UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

George W. King

Project No. 9611-001

ORDER GRANTING EXEMPTION FROM LICENSING (5 MW OR LESS) (Issued January 27, 1988)

On March 30, 1987, George W. King filed an application to exempt the Mechanicsville Project from the licensing requirements set forth in Part I of the Federal Power Act. The proposed small hydropower project is described in the attached public notice. The comments of interested agencies and individuals, including the U.S. Fish and Wildlife Service and the state fish and wildlife agency, have been fully considered in determining whether to issue this exemption from licensing.

Article 2 of this exemption requires compliance with the terms and conditions prepared by federal or state fish and wild-life agencies to protect fish and wildlife resources. These mandatory terms and conditions are contained in any attached letters commenting on the exemption application. If contested, the Commission will determine whether any mandatory term or condition is outside the scope of article 2.

After considering the mandatory terms and conditions designed to protect fish and wildlife resources, the environmental information in the exemption application, the staff's independent assessment 1/, and other public comments, the Director finds that issuance of this order is not a major federal action significantly affecting the quality of the human environment.

Article 11 is included in this order requiring the exemptee to develop a dissolved oxygen (DO) monitoring plan. Article 12 requires exemptee to develop a wetlands monitoring plan for the 9.4-acre wetland located within the project reservoir. Article 13 requires the exemptee to implement the cultural resources protection measures to mitigate and avoid impacts to the historic structures and archeological remains in such a manner satisfactory to the SHPO. The bases for inclusion of articles 11, 12, & 13 are discussed in the environmental assessment.

-2-

The Director orders:

(A) The Mechanicsville Project is exempted from the licensing requirements of Part I of the Federal Power Act, subject to the attached standard articles. See section 4.106 of the Commission's regulations and the following additional articles:

<u>Article 10</u>. Before commencing any ground-disturbing or spoil-producing activities, the exemptee, in consultation and cooperation with the appropriate federal, state, and local agencies (including the Soil Conservation Service and any federal agency with managerial authority over any part of the project lands), shall prepare a plan to control erosion and dust, stabilize slopes, and minimize the quantity of sediment or other potential water pollutants resulting from construction and operation of the project. The plan shall identify critical areas, include functional design drawings and map locations of control measures, and establish schedules for implementation, monitoring, maintenance, and periodic review.

The exemptee may commence ground-disturbing or spoilproducing activities 30 days after submitting the final plan to
the consulted agencies, or sconer if the plan is approved by the
Soil Conservation Service and any federal agency with managerial
authority over any part of project lands. Any consulted agency
that objects to the exemptee's final plan should notify the
Commission, specify the objection, and recommend alternative
measures. The Commission reserves the right to modify the final
plan.

Article 11. The exemptee, in cooperation with the U.S. Fish and Wildlife Service and the Connecticut Department of Environmental Protection, shall develop a dissolved oxygen (DO) monitoring plan. The plan must include measures for rapidly altering project operation to ensure maintenance of the DO concentration of the French River at the state DO standard. The DO concentration should be measured immediately downstream of the confluence of the tailrace with the river channel. The exemptee must file the plan with the Commission for approval within 6 months after the date of issuance of this exemption. The filing must include the comments on the plan from the aforementioned agencies. The Commission reserves the right to require modifications to the plan.

^{1/} Environmental Assessment, Mechanicsville, FERC Project No. 9611-001, Federal Energy Regulatory Commission, January 12, 1987. This document is available in the Commission's public file associated with this proceeding.

Article 12. The exemptee, after consultation with the U.S. Fish and Wildlife Service (FWS) and the Connecticut Department of Environmental Protection, must develop a wetlands monitoring plan for the 9.4-acre wetland located within the project reservoir. The plan must provide for documenting plant species composition, density, and frequency and other necessary parameters prior to and during project operation to assess whether the FWS condition that prevents the use of flashboards from July 1 through October 31 is providing sufficient protection for the wetlands. Further, the plan must contain a monitoring implementation schedule and provisions for altering project operation should the results of the monitoring show that project operation is having an adverse effect on the wetlands. The determination of adverse effect must be a determination made between the exemptee and the aforementioned agencies after the agencies have reviewed the results of monitoring.

The plan must be filed with the Commission for approval within 1 year after the date of issuance of the order granting exemption, and must include the comments on the plan from the aforementioned agencies. The Commission reserves the right to require modifications to the plan.

Article 13. The exemptee, before starting any land-clearing or ground-disturbing activities associated with construction of the project, shall implement the cultural resources protection measures to mitigate and avoid impacts to the historic structures and archeological remains, as described in the letter from the Connecticut State Historic Preservation Officer (SHPO) dated November 25, 1986. The plan shall be implemented in a manner satisfactory to the SHPO. After the completion of this construction, and before any commercial operation of the project, the exemptee shall file with the SHPO documentation that the plan has been implemented in such a manner. The exemptee shall make funds available in a reasonable amount for these mitigative and avoidance measures.

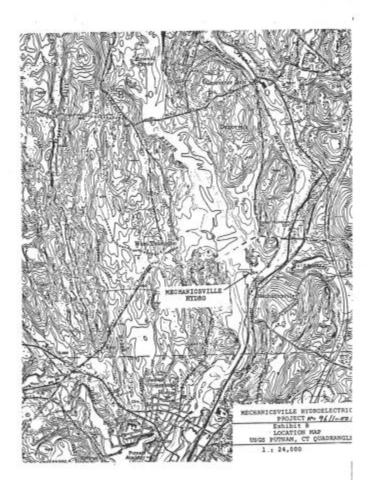
- (B) Article 2 of this exemption is amended to include the National Marine Fisheries Service as a fish and wildlife agency that can provide terms and conditions.
- (C) The Commission reserves the right to assess the exemptee fees pursuant to section 30(e) of the Federal Power Act.
- (D) The exemptee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(E) This order is issued under authority delegated to the Director and is final unless appealed to the Commission within 30 days from the date of this order.

dward Tt. Abrams

Acting Director, Division of Project Management

- a. Type of Application: Exemption (5 MW or Less)
- b. Project No.: 9611-001
- c. Date Filed: March 30, 1987
- d. Applicant: Saywatt Hydro Associates
- e. Name of Project: Mechanicsville Hydroelectric
- f. Location: On French River, near town of Thomson, in Windham County, Connecticut
- g. Filed Pursuant to: Energy Security Act of 1980, Section 408, 16 U.S.C. \$2705 and \$2708
- h. Applicant Contact: Mr. George W. King 170 Barretts Mill Rd. Concord, NA 01742 (617) 369-1136
- i. FERC Contact: Sat Goel, (202) 376-9816
- j. Comment Date: AUS 28 1987
- k. Description of Project: The project would consist of: (1) an existing 20-foot-high, 200-foot-long dam presently owned by Essex Corporation having an agreement which gives the applicant the exclusive option to purchase; (2) an existing reservoir with 44-acre surface area and 256-acre-foot storage capacity; (3) a new 5-foot-diameter, 20-foot-long penstock; (4) an existing powerhouse containing a new 325-kw generating unit and; (5) a new 900-foot-long, 2.3-kV transmission line connecting to Mortheast Utility Company. The estimated average energy produced by the project would be 1,174,000 kWh.
- Purpose of Exemption: An exemption, if issued, gives the exemptee priority of control, development and operation of the project under the terms of the exemption from licensing, and protects the exemptee from permit or license applicants that would seek to take or develop the project.
- m. This notice also consists of the following standard paragraphs: A3, A9, B, C and D3a.



ENVIRONMENTAL ASSESSMENT

FEDERAL ENERGY REGULATORY COMMISSION OFFICE OF HYDROPOWER LICENSING, DIVISION OF ENVIRONMENTAL ANALYSIS Date: January 7, 1988

Project name: Mechanicsville FERC No. 9611-001 A. APPLICATION Application type: Exemption < 5 Megawatts Date filed 03/30/87 2. Applicant: Saywatt Hydro Associates 3. Water body: French River River basin: Thames 4. Nearest city or town: Thompson 5. County: Windham State: Connecticut 6. Federal lands affected: X No __Yes:

B. PURPOSE AND NEED FOR ACTION

1. Purpose.

The proposed project would provide an estimated average of 1,174,000 kilowatthours of electrical energy per year to the Northeast Utility Company.

(land management agency)

2. Need for power.

Under section 213 of the Public Utilities Regulatory Policies Act (PURPA), the authority of the Commission to grant an exemption from licensing is not limited by a determination of the need for power. See Briggs Hydroelectric, 32 FERC ¶ 61,399 (1985). See also David Cereghino, 35 FERC ¶ 61,067 (1986)).

C. PROPOSED PROJECT AND ALTERNATIVES

1. Description of the proposed action.

The applicant proposes to rehabilitate an abandoned hydroelectric facility. Existing project features include a dam consisting of a 200-footlong by 20-foot-high granite block spillway surmounted with the remains of weir boards and a 210-foot-long earthen dike, a 44-acre reservoir at elevation 301.5 feet mean sea level (msl), and an abandoned powerhouse. Proposed new project features would include 2-foot-high flashboards that would create a 48-acre reservoir at elevation 303.5 feet msl, a 325-kilowatt generating unit, and a 900-foot-long, 2.3-kilovolt transmission line (figure 1). The project would be operated in a run-of-river mode. (Flow in the river below the project would equal instantanous inflow to the reservoir.)

- 2. Applicant's proposed mitigative measures.
- a. Construction.

The applicant proposes to construct the project without affecting the historic mill ruins and to clear litter from the ruins to enhance its natural setting.

b. Operation.

The applicant proposes the following measures: (1) to operate the project in a run-of-river mode; (2) to provide a minimum flow of 86 cubic feet per second (cfs); and (3) to encourage public access to the project area for recreational purposes.

3. Terms and conditions for exemption from licensing (Federal Power Act).

The fish and wildlife agencies have not provided terms and conditions. X The agencies listed below have provided terms and conditions for the protection of fish and wildlife resources at the proposed project.

Agency	Attachment	Date of letter	
Connecticut Department of Environmental Protection	A	08/27/87	
Department of the Interior	В	08/31/87 12/18/86	

- 4. Alternatives to the proposed project.
- a. X No reasonable action alternatives have been found. Action alternative
- b. Alternative of no action.

No action, denial of the exemption, would practude the applicant from constructing the proposed project. No action would involve no alterations to the existing environment and would preclude the applicant from producing electrical power at the site.

D. CONSULTATION AND COMPLIANCE

1. Fish and wildlife consultation (Fish & Wildlife Coordination Act).

			STATE STATE	(FWS)) ÷	X Yes.	No.
	ate(s):					X Yes.	No.
c. Na	tional Me	rine Fish	eries Se	rvice	(NMFS):	X Yes.	No.

2. Section 7 consultation (Endangered Species Act).

a. Listed species: X None. Present: b. Consultation: X Not required. __Required; completed: / / .

3. Cultural resource consultation (Historic Preservation	Act).
a. State Historic Preservation Officer (SHPO): X Yes.	No.
b. National Park Service (NPS): X Yes.	
c. National Register status: None.	X Eligible or listed.
c. National Register status: None. d. Council: Not required. X Completed: 01 /08 /	88. (date comments
reque	sted)
e. Further consultation: X Not required. Require	
Remarks: The SHPO has stated that the existing dam an	d powerhouse and the
archeological remains of 19th century mills in the vicin	ity of these facilities are
eligible for inclusion in the National Register of Histo	
project would not have an adverse effect on the historic	al integrity of these
remains if certain mitigative measures specified in the	letter providing these
comments are implemented (letter from Dawn Maddox, Deput	y State Historic
Preservation Officer for Connecticut, Hartford, Connecti	cut, November 25, 1986).
The comments of the Advisory Council on Historic Preserv	ation have been requested.
4. Recreational consultation (Federal Power Act).	
a. U.S. Owners: Yes. X No.	
b. NPS: X Yes. No.	
c. State(s): X Yes. No.	
Wild and scenic rivers (Wild and Scenic Rivers Act).	
Status: X NoneListed. Determination completed Administering agency:	: _/
	ES VOEJSWY
LWCFA lands and facilities (Land and Water Conservation)	on Fund Act).
Status: X NoneDesignatedDetermination	
Administering agency:	**************************************
E. COMMENTS	
1. The following agencies and entities provided comments	on the application or
filed a motion to intervene in response to the public	
filed a motion to intervene in response to the public	Hottee dated 07/13/61.
Commenting agencies and other entities	Date of letter
Environmental Protection Agency	08/18/87
Connecticut Department of Environmental Protection	08/18/87 08/27/87
Department of the Army, New England Division Corps	08/28/87
of Engineers	
Department of the Interior	08/31/87
	77.70
X The applicant did not respond to the comments.	
F. AFFECTED ENVIRONMENT	
	,
1. General description of the locale.	
The project site, located 1,200 feet above the c	onfluence of the

French and Quinebaug Rivers, is a predominantly rural area of farms and woodland.

Vegetative cover is mostly second or third growth mixed woodland. The area's topography is characterized by gently rolling hills, and the climate by cold winters and mild summers.

- Descriptions of the resources in the project impact area (Source: Saywatt Hydro Associates, 1987, application, exhibit E, unless otherwise indicated).
- a. Geology and soils: The project area is underlain with alluvial gravel on top of bedrock. The soil is silty due to river flooding.

b. Streamflow:

lowflow: 45 cfs; flow parameter: flow exceeded 90 percent of the time. high flow: 500 cfs; flow parameter: flow exceeded 10 percent of the time. average flow: 145 cfs.

c. <u>Water quality</u>: Water quality is good downstream from the project dam and varies from good to poor upstream from the project dam. The Connecticut Department of Environnmetal Protection (DEP) has designated all project area waters both upstream and downstream from the project dam as class B. Class B waters are suitable for swimming and fish propogation and have a minimum disolved oxygen (DO) standard of 5 milligrams per liter (mg/l). The DEP water quality data show DO levels of 7.5 mg/l just downstream from the project dam and 6 mg/l just upstream of the project dam.

High loading of pollutants to the river lowers the DO concentration of the river upstream of the project; however, the aeration effect of the existing dam and high gradient reaches of the river maintain the DO concentration of the project impoundment and river downstream of the dam at levels above or at state standard levels.

In such polluted environments, heavy metals tend to accumulate in the bottom sediments of the impoundments located along the river. Sediments in the impoundments located upstream and downstream of the dam are contaminated with cadmium in levels in excess of 20 micrograms per liter (ug/l). Sediments in the project impoundment, however, were found to contain cadmium in levels of less than 1 ug/l and are not considered to be toxic.

d. Pisheries:

Anadromous: X Absent. X Present.

Resident: Absent. X Present. The project area supports a poor quality warmwater fishery. Species include largemouth bass, chain pickerel, pumpkinseed, white sucker, and brown bullhead.

e. Vegetation:

Cover type

Dominant species

mixed woodland

overstory: white birch, quaking aspen swamp maple, red maple, cherry,

elm, oak

understory: wild grape, alder, elderberry, dogwood, sumac, milkweed, ferns

marsh

cattail, buttonbush, water willow

F. Wildlife: Species inhabiting the project area include white-tailed deer, woodchuck, skunk, cottontail rabbit, red fox, raccoon, muskrat, weasel, black dock, hercop, marsh hawk, kinglisher, and various songhirds.

g. Cultural:

- Mational Register (listed and eligible) properties have not been recorded.
- X There are properties listed on, or eligible for listing on, the National Register of Mistoric Places in the area of the projects potential environmental impact.

Description: The eligible das and powerhouse were contracted about 1922 by
the Futnam Light and Fower Company. The hydroelectric capability of these
structures was destroyed, and rubsequent power production discontinued in 1936
as a result of a flood. The eligible archeological resains are rules of textile
sills constructed in the 19th century and destroyed by fire. Bo other National
Register wligible or listed sites are located in the project impact areas.

- h. <u>Visual quality</u>: The landscape in the area, consisting of rolling farmland, soodland, and small New England towns along a river, make this a valuable visual resource.
- Recreation: Poor water quality has limited on-water recreational activities such as fishing and boating. Motorists enjoy the scenic beauty of the area. A rest area on the southeast side of the impoundment is the only developed recreational facility in the project area.
- Land use: Land use is agricultural, rural residential, and woodland.
- k. Socioeconomica: The economic and social well-being of the area is influenced by farming and small business.

G. ENVIRONMENTAL ISSUES AND PROPOSED RESOLUTIONS

Mitigative measures recommended by the staff are in addition to those proposed by the applicant, section C(2), and any conditions identified in section C(3). There are 5 leaves addressed below.

1. Water quality: Operation of the project would reduce the DO levels of the river by eliminating the seration effect of the dam. In addition, the installation of the flashboards would increase the size of the impoundment and, as a result, would increase the retention time of the impoundment. Increased retention time of the reservoir would result in an increase in the water temperature of the river and an increase in contact time of the water with oxygen consuming audients. Both of these phenomens would result in a decrease in the DO levels of the impoundment.

Terms and conditions stipulated by Interior and the DEP would require the applicant to remove the flashboards from the project during the months of July through October, release all flows less than 86 cfs over the dam, and monitor the DO lewels of the river.

Project impacts to the DO levels of the river would be most significant during the summer low-flow period. By eliminating the flashboards and releasing all flows less than 86 cfs over the dam during the critical low-flow period, project impacts to the DO levels of the river would be minimized. Adherence to the conditions stipulated by Interior and the DEP would minimize project impacts to the DO level of the river and to fish and other water quality-dependent resources. Requiring the exemptee to monitor the DO levels of the river, however, would not ensure that the DO concentrations of the river would be maintained at levels that would protect water quality-dependent resources. Modification to project structures or operation, in addition to the conditions stipulated by the agencies, may be necessary to ensure protection of the water quality of the river. Altering project operation by releasing additional flows over the dam is effective in increasing the DO levels of the river. The exemptee should develop a water quality monitoring plan that provides for modifying project operation to ensure that the DC concentration of the river would be maintained at state standard levels.

2. <u>Project operation</u>: Interior and the DEP have stipulated conditions that would ensure that project operation would not significantly alter the flow regime of the river downstream of the project. Specifically, the agencies' conditions require the applicant to operate the project end run-of-river mode such that inflow to the project equals outflow, except when the applicant reinstalls the flashboards and discharge from the project is decreased to refill the reservoir. This reduction can occur only when the flow of the river is sufficient to ensure that refilling of the reservoir will take no more than 10 minutes. During the refilling period, conditions stipulated by the agencies would ensure the release of 50 cfs downstress of the daw.

Project operation has the potential to modify the flow regime of the river by a store and release mode of operation to enhance power production and during refilling of the reservoir. Adherence to the condition set forth by the sepencies would ensure maintenance of sufficient discharge to the river to protect fish and other flow-dependent resources of the river downstreams of the project.

- 3. Future fish passage: Interior and the DEP have stipulated conditions that would regaire the applicant to provide future fish passage facilities at the project when requested by these agencies. There are no migratory or anadromous fish presently using the river in the project vicinity. Restoration of anadromous fish in this river system by interior and the DEP, however, could be expanded in the future to include the project area. Adherence to the condition stipulated by the species would provide for construction of fish passage facilities at the project, thereby emsuring that the project structures and operation do not adversely impact anadromous fish resources.
- 4. Project effects on reservoir marsh vegetation: Operation of the project with flashboards would raise the water level of the reservoir by 18 inches. Such a water level increase in the 9.4-acre marsh would have a long-term, adverse effect on the wetland vegetation and dependent wildlife.

Interior, by letter of August 31, 1987, has provided a condition to protect the wetlands. Specifically, the condition requires that flashboards not be used during the period of July 1 through October 31. This condition would provide some protection of project wetlands; but may not be sufficient. Generally, the growing season for wetland vegetation would occur from May through October. Interior's condition would not prevent the use of flashboards during May and June, which may produce an adverse effect on the wetlands because of the presence of higher water levels. The exemptee, therefore, should be required to monitor the 9.4 acres of marsh within the project reservoir and to recommend changes in project operation if the results of monitoring show that the condition is not providing sufficient protection of the wetlands.

5. Impacts to historic structures and archeological remains that are eligible for inclusion in the National Register of Historic Places: To comply with the National Historic Preservation Act, the Commission must ensure that the SHPO's recommended mitigative and avoidance measures are implemented to protect the National Register eligible sites in the project area. The SHPO's recommended mitigative measures consist of documenting and rehabilitating the eligible historic structures, as well as documenting and avoiding the eligible archeological remains. To indicate that impacts have been mitigated or avoided, the exemptee should file documentation with the SHPO certifying that the recommended measures have been implemented in a manner acceptable to the SHPO.

H. ENVIRONMENTAL IMPACTS

 Assessment of adverse and beneficial impacts expected from the project as proposed by the applicant (P) (section C(2)); the proposed project with the staff's recommended mitigation (Ps) (section G); and any other alternative considered (A) (section C(4)).*

Resource	P	Impac Pa	A	Remarks		
a. Geology-Soils	1AS			c. Installing flashboards would slightly slow		
b. Streamflow	10			water passing through the reservoir re- sulting in a small increase in water		
c. Water quality: Temperature				temperature. Project operation would result in a minor reduction in the DO		
Dissolved oxygen	2AL	1AL		levels in the river downstream from the project. Localized erosion due to con-		
Turbidity and sedimentation				struction activities would result in minor short-term increases in turbidity and sedimentation.		
d. Fisheries: Anadromous	0			d. Because of the nonmigratory nature of fish in the project area, project operation should cause only minor fish entrainment		
Resident	1AL			mortality. e.,f. Project construction would require the removal of less than 1 acre of non-forest vegetation along the transmission line route and several mature trees from the site. Operation of the project with flashboards would raise the water level about 18 inches within the existing 9.4-acre marsh in the project reservoir, potentially producing minor, adverse lon term impacts on the marsh vegetation.		
e. Vegetation	1AL	0				
f. Wildlife	IAL	0				
g. Cultural: Archeological	1AL	0				
Historical	1AL	0				
h. Visual quality	1BL	-	_	h. Restoration of the abandoned hydroelectric facility and removal of litter from the		
i. Recreation	0	-	H	mill ruins would enhance visual quality the project area.		
j. Land use	0	-	_			
k. Socioeconomics	0	-				
	-	-	H			

^{*} The assessment reflects the adoption of any terms and conditions set by the fish and wildlife agencies, in addition to the applicant's proposed mitigation Assessment symbols indicate the following impact levels:

O = No impact; 1 = Minor impact; 2 = Moderate impact; 3 = Major impact; A = Adverse; B = Beneficial; L = Long-term impact; S = Short-term impact.

2. Impacts of the no-action alternative.

Under the no-action alternative, there would be no construction of project facilities or changes to the existing physical, biological, or cultural components of the area. Electrical power that would be generated by the proposed hydroelectric project would have to be generated from other available sources or offset by conservation measures.

- 3. Recommended alternative (including proposed, required, and recommended millipative measures): X Proposed project. Alternative. No action.
- 4. Reveson(a) for selecting the preferred alternative.

The proposed project would provide electrical power without significantly affecting the environmental conditions of the project area.

I. UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS OF THE RECOMMENDED ALTERNATIVE

Project construction would cause minor, short-term increases in erosion and sedimentation and would require the removal of less than 1 acre of non-forest vegetation. Project operation would result in minor, long-term increases in water temperature and fish entrainment and minor, long-term decreases in DO.

J. CONCLUSION

- X Finding of No Significant Impact. Approval of the recommended alternative [H[3]] would not constitute a major federal action significantly affecting the quality of the human environment; therefore, an environmental impact statement (EIS) will not be prepared.
- Intent to Prepare on EIS. Approval of the recommended alternative [H(3)] would constitute a major federal action significantly affecting the quality of the human environment; therefore, an EIS will be prepared.

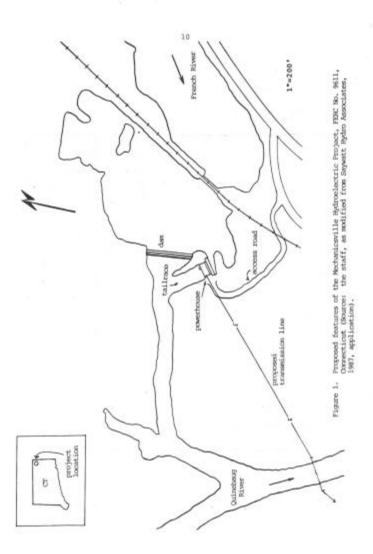
K. LITERATURE CITED

1. Seywett Hydro Associates. 1987. Application for exemption from licensing for the Mechanicsville Hydroelectric Project, PERC No. 9611, Connecticut. March 30,

L. LIST OF PREPARERS

Mary Nowak

Name	Position title			
Ann F. Miles	Environmental Protection Specialist (Coordinator)			
Det Murphy	Wildlife Biologist			
Gary Nelson	Ecologist			
Edwin Blatter	Archeologist			
Mary Nowak	Editor			





STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

and the second of the second o



the same and the s

HY.

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of

MECHANICSVILLE HYDROELECTRIC SAYWATT HYDRO ASSOCIATES)

Project No. 9611-001

2

RECOMMENDATIONS FOR TERMS AND CONDITIONS

This project should not pose any major conflicts with the various natural resource, regulatory or management programs and objectives of this Department. However, to insure the long-term compatibility of this project with those programs and objectives, the following terms and conditions are requested for incorporation as exemption conditions in accordance with section 4.105(b)(2) of the Commission's regulations.

- 1) The exemptee shall operate the project in conformance with a run-of-river mode, which is defined as the inflow to the project shall equal the outflow on an instantaneous basis.
- 2) The exemptee shall discharge over the dam flows into the project that are below 86 cfs.
- 3) The exemptee shall; release a minimum of 50 ofs immediately following plant shutdown, until the pond elevation rises to allow spillage of the inflow and provided that this time period not exceed ten minutes.
- 4) The exemptee shall remove the flashboards during July, August and September of each year to reduce the time of travel through the impoundment during low flow periods. This mechanism will help protect water quality downstream of the dam by reducing the effects of sediment oxygen denand on the water column resulting from the increased time of travel through the impoundment.
- 5) The exemptee shall perform post-construction monitoring of water quality within the project area, specifically with regard to dissolved oxygen concentrations, for a period of one year. This

165 Capitol Avenue . Hartford, Connection (610).

Mechanicsville Hydro

Project No. 9611-001

monitoring shall be performed on a biweekly basis with measurements taken above the dam and below the tailrace.

- 6) There is an outstanding Dam Safety Order pending against Essex Hydro Associates, Inc., the previous owners of these facilities. The order was issued for the performance of necessary repair work. These repairs must be made by the exemptee to the Department's satisfaction.
- 7) The exemptee shall provide acceptable fish passage facilities at this project when prescribed by the Department and/or the U.S. Fish and Wildlife Service.
- 8) The exemptee shall allow public access to the project area for fishing and canoe portage, subject to reasonable safety and liability limitations.

In addition, the applicant should be aware that a diversion permit, a dam safety permit and an iuland wetlands permit will be required for this project. These permit programs are admini-stered by the Department's Water Resources Unit. Specific information regarding the first two permit programs can be obtained from Wes Marsh of that unit at 165 Capitol Avenue, Hartford, Connecticut, 06106 or by telephone at 566-7245. For information on the inland wetlands permit, please contact Doug Cooper of that unit at 566-7280.

Should the commission or the applicant have any questions on this submittal, please contact Wabel Chin of my planning staff at 203-566-5740. Thank you.

Commissioner

LC/BJE/MC/mc

D.F. Cooke, US EPA R.E. Scheirer, US FAVS

G.V. King



STATE OF CONNECTICUT DEPARTMENT OF ENVIRONMENTAL PROTECTION

and the second of the second o



the same and the s

HY.

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

In the Matter of

MECHANICSVILLE HYDROELECTRIC SAYWATT HYDRO ASSOCIATES)

Project No. 9611-001

2

RECOMMENDATIONS FOR TERMS AND CONDITIONS

This project should not pose any major conflicts with the various natural resource, regulatory or management programs and objectives of this Department. However, to insure the long-term compatibility of this project with those programs and objectives, the following terms and conditions are requested for incorporation as exemption conditions in accordance with section 4.105(b)(2) of the Commission's regulations.

- 1) The exemptee shall operate the project in conformance with a run-of-river mode, which is defined as the inflow to the project shall equal the outflow on an instantaneous basis.
- 2) The exemptee shall discharge over the dam flows into the project that are below 86 cfs.
- 3) The exemptee shall; release a minimum of 50 ofs immediately following plant shutdown, until the pond elevation rises to allow spillage of the inflow and provided that this time period not exceed ten minutes.
- 4) The exemptee shall remove the flashboards during July, August and September of each year to reduce the time of travel through the impoundment during low flow periods. This mechanism will help protect water quality downstream of the dam by reducing the effects of sediment oxygen denand on the water column resulting from the increased time of travel through the impoundment.
- 5) The exemptee shall perform post-construction monitoring of water quality within the project area, specifically with regard to dissolved oxygen concentrations, for a period of one year. This

165 Capitol Avenue . Hartford, Connection (610).

Mechanicsville Hydro

Project No. 9611-001

monitoring shall be performed on a biweekly basis with measurements taken above the dam and below the tailrace.

- 6) There is an outstanding Dam Safety Order pending against Essex Hydro Associates, Inc., the previous owners of these facilities. The order was issued for the performance of necessary repair work. These repairs must be made by the exemptee to the Department's satisfaction.
- 7) The exemptee shall provide acceptable fish passage facilities at this project when prescribed by the Department and/or the U.S. Fish and Wildlife Service.
- 8) The exemptee shall allow public access to the project area for fishing and canoe portage, subject to reasonable safety and liability limitations.

In addition, the applicant should be aware that a diversion permit, a dam safety permit and an iuland wetlands permit will be required for this project. These permit programs are admini-stered by the Department's Water Resources Unit. Specific information regarding the first two permit programs can be obtained from Wes Marsh of that unit at 165 Capitol Avenue, Hartford, Connecticut, 06106 or by telephone at 566-7245. For information on the inland wetlands permit, please contact Doug Cooper of that unit at 566-7280.

Should the commission or the applicant have any questions on this submittal, please contact Wabel Chin of my planning staff at 203-566-5740. Thank you.

Commissioner

LC/BJE/MC/mc

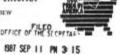
D.F. Cooke, US EPA R.E. Scheirer, US FAVS

G.V. King



United States Department of the Interior

OFFICE OF ENVIRONMENTAL PROJECT REVIEW BOSTON PEDERAL OFFICE BUILDING ROOM HOZ III CAUSEWAY STREET BOSTON, MASSACTIUSETTS 02222 - 1035



Attachment B

87/1079

REF: FERC No. 9611

NECEN STALENTROY SELVISOR FISH & MILLIUFE SERVICE SEP 3 1987

Br. Kenneth F. Plumb, Secretary Commission, Schilles Hr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission () KAIAC STATES

O. R. H. Washington, D.C. 20426

Dear Mr. Plumb:

This is in response to your public notice dated July 13, 1987, regarding the application for exemption for the Mechanicsville Hydroelectric Project, located on the French River in Windham County, Connecticut,

1. Fish and Wildlife Resources

The Applicant has consulted with the Figh and Wildlife Service (FWS) regarding this project. In a letter to the Applicant dated December 18, 1986, (copy enclosed), the FWS prescribed terms and conditions to prevent loss of, or damage to, fish and wildlife resources at this project, should it be exempted from licensing by the Commission. To protect wetlands at the site and their water quality functions, Condition No. 10 is added to require that flashboards not be used during the period July 1 through October 11. Based on the requirements of Section 30(c) of the Federal Power Act and Section 408 of the Energy Security Act, these terms and conditions will be part of the exemption.

2. Cultural Resources

We note that review by the State Historic Preservation Officer (SHFO) determined that the existing dam, powerhouse, and associated 19th century industrial archaeological complex appear to be eligible for the Mational Hogister of Historic Places. The Advisory Council on Mistoric Preservation should be provided an appartunity to review and comment on this project. To insure the preservation of all cultural resources as defined by the National Historic Preservation Act of 1966, we request the following article be included in the a imption:

Exempted shall, prior to undertaking any ground-disturbing activities, complete consultation with the State Historic Preservation Officer (SHFO) to insure that all proposed mitigation measures are adequate and acceptable to the SHPO. If the SHPO concurs with the exemptee's proposed measures, ground-disturbing activities may proceed. If any previously unrecorded archaeological or historical sites are discovered during the course of construction or development of any project works or other facilities at the project, construction activity in the vicinity shall be halted and the SHPO shall be notified to determine the significance of the sites and measures needed to recover important scientific, prehintoric, historic or archaeological data that otherwise would be damaged or destroyed. If an agreement cannot be reached on the amount of money to be expended on archaeological or historical work related to the project, the Commission reserves the right to require the exemptee to conduct, at its own expense, any such work found necessary.

3. Recreational Resources

The information reviewed did not reveal any significant or outstanding opportunities for the development of public outdoor recreational facilities within project boundaries. However, the National Park Service does request that the following condition be made a part of the exemption:

The Exemptee shall allow public access to the project area for utilization of the resources for recreation purposes, subject to reasonable safety and liability limitations. Such access should be permanently and prominently posted so that its availability for recreation is made known to the public.

Subject to the above conditions, the National Park Service has no objection to the granting of an exemption for this project.

We appreciate the opportunity to comment on this application.

Sincerely yours.

William Patterson Regional Environmental Officer



United States Department of the Interior

FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES P.O. BOX 1518 CONCORD, NEW HAMPSHIRE 08801

REF: FERC No. 3611

Hr. Robert King Saywatt Hydro Associates 170 Barretts Hill Road Concord, Hassochusetts 01742 DEC 1 8 1986

Dear Mr. King:

This responds to your letter of Hovember 17, 1936, which transmitted a copy of a draft application for exemption from licensing for the Hechanicaville Hydro Project, located but the French River in Mindlam County, Connecticut. These comments are submitted in accordance with provisions of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et sec.).

Based on our review of the application and consultation with the Connecticut Department of Environmental Protection (DEP), it appears that impacts to fish and widdlife resources from construction and operation of this project can be adequately nitigated. An instantaneous run-of-river operation will insure secting our minimum flow requirement below the project of at least 55 ofs (mailsa hayset flow in New England rivers) or inflow to the project, whichever is less. At river flow below 36 ofs the project should be manually shut down and all inflow released over the dam. You should present to us for approval a plan for controling dissolved oxygen concentrations below the project. This plan should be approved prior to project start-up. Fish peasuge facilities are not necessary at this time, but a condition will be included since exemptions are issued in perpetuity.

Section 30(c) of the Federal Power Act and Section 403 of the Energy Security Act require inclusion in the exemption of all terms and conditions that are prescribed by State and Federal fish and wildlife segencies to prevent loss of, or damage to, fish and wildlife resources, and to otherwise carry out the purposes of the Fish and Wildlife Coordination Act. Consistent with our responsibilities, the following terms and conditions are provided:

- The Exemptes shall provide fish-passage facilities at this project when so directed by the Fish and Wildlife Service and/or the Connecticut Department of Environmental Protection.
- The Exemptee shall operate the project in an instantaneous rum-of-river mode, i.e., outflow below the twilruce equals inflow to the project reservoir instantaneously, and at all times act to minimize water level fluctuations in the reservoir.

- 3. The Exemptee shall notify the Fish and Wildlife Service in writing when the project commences operation. Such notice shall be sent within 30 days of start-up to Supervisor. Ecological Services, U.S. Fish and Wildlife Service, P.O. Box 1518, Concord, New Hampahire 03301. A set of as-built plans shall be furnished with the notification.
- 4. The Exemptee shall, six months prior to project operation, present to the Fish and Wildlife Service for approval a plan for monitoring dissolved oxygen concentrations at this project.
- 5. The Examples shall allow public access to the project area for utilization of public resources, subject to reasonable safety and liability limitations. Such access should be prominently and permanently posted so that its availability is made known to the public.
- 5. The Exemptee shall, within six months of the date of issuance of an exemption from licensing, present to the Fish and Wildlife Service for approval a plan for monitoring instantaneous flow releases at this project. Following approval of the monitoring plan, the Exemptue shall then measure instantaneous flows and provide records of discharge at the project on a regular basis as per specifications of the Fish and Wildlife Service. Upon receiving a written request from the Exemptee, the U.S. Fish and Wildlife Service may waive the requirement for flow monitoring at this project provided the Exemptee satisfactorily demonstrates that the required flow will be discharged at all times.
- 7. The Exemptse shall allow the Fish and Wildlife Service to inspect the project area at any time while the project operates under an exemption from licensing to monitor compliance with their terms and conditions.
- 3. The Fish and Wildlife Service is reserved the right to add and alter terms and conditions as appropriate to carry out its responsibilities during the life of the project with respect to fish and wildlife resources. The Exemptee shall, within thirty (30) days of receipt, file with the Commission any additional terms and conditions imposed by the above agency.
- The Exemptee shall incorporate the aforamentioned fish and wildlife anditions in any conveyance -- by lesse, sale or otherwise -- of his interests so as to legally assure compliance with said conditions for as long as the project operates under an exemption from licensing.

If you have any questions about the contents of this letter, please cell Hr. Bob Subeirer of my staff, at (603) 225-1458.

In order to acknowledge receipt of this letter, plause sign the enclosed copy and raturn as seen as possible.

Sincerely yours,

Gordon F. Beckett

Enclosure As Stated Gordon E. Beckett Supervisor New England Area

I accept the terms and conditions identified in this letter.

Thut Course King 12/31/26

- CC: 'RO/FWE Reeding File FERC, Hydro Licensing CT DEF, Flanning, Brian Emerick CT DEF, Flaheries, Bob Jones EPA
- ES: B5ohelrer: Jd:12-17-861:839-941:

§ 4.106 Standard terms and conditions of exemption from licensing

Any exemption from licensing granted under this subpart for a small hydroelectric power project is subject to the following standard terms and conditions:

- (a) Article 1. The Commission reserves the right to conduct investigations under sections 4(g), 306, 307, and 311 of the Federal Power Act with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, or maintenance of the exempt project. If any term or condition of the exemption is violated, the Commission may revoke the exemption, issue a suitable order under section 4(g) of the Federal Power Act, or take appropriate action for enforcement, forfeiture, or penalties under Part III of the Federal Power Act.
- (b) <u>Article 2</u>. The construction, operation, and maintenance of the exempt project must comply with any terms and conditions that the United States Fish and Wildlife Service and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish or wildlife resources or to otherwise carry out the purposes of the Fish and Wildlife Coordination Act, as specified in Exhibit E of the application for exemption from licensing or in the comments submitted in response to the notice of the exemption application.
- (c) Article 3. The Commission may revoke this exemption if actual construction of any proposed generating facilities has not begun within two years, or has not been completed within four years from the date on which this exemption was granted. If an exemption is revoked under this article, the Commission will not accept from the prior exemption holder a subsequent application for exemption from licensing or a notice of exemption from licensing for the same project within two years of the revocation.
- (d) Article 4. This exemption is subject to the navigation servitude of the United States if the project is located on navigable waters of the United States.
- (e) Article 5. This exemption does not confer any right to use or occupy any Federal lands that may be necessary for the development or operation of the project. Any right to use or occupy any Federal lands for those purposes must be obtained from the administering Federal land agencies. The Commission may accept a license application by any qualified license applicant and revoke this exemption, if any necessary right to use or occupy Federal lands for those purposes has not been obtained within one year from the date on which this exemption was granted.

- (f) <u>Article 6</u>. In order to best develop, conserve, and utilize in the public interest the water resources of the region, the Commission may require that the exempt facilities be modified in structure or operation or may revoke this exemption.
- (g) Article 7. The Commission may revoke this exemption if, in the application process, material discrepancies, inaccuracies, or falsehoods were made by or on behalf of the applicant.
- (h) Article 8. Any exempted small hydroelectric power project that utilizes a dam that is more than 33 feet in height above streambed, as defined in 18 CFR 12.31(c) of this chapter, impounds more than 2,000 acre-feet of water, or has a significant or high hazard potential, as defined in 33 CFR Part 222, is subject to the following provisions of 18 CFR Part 12, as it may be amended:
 - Section 12.4(b)(1)(i) and (ii), (b)(2)(i) and (iii), (b)(iv), and (b)(v);
 - (2) Section 12.4(c);
 - (3) Section 12.5;
 - (4) Subpart C; and
 - (5) Subpart D.

For the purposes of applying these provisions of 18 CFR Part 12, the exempted project is deemed to be a licensed project development and the owner of the exempted project is deemed to be a licensee.

(i) Article 9. Before transferring any property interests in the exempt project, the exemption holder must inform the transferee of the terms and conditions of the exemption. Within 30 days of transferring the property interests, the exemption holder must inform the Commission of the identity and address of the transferee.