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ENVIRONMENTAL ASSESSMENT
FOR EXEMPTION FROM LICENSING

Dexter
(Name of Project)

FERC No. 2695 - 002

New York
(State)

Division of Environmental Analysis
Office of Hydropower Licensing
Federal Energy Regulatory Commission
825 N. Capitol Street, NE
Washington, D.C. 20426

July 15, 1986
(Date)

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ENVIRONMENTAL ASSESSMENT
DIVISION OF ENVIRONMENTAL ANALYSIS, OFFICE OF HYDROPOWER LICENSING
FEDERAL ENERGY REGULATORY COMMISSION

Date: July 15, 1986

Project name: Dexter FERC No. 2695 - 002

A. APPLICATION

1. Application type: Amendment of Exemption Date filed: 10 / 22 / 85

2. Applicant: Hydro Development Group, Inc.

3. Water body: Black River River basin: Black

4. Nearest city or town: Dexter

5. County: Jefferson State: NY

6. Federal lands affected:
 No Yes: _____; acreage = _____
(land management agency)

B. PURPOSE AND NEED FOR ACTION

1. Purpose.

Project power will continue to be sold to Niagara Mohawk Power Corporation.

2. Need for power.

The project is a qualifying facility under the Public Utilities Regulatory Policies Act (PURPA). Under § 213 of PURPA, the authority of the FERC to grant an exemption from licensing is not limited by a determination of the need for power.

C. PROPOSED PROJECT AND ALTERNATIVES

1. Description of the proposed action. The existing project consists of: (1) three concrete gravity dams, one 12 feet in height and 142 feet in length, one 8 feet in height and 145 feet in length, and one 12 feet in height and 433 feet in length, each with 30-inch flashboards; (2) a 120-acre reservoir at an elevation of 262 feet mean sea level; and (3) three powerhouses containing six turbine generators having a combined capacity of 2,320 kilowatts (kW) operating at a hydraulic head of 14 feet. The proposed improvements consist of: (1) structural modification to two existing flumes; (2) retirement of three existing turbine/generator units with a total capacity of 1,500 kW; (3) addition of six turbine/generator units with a total capacity of 3,750 kW, operating under 14-foot hydraulic head; (4) a 4,500 KVA, 2.4kV/24kV electrical substation; (5) three new 2.4kV transmission lines, two of 550-foot length and one of 50-foot length; and (6) appurtenant facilities. The exemptee would also construct a permanent fish ladder at Dam #18 to replace the temporary fish passage facility.

2 Applicant's proposed mitigative measures.

a. Construction. The exemptee proposes to construct a fish ladder, as approved by the U.S. Fish and Wildlife Service (FWS), to allow for upstream passage of chinook and coho salmon at Dam #18. The fish ladder would be located at Dam #18 because approved modification of the dam will result in the most attractive flows for the migrating anadromous fish.

b. Operation. The exemptee proposes to operate the project in a run-of-river mode. The proposed fish ladder would be monitored by both the exemptee and the New York State Office of Environmental Conservation (DEC) to determine a facility operating scheme that is sensitive to migrating fish. The exemptee would also work with FWS and DEC to minimize adverse impacts to a downstream juvenile run associated with low flow operating regimes.

3. Terms and conditions for exemptions from licensing [18 CFR §4.106(b) or 4.94(b)].

- None of the fish and wildlife agencies have provided terms and conditions.
[X] The agencies listed below have provided terms and conditions for the proposed project.

Table with 3 columns: Agency, Attachment, Date of letter. Row 1: U.S. Fish and Wildlife Service, A, 3 / 14 / 86.

4. Alternatives to the proposed project.

a. [X] No other reasonable action alternatives have been found.

Action alternative.

b. Alternative of no action.

No action would prohibit the exemptee from making the proposed modifications or constructing the proposed facilities. No action would involve no alterations to the existing project and would preclude the applicant from constructing a permanent fish ladder.

D. AFFECTED ENVIRONMENT

1. Descriptions of the resources that would be impacted by the proposed project.

a. Geology and Soils. Alfisol soils are usually moist during the warm season of the year but may be intermittently dry in some horizons for short periods. Primarily used for row crops, small grains, and pasture.

b. Streamflow.

low flow: 1200 cfs; flow parameter: exceeded 95% of the time
 high flow: 8700 cfs; flow parameter: exceeded 10% of the time
 average flow: 3,000 cfs; flow parameter: exceeded 50% of the time
 Remarks. Period of record is 1981.

c. Water quality. The water quality of the Black River has been improved in the last several years due to upstream installation of pollution abatement facilities. DEC, by telephone call of 11-6-85, said the project would not significantly affect existing water quality standards. Low flow dissolved oxygen levels of approximately 8.5 mg/l (98% saturation) were recorded at the Watertown gage (1983).

d. Fisheries.

Anadromous: None. X species include: steelhead trout and Pacific salmon.

Resident: None. X Species include: walleye, northern pike, rock bass, black bass, bullhead, yellow perch, and brown trout.

Remarks. The DEC is attempting to introduce Pacific salmon into the Black River to provide an expanded Great Lakes Sport fishery.

e. Vegetation.

Cover type	Dominant species
<u>shallow marsh</u>	<u>cattail, marshgrass</u>
<u>forested river bank</u>	<u>willow, poplars, oaks, maples, hemlock, elm, red pine, and gray birch.</u>

Remarks. _____

f. Wildlife.

Species inhabiting the project area include: pigeon, red-wing black bird, crow, red tail hawk, blue jay, robin, muskrat, raccoon, beaver, mice, rabbits, skunk, and wood chuck.

Remarks. _____

g. Cultural.

There are properties listed on or eligible for listing on the National Register of Historic Places in the area of the project's potential environmental impact.

Description. _____

X national Register (listed and eligible) properties have not been recorded.

Remarks. By letter dated March 5, 1985, the New York State Preservation Officer stated that the project would have no effect on the cultural resources.

h. Visual quality. The dominant visual features of the project area are the three existing reservoirs.

i. Recreation. Fishing has become a particularly popular recreational activity since the inception of the salmon stocking program. In response to this increased use the Village of Dexter recently completed a boat ramp and parking area just west of the project. The applicant, in coordination with DEC and FWS, is nearing completion of a public picnic and boat access area on Fish Island.

j. Land use. Residential developments from the Village of Dexter, are located on the northern side of the project area.

k. Socioeconomics. The economic and social well being of the area is influenced by industry and dairy farming.

l. Ambient noise. Fair because of moderate development adjacent to the project area.

m. Ambient air quality. Fair because of moderate development adjacent to the project area.

n. Other resources. None

E. CONSULTATION AND COMPLIANCE

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

(a) Fish & Wildlife Service (FWS): Yes No (b) State(s): Yes No
(c) National Marine Fisheries Service (NMFS): Yes No

Remarks. NYSDEC and FWS were consulted and commented on the design and location of both the temporary and permanent fish ladder as well as an adequate flow regime.

2. Section 7 consultation (Endangered Species Act).

(a) Listed species: _____

(b) Not required. Required; completed (date): / / .

Remarks. DEC, by telephone call on July 11, 1985, indicated no effect on any endangered or threatened species. FWS letter of 7-3-85 also determined no effect.

3. Cultural resource consultation (Historic Preservation Act).

(a) Register status: None. Potentially eligible. Eligible or listed.

(b) State Historic Preservation Officer (SHPO): Yes No

(c) National Park Service (NPS): Yes No

(d) Council: Not required. Completed (date): / / .

(e) Further consultation: Not required Required.

Remarks. See Section D.g.

4. Recreation consultation [Federal Power Act, §10(a)].

(a) U.S. Owners Yes No (b) NPS: Yes No

(c) State(s): Yes No Remarks. DEC, in a letter dated 7-1-85, stated that the provision of recreational amenities included in the exemption from licensing, was still relevant to the amended project.

5. Wild and scenic rivers (Wild and Scenic Rivers Act).

Status: None. Listed. Determination completed: / / .

Administering agency: _____
Remarks: _____

6. LWCF lands and facilities affected (Land and Water Conservation Fund Act).

Status: None. Designated. Determination completed: / / .

Administering agency: _____
Remarks: _____

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

Resource	Impact			Remarks
	P	Ps	A	
a. Geology/Soils	0			
b. Streamflow	0			
c. Water quality:				
Temperature	0			
Dissolved oxygen	0			
Turbidity and sedimentation	0			
Other:	-			
d. Fisheries:				
Anadromous	0			d.&i. The designated impact levels for fish and wildlife resources assumes that the mandatory terms and conditions set by the federal and state fish and wildlife agencies would protect these resources [see Section C(3)].
Resident	0			
e. Vegetation	0			
f. Wildlife	0			
g. Cultural:				
Archeology	0			
History	0			
h. Visual quality	0			
i. Recreation	IBL			i. & j. Completion of the permanent fish ladder would enhance fishing opportunities in the project area.
j. Land use	IBL			
k. Socioeconomics	0			
l. Ambient noise	0			
m. Ambient air quality	0			

* The assessments reflect any terms and conditions set by the agencies, in addition to the applicant's proposed mitigation. Assessment symbols indicate the following impact levels:

0 = No Impact; 1 = Minor Impact; 2 = Substantial Impact; 3 = Major Impact;
 A = Adverse; B = Beneficial; L = Long-term Impact; S = Short-term Impact.

(e.g., IBL = Minor, Beneficial, long-term Impact)

3. Recommended alternative (including proposed, required, and recommended mitigative measures): X Proposed action Alternative action. No action.

4. Reason(s) for selecting the preferred alternative.

The proposed project is preferred over the no-action alternative because the purpose of the project can be achieved without significant environmental impacts.

I. SUMMARY OF UNAVOIDABLE ADVERSE ENVIRONMENTAL IMPACTS

The proposed capacity addition to the project would have potential adverse impacts on the downstream migration of steelhead trout juveniles and eventually Atlantic salmon because of low flows. The periods of low flow would not be extensive since the fish runs do not include the lowest flow months of July and August. Minor impacts of turbine mortality on juvenile fish would also occur. Installation and removal of the cofferdam would result in minor impacts of erosion and increased turbidity.

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 an 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. LIST OF PREPARERS

<u>Name</u>	<u>Position title</u>
<u>Reed Snyder</u>	<u>Environmental Protection Specialist (Coordinator)</u>
<u>John Novak</u>	<u>Supervisory Fishery Biologist</u>
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<u> </u>	<u> </u>

L. LITERATURE CITED

1. Hydro Development Group, Inc. 1985. Application for an amendment of exemption from licensing, FERC No. 3695, New York. October 22, 1985.

2. The National Atlas, U.S. Geological Survey. 1970. Washington, D.C.



IN REPLY REFER TO
(ER 96/154)

United States Department of the Interior

OFFICE OF THE SECRETARY
Office of Environmental Project Review
1500 Custom House
165 State Street
Boston Massachusetts 02109

March 14, 1986

FILED
OFFICE OF THE SECRETARY
1986 MAR 17 PM 3:21
FEDERAL ENERGY
REGULATORY COMMISSION

Mr. Kenneth F. Plumb, Secretary
Federal Energy Regulatory Commission
825 N. Capitol Street, N.E.
Washington, DC 20426

Dear Mr. Plumb:

The Department of the Interior has reviewed the January 23, 1986 Notice of Application for Amendment of Exemption from Licensing by Hydro Development Group, Inc., for the Dexter Hydro Project, FERC #2695-002, located on the Black River in Jefferson County, New York.

The Amendment would relocate the fishway to Dam #18, providing a more stable attraction flow for upstream fish migration. We support this modification, and we have no objection to the proposed Amendment.

We further prescribe the following terms and conditions relating to the fishway:

1. The Exemptee shall, at its expense, design and make operative structures and procedures to enable anadromous fishes to migrate upstream and, if necessary, downstream past the project works; and
2. The Exemptee shall ensure that the design, location, installation, maintenance, repair and operation of structures necessary for the upstream and, if necessary, downstream migration of fishes past the project conform to the specifications of and are satisfactory to the U. S. Fish and Wildlife Service.

Sincerely,

William Patterson
Regional Environmental Officer