Appendix 1

Resource Agency Terms and Conditions Letters re: South Milton Hydro FERC Exemption No. 3984



DEPARTMENT OF

INLAND FISHERIES AND WILDLIFE

284 STATE STREET AUGUSTA, MAINE 04333

207-289-3371

VII H. MANUEL

VILLIAM PEPPARO

November 5, 1980

Kenneth F. Plumb, Secretary Federal Energy Regulatory Commission 825 No. Capitol Street, N.E. Washington, D.C. 20426

RE: Amended Comments, Project #3222, Salmon Falls River

Dear Mr. Plumb:

In preparing comments for an application for another site on the Salmon Falls River, we find that our comments on Project #3222 may be confusing and should have been stated more clearly. Please accept the following comments in lieu of the comments sent you on October 29, 1980:

Great East Lake, the headwaters of the Salmon Falls River, supports a naturally produced population of lake trout. Maintenance of the lake trout depends on stable water levels. The agreed upon policy with the N.H. Water Control Board is that no more than a 4 foot fall drawdown of Great East Lake shall occur, and the drawdown shall be accomplished by no later than October 15, and no more drawdown should occur throughout the winter until March 31 of the following year. This will permit the survival of lake trout eggs from the time they are laid down until they swim out into deep water. This Department has no objections as long as the current water management regime is maintained.

Sincerely,

Commissioner

GHM: vg

cc: Lyndon Bond, Chief Fisheries Division
Scarborough Headquarters
Gary Dawbin, Energy Office
E. Fritz, Spaulding Fibre Company, Inc.
Robert Rondeau, District Warden



UNITED STATES DEPARTMENT OF THE INTERIOR

FISH AND WILDLIFE SERVICE ECOLOGICAL SERVICES P.O. Box 1518

Concord, New Hampshire 03301

Mr. Howard M. Moffett Orr and Reno Professional Association 95 North Main Street Concord, New Hampshire 03301

Gordon Russell

Dear Mr. Moffett:

This responds to your January 2, 1981 request, for our comments on Spaulding Fibre Company's applications for exemption from Federal licensing at their South Milton and North Rochester, New Hampshire plants. We have reviewed the draft Exhibit E (Environmental Report) for these projects and have visited both sites. Our comments at this time will be preliminary, pending receipt of the notice of application from the Federal Energy Regulatory Commission (FERC).

Our major concerns regarding hydroelectric power generation at both projects pertain to impacts on anadromous fish in the Salmon Falls River and to reduced flows below the project dams. Although there are no existing runs of anadromous fish in the Salmon Falls River above the first dam on the river in Rollinsford, New Hampshire, the Maine Department of Marine Resources has indicated that there is potential for restoring fish runs throughout the entire river. There are no active plans for restoration at this time. However, we will ask that the exemptions be conditioned so that Spaulding Fibre must provide fish passage facilities when plans are initiated to restore anadromous fish runs through the project areas.

Both projects include diversions through penstocks or canals. During times of low flows, these diversions could have significant adverse effects on aquatic habitat in the natural river channel between the dam At the South Milton site roughly 4,600 feet of river and the tailrace. is bypassed by a penstock, while the canal at the North Rochester site would affect about 3,100 feet of river. We will request FERC to condition both exemptions so that adequate flow is provided at each dam to maintain suitable aquatic habitat in the river.

We encourage the applicant to develop a flow regulation plan that will ensure the maintenance of stream habitat for resident and migrating aquatic organisms. The streamflow plan should be based on physical and biological studies of the stream limediately below each dam. These studies should measure how the depth and velocity of water change over a range of flows and what immediate effect this has on the aquatic organisms in the study reach. The range of flows should include, but not necessarily be limited to, those proposed for mitigation by the applicant or consulted resource agencies.

Preferrably, the applicant can manipulate discharges using existing structures to achieve the desired range of streamflow. If this is not possible, suitable simulation techniques should be used to project hydrologic changes based on a more limited amount of actual measurements. (The Fish and Wildlife Service's Instream Flow Methodology is one example of appropriate hydrographic simulation methodology).

The applicant should do the following as part of any streamflow study:

- a. Cross sections should be made at each rate of flow to describe depth, velocity, and percentage of inundated streambed. The number and location of representative cross sections should be agreed upon by State Fish and Wildlife Agencies and the Fish and Wildlife Service. However, it would be the responsibility of the applicant to do the actual hydrologic field work.
- b. Substrate types should be described along with the approximate percentage of each type (boulders, rubble, gravel, etc.), that are inundated at each rate of flow.
- c. The immediate effects of the various rates of flow on aquatic organisms should be described e.g., is there visible stranding of fish and invertebrates at reduced flows? Do the higher flows result in scouring and displacement of aquatic organisms?

The alteration of existing streamflow patterns should be evaluated in terms of impact to fish and other aquatic organisms in the area below each dam. Consideration should also be given to how altered flows will affect potential fishery management plans for this section of the river.

We encourage the applicant to perform the necessary studies as outlined above to arrive at a suitable streamflow regulation plan. In the absence of suitable physical and biological justification for an alternative flow regulation plan, the Fish and Wildlife Service will follow its streamflow policy for New England. This policy states that FWS will recommend median August streamflow for projects on rivers that are essentially free-flowing and that have at least 25 years of U.S. Geological Survey gaging data. On regulated rivers, or on those having inadequate gaging data, the recommendation will be for that discharge equal to 0.5 cubic feet per second per square mile (cfsm) of drainage area above the dam. Additional flows for fish spawning and incubation will be recommended as appropriate.

The Salmon Falls River is regulated by damming, therefore, our recommendation will be based on 0.5 cfsm at the South Milton and North Rochester dams. At the South Milton site, a drainage area of 116 square miles yields 58 cfs for 0.5 cfsm. Similarly, the drainage area at the North Rochester site is 133 square miles, which gives 66 cfs for 0.5 cfsm.

We hope this information will assist you in your planning. Please contact us if we can be of further assistance.

Sincerely,

Gordon E. Beckett Supervisor



United States Department of the Interior

OFFICE OF THE SECRETARY
Northeast Region
15 State Street
Boston, Massachusetts 02109

January 7, 1981

Mr. Howard M. Moffett Orr and Reno 95 North Main Street Concord, New Hamushire 03301

Dear Mr. Moffett:

This is in regard to your Docember 2 letter regarding FERC Exemption Application for hydroelectric power projects on the Salmon Falls River at South Milton and North Rochester, New Hampshire.

It is my understanding that over the past several months you have successfully coordinated this project's development with those Interior offices which would have an interest in it. As a result, this office has no further comments to offer on it.

Sincerely,

Stillion Rawon

William Patterson Regional Environmental Officer CHAIRMAN Raiph H. Gelder



COMMISSIONERS Dianths A. Carrigua Lincoln Smith

PUBLIC UTILITIES COMMISSION 242 State Street State House Station 18 Augusta, Maine 04333 (207) 289-3831

January 6, 1981

Howard Moffitt, Esq. Orr & Reno Concord, N. H.

Gentlemene:

Based on the limited data available, the Commission Staff has no comment at this time on Spaulding Fibre Company's application for the Hydro-electric Power Projects on Salmon Falls River.

Very truly yours,

John R. Leavitt, P.E.

Chief Utility Engineer - Electric

JRL/bp

CHAIRMAN
J. MICHAEL LOVE
COMMISSIONERS
FRANCIS J. RIORDAN
PAUL R. MCQUADE



PUBLIC UTILITIES COMMISSION

8 Old Suncook Road Concord 03301 Telephone Area Code 603 271-2452

January 6, 1981

Howard M. Moffett, Esq. Orr and Reno 95 No. Main Street Concord, New Hampshire 03301

Dear Mr. Moffett:

We are in receipt of your letter of December 2, 1980 requesting our further comments regarding the licensing of your South Milton hydro-electric site in view of your decision to apply for exemption from the licensing requirements of the Federal Power Act.

Your decision to apply for an exemption does not alter our decision to encourage you to proceed.

Very truly yours,

N. H. PUBLIC UTILITIES COMPRISSION

Bruce B. Ellsworth Chief Engineer

BBE: RR

STATE OF NEW HAMPSHIRE



FISH AND GAME DEPARTMENT

Box 2003 34 Bridge Street Concord, N. H. 03301 (603) 271-3421

CHARLES E. BARRY EXECUTIVE DIRECTOR

January 6, 1981

Spaulding Fibre Company, Inc. Technical Papers and Boards Division North Rochester, New Hampshire 03867

Gentlemen:

It does not make any difference to the New Hampshire Fish and Game Department whether the Spaulding Fibre Company, Inc. applies for a federal license or an exemption for its two small hydroelectric power projects on the Salmon Falls River at South Milton and North Rochester New Hampshire. Our concerns remain the same in either case, as stated in our previous correspondence of September 15, 1980.

The New Hampshire Fish and Game Department does not have any plans for restoring anadromous fish (sea run) to the Salmon Falls river in the foreseeable future. However, should these plans change there is the possibility that you would be required to provide fish passage facilities at these sites.

Sincerely yours,

George R. Morrison

George R. Marris

Fish and Wildlife Ecologist

GRM/1 tw



STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

STATE HOUSE - STATION 21 AUGUSTA, MAINE 04333

January 5, 1981

Mr. Howard Moffett Orr and Reno Professional Associates 95 North Main Street P.O. Box 709 Concord, New Hampshire 03301

Dear Mr. Moffett:

This will acknowledge your phone call of last week to Lewis Flagg of this agency. It is our understanding that your client, Spaulding Fiber Company of North Rochester, New Hampshire, is applying for a license exemption from the Federal Energy Regulatory Commission for the following hydroelectric projects on the Salmon Falls River:

South Milton Hydroelectric Site - South Milton, N.H. North Rochester Hydroelectric Site - North Rochester, N.H.

It is our understanding that these sites have been in continuous operation since the early 1900's and are essentially run-of-the-river generating plants. We have no plans at the present time to reestablish anadromous fish runs on the Salmon Falls River. However, future fish production needs, particularly river herring, may require fish passage facilities at some future date. We do have concerns for maintaining fresh water inflows to the estuary below South Berwick as that area does produce limited quantities of alewives, shad, and blueback herring that are locally utilized for lobster bait and food fish.

If these two projects should be utilized for peak power generation, we would recommend that flows be maintained such that an instantaneous minimum flow of 50 CFS can be achieved at South Berwick.

If additional information is necessary, please feel free to contact this office.

Sincerely

SPENCER APOLLONIO Commissioner

SA/dl

cc: Glenn Manuel, Commissioner, Inland Fisheries & Wildlife

CHARLES E. BARRY EXECUTIVE DIRECTOR

OFFICIAL FILE Deers

34 Bridge Street Concord, N.H. 03301 (603) 271-3421

=0

April 20, 1981

Kenneth Plumb, Segretary 1995 Federal Energy Regulatory Commission J 825 N. Capital Street, N.W.

Washington, DC 20426

Dear Mr. Plumb:

This is in response to the Spaulding Fiberboard, Technical Paper and Board Division, No. Rochester, New Hampshire application for a license exemption for the proposed South Milton hydroelectric project located on the Salmon Falls River.

Although the New Hampshire Fish and Game Department, and its comparable state of Maine agency on this border river, have not been actively managing this river for many years due to its heavy pollution load and many dams, there is reason to believe that this situation is changing. Presently, there are plans for introducing rainbow trout to the stretch or river below the present 15 foot high rock crib and timber dam at the South Milton site. This is the section of river where the 3800 foot long penstock bypasses 4600 feet of the river. This stretch of river is quite scenic and should provide good habitat for a put-and-take rainbow trout fishery during the spring months (late April-late June). We do not anticipate any substantial carryover into the summer months as temperatures will probably be at the critical level during this time of seasonal low flows.

In order that this program may be brought to fruition in this area, it will be necessary to have sufficient water in the riverbed itself to provide for the well-being of the resident aquatic community as well as for the stocked rainbows. With this in mind it is now deemed necessary to have a quaranteed minimum flow of no less than 25 cfs with a possible future and adjustment, if necessary, of 0.5 cfsm (58 cfs). This to be negotiated should the necessity arise.

The proximity of this stretch of river to provide a trout fishery to the high density population areas of Rochester and Dover, New Hampshire, make it uniquely attractive. The continuing trend in pollution abatement now allow us to provide good quality trout fishing, even if on a put-and-take basis, where it was impossible trepresent the contract course a few years ago. DOCKETED ---

Sincerely yours,

DOCKET SECTION

Executive Director

CEB/nkc



United States Department of the Interior

2 2.

OFFICE OF THE SECRETARY WASHINGTON, D.C. 20240

ER-81/644

MAY --- 8- 1981

Mr. Kenneth F. Plumb, Secretary Tederal Energy Regulatory Commission 825 North Capitol Street, N.E.-Washington, D.C. 20426

Dear Mr. Plumb:

We have reviewed the application for exemption for small hydroelectric project, South Milton Project, FERC No. 3984, Salmon Falls River, Strafford County, New Hampshire, and York County, Maine, and offer the following comments for your consideration.

The proposed project includes a penstock that bypasses roughly 4,600 feet of the Salmon Falls River. Some of this section of river is high gradient and the substrate is largely bedrock and relatively unproductive as benthic habitat. However, a substantial portion of the bypassed reach is suitable salmonid habitat, at least in the spring and early summer. Elevated water temperatures later in summer, resulting from upstream impoundments, probably preclude year-round residence by trout in this section of the river.

The New Hampshire Fish and Game Department has informed us that . they will soon be stocking rainbow trout in this section of river on a "put-and-take" basis. Most of the stocked fish will be caught in the first two months of the season (May and June). Warm temperatures and upstream flow regulation will limit extended survival after stocking.

The likelihood of fish stocking below the dam necessitates release of an adequate flow through the bypassed reach. The magnitude of this flow will be dependent upon releases from Milton Pond, which are presently maintained above 25 cubic feet per second (cfs) by the New Hampshire Water Resources Board. It will not be possible to set an exact flow until the stocking program begins. Until then, a minimum flow of 25 cfs should be sufficient. In order to maintain suitable fish and wildlife habitat below the project area, an aquatic base flow of 58 cfs should be released at the downstream limit of the project area. The 58 cfs discharge can include that released through the bypassed reach. When inflows to the project area fall below 58 cfs, outflows should be no less than inflows.

DOCKET SENTON

Control of the Control of the Control

There are no active plans for anadromous fish restoration in the Salmon Falls River. In the estuary of the river, there are runs of rainbow smelt, alewives, blueback herring, and American shad. Although there are no current plans (within 25 years) to extend these runs upstream of the first dam on the river, the Maine Department of Marine Resources has indicated that there is potential for restoring anadromous fish throughout the entire main stem of the river.

Pursuant to Article 2 of Section 4.105 of the Energy Security Act of 1980, our Fish and Wildlife Service requests inclusion of the following terms and conditions in the exemption:

- 1. An aquatic base flow of 58 cfs shall be maintained at the down-stream limit of the project area. When inflows to the project area fall below 58 cfs, outflows shall be no less than inflows.
- 2. An interim minimum flow of 25 cfs shall be maintained at the dam during the first year of operation and monitored for its suitability for "put-and-take" management of rainbow trout in the 4,600-foot reach below the dam. The 25 cfs flow can then be adjusted by the New Hampshire Fish and Game Department to maintain this trout fishery once better information is available.
- 3. Upon initiation of an anadromous fish restoration program for the Salmon Falls River, the holder of this exemption will provide adequate fish-passage facilities at this project. Additional streamflow and other measures to accommodate anadromous fish will also be provided as appropriate.

Thank you for the opportunity to comment on this application.

CECIL S. HOPAMANN

Special Assistant to Assistant SECRETARY

cc: Mr. Fred Springer

- white and said of the