

## State of Vermont

Department of Fish and Game Department of Forests, Parks, and Recreation Department of Water Resources & Environmental Engineering Natural Resources Conservation Council

ROUTAGEOCY OF ENVIRONMENTAL CONSERVATION GENERAL NOTED

Montpelier, Vermont 05602 Department of Water Resources and Environmental Engineering

WATER QUALITY DIVISION April 5, 1984

Mr. John Warshow · Winooski Hydroelectric Company 26 State Street Montpelier, VT 05602

> Re: Winooski #8 Hydroelectric Project-Water Quality Certificate

Dear Mr. Warshow;

We are in receipt of your letter dated March 15, 1984 and addressed to Mr. David Clough concerning a proposed amendment to condition B of the Water Quality Certificate for the Winooski #8 Hydroelectric Project. This proposed amendment was submitted in accordance with Condition G of said certificate.

Your proposal is to pass the minimum flow requirement of 25 cfs (or inflow to the impoundment if less) through a mini turbine-generator to be located about 45 feet below the dam's right abutment and gate house. The discharge from this turbine would be directly into the plunge pool just below the dam. proposal is as opposed to passing said flow at the dam.

As you are aware, the minimum flow requirement of 25 cfs over the dam was to maintain water quality standards in the plunge pool as this pool is considered to be an important refuge and habitat area for salmonids.

We have reviewed your proposal and hereby amend Condition B of your 401 as follows:

> A flow of 25 cfs, or inflow to the impoundment if less, shall be passed through a mini turbine/ generator to be located approximately 45 feet below the dam's right abutment and gate house. discharge from this turbine shall be directly into

the plunge pool just below the dam. When the project is not operating, all inflows shall be released at the dam, except during the aforementioned maintenance operations. The applicant shall provide the Department with plans and specifications of the proposed turbine for review and approval prior to project construction; this information shall include a description of the turbine's operating range and a map outlining the location of this turbine and its discharge point in relation to the plunge pool. Following start up of project operation and as soon as stream flows allow, the applicant shall conduct a demonstration for the Department of flows discharged from this turbine to determine if these flows are well circulated throughout the plunge pool.

As you are aware, our approval of passing the minimum flow requirement of 25 cfs through this turbine rather than over the dam is based on water quality only and not aesthetics.

Do not hesitate to contact this office should you have any comments or questions on this matter.

Sincerely,

Alison M. DesMeules Environmental Technician

AMD/rh

cc: Stephen B. Sease, Director, Environmental
Conservation Planning
Angelo Incerpi, Director, Fisheries Management
John Claussen, District Fisheries Biologist
Wayne Foster, Public Service Board
Gordon Stensrud, Public Service Department
Federal Energy Regulatory Commission
Elizabeth Higgins, U.S. Environmental Protection Agency
Gordon Beckett, U.S. Fish and Wildlife Service