

CRESCENT PROJECT

LIHI APPLICATION

ATTACHMENT A

FLOWS



Green Power

Enel Green Power North America, Inc.

One Tech Drive, Suite 220
Andover, Massachusetts USA 01810
T 978 681 1900 F 978 681 7727

LITTLEVILLE POWER COMPANY, INC.
A SUBSIDIARY OF ENEL GREEN POWER NORTH AMERICA, INC.

Via eFiling

January 16, 2014

Gerald L. Cross, P.E.
Regional Engineer
Federal Energy Regulatory Commission
19 West 34th Street, Suite 400
New York, NY 10001

Re: Texon (Crescent) Hydroelectric Project (FERC No. 2986-MA);
Certification of Minimum Flow Compliance

Dear Mr. Cross:

Based on a review of our operating records I hereby certify that, to the best of my knowledge, the Texon (Crescent) Hydroelectric Project (FERC No. 2986-MA) was operated in compliance with the project's minimum flow requirements during 2012.

Please do not hesitate to contact me at (978) 681-1900, extension 809 if you have any questions concerning this certification.

Sincerely,
Littleville Power Company, Inc.

A handwritten signature in black ink, appearing to read "Kevin M. Webb", with a long horizontal line extending to the right.

Kevin M. Webb
Hydro Licensing Manager

cc: J. Schott, LPC
R. Bartlett, LPC



ANTHONY D. CORTESE, Sc. D.
Commissioner

The Commonwealth of Massachusetts

Executive Office of Environmental Affairs

Department of Environmental Quality Engineering

Division of Water Pollution Control

One Winter Street, Boston 02108

RECEIVED
AUG 26 1981

Energy Facilities
Energy Facilities State Council

August 11, 1981

Halliwell Associates, Inc.
865 Waterman Avenue
East Providence, Rhode Island 02914

Re: Water Quality Certification
Texon Hydroelectric
Westfield River
Russell

Dear Mr. Ryder:

In response to your request dated July 28, 1981 submitted on behalf of Texon, Inc., this Division has reviewed your application for a license for the operation and maintenance of a hydropower facility located on the Westfield River, Russell. This certification of water quality is directed solely at the operation of the facility and not any work such as dredging or cofferdam construction which is anticipated prior to operation.

In accordance with the provisions of Section 401 of the Federal Water Pollution Control Act as amended (Public Law 95-217), this Division hereby certifies that, based on information and investigations, there is reasonable assurance that the proposed activity will be conducted in a manner which will not violate applicable water quality standards adopted by this Division under authority of Section 27(5) of Chapter 21 of the Massachusetts General Laws, said water quality standards having been filed with the Secretary of State of the Commonwealth on September 15, 1978.

The proposed activity is a run-of-the-river facility with water being returned to the river through a tailrace, no further than fifty feet downstream of the hydroelectric dam. In order to maintain water quality in the vicinity of the facility, a continuous minimum low flow of 22 cubic feet per second must be maintained. This minimum low flow can be passed either through the tailrace or over the dam.

Should any violation of the water quality standards or the terms of this certification occur as a result of the proposed activity, the Division will direct that the condition be corrected. Non-compliance on the part of the permittee will be cause for this Division to recommend the revocation of the permit(s) issued therefor or to take such other action as is authorized by the General Laws of the Commonwealth. This certification does not relieve the applicant of the duty to comply with any other statutes or regulations.

Very truly yours,



Thomas C. McMahon
Director

TCM/RT/wp

cc: Anthony D. Cortese, Sc.D., Commissioner, Department of Environmental Quality Engineering, One Winter Street, Boston 02108
Morgan Rees, Chief, Permits Branch, Corps of Engineers, 424 Trapelo Road, Waltham 02154
John J. Hannon, Director, Division of Land & Water Use, Department of Environmental Quality Engineering, One Winter Street, Boston 02108
Richard Cronin, Director, Division of Fisheries & Wildlife, 100 Cambridge Street, Boston 02202
Kimball Simpson, Division of Water Pollution Control, Westboro 01581
Robert Smart, Energy Facilities Siting Council, 73 Tremont Street, Boston 02108



UNITED STATES
DEPARTMENT OF THE INTERIOR
FISH AND WILDLIFE SERVICE
ECOLOGICAL SERVICES
P.O. Box 1518
Concord, New Hampshire 03301

FIGURE 3

OCT 03 1980

Mr. Todd Cormier
Halliwell Associates, Inc.
589 Warren Avenue
East Providence, Rhode Island 02914

Dear Mr. Cormier:

This responds to your request for our recommendation concerning streamflow regulation at the Texon hydroelectric project (FERC No. 2986). Our streamflow policy for New England recommends that on regulated rivers such as the Westfield, the Aquatic Base Flow (ABF) be 0.5 cubic feet per second per square mile of drainage area above the dam (cfsm). When inflows to the project area fall below 0.5 cfsm, the greater of inflow or 0.2 cfsm should be released. Drainage area at the Texon dam is roughly 329 square miles, which provides a value of 165 cfs for 0.5 cfsm.

While it is our recommendation that the licensee maintain an adequate maintenance streamflow (0.5 cfsm) at the project, it should not be necessary to spill water over the Texon dam to do so. Because the powerhouse is located adjacent to the dam, outflows from the tailrace will adequately cover the substrate below the dam, provided that operation is run-of-the-river. Lack of streamflow over the dam will expose a stretch of riverbed no more than 50 feet long. There would be a negligible loss of habitat in this area, however, as it consists largely of a vertical bedrock outcrop.

The Aquatic Base Flow (0.5 cfsm) should, therefore, be maintained at the tailrace for the Texon project. This should not affect the power production by the project, as proposed operation is run-of-the-river.

We hope this will clarify our recommendation regarding streamflow regulation at the Texon project.

Sincerely yours,

Gordon E. Beckett
Supervisor


MEMORANDUM

TO: Alan Cooperman
FROM: Bryant Firmin
DATE: July 30, 1981
SUBJECT: Texon, Inc. Hydroelectric Project

On Monday, July 27, 1981, the writer accompanied by Warren Kimball attended a pre-licensing conference regarding Texon, Inc. Hydroelectric proposal to generate electricity on the Westfield River in the Town of Russell, Massachusetts. The conference consisted of an on-site inspection followed by a formal meeting at the Russell Town Hall. Attached is a short narrative of the proposed project and its development.

With respect to water quality standards being maintained at and below the project site, the writer foresees no adverse impact upon the Class B status of the Westfield River as a result of the Texon project. The facility will be a run-of-the-river operation and the water diverted for power above the dam will be returned to the river via an existing tailrace no farther than fifty (50) feet downstream of the dam. Due to the natural dam features and the angle of the effluent discharge no areas of dry river bed will result. In addition, according to the consulting engineer, Jay Ryder of Halliwell Associates, a minimum of 80 cfs will be necessary to generate power which is nearly four times the $Q_{7,10}$ of 22 cfs at the Texon Dam. With no ponding capabilities, the $Q_{7,10}$ will be maintained at all times.

A minimum of dredging will be conducted in the area of the intake structure. There are no industrial discharges upstream and the river is subject to scour several times a year. The fate of the dredge spoils will be addressed in the final exemption/license application to the Federal Energy Regulatory Commission (FERC). These are expected to be minimal and generally clean.

As a result of the assurances given by Texon and Mr. Ryder as to the maintenance of the $Q_{7,10}$ (i.e. run-of-the-river mode of operation) the writer recommends that the Division's Permits Section issue a Water Quality Certificate upon request from Texon, Inc.

BF/deg

cc: Kimball Simpson
Paul Hogan
Rich Tomczyk, Permits Section