

September 19, 2008

Mr. Doug Whittier  
FPL Energy Maine Hydro, LLC  
168 Capital Street, Suite 2  
Augusta, Maine 04330

RE: Maine Pollutant Discharge Elimination System (MEPDES) Permit #ME0001244  
Maine Waste Discharge License (WDL) Application #W000581-5R-E-R  
**Final Permit**  
**Bar Mills Hydro Project**

Dear Mr. Whittier:

Enclosed please find a copy of your **final** MEPDES permit and Maine WDL which was approved by the Department of Environmental Protection. Please read the permit/license and its attached conditions carefully. You must follow the conditions in the permit/license to satisfy the requirements of law. Any discharge not receiving adequate treatment is in violation of State Law and is subject to enforcement action.

Any interested person aggrieved by a Department determination made pursuant to applicable regulations, may appeal the decision following the procedures described in the attached DEP FACT SHEET entitled "*Appealing a Commissioner's Licensing Decision.*"

If you have any questions regarding the matter, please feel free to call me at 287-7693.

Sincerely,

Gregg Wood  
Division of Water Quality Management  
Bureau of Land and Water Quality

Enc.

cc: Fred Gallant, DEP/SMRO  
Sandy Lao, USEPA

## IN THE MATTER OF

|                            |   |                           |
|----------------------------|---|---------------------------|
| FPL ENERGY MAINE HYDRO LLC | ) | MAINE POLLUTANT DISCHARGE |
| HOLLIS, YORK COUNTY, MAINE | ) | ELIMINATION SYSTEM PERMIT |
| COOLING WATER DISCHARGE    | ) | AND                       |
| BAR MILLS HYDRO PROJECT    | ) |                           |
| ME0001244                  | ) | WASTE DISCHARGE LICENSE   |
| W000581-5R-E-R             | ) | <b>RENEWAL</b>            |
| <b>APPROVAL</b>            |   |                           |

Pursuant to the provisions of the Federal Water Pollution Control Act, Title 33 USC, Section 1251, et. seq. and 38 MRSA Sections 413 and 414-A et. seq., and 06-096 CMR 582 (Regulations Relating to Temperature, effective date February 18, 1989, as amended), the Department of Environmental Protection (Department hereinafter) has considered the application of FPL ENERGY MAINE HYDRO LLC (FPL hereinafter) with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

### APPLICATION SUMMARY

FPL has applied to the Department for renewal of combination Maine Pollutant Discharge Elimination system (MEPDES) permit #ME0001244/Department Waste Discharge License (WDL) #W000581-5R-D-R (permit hereinafter) which was issued on February 20, 2004 and is due to expire on February 20, 2009. The license authorized the discharge of up to a daily maximum of 67,000 gallons per day of non-contact cooling water from two outfalls and an unspecified quantity of miscellaneous waste waters and storm water runoff from three additional outfalls from the Bar Mills Hydro Project to the Saco River in Hollis, Maine.

### PERMIT SUMMARY

This permitting action carries forward all the terms and conditions of the 2/20/04 permit.

## CONCLUSIONS

BASED on the findings in the attached Fact Sheet dated August 15, 2008, and subject to the Conditions listed below, the Department makes the following conclusions:

1. The discharge, either by itself or in combination with other discharges, will not lower the quality of any classified body of water below such classification.
2. The discharge, either by itself or in combination with other discharges, will not lower the quality of any unclassified body of water below the classification which the Department expects to adopt in accordance with state law.
3. The provisions of the State's antidegradation policy, 38 MRSA Section 464(4)(F), will be met, in that:
  - (1) Existing in-stream water uses and the level of water quality necessary to protect and maintain those existing uses will be maintained and protected;
  - (2) Where high quality waters of the State constitute an outstanding national resource, that water quality will be maintained and protected;
  - (3) The standards of classification of the receiving water body are met or, where the standards of classification of the receiving water body are not met, the discharge will not cause or contribute to the failure of the water body to meet the standards of classification;
  - (4) Where the actual quality of any classified receiving water body exceeds the minimum standards of the next highest classification, that higher water quality will be maintained and protected; and
  - (5) Where a discharge will result in lowering the existing quality of any water body, the Department has made the finding, following opportunity for public participation, that this action is necessary to achieve important economic or social benefits to the State.
4. The discharge will be subject to effluent limitations that require application of best practicable treatment.
5. The discharge is necessary and there are no other reasonable alternatives available.

**ACTION**

THEREFORE, the Department APPROVES the application of FPL ENERGY MAINE HYDRO LLC, to discharge up to 67,000 gallons per day of non-contact cooling water at a temperature not to exceed 95 degrees Fahrenheit and an unspecified quantity of miscellaneous waste water and storm water runoff from the Bar Mills Hydro Project to the Saco River in Hollis, Maine, as described above, SUBJECT TO ALL APPLICABLE STANDARDS AND REGULATIONS AND THE FOLLOWING CONDITIONS:

1. *“Maine Pollutant Discharge Elimination System Permit Standard Conditions Applicable To All Permits,”* revised July 1, 2002, copy attached.
2. The attached Special Conditions, including any effluent limitations and monitoring requirements.
3. This permit expires five (5) years from the date of signature below.

DONE AND DATED AT AUGUSTA, MAINE, THIS 18<sup>th</sup> DAY OF September, 2008.

COMMISSIONER OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
David P. Littell, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application August 8, 2008.

Date of application acceptance August 11, 2008.

Date filed with Board of Environmental Protection \_\_\_\_\_

This Order prepared by Gregg Wood, Bureau of Land and Water Quality

## **SPECIAL CONDITIONS**

### **A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

1. The discharge shall not contain a visible oil sheen, foam, or floating solids at any time that would impair the designated uses or habitat characteristics of the receiving waters or would otherwise lower the quality of the receiving water below its assigned classification.
2. The discharge shall not impart color, taste, turbidity, toxicity, or other properties that would impair the designated uses or habitat characteristics of the receiving waters or would otherwise lower the quality of the receiving water below its assigned classification.
3. The permittee shall notify DEP immediately of the discharge of any pollutants other than heat from the facility. The permittee shall also notify DEP of any changes in facility design, operation or generating capacity that may affect the flow or temperature of the cooling water discharge.
4. All miscellaneous facility leakage and lubrication waters that may become contaminated with oil or grease shall be subject to Best Management Practices (BMPs) designed to prevent the release of contaminants to the waters of the state. Within 90 days of permit issuance, BMPs shall be developed by the permittee and shall be available in writing for DEP review and approval upon request. BMPs may consist of, but not be limited to, the following, as appropriate: development and implementation of a spill prevention plan; use of oil absorbent pads or booms and/or physical berms to contain spills or leaks of hydraulic and lubrication oils; and the treatment of water collected in floor drains and sumps through an oil/grease trap or oil-water separator. Where bearing cooling water is used, BMPs shall include the maintenance of a written log or record of bearing oil levels and maintenance activities. Where floor drains and sumps are used, BMPs shall include (1) written procedures for the cleaning and maintenance of any oil-grease trap, oil skimmer or oil-water separator and (2) maintenance of a written log or record of visual inspections of sumps for oil and grease and of actions taken to prevent the discharge of oil or grease from the facility.

### **B. UNAUTHORIZED DISCHARGES**

The permittee is authorized to discharge only in accordance with the terms and conditions of this permit. Discharges of waste water from any other point source are not authorized under this permit, but shall be reported in accordance with Standard Condition B(5) (*Bypass*) of this permit.

**SPECIAL CONDITIONS**

**C. NOTIFICATION REQUIREMENT**

In accordance with Standard Condition D, the permittee shall notify the Department of any substantial change in the volume or character of pollutants being discharged.

**D. REOPENING OF PERMIT FOR MODIFICATIONS**

Based upon site inspections, additional site specific or any other pertinent information or test results obtained during the term of this permit, the Department may, at anytime and with notice to the permittee, modify this permit to establish limitations or require additional monitoring, inspections and/or reporting based on the new information.

**E. SEVERABILITY**

In the event that any provision, or part thereof, of this permit is declared to be unlawful by a reviewing court, the remainder of the permit shall remain in full force and effect, and shall be construed and enforced in all respects as if such unlawful provision

**MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
AND  
MAINE WASTE DISCHARGE LICENSE**

**FACT SHEET**

Date: **August 15, 2008**

PERMIT NUMBER: **ME0001244**

LICENSE NUMBER: **W000581-5R-E-R**

NAME AND ADDRESS OF APPLICANT:

**FPL ENERGY MAINE HYDRO LLC  
168 Capitol Street, Suite 2  
Augusta, Maine 04330**

COUNTY: **York County**

NAME AND ADDRESS WHERE DISCHARGE(S) OCCUR(S):

**BAR MILLS HYDRO PROJECT  
18 Canal Road, Route 4  
Hollis, Maine 04042**

COGNIZANT OFFICIAL AND TELEPHONE NUMBER: **Doug Whittier  
(207) 621-4157 Ext. 12**

**1. APPLICATION SUMMARY**

- a. Application: FPL Energy Maine Hydro LLC (FPL hereinafter) has applied to the Department for renewal of combination Maine Pollutant Discharge Elimination system (MEPDES) permit #ME0001244/Department Waste Discharge License (WDL) #W000581-5R-D-R (permit hereinafter) which was issued on February 20, 2004 and is due to expire on February 20, 2009. The permit authorized the discharge of up to a daily maximum of 67,000 gallons per day of non-contact cooling water from two outfalls and an unspecified quantity of miscellaneous waste waters and storm water runoff from three additional outfalls from the Bar Mills Hydro Project to the Saco River in Hollis, Maine.

## 1. APPLICATION SUMMARY (cont'd)

- b. History: The most current relevant regulatory actions and or significant events include the following:

*May 24, 1985* - The Department issued amendment and renewal order #W000581-57-A-R to Central Maine Power.

*December 23, 1998* - The Department issued global transfer #W000581-5R-C-T transferring #W000581-57-A-R from Central Maine Power to FPL Energy Maine.

*February 5, 1999* - The Department issued renewal order #W000581-5R-B-R.

*January 12, 2001* – The State of Maine received authorization from the U.S. Environmental Protection Agency (EPA) to administer the National Pollutant Discharge Elimination System (NPDES) permitting program in Maine. From this date forward, the program has been referred to as the Maine Pollutant Discharge Elimination System (MEPDES) permit program.

*February 20, 2004* – The Department issued combination MEPDES permit #ME0001244/WDL #W000581-5R-D-R for a five-year term.

*August 8, 2008* – FPL submitted a timely and complete application to renew the MEPDES permit for the Bar Mills Hydro Project.

- c. Source Description: The source of the discharge is a hydroelectric generating facility. The discharge consists of non-contact cooling water. The discharge flow rate is variable, depending on cooling needs, up to a maximum flow of 67,000 gallons per day (maximum cooling system capacity, based on information from applicant). The discharge occurs from two separate outfalls.

Other miscellaneous discharges from the facility consist of shaft lubrication waters, foundation leakage waters, and/or leakage from wicket gates and other equipment. In the event of unplanned leaks, spills or equipment failure, these discharges may become contaminated with hydraulic or lubrication oil and grease.

## 2. CONDITIONS OF PERMITS

Maine law, 38 M.R.S.A. Section 414-A, requires that the effluent limitations prescribed for discharges require application of best practicable treatment, be consistent with the U.S. Clean Water Act, and ensure that the receiving waters attain the State water quality standards as described in Maine's Surface Water Classification System. "Best practicable treatment" (BPT) means the methods of reduction, treatment, control and handling of pollutants for a category or class of discharge sources that are best calculated to protect and improve the quality of the receiving water and that are consistent with the requirements of the Federal Clean Water Act.



## **2. CONDITIONS OF PERMITS (cont'd)**

Maine law, 38 M.R.S.A., Section 420, and Department Regulation Chapter 530, *Surface Water Toxics Control Program* requires the regulation of toxic substances at the levels set forth for Federal Water Quality Criteria as published by the U.S. Environmental Protection Agency pursuant to the Clean Water Act.

Maine law, 38 MRSA Section 414-A requires that a discharge, either by itself or in combination with other discharges, not lower the quality of any classified body of water below its assigned classification. Therefore, discharges shall be subject to any additional effluent limitations required to meet applicable water quality standards.

## **3. RECEIVING WATER QUALITY STANDARDS**

At the point of discharge, the Saco River is classified as having Class A waters.

Class A waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as natural. The dissolved oxygen content of Class A waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. Discharges into Class A waters licensed prior to January 1, 1986, are allowed to continue only until practical alternatives exist.

## **4. REGULATIONS RELATING TO TEMPERATURE**

The Department's Chapter 582, *Regulations Relating to Temperature* states that no discharge shall cause the ambient temperature of any freshwater body to be raised more than 5 degrees Fahrenheit, nor shall any discharge cause the temperature of any waters to exceed the U.S. Environmental Protection Agency's (EPA) national ambient water quality criteria established to protect all species of fish that are indigenous to the receiving waters. When the ambient temperature of any body of water naturally exceeds the applicable EPA criteria, no thermal discharge may be allowed which alone or in combination with other discharges would raise the ambient temperature of the receiving water more than 0.5 degrees Fahrenheit.

The Department has established that cold water fish species are indigenous to all Maine rivers and streams. EPA has established maximum temperatures for the protection of growth and survival of cold water fish as follows: a weekly average temperature of 66 degrees Fahrenheit; and a daily maximum temperature of 73 degrees Fahrenheit.

## **5. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

EPA has not promulgated National Effluent Guidelines for non-contact cooling water. The DEP has made a Best Professional Judgment (BPJ) determination that BPT for hydro project cooling water is no treatment.

The Department has calculated that, under worst case conditions of maximum cooling water flow (67,000 GPD), maximum cooling water temperature (assumed 95 degrees Fahrenheit, based on staff analysis of industry data), and 7Q10 receiving water flow (440 cfs), and without any treatment to reduce thermal loading, the discharge will raise the ambient temperature of the receiving water by only 1/100<sup>th</sup> of a degree Fahrenheit. Therefore, the Department has determined that neither effluent limitations nor monitoring requirements are necessary to ensure that applicable water quality standards are met.

## **6. PUBLIC COMMENTS**

Public notice of this application was made in the Journal Tribune on or about August 4, 2008. The Department receives public comments on an application until the date a final agency action is taken on that application. Those persons receiving copies of draft permits shall have at least 30 days in which to submit comments on the draft or to request a public hearing, pursuant to Chapter 522 of the Department's rules.

## **7. DEPARTMENT CONTACTS**

Additional information concerning this permitting action may be obtained from and written comments should be sent to:

Gregg Wood  
Department of Environmental Protection  
Bureau of Land and Water Quality  
Division of Water Quality Management  
17 State House Station  
Augusta, Maine 04333-0017 Telephone (207) 287-7693  
e-mail: [gregg.wood@maine.gov](mailto:gregg.wood@maine.gov)

## **8. RESPONSE TO COMMENTS**

During the period of August 15, 2008, through the issuance date of the permit/license, the Department solicited comments on the proposed draft permit/license to be issued for the discharge(s) from the Bar Mills Hydro Project. The Department did not receive comments from the permittee, state or federal agencies or interested parties that resulted in any substantive change(s) in the terms and conditions of the permit. Therefore, the Department has not prepared a Response to Comments.