

Monday, February 13, 2012

Ms. Debra A. Howland
Executive Director and Secretary
New Hampshire Public Utilities Commission
21 South Fruit St., Suite 10
Concord, NH 03301-2429

**RE: Burnham (Pittsfield) Hydroelectric Project (FERC No. P-11472) / (QF 06-320-000)
– Request for Certification as a Class IV Renewable Energy Source**

Dear Ms. Howland:

KEI (Maine) Power Management (II) LLC ("KEI") hereby requests that the New Hampshire Public Utilities Commission certify KEI's Burnham (Pittsfield) Hydroelectric Project (FERC No. P-11472) as an eligible Class IV renewable energy source pursuant to New Hampshire R.S.A 362-F:4(IV) and F:13 and Admin. Code Puc 2502.10 Electric Renewable Portfolio Standard.

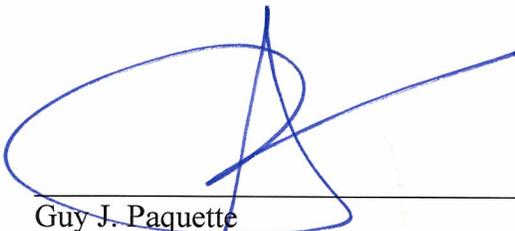
KEI acquired the facility from Ridgewood Maine Hydro Partners, L.P. on November 20th, 2009. The Project is designated as the Burnham Hydroelectric Project in FERC correspondence, Burnham being the city where the generating station is located. In the NEPOOL GIS, the Project is registered as the Pittsfield Project from the name of the city where the dam is located.

In Support of the request for Class IV eligibility for the Burnham (Pittsfield) Hydroelectric Project, KEI submits an original and seven copies of the completed application, required documentation and supplemental supporting information.

Thank you for your consideration of KEI's request. If you have any questions or need additional information, please contact

Stéphane Cohen
KEI (USA) Power Management Inc.
c/o Kruger Energy Inc.
3285 chemin Bedford
Montreal, Québec
H3S 1G5
E-mail: stephane.cohen@kruger.com
Tel: 514-343-3100 ext. 2109





Guy J. Paquette
Vice President, Corporate and Legal Affairs

**STATE OF NEW HAMPSHIRE
PUBLIC UTILITIES COMMISSION
SAMPLE APPLICATION FORM
FOR RENEWABLE ENERGY SOURCE ELIGIBILITY
Pursuant To New Hampshire Admin. Code Puc 2500 Rules**

1. ELIGIBILITY CLASS APPLIED FOR: I II III IV

2. Applicant's legal name: KEI (Maine) Power Management (II) LLC
c/o KEI (USA) Power Management Inc.

3. Address: 3285 Bedford Road, Montreal, Quebec, Canada H3S 1G5

4. Telephone number: (514) 343-3100 ext. 2109

5. Facsimile number: (514) 343-3124

6. Email address: stephane.cohen@kruger.com

7. Facility name: Burnham (Pittsfield) Hydroelectric Project (FERC No. 11472)
/ (QF 06-320-000)

8. Facility location: 1364 Main Street, Burnham, Maine 04967

9. Latitude: 44.720309 **Longitudes:** -69.413338

10. The name and telephone number of the facility's operator, if different from the owner:

Lewis C. Loon
KEI (USA) Power Management Inc.
Manager, Operations and Maintenance – Maine
37 Alfred Plourde Parkway, Suite 2, Lewiston, ME 04240
(207) 786-8834

11. The ISO-New England asset identification number, if applicable: Asset ID. 2209

12. The GIS facility code, if applicable: MSS2209

13. A description of the facility, including fuel type, gross nameplate generation capacity the initial commercial operation date, and the date it began operation, if different.

The Burnham (Pittsfield) Hydroelectric Project ("the Project") was constructed in 1929 by Central Maine Power Company and owned and operated by Consolidated Hydro Maine, Inc. & Ridgewood Maine Hydro Partners, LP from 1986 to 2009. The Project was then acquired by KEI (Maine) Power Management (II) LLC on November 20th, 2009 (details of license transfer can be found in attachment 7). The project works consist of: (1) a 615-foot-long dam with: (a) a central concrete Ambursen type structure topped by a 208.5' long concrete ogee spillway with 4.3-foot-high steel flash boards; (b) four 9.5' wide stoplog bays; (c) an intake section with trashracks and headgates; and (d) a combined crib dike and retaining wall to the east of the dam, and a 140' long earthen dike with a concrete core wall to the west of the dam; (2) a 304-acre impoundment with a normal water surface elevation of 165.9 feet mean sea level (including flashboards); (3) a 495-foot-long, 12-foot-diameter penstock from the intake structure to the powerhouse; (4) a powerhouse containing three generating Francis turbine units with a combined installed capacity of 1,050 kW; (5) a 300-foot-long tailrace; (6) a substation; and (7) appurtenant facilities.

The Project is operated in the following manner. When inflows to the project equal or exceed the combined hydraulic capacity of the project's three turbines, approximately 650 cubic feet per second (cfs), the Project is operated in a run-of-river mode, with excess flows passing over the top of the flashboards. At intermediate flows, inflows are regulated with a PLC pond level control system, regulating the pond levels at the crest of the flashboards. The PLC control system is also programmed to dispatch unit operation based on head pond levels. When inflows fall below a predetermined set point, typically the crest of the flashboards the PLC control systems is designed to shutdown unit operations. Once flows have recovered to a predetermined set point the PLC will initiate the start sequence and dispatch the unit(s) to restart. The control system is designed to operate in a manner that the inflow will equal outflow for continuous run-of-river operations.

14. If Class I certification is sought for a generation facility that uses biomass, the applicant shall submit:

(f) N/A: Class I certification is NOT being sought for a generation facility that uses biomass.

15. If Class I certification is sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies to produce energy, the applicant shall:

(c) N/A: Class I certification is NOT being sought for the incremental new production of electricity by a generation facility that uses biomass, methane or hydroelectric technologies.

16. If Class I certification is sought for repowered Class III or Class IV sources, the applicant shall:

(c) N/A: Class I certification is NOT being sought for repowered Class III or Class IV sources.

17. If Class I certification is sought for formerly nonrenewable energy electric generation facilities, the applicant shall:

(c) N/A: Class I certification is NOT being sought for formerly nonrenewable energy electric generation facilities

18. If Class IV certification is sought for an existing small hydroelectric facility, the applicant shall submit proof that:

(a) it has installed upstream and downstream diadromous fish passages that have been required and approved under the terms of its license or exemption from the Federal Energy Regulatory Commission, and

(b) when required, has documented applicable state water quality certification pursuant to section 401 of the Clean Water Act for hydroelectric projects.

KEI (Maine) Power Management (II) LLC, is party to the Kennebec Hydro Developers Group (KHDG) Agreement which requires the Project to take certain actions that would provide for fish passage at the site thus allowing for the passage of sufficient numbers of targeted species per the State fisheries restoration goals. By order issued September 16, 1998, the FERC approved the KHDG Agreement and amended the Burnham application to include the applicable fish passage provisions of the KHDG Agreement (dated May 26, 1998). The Water Quality Certification also includes requirements for fish passage facilities. As noted in the FERC license, the permanent downstream fish passage was already in place and in operation at the Project at the time of the FERC license issuance.

On February 1, 2007, the operations and maintenance plan, and effectiveness study plan for upstream and downstream fish passage at the Project were approved (related document can be found in attachment 1), followed by the approved exhibit F as built drawings of the upstream fish passage (related document can be found in attachment 2). In compliance with the FERC license (found in attachment 3) for the Project issued April 7, 2004 (107 FERC ¶62,006), and associated

Water Quality Certification (found in attachment 4) issued by the State of Maine Department of Environmental Protection on February 10, 2004 (#L-17810-33-J-N), both upstream and downstream diadromous fish passage facilities as well as both upstream and downstream eel passage facilities were constructed and are currently operated at the Project. Please see attachment 8 for project photographs.

19. If the source is located in a control area adjacent to the New England control area, the applicant shall submit proof that the energy is delivered within the New England control area and such delivery is verified using the documentation required in PUC 2504.01(a) (2) a. to e.

N/A, the Project is located within the NE control area.

20. All other necessary regulatory approvals, including any reviews, approvals or permits required by the NITDES or the environmental protection agency in the facility's state.

Please see attachment 3 for the FERC license for the Project (issued April 7, 2004) which also contains the provisions of the Water Quality Certification (issued by the State of Maine on February 10, 2004) for the Project found in attachment 4.

21. Proof that the applicant either has an approved interconnection study on file with the commission is a party to a currently effective interconnection agreement, or is otherwise not required to undertake an interconnection study.

The Project currently has an interconnection agreement with Central Maine Power Company (agreement No. IA-CMP-24). This agreement was signed on December 31st, 2008 and made effective as of January 1, 2009 and will remain effective for a period of 20 years since the date of emission. Due to confidentiality reasons we have not attached the interconnection agreement to this application.

22. A description of how the generation facility is connected to the regional power pool of the local electric distribution utility.

Electric power is delivered from the interconnection of the Project's 34 kV cable to Central Maine Power's (CMP) 34 kV distribution circuit tap 807D1 located on CMP's Distribution Circuit Tap 807D1.

23. A statement as to whether the facility has been certified under another non- federal jurisdiction's renewable portfolio standard and proof thereof.

The Project currently qualifies as a Class II renewable energy source in the state of Connecticut and as a Class II renewable energy source in the state of Maine. Please see attachment 5 for the GIS certificate information sheets.

24. A statement as to whether the facility's output has been verified by ISO-New England.

The Project is a settlement only generator (asset identification number 2290) and its output is verified by the ISO-New England.

25. A description of how the facility's output is reported to the GIS if not verified by ISO-New England.

N/A, the Project's output is verified by the ISO-New England.

26. An affidavit by the owner attesting to the accuracy of the contents of the application.

Please see attachment 6 for affidavit of Guy J. Paquette, Vice President, Corporate and Legal Affairs of KEI (Maine) Power Management (II) LLC, attesting to the accuracy of the contents of this application.

27. Such other information as the applicant wishes to provide to assist in classification of the generating facility.

The Project's license transfer from Ridgewood Maine Hydro Partners, L.P. to KEI (Maine) Power Management (II) LLC, a wholly owned subsidiary of KEI (USA) Power Management Inc. was approved per FERC order dated September 23, 2009 (128 FERC ¶62,226). Please see attachment 7 for a copy of the approval.

29. Preparer's information:

Name: Stéphane Cohen

Title: Junior Mechanical Engineer, Hydro Sector of Kruger Energy Inc.

Address: 3285 chemin Bedford, Montreal, Quebec, Canada, H3S 1G5.

30. Preparer's signature:

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ATTACHMENTS

ATTACHMENT 1

**ORDER APPROVING UPSTREAM AND DOWNSTREAM FISH PASSAGE AND
MAINTENANCE PLAN AND EFFECTIVENESS PLAN**

UNITED STATES OF AMERICA 118 FERC ¶ 62,100
FEDERAL ENERGY REGULATORY COMMISSION

Ridgewood Maine Hydro Partners, L.P.

Project No. 11472-044

ORDER APPROVING UPSTREAM AND DOWNSTREAM
FISH PASSAGE OPERATION AND MAINTENANCE PLAN
AND
EFFECTIVNESS TESTING PLAN

(Issued February 1, 2007)

On November 1, 2006, Ridgewood Maine Hydro Partners, L.P. (licensee) filed two plans for its Burnham Hydroelectric Project (FERC No. 11472) pursuant to license article 401¹ and the State of Maine Department of Environmental Protection's (MDEP) water quality certificate (WQC) conditions 2(E) and 2(F). The licensee's filing included an Upstream and Downstream Fish Passage Operation and Maintenance Plan, and a Fish Passage Effectiveness Testing Plan. The Burnham Project is located on the Sebasticook River, a tributary of the Kennebec River, in Somerset and Waldo Counties, Maine.

LICENSE REQUIREMENTS

License article 401 requires that the licensee file specific plans or study results, in conformance with the conditions stipulated by MDEP's water quality certificate and after consultation with the resource agencies. For each plan and study, the licensee is required to submit to the Commission documentation of its consultation with the MDEP, the U.S. Fish and Wildlife Service (FWS), the Maine Department of Inland Fisheries and Wildlife (MDIFW), and the Maine Department of Marine Resources (MDMR). Further, article 401 requires the licensee's filing to include copies of comments and recommendations made in connection with the plan or report, and a description of how the plan or report accommodates the agencies' comments or recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. Article 401 reserved the Commission's right to make changes to the plans or reports.

On February 10, 2004, the MDEP granted water quality certification under Section 401 of the Clean Water Act to the licensee for operation of the Burnham Project. Condition 2(E) requires the licensee to submit final design and operational plans for all

¹ Order Issuing Original License. 107 FERC ¶ 62,006 (Issued April 7, 2004).

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permanent upstream and downstream fish passage facilities and/or operational measures to the MDEP for their review and approval. Condition 2(F) states that the licensee shall, in consultation with state and federal fisheries agencies, conduct a study or studies to determine the effectiveness of all permanent upstream and downstream fish passage facilities and/or operational measures, in accordance with the terms of the KHDG Settlement Agreement.² Additionally, condition 2(F) requires the licensee to provide the results of the study or studies, to the agencies and Commission. The MDEP reserved its authority, after notice and opportunity for hearing, to require reasonable changes in the design and/or operation of the fish passage facilities as may be deemed necessary to adequately pass fish through the project site.

THE LICENSEE'S PLANS

The first part of the licensee's November 1, 2006 filing describes operation and maintenance of upstream and downstream passage facilities for both anadromous and catadromous fishes. The second section describes the effectiveness study for these two different types of migrating fishes. Lastly, the licensee's plan describes how it proposes to report the results of its studies.

I. Operation and Maintenance of Fish Passage Facilities

1. *Downstream Fish Passage for Anadromous Migrants*

The licensee proposed to operate the downstream fish passage facility, with the required attraction flows, from June to mid-July for passage of spent adult clupeids, and from September to November 30 to pass juvenile clupeids. The licensee proposed that the operational season begin by April 15 and extend into the fall until ice formation once the need to pass Atlantic smolts and kelts is determined. The licensee stated that future refinement of the operational timing will be made as information on the behavior of migrants at the project is obtained and in consultation with MDMR and the Maine Atlantic Salmon Commission (MASC). Since the bypass system will also provide passage of the required minimum flow releases, the licensee stated it will typically operate on a year-round basis with varying flows. The licensee stated that flows in the bypass system during the non-passage seasons will be limited to those required to satisfy minimum flow requirements at the project. The licensee added that the settings for the combined fish passage and downstream fish bypass system will be based on calculations

² An Agreement between members of the Kennebec Hydro Developers Group (KHDG), the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the U.S. Fish and Wildlife Service, dated May 26, 1998.

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of the opening necessary to provide the required minimum flow with the impoundment drawn down one foot below the top of the flashboards.

The licensee stated that its roving operator routinely visits the project, typically a minimum of three times per week during unit operation and once per week during non-operational periods. The licensee indicated that the operator checks the bypass system for debris clogging, proper gate adjustment, and cleans the trashracks when needed. Rack cleaning will be accomplished with standard rack brushing equipment. During cleaning the unit flow may be reduced to assist in cleaning operations. If the intake is equipped with overlays and the overlays cannot be adequately cleaned by normal means, the licensee stated individual overlay sections would be temporarily removed and cleaned above deck or reversed and reinstalled to allow accumulated debris to pass through the unit. The licensee stated that during the migration season, when the overlays are not installed, the unit will be placed in minimum generation mode or taken off-line to reduce the risk of entrainment. The licensee added that during the non-passage season the overlays will be removed to avoid clogging. The licensee proposed that annual maintenance would include (if necessary) dewatering to remove accumulated debris within the bypass system and checking the structure's integrity. Minimum flow releases during maintenance activities would be maintained either through spillage over the dam, by the use of the deep gate(s), or by some combination of the available project features.

2. Upstream Fish Passage for Anadromous Migrants

The licensee proposed to operate the upstream passage system annually beginning May 1 until June 15. Initially the licensee stated the facility would discontinue operation between June 15 and November 30. The licensee proposed to modify this non-operational period should Atlantic salmon migrants be observed or documented as present and require passage. The presence of Atlantic salmon will be determined in consultation with the MASC and confirmation that salmon passage is occurring at the downstream Benton Falls Project (FERC No. 5073). The licensee stated that the facility will not operate from November 30 to May 1. The licensee added that the operational period may be modified on an annual basis based on direction from the MDMR and MASC to account for annual variations of the start and end of the spring migration.

The licensee stated that the upstream fish passage facility is automatically controlled through the use of a programmable-logic-controller (PLC). Flows entering the exit channel are directed to the upstream end of the hopper area through a single manually adjusted valve. The licensee stated that during the passage season, the valve would be set daily (except weekends) to match headpond levels. The licensee proposed to set the valve late Friday to match anticipated impoundment levels during the weekend. The PLC

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monitors tailrace water levels and adjusts the entrance gate to maintain an approximate 6-inch differential between the lift's lower collection chamber and the tailwater level. The licensee stated that the gate is adjusted once a change of three inches or more has occurred in the tailwater level.

The licensee proposed to operate the automated passage system from 6:00 a.m. to 7:00 p.m. daily during the passage season. The licensee stated that the cycle time of the fish passage system would vary based on the number of fish being passed. During the early portion of the operational period, the licensee proposed to adjust the facility cycle to 4-hour increments. As the number of fish utilizing the facility increases, the licensee stated the cycle would be shortened to increase the number of daily cycles until the peak run has passed. After the peak run has passed the cycle time would be readjusted to a cycle time no longer than 4-hours. The licensee stated that adjustment of the cycle time would be based on direction from MDMR to match timing and duration of cycles to the annual variation in timing of the spring migration.

The licensee stated that its roving operator typically visits the site a minimum of three times per week during generation, and once per week during non-operational periods. The licensee stated that the operator will check the elevator system for debris clogging, proper gate and valve adjustment, function of the automatic system, mechanical operation and remove debris as required for proper operation. The licensee added that during cleaning, the passage flow may be temporarily reduced or stopped to assist in cleaning operations. The licensee stated that during the non-passage season the facility would remain in a watered condition, but all valves and gates would be closed to stop all flows through the elevator system. The licensee indicated that the main hopper and separator screen would be raised and the crowder assembly would be placed in its full open position and the entire facility would de-energized. The licensee stated that annual maintenance would include (if necessary) dewatering to remove accumulated debris within the system and checking the various mechanical and electrical systems for integrity and operation.

3. Downstream Eel Passage for Catadromous Migrants

The licensee stated that the downstream eel passage systems would typically be placed in operation by September 1 of each year and operated until the earlier of November 30 or a date mutually agreed upon with the MDMR. The licensee proposed to fully open the unit intake bypass system during the nighttime hours only and close it during daytime hours. The licensee stated that its roving operator would check the various bypass systems for debris clogging and clean the trashracks when needed. The licensee stated that the operator would observe the forebay and tailrace areas for evidence

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of eel mortality and, if discovered, notify the MDMR to determine what, if any, appropriate action(s) should be taken. The licensee stated that annual maintenance would include (if necessary) dewatering to remove accumulated debris within the forebay and dam bypass systems and checking the structure's integrity.

4. *Upstream Eel Passage for Catadromous Migrants*

The licensee proposed to operate the upstream eel ladder from June 1 to September 1. The licensee proposed that the timing for beginning and stopping annual operation may be modified through mutual agreement between the licensee and MDMR to account for annual variations in timing of the migration caused by high river flows and or delayed warming of river temperatures. The licensee stated that future refinement of the operational timing would be made in consultation with the MDMR as information on the behavior of migrants at the project is obtained.

The licensee stated that daily adjustment to the ladder is not required; however, during periods of high river flows, the deep gates may be opened requiring the lower ladder section to be raised to prevent damage. The licensee added that the ladder section would be returned to its operational position once river flows have receded. The licensee indicated that various components of the ladder system, such as the pump, may be removed and serviced during the non-passage season.

The licensee stated that its roving operator would check the ladder and attraction flow system for high water damage, debris clogging, vandalism, proper adjustment, and pump operation. The licensee added that additional checking would occur after major storm events. The licensee proposed that annual maintenance would include (if necessary) dewatering to remove accumulated debris within the ladder system, checking the structure's integrity, repairing or replacing the attraction flow pump, piping, and ladder substrate.

II. Effectiveness Testing

1. *Downstream Fish Passage Effectiveness Study for Anadromous Migrants*

The licensee stated that downstream fish passage effectiveness has previously been evaluated based on visual documentation of bypass use and the lack of tailrace mortality. The licensee proposed to continue to have its staff visually observe the dam intake and bypass entrance and exit to document use of the system by downstream migrants. The licensee stated that it would also observe the tailrace area for evidence of predation or mortality and that weekday observations would be made throughout the daylight and

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evening hours during the passage season. The licensee stated that observations would be documented throughout the study period and summarized in a report for review by the resource agencies.

The licensee proposed to conduct a quantitative effectiveness study to document the bypass system effectiveness. The licensee stated that although the final testing method would be selected after consultation with the MDMR, it would consider the use of mark and recapture techniques such as releasing approximately 500 live, juvenile clupeids (Alewife) upstream of the project's intake and subsequently recapturing them during use of the downstream fish passage facility. The licensee stated it would install a collection net or similar blocking mechanism to capture fish that have passed through the bypass gates, but prior to passage through the bypass pipe, resulting in potential mortality of the test fish. The licensee indicated that the study would be scheduled to coincide with peak downstream movements of juvenile clupeids (*i.e.*, mid-September to October). The licensee also stated that potential marking methods may include either fin clipping, streamer tags or dye. Further, the licensee added, selection of the marking technique as well as how effectiveness would be calculated, would be done in consultation with the MDMR and FWS.

The licensee proposed to initially test effectiveness for Alewife. The licensee added that as American shad and Atlantic salmon become present, additional effectiveness tests would be conducted for those species and the testing plans would be developed in consultation with the resource agencies.

2. Upstream Passage Effectiveness Studies

The licensee proposed to assess the upstream passage facility effectiveness in three phases: an initial phase (reconnaissance) during which any system required adjustments or system modifications would be identified and corrected; a second phase involving quantifying use of the fishway by upstream migrating fishes; and, if necessary, a final third phase involving a mark and recapture or radio telemetry study to quantify the efficiency of the upstream fishway. The licensee stated that Phase 1 and 2 would be conducted simultaneously the second year of operation, with Phase 2 of the study being continued during the third year of operation. The licensee proposed that Phase 2 of the study be conducted utilizing an automatic fish counter. The licensee stated that the fish counter components were selected through the direction and assistance of the MDMR. The licensee stated that the fish counting method was recommended by the MDMR as a cost effective means to assess effectiveness of the system. The licensee added that the count data would be collected on a daily/weekly/monthly basis by the MDMR, both at the Burnham Project and at other nearby projects where the MDMR has installed these

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counter systems (to and document passage of radio tagged fish throughout the river system).

The licensee proposed to begin Phase 1 during the second spring migration that the fishway is operational, which should occur in 2007. The licensee stated that this phase would entail a reconnaissance level effort to qualitatively evaluate the effectiveness of the fishway and attraction flows. The licensee stated it would document whether the fish passage facility is attracting fish and successfully passing them in appreciable numbers. Specifically, the licensee indicated that Phase I would proceed as follows: visually observe if adult clupeids are congregating and holding at areas other than the fishway attraction area; visually observe if adult clupeids are entering and passing through the entrance gate; visually observe if there are any mechanical or flow related disturbances limiting successful passage; and visually observe whether adult clupeids are exiting the elevator into the headpond without impediment or injury.

The licensee stated that these activities would be conducted during the period of upstream migration of American shad and alewives (May 1 to June 30) and observations would be performed during spillage and non-spillage periods at the project depending on river flow conditions. The licensee proposed that any problems associated with attraction flows, the physical facility, or its operation, during the reconnaissance phase, would be identified and corrected. The licensee proposed that Phase 1 be completed during the second passage season (*i.e.*, 2007).

Based on its consultation with the MDMR, the licensee proposes to install an electronic fish counter in the exit channel of the fish lift facility to obtain actual counts of anadromous fish utilizing the fish elevator system and to monitor trends in fish migration. The licensee stated that the MDMR is proposing to conduct a basin wide tagging study to document fish passage into the upper reaches of the river basin and use of non-project related fish passage systems. The licensee added that the MDMR study would consist of Passive-Integrated-Transponder (PIT) tagged fish released at the downstream Fort Halifax Project. The licensee added that fish passing the Burnham Project would be required to pass through the newly installed downstream Benton Falls (FERC No. 5072) fish elevator system. The licensee stated that both the Benton Falls and Burnham fish passage systems would be equipped with antennae to document passage of PIT tagged fish. The licensee added that the MDMR would be responsible for all equipment, labor and analysis of the PIT tag study noting that documented numbers of fish passing through the Benton Falls facility would be compared to the number of fish passing through the Burnham facility.

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The licensee stated that initially, testing would be conducted for Alewife and as American shad and Atlantic salmon become present, additional effectiveness test would be conducted for these species. The licensee proposed to consult with the resources agencies regarding the development of future testing plans.

3. Downstream Eel Effectiveness Study

The licensee proposed to evaluate the effectiveness of downstream eel passage based on capture and counts of migrating eels that pass through the intake bypass system. The licensee proposed to fit a collection net at the bypass discharge to capture all passed migrants. The licensee added that access to the collection net would be via boat to the underside of the draft tube area and that additional details of the study would be developed in consultation with the MDMR.

The licensee proposed to document passage through alternative passage routes (dam bypass pipe, deep gates or spillage) by periodic visual observations. The licensee stated that during the first two years of operation, it would conduct visual observations from the surface of the dam intake and shoreline to document passage through either the dam bypass system or deep gate(s). The licensee proposed to begin eel observations when other sites in the area indicate eel movements are occurring.

4. Upstream Eel Effectiveness Study

The licensee proposed to evaluate the effectiveness of upstream eel passage based on comparison of passage counts with the downstream Benton Falls Project. The licensee stated that the Benton Falls Project's upstream eel ladder is equipped with a catch box within the impoundment and that the MDMR generally checks the catch box twice per week during the migration season. The licensee stated that once counted and measured, the eels are released into the Benton Falls impoundment. The licensee proposed to equip the Burnham upstream eel ladder with a collection tank to facilitate capture and counting of migrants. The licensee stated it will compare the number of eels passed at Burnham with the Benton Falls Project passage rates for a comparative analysis.

In addition to comparative counts, the licensee proposed to conduct visual observations, during the first two years of operation, from the surface of the passage system to document use. The licensee stated that monitoring would include making observations on the presence and locations of elvers at the ladder entrance, within the ladder, the approach zones, the embankments near the dam and the presence of eel predators in the vicinity of the ladder, as well as general observations on ascension rates, and mortality. The licensee proposed that, to the extent possible, its observations would

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include enumeration of the eels observed in the various areas and ladder system. The licensee stated that observations for eel migration would begin when other sites in the area indicate eel movements are occurring and visual monitoring would include periodic nighttime observations to observe actively migrating eels. The licensee proposed to continue the observations nightly for the first week after migration is observed and continue a minimum of once per week during the passage season after confirmation of the system use has been documented.

III. Reporting

The licensee proposed to prepare a draft summary report of operations and effectiveness testing, for the 2007 operating season, by January 31, 2008, and submit it to the MDIFW, MDMR, MASC, MDEP, FWS and the National Marine Fisheries Service for review and comment. The licensee proposed to file a final report that addresses comments from the resource agencies, with the Commission by March 31, 2008. Similarly, the licensee stated, a summary report of the upstream eel passage system would be developed in late 2008, after installation of the selected passage system. The licensee stated that it would consult with the above-listed agencies to determine if additional testing is required based upon review of fish counts, flow conditions, and availability of other target species. If additional testing is required, the licensee proposes to develop a separate testing plan in consultation with the various agencies.

RESOURCE AGENCY CONSULTATION

By email dated September 19, 2006, the licensee provided the resource agencies a draft copy of its operations and effectiveness study plan for fish passage at the Burnham Project. Written comments were received from the MDEP, MDMR, FWS and the MASC.

By email dated September 20, 2006, the MDEP stated their concurrence with the plans indicating that it appears to address all outstanding fish passage compliance items listed in the licensee's email transmission of the plans.

By letter dated October 12, 2006, the MDMR provided comments on five sections of the licensee's plan. In a letter dated October 10, 2006, the FWS provided comments on 10 areas of the licensee's plans and by letter dated October 18, 2006, the MASC provided comments on four sections of the licensee's plans.

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DISCUSSION

The licensee's final operation and maintenance plan and effectiveness study plan for fish passage at the Burnham Project incorporated the comments and recommendations of the resources agencies. The licensee's plans also contained flow calculations for the various facilities. The licensee indicated that it reconfirmed the calculations in response to a comment from the FWS concerning the downstream passage gate system. Additionally, the licensee stated that it would review with the MDMR the suggested locations and details of the upstream eel passage system during the 2007 migration season as suggested by the MDMR. The licensee proposed to develop the final details of the upstream eel passage system in consultation with the resource agencies. The licensee stated that it intends to install the approved system prior to the 2008 migrations season.

Included with the licensee's filing were engineering design drawings of the upstream and downstream fish passage facilities along with intake and gate project feature drawings. The licensee's operational and effectiveness study plans were detailed and complete and should provide reliable operation of the fish passage facilities. The licensee's filing meets the requirements of license article 401, specifically WQC conditions 2(E) and 2(F) and, accordingly, should be approved.

The Director Orders:

(A) Ridgewood Maine Hydro Partners' Operation and Maintenance Plan, and Effectiveness Study Plan, filed November 1, 2006, for upstream and downstream fish passage at the Burnham Hydroelectric Project, is approved.

(B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR ¶ 385.713.

George H. Taylor
Chief, Biological Resources Branch
Division of Hydropower Administration
and Compliance

ATTACHMENT 2

ORDER APPROVING EXHIBIT F DRAWINGS

UNITED STATES OF AMERICA 123 FERC ¶ 62,038
FEDERAL ENERGY REGULATORY COMMISSION

Ridgewood Maine Hydro Partners, L.P.

Project No. 11472-046

ORDER APPROVING EXHIBIT F DRAWINGS

(Issued April 10, 2008)

On February 12, 2007, Ridgewood Maine Hydro Partners, L.P. (Ridgewood), licensee for the Burnham Hydroelectric Project, FERC No. 11472, pursuant to ordering paragraph (F) of the Order Issuing Original License¹ filed as-built Exhibit F drawings showing the upstream fish passage facilities. The project is located on the Sabasticook River in Summerset and Waldo Counties, Maine.

BACKGROUND

Article 306 of ordering paragraph (F) of the license required Ridgewood to submit the Exhibit F drawings within 3 months of completing the construction of the upstream fish passage facilities for Commission approval.

REVIEW

Our review of the Exhibit F drawings, show that they accurately depict the upstream fish passage facilities. This order approves the Exhibit F drawings, which conform to the Commission's rules and regulations. In ordering paragraph (B) we are requiring the licensee to file the approved drawings in aperture card and electronic file formats.

The Director orders:

(A) The following Exhibit F drawings, filed on February 12, 2007, conform to the Commission's rules and regulations, and are approved and made part of the license:

¹ See 107 FERC ¶ 62,006 Order Issuing Original License issued April 7, 2004.

Exhibit	FERC No.	Superseded No.	Title
F-1	11472-11	11472-1	Site Plan
F-2	11472-12	11472-2	Plan of Dam
F-3	11472-13	11472-3	Dam & Intake Sections
F-4	11472-14	11472-4	Dam Downstream Elevation
F-5	11472-15	11472-5	Powerhouse Elevations
F-6	11472-16	11472-6	Powerhouse Elevations
F-7	11472-17	11472-7	Powerhouse Floor Plan
F-8	11472-18	11472-8	Powerhouse Section

(B) Within 45 days of the date of issuance of this order, the licensee shall file the approved exhibit drawings in aperture card and electronic file formats. The superseded drawings are deleted from the license.

a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Project-Drawing Number (i.e., P-11472-11, etc.) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (i.e., F-1, etc.), Drawing Title, and date of this order shall be typed on the upper left corner of each aperture card. See Figure 1.

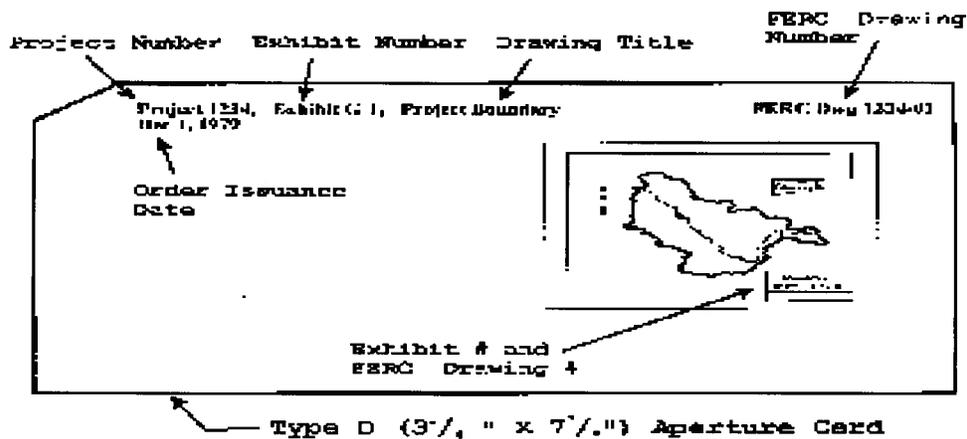


Figure 1 Sample Aperture Card Format

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office.

b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. Exhibit F drawings must be identified as **(CEII) material under 18 CFR §388.113(c)**. Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this order, and file extension in the following format [P-11472-11, F-1, Site Plan, etc., MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

IMAGERY - black & white raster file
 FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4
 RESOLUTION – 300 dpi desired, (200 dpi min)
 DRAWING SIZE FORMAT – 24" X 36" (min), 28" X 40" (max)
 FILE SIZE – less than 1 MB desired

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(C) This order constitutes final agency action. Requests for a rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. §385.713.

Mohamad Fayyad
Engineering Team Lead
Division of Hydropower Administration
and Compliance

ATTACHMENT 3

ORDER ISSUING ORIGINAL LICENSE

UNITED STATES OF AMERICA 107 FERC ¶ 62,006
FEDERAL ENERGY REGULATORY COMMISSION

Ridgewood Maine Hydro Partners, L.P.

Project No. 11472-000

ORDER ISSUING ORIGINAL LICENSE
(Minor Project)

(April 7, 2004)

INTRODUCTION

1. On April 8, 1994, Consolidated Hydro Maine, Inc. (CHMI) filed an application for an original license pursuant to Part I of the Federal Power Act (FPA)¹ to operate and maintain the existing 1,050-kilowatt (kW) Burnham Hydroelectric Project No. 11472. The project is located on the Sebec River, a tributary of the Kennebec River, in Somerset and Waldo Counties, Maine.² The project does not occupy any Federal lands. As discussed below, I am issuing an original license for the project.

BACKGROUND

2. Public notice of the license application was issued on April 5, 1995. The Maine State Planning Office (MSPO) and Ms. Heather Jean Read (Ms. Read) filed timely motions to intervene in this proceeding. Ms. Read's motion, which was in opposition to the project, was withdrawn by letter dated April 16, 2002. The U.S. Department of the Interior (Interior) filed a late motion to intervene on February 10, 2004.³

3. On January 17, 1996, the Commission issued a notice indicating that the project was ready for environmental analysis and soliciting comments, recommendations, and terms and conditions. In response, the Commission received comments from Interior, MSPO, and Ms. Read. Ms. Read was concerned about the potential for flooding on her

¹ 16 U.S.C. §§ 791(a) – 825(r).

² On February 7, 1991, the Director, Office of Hydropower Licensing, issued an order finding that the project is required to be licensed under Section 23(b) of the FPA, because the portion of the Sebec River on which it is located is a navigable waterway. See Consolidated Hydro, Inc., 54 FERC ¶ 62,094 (1991).

³ Notice granting late intervention was issued March 22, 2004.

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property located adjacent to the project impoundment, but no longer has this concern as indicated in her withdrawal of motion to intervene.

4. On June 18, 1996, Commission staff issued for public comment a draft environmental assessment (draft EA). Comments on the draft EA were filed by the U.S. Geological Service (USGS), Ms. Read, and CHMI. On November 1, 1996, Commission staff issued a final EA. No comments were filed on the final EA.

5. On September 25, 1996, CHMI and Ridgewood Maine Hydro Partners, L.P. (Ridgewood) filed an application to amend the pending license applications for four projects, including the Burnham Hydroelectric Project.⁴ CHMI and Ridgewood requested that the license application for these projects be amended to change the name of the license applicant from CHMI to Ridgewood, reflecting the merger of CHMI and Ridgewood.

6. On October 21, 1996, the Commission issued a notice of the amendment of license application, requesting comments, protests, or motions to intervene.⁵

7. All motions to intervene, protests, and comments have been fully considered in determining whether, and under what conditions, to issue this license. In this license order, CHMI is identified as the license applicant where it made proposals; applied to agencies; responded to comments, protests, or motions to intervene; or filed documents with the Commission regarding the Burnham Hydroelectric Project.

PROJECT DESCRIPTION

8. The Burnham Project was constructed in 1929 by Central Maine Power and has been owned and operated by CHMI and Ridgewood since 1986. The project consists of a 615-foot-long dam including a 208.5-foot-long concrete ogee spillway section with steel flashboards, a 2.5-mile-long impoundment, and a 495-foot-long penstock leading to, a powerhouse containing three generating units with a total installed capacity of 1,050 kW. A more detailed project description is contained in ordering paragraph (B)(2).

⁴ The other three projects are the Marcal Project No. 11482, the Damariscotta Mills Project No. 11566, and the Eustis Project No. 11132.

⁵ Since the merger between CHMI and Ridgewood is complete, the license will be issued to Ridgewood.

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9. The Burnham Project is operated in a combination run-of-river (ROR) and store-and-release mode. When inflows to the project equal or exceed the combined hydraulic capacity of the project's three turbines, approximately 650 cubic feet per second (cfs), the project is operated in a ROR mode, with excess flows passing over the top of the flashboards. At intermediate flows, inflows are matched as closely as possible by the operation of one or more of the three turbines, such that the project is operated essentially in a ROR mode, with no inflow passed over the spillway. When inflows are less than the minimum hydraulic capacity of one of the turbine units, approximately 100 cfs, the project is operated in a store-and-release mode. Since 1990, the reservoir fluctuation has been restricted to within 1 foot of the top of the flashboards during store-and-release operation. CHMI does not propose any new construction or additional capacity at the project.

10. The Burnham Project is located on the Sebasticook River 22 river miles upstream of its confluence with the Kennebec River. Two other Commission-licensed projects are located on the Sebasticook River downstream of the Burnham Project. Benton Falls Associates' Benton Falls Project No. 5073 is located at river mile 5.3. Just above the confluence of the Sebasticook and Kennebec Rivers is FPL Energy Maine Hydro, LLC's Fort Halifax Project No. 2552. By order issued January 23, 2004, the Commission granted FPL Energy's application for surrender of that license and partial removal of the project dam.⁶

LOWER KENNEBEC RIVER COMPREHENSIVE HYDROPOWER SETTLEMENT ACCORD

11. On May 28, 1998, Ridgewood and other owners of hydropower projects in the Kennebec River Basin (Kennebec Hydropower Developers Group or KHDG) filed an Offer of Settlement (the KHDG Agreement) with the National Marine Fisheries Service (NMFS), the U.S. Fish and Wildlife Service (FWS), the State of Maine, and the Kennebec Coalition, comprising American Rivers, Inc., the Atlantic Salmon Federation, Trout Unlimited, the Kennebec Valley Chapter of Trout Unlimited, and the Natural Resources Council of Maine. Under the KHDG Agreement, the KHDG would provide \$4.75 million toward fish restoration in the Kennebec River Basin and remove the Edwards Dam, the lowermost dam on the Kennebec. In addition, the KHDG licensees, with the support of the other parties to the agreement, would seek amendment of their licenses to incorporate fish passage measures specified in the agreement. These

⁶ FPL Energy Maine Hydro, LLC, 106 FERC ¶ 61,038 (2004), reh'g pending.

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amendments would allow the licensees to defer implementing the existing fish passage measures then required by their licenses.

12. The Burnham Project was the only non-licensed project included in the KHDG Agreement. In respect to the Burnham Project, the KHDG Agreement provides for construction of permanent upstream passage facilities capable of passing sufficient quantities of alewife, shad, and Atlantic salmon to meet stated fisheries management goals one year following the occurrence of the provision of temporary or permanent upstream fish passage for alewives at the Fort Halifax Project and of installation of alewife fish passage facilities or the removal of dams at four locations upstream of the Burnham Project. The KHDG Agreement requires permanent downstream fish passage facilities to be operational the second year following the Commission's issuance of a license. Until permanent downstream fish passage is installed, interim downstream fish passage measures are to be installed or undertaken to eliminate significant injury or mortality to river herring during downstream migration, upon the direction of the Maine Department of Marine Resources.

13. By order issued September 16, 1998, the Commission approved the KHDG Agreement and, at the request of Ridgewood, amended the Burnham application to include the applicable fish passage provisions of the KHDG Agreement. Edwards Manufacturing Company, Inc. and City of Augusta, Maine, 84 FERC ¶ 61,227 (1998). These provisions thus replace the application's original fish passage proposals for, in brief, construction of a Denil fish ladder and the addition of permanent downstream fish passage facilities within two years of license issuance.

WATER QUALITY CERTIFICATION

14. Under Section 401(a)(1) of the Clean Water Act (CWA),⁷ the Commission may not issue a license for a hydroelectric project unless the state water quality certifying agency either has issued a water quality certification (WQC) for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed 1 year. Section 401(d) of the CWA provides that state certification shall become a condition of any federal license or permit that is issued.⁸ Only a reviewing court can revise or delete these conditions.⁹

⁷ 33 U.S.C. § 1341(a)(1).

⁸ 33 U.S.C. § 1341(d).

⁹ See American Rivers v. FERC, 129 F.3d 99 (D.C. Cir. 1997).

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15. On April 5, 1994, CHMI applied to the Maine Department of Environmental Protection (MDEP) for a WQC for the Burnham Project, which the MDEP received on April 10, 1994. Each year since that date, CHMI has withdrawn and refiled its application. On February 10, 2004, the MDEP issued a WQC for the Burnham Project that includes seven conditions, which are set forth in Appendix A of this order and incorporated into the license (see ordering paragraph D). The WQC includes requirements for limiting impoundment fluctuations, minimum flow releases, fish and eel passage facilities, fish passage and macroinvertebrate studies, and recreational facilities. The WQC requires upstream and downstream fish passage consistent with the KHDG Agreement.¹⁰ Article 401 requires the licensee to file, for Commission approval, plans required by the WQC conditions.

SECTION 18 FISHWAY PRESCRIPTIONS

16. Section 18 of the FPA¹¹ provides that the Commission shall require the construction, maintenance, and operation by a licensee of such fishways as may be prescribed by the Secretary of the Interior or the Secretary of Commerce, as appropriate.

17. By letter dated March 18, 1996, Interior indicated that it anticipates that final plans for fish passage facilities at the Burnham Project will be developed during post-licensing consultation according to the terms of the approved KHDG Agreement. Pursuant to Section 18, Interior requested that the Commission reserve its authority to prescribe fish passage facilities for the project.

18. The KHDG Agreement to which the Interior letter refers is not the 1998 agreement but an earlier 1987 agreement, under which CHMI was to have installed permanent upstream and downstream fish passage facilities at earlier dates. The provisions of that agreement have been superseded by those of the later 1998 agreement, but Interior did not file a further pleading concerning its Section 18 authority. In any event, consistent with the Commission's policy, Article 404 of this license reserves the Commission's authority to require fishways that may be prescribed by Interior for the Burnham Project.

¹⁰ The WQC notes, however, that permanent downstream fish passage facilities have already been installed at the project.

¹¹ 16 U.S.C. § 811.

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THREATENED AND ENDANGERED SPECIES

19. Section 7(a) of the Endangered Species Act of 1973 (ESA)¹² requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modification of designated critical habitat.

20. FWS states that there are no federally-listed threatened and endangered species that are known to occur in the project area, except for transient bald eagles.¹³ In the draft EA (page 59) and in the final EA (page 60), staff determined that bald eagles are sighted frequently, but none are known to nest within or immediately adjacent to the project. FWS did not file comments on either EA. The FWS federally-listed threatened and endangered species list on the web includes no new listed species in Somerset and Waldo Counties, Maine.¹⁴ The project as licensed would have no effect on the eagle or its habitat and, therefore, no further Section 7 consultation is required.

RECOMMENDATIONS OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

21. Section 10(j) of the FPA¹⁵ requires the Commission, when issuing a license, to include conditions based upon recommendations of federal and state fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act,¹⁶ for protection and enhancement of fish and wildlife and their habitat affected by the project. If the Commission believes that any such recommendations may be inconsistent with the purpose and requirements of Part I of the FPA, or other applicable law, Section 10(j)(2) of the FPA¹⁷ requires the Commission and the agencies to attempt to resolve such inconsistencies, giving due weight to the recommendations, expertise, and statutory

¹² 16 U.S.C. § 1536(a).

¹³ Interior letter dated March 18, 1996.

¹⁴ See <http://northeast.fws.gov/Endangered>.

¹⁵ 16 U.S.C. § 803(j)(1).

¹⁶ 16 U.S.C. § 661 *et seq.*

¹⁷ 16 U.S.C. § 803(j)(2).

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responsibilities of such agencies. If the Commission still does not adopt a recommendation, it must explain how the recommendation is inconsistent with Part I of the FPA or other applicable law and how the conditions imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources.

22. Interior filed recommendations for license conditions pursuant to Section 10(j) of the FPA.¹⁸ This license includes conditions consistent with Interior's 10(j) recommendations to: (1) release minimum instream flows in the bypassed reach and downstream of the project; (2) limit annual impoundment drawdowns; and (3) develop a plan to monitor instream flows and impoundment water levels. These requirements are found in Article 402 of the license and in the WQC attached as Appendix A.

23. Interior also recommended pursuant to Section 10(j) that the licensee: (1) submit an instream flow and water level fluctuation monitoring plan to resource agencies for comment within 3 months of license issuance; and (2) monitor recreation use. Staff determined that these two recommendations were outside the scope of Section 10(j) because they were not specific measures to protect fish and wildlife. However, the staff considered and this license adopts the recommendations under the comprehensive planning requirement of Section 10(a)(1) of the FPA, as discussed below under other issues, Sections A and D.

OTHER ISSUES

A. Minimum Flow and Reservoir Level Fluctuation Monitoring

24. Interior recommended developing an instream flow and water level fluctuation monitoring plan. In the final EA (page 45), staff recommended developing a plan to monitor impoundment elevations and minimum flow releases to document compliance with project operations. The subsequently submitted WQC requires such a monitoring plan. Article 401 requires the licensee to submit the monitoring plan for Commission approval. Article 402 requires the licensee to comply with the minimum flows and water level fluctuations in the WQC within 60 days of installing equipment that may be required by the monitoring plan.¹⁹

¹⁸ Letter dated March 18, 1996.

¹⁹ As noted above, Interior recommended that the monitoring plan be submitted to resource agencies for comment within 3 months of license issuance. In the EA, staff determined that this 3-month submittal requirement was not a Section 10(j)

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B. Erosion Control

25. In the final EA (pages 19 and 20), staff determined that some minor, short-term erosion may occur as a result of fish passage construction, recovery of data from archaeological sites, and improving recreational facilities. Staff recommended that removal of vegetation and earth disturbing activities while recovering site specific archaeological data and installing the proposed fish passage and recreation facilities be mitigated by implementing an erosion and sedimentation control plan. Article 405 requires a plan to control erosion and sedimentation.

C. Dissolved Oxygen Monitoring

26. In the final EA (page 29), staff determined that a natural sill that spans the project impoundment restricts downstream flows and may contribute to water quality impacts. Staff recommended that CHMI continue discussions with MDEP regarding practical cooperative options to enhance water quality in the Sebasticook River. Article 406 requires documentation of the results of consultation with the MDEP to determine the need for mitigation of low dissolved oxygen levels in the upper reach of the impoundment.

D. Recreation Plan

27. CHMI proposes, and the EA recommends a number of recreation enhancements at the project. Article 407 requires a recreation plan for providing these enhancements at the project. Interior recommended monitoring recreation use to determine whether additional facilities may be required in the future. As noted, in the EA, staff concluded that this was not a Section 10(j) recommendation, but did recommend recreation monitoring. Article 408 requires the licensee to monitor recreational use through Form 80 and consult with resource agencies before filing its Form 80.

E. Historic Properties

28. On January 6, 1997, the Maine State Historic Preservation Officer, the Advisory Council on Historic Preservation and the Commission executed a Programmatic

recommendation, and recommended that the measure not be adopted because the Commission retains authority to establish schedules. However, the monitoring plan required by the WQC provides for consultation with resource agencies, including FWS, before its submittal, within 6 months of license issuance, to MDEP. Therefore, Interior's consultation recommendation will essentially be incorporated into the license.

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Agreement (PA) for protecting and managing historic properties that might be affected by licensing the Burnham Project (Article 409). This serves to satisfy the Commission's responsibilities under Section 106 of the National Historic Preservation Act.²⁰

OTHER INTERIOR CONCERNS

A. Revisit the Environmental Analysis

29. In its motion to intervene, Interior requests that the Commission revisit its environmental analysis and clarify the process to be followed in this proceeding, since conditions have changed since the final EA was issued in 1996.

30. Interior offers three reasons why the Commission should revisit the analysis in the final EA. Interior states that the need for power analysis relied on projections of capacity demand covering the period 1995-2004, which are now history, not projections. The Burnham Project is located in the New England Power Pool area of the Northeast Power Coordinating Council (NPCC) region of the North American Electric Reliability Council (NERC). The staff have reassessed the need for power, and, according to the NERC, summer peak demand in the region is expected to increase at an average rate of 1.5 percent per year during the period from 2003-2012. The present and future use of the Burnham Project power, its displacement of nonrenewable fossil-fired generation, and contribution to a resource diversified generation mix, support a finding that the power from the project would help meet both the short- and long-term need for power in the NPCC region.

31. Interior states that there have been significant changes on the river since the issuance of the final EA. For instance, the analysis of fishery resources in the final EA was based on there being three dams downstream of the Burnham Project. Interior points out that Edwards Dam, Project No. 2389, on the Kennebec River, was removed in 1998, and the dam at the Fort Halifax Project No. 2552 is due to be breached pursuant to a Commission order issued January 23, 2004. Interior notes that breaching the Fort Halifax dam will allow American shad and Atlantic salmon access to the Sebasticook River up to the licensed and operating downstream Benton Falls Project No. 5073, for which there are plans for fish passage. Interior also notes that the 1998 KHDG Agreement was not analyzed as an option in the 1996 final EA, because the Agreement was not yet in existence. Interior suggests that a new or amended EA should analyze the agreement as an option, and urges the Commission to adopt the agreement as the preferred option.

²⁰ 16 U.S.C. § 470s.

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32. I understand that changes have occurred in the Kennebec River basin and that those downstream changes have affected the environmental resources at the Burnham Project. This license order takes into consideration current upstream fish migration and requires upstream and downstream fish passage measures to enhance environmental resources, in accordance with the fish passage terms of the KHDG Agreement, compliance with which is required by the WQC conditions that are made conditions of this license.

B. Fish Passage Installation

33. In a letter to CHMI, filed with the Commission on February 17, 2004, FWS expressed concern about the timely installation of permanent upstream fish passage facilities at the Burnham Project. FWS notes that CHMI has consistently proposed installation of a Denil fish ladder to fulfill the KHDG Agreement requirements for upstream fish passage. FWS states that it has informed CHMI that a Denil ladder would not have sufficient capacity to pass current design populations for anadromous fish, and that therefore FWS would not approve use of such a facility. According to FWS, CHMI has not consulted further with the resource agencies on upstream fish passage design.

34. In the February 17, 2004 letter, FWS states that the provisions of the KHDG Agreement triggering upstream fish passage at Burnham have now been met.²¹ FWS concludes that CHMI should fulfill its commitments in the Agreement by: (1) submitting revised conceptual fish passage plans to the resource agencies; (2) developing and submitting design plans for approval by the resource agencies before filing them with the Commission and the MDEP; (3) applying for, and receiving necessary construction work permits; (4) selecting a construction contractor; and (5) completing construction by the end of June 2004. FWS also requests that CHMI convene a meeting with the resource agencies to develop a schedule for fish passage installation.

²¹ As noted, the KHDG Agreement provides for construction at Burnham of permanent upstream passage facilities capable of passing sufficient quantities of alewife, shad, and Atlantic salmon to meet stated fisheries management goals one year following the occurrence of the provision of temporary or permanent upstream fish passage for alewives at the Fort Halifax Project and of installation of alewife fish passage facilities or the removal of dams at four locations upstream of the Burnham Project. FWS states that fish passage was provided at the last of the four upstream dams in June 2003. The four dams are the: (1) Pleasant Pond Dam; (2) Newport Dam; (3) Plymouth Pond Dam; and (4) Seabasticook Lake Dam.

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35. A review of the Commission's record for this project contains no information about how Ridgewood, as successor to CHMI, plans to meet its fish passage obligations set out in the KHDG Agreement and in the WQC conditions. The WQC also contains conditions requiring Ridgewood to complete an eel passage study, a fish passage efficiency study, and a macroinvertebrate study. In light of the above concerns raised by FWS, the Commission staff and the resource agencies should know when the licensee plans to consult with the agencies and meet the requirements of both the WQC and the KHDG Agreement. Therefore, Article 403 requires the licensee, in consultation with the agencies, to prepare a KHDG Agreement and WQC conditions report that provides the status and schedule for completing the fish passage provisions in the KHDG Agreement and for conducting the various studies required in the WQC.

ADMINISTRATIVE CONDITIONS

A. Annual Charges

36. The Commission collects annual charges from licensees for administration of the FPA. Article 201 provides for the collection of such funds. Projects with authorized installed capacity of less than or equal to 1,500 kW will not be assessed an annual charge.²² Such is the case for the Burnham Project, which has a capacity of 1,050 kW.

37. The Commission requires licensees to file sets of approved project drawings on microfilm and in electronic file format. Article 202 requires the filing of these drawings.

B. Exhibit G Drawings

38. The Exhibit G drawing that was filed with the license application does not meet the current Commission requirements for a project boundary map. A project boundary map must enclose all the principal project works necessary for operation and maintenance of the project within the project boundary line. Article 301 requires the licensee to file revised Exhibit G drawings showing all the project works pursuant to the requirements of 18 CFR Sections 4.39 and 4.41.

C. Commission Approval of Construction Plans

²² On March 15, 1995, the Commission revised its regulations no longer assessing annual charges on minor projects beginning fiscal year October 1, 1994. See Order No. 576 Charges and Fees for Hydroelectric Projects.

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39. Ridgewood has agreed to install and operate permanent upstream and downstream fish passage facilities at the Burnham Project. Constructing fish passage facilities could entail major construction at the site of the 27.7-foot-high dam. Commission approval of the plans and specification is needed to assure construction is performed in a safe and environmentally sound matter. Articles 302 through 305 require the licensee to submit various pre-construction plans and specifications prior to fish passage construction, and Article 306 requires the licensee to file revised Exhibit A, F, and G drawings describing and showing the project as built.

D. Use and Occupancy of Project Lands and Waters

40. Requiring a licensee to obtain prior Commission approval for every use or occupancy of project land would be unduly burdensome. Therefore, Article 410 allows Ridgewood to grant permission, without prior Commission approval, for the use and occupancy of project lands for such minor activities as landscape planting. Such uses must be consistent with the purpose of protecting and enhancing the scenic, recreational, and environmental values of the project.

COMPREHENSIVE PLANS

41. Section 10(a)(2)(A) of the FPA²³ requires the Commission to consider the extent to which a hydroelectric project is consistent with federal or state comprehensive plans for improving, developing, or conserving waterways affected by the project.²⁴ Under Section 10(a)(2)(A), federal and state agencies filed a total of 18 qualified comprehensive plans of which we identified nine plans relevant to the application.²⁵ No conflicts were found.

²³ 16 U.S.C. § 803(a)(2)(A).

²⁴ Comprehensive plans for this purpose are defined at 18 C.F.R. § 2.19 (2003).

²⁵ (1) Fish and Wildlife Service, Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service, undated; (2) Fish and Wildlife Service, Canadian Wildlife Service, North American waterfowl management plan, 1986; (3) Maine Atlantic Sea Run Salmon Commission, Strategic plan for the management of Atlantic Salmon in the State of Maine, 1984; (4) Maine Department of Conservation, Maine rivers study - final report, 1982; (5) Maine State Planning Office, State of Maine comprehensive rivers management plan, 1987; (6) Maine State Planning Office, Kennebec River resource management plan: balancing hydropower and other uses, 1993; (7) New England Division Corps of Engineers, Hydrology of floods - Kennebec River Basin, Maine, 1985; (8) New England Division Corps of Engineers, Hydrology of floods - Kennebec River Basin, Maine, Part

PROJECT ECONOMICS

42. In determining whether a proposed project will be best adapted to a comprehensive plan for developing a waterway for beneficial public purposes, the Commission considers a number of public interest factors, including the economic benefit of the project power.

43. Under the Commission's approach to evaluating the economics of hydropower projects, as articulated in Mead Corp.,²⁶ the Commission employs an analysis that uses current costs to compare the costs of the project and likely alternative power, with no forecasts concerning potential future inflation, escalation, or deflation beyond the license issuance date. The basic purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and of reasonable alternatives to project power. The estimate helps to support an informed decision concerning what is in the public interest with respect to a proposed license.

44. As proposed by CHMI, the project would produce an average of 5.44 gigawatt-hours (GWh) of energy annually at an annual cost of about \$380,530 or 69.95 mills per kilowatt-hour (mills/kWh). The annual value of power would be about \$205,500 or 37.77 mill/kWh.²⁷ To determine if the project would be economically beneficial, staff subtracts the project's cost from the value of the project's power. Thus, the project's power would cost about \$175,030 or 32.18 mills/kWh more than currently available alternative power.

45. As licensed with staff recommended measures, including the mandatory WQC conditions, the project would produce an average of 5.44 (GWh) of energy annually at an

II, 1988; and (9) New England Division Corps of Engineers, Water resources study - Kennebec River Basin, Maine (reconnaissance report), 1989.

²⁶ 72 FERC ¶ 61,027 (1995).

²⁷ Our estimate of the cost of alternative power is based on the cost of energy generation in natural gas-fueled combined cycle combustion turbine (CCCT) generating plants in the New England Area Reliability region of the North American Electric Reliability Council. Our estimate of the fuel cost (based on fuel consumption at a heat rate of 6,200 Btu/kWh) is \$26.46 mills/kWh. We estimated the fuel cost based on information published by the Energy Information Administration in their Annual Energy Outlook for 2003. We include the cost of alternative capacity in our power value computations and compute the cost of alternative CCCT capacity to be \$99/kW-year. The total alternative power costs for the Burnham Project is 37.77 mills/kWh.

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annual cost of about \$393,710 or 72.37 mills/kWh. The annual power value would be about \$205,500 or 37.77 mills/kWh. Thus, the project's power would cost about \$188,210 or 34.60 mills/kWh more than currently available alternative power.

46. Our evaluation of the economics of the proposed action and the proposed action with additional staff-recommended measures shows for each alternative that project energy would cost more than alternative energy. However, project economics is only one of the many public interest factors considered in determining whether or not to issue a license, and project operation may be desirable for other economic reasons such as to diversify the mix of energy sources in the area, and provide a fixed-cost source of power and reduce contract needs. Ultimately, the applicant must decide if it is in their best interest to accept the license and operate the project.

47. In analyzing public interest factors, the Commission takes into account that hydroelectric projects offer unique operational benefits to the electric utility system (ancillary benefits). These benefits include their value as almost instantaneous load-following response to dampen voltage and frequency instability on the transmission system, system-power-factor-correction through condensing operations, and a source of power available to help in quickly putting fossil-fuel based generating stations back on line following a major utility system or regional blackout.

48. Ancillary services are now mostly priced at rates that recover only the cost of providing the electric service at issue, which do not resemble the prices that would occur in competitive markets. As competitive markets for ancillary services begin to develop, the ability of hydro projects to provide ancillary services to the system will increase the benefits of the project.

COMPREHENSIVE DEVELOPMENT

49. Sections 4(e) and 10(a) of the FPA,²⁸ respectively, require the Commission to give equal consideration to power development purposes and to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of fish and wildlife, the protection of recreational opportunities, and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing a waterway or waterways for all beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

²⁸ 16 U.S.C. §§ 797(e) and 803(a)(1).

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50. Based on my independent review and evaluation of the Burnham Project, recommendations from the resource agencies and other stakeholders, and the no-action alternative, I have selected the Burnham Project, with the staff-recommended measures, as the preferred alternative.

51. I selected this alternative because: (1) issuance of an original license would serve to maintain a beneficial and dependable source of electric energy; (2) the required environmental measures would protect and enhance fish and wildlife resources, water quality, recreational and cultural resources; and (3) the 1,050-kW of electric energy generated from a renewable resource would continue to offset the use of fossil-fueled, steam-electric generating plants, thereby conserving nonrenewable resources and reducing atmospheric pollution.

LICENSE TERM

52. Section 6 of the FPA²⁹ provides that original licenses for hydropower projects shall be issued for a term not exceeding 50 years. The Commission's general policy is to establish 30-year terms for projects with little or no redevelopment, new construction, or new environmental mitigation and enhancement measures; 40-year terms for projects with a moderate amount of such activities; and 50-year terms for projects with extensive measures. Also, it is the Commission's policy to coordinate to a reasonable extent the license expiration dates of projects in a river basin, in order that subsequent relicensing proceedings can also be coordinated.³⁰

53. The five other licensed projects³¹ included in the Kennebec River Basin Settlement Accord, and the license expiration dates are the: (1) Shawmut Project No. 2322 expiring January 31, 2021; (2) Weston Project No. 2325 expiring October 31, 2036; (3) Benton Falls Project No. 5073 expiring February 28, 2034; (4) Lockwood Project No. 2574 expiring April 30, 2004; and (5) Hydro-Kennebec Project No. 2611 expiring September

²⁹ 16 U.S.C. § 799.

³⁰ In issuing new and original licenses, the Commission will coordinate the expiration dates of licenses to the maximum extent possible, to maximize future consideration of cumulative impacts at the same time in contemporaneous proceedings at relicensing. See 18 C.F.R. § 2.23 (2003).

³¹ This excludes the Fort Halifax Project No. 2552, the surrender of which has been approved, as noted in the text, supra.

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30, 2036. The Benton Falls Project is the only other licensed project located on the Sebasticook River.³² The five projects are all located in close proximity to one another.

54. Three of the five project licenses expire within two years of each other, between February 2034 and October 2036. To closely align the license expiration dates of the three projects included in the KHDG Settlement, this license will expire on October 31, 2036, a term of 32 years and 8 months.

55. In the case of licenses issued to previously unauthorized existing projects, it is the Commission's policy to condition the license upon payment of an amount equivalent to any additional charges that would have been collected had the license been backdated to when it first should have been issued.³³ As discussed above, the Burnham Project was constructed in 1929 for the purpose of producing hydroelectric power. For projects constructed prior to 1935, the Commission's policy is to assess charges from April 1, 1962, unless there was an earlier specific navigability finding, in which case charges are assessed from the date of the navigability finding or from January 1, 1938, whichever is later. Since the Director's navigability finding for the Burnham Project was not made until 1991, we will assess charges from April 1, 1962.³⁴

SUMMARY OF FINDINGS

56. The final EA for the Burnham Project contains background information, analysis of effects, support for related license articles, and basis for finding that the project will not result in any major, long-term adverse environmental effects. The project would be safe if operated and maintained in accordance with the requirements of this license.

57. Based on the review and evaluation of the project, as proposed by the applicant, and the staff-recommended environmental measures, including the WQC conditions, I conclude that the continued operation and maintenance of the project in the manner

³² The Pioneer Project No. 8736, and the Waverly Avenue Project No. 4293, located upstream of the Burnham Project, are projects that have been issued an exemption from licensing with no expiration date.

³³ City of Danville, Virginia, 58 FERC ¶ 61,318 at pp. 62,020 – 21 (1992).

³⁴ *Id.*, at p. 62,021. As of October 1, 1994, the Commission is not assessing annual charges for projects with less than 1,500 kilowatts authorized installed capacity. See 18 C.F.R. § 11.1 (b)(1) (2003). Therefore, the charges will be assessed for the period April 1, 1962, through September 30, 1994.

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required by the license would protect and enhance fish and wildlife resources, water quality, recreation, and historic resources. The electricity generated from this renewable water power resource would be beneficial because it would continue to offset the use of fossil-fueled generating stations, thereby conserving non-renewable resources and reducing atmospheric pollution. I conclude that the Burnham Project, with the conditions set forth below, will be best adapted to the comprehensive development of the Sebasticook River for beneficial public uses.

The Director orders:

(A) This license is issued to Ridgewood Maine Hydro Partners, L.P. (licensee), effective the first day of the month in which this order is issued and to expire on October 31, 2036, to continue to operate and maintain the Burnham Hydroelectric Project. This license is subject to the terms and conditions of the Federal Power Act (FPA), which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the FPA.

(B) The project consists of:

(1) Project works consisting of: (1) a 615-foot-long dam with; (a) a central concrete Ambursen type structure topped by a spillway with 4.3-foot-high steel flash boards; (b) four stoplog bays; (c) an intake section with trashracks and headgates; and (d) a combined crib dike and retaining wall to the east of the dam, and an earthen dike with a concrete core wall to the west of the dam; (2) a 304-acre impoundment with a normal water surface elevation of 165.9 feet msl; (3) a 495-foot-long, 12-foot-diameter penstock from the intake structure to the powerhouse; (4) a powerhouse containing three generating units with a combined installed capacity of 1,050 kW; (5) a 300-foot-long tailrace; (6) a substation; and (7) appurtenant facilities.

The project works generally described above are more specifically shown and described by those portions of Exhibit A and Exhibit F filed April 8, 1994:

Exhibit A: Pages A-1 through A-5.

Exhibit Drawing	FERC No. 11472-	Showing
F-1	1	Site Plan
F-2	2	Plan of Dam

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Exhibit Drawing	FERC No. 11472-	Showing
F-3	3	Dam and Intake Sections
F-4	4	Dam Downstream Elevation
F-5	5	Powerhouse Elevations
F-6	6	Powerhouse Elevations
F-7	7	Powerhouse Floor Plan
F-8	8	Powerhouse Section

(2) All of the structures, fixtures, equipment or facilities used to operate or maintain the project and located within the project boundary, all portable property that may be employed in connection with the project, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The Exhibits A and F described above are approved and made part of the license.

(D) This license is subject to the conditions of the water quality certification issued by the Maine Department of Environmental Protection pursuant to Section 401(a) of the Clean Water Act, as those conditions are set forth in Appendix A to this order.

(E) The following sections of the FPA are waived and excluded from the license for this minor project:

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the Act that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(F) This license is subject to the articles set forth in Form L-9 (October 1975), entitled, "Terms and Conditions of License for Constructed Minor Project Affecting Navigable Waters of the United States," and the following additional articles.

Article 201. Administrative Annual Charges. The licensee shall pay the United States the following annual charges:

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From April 1, 1962, through September 30, 1994, for the purpose of reimbursing the United States for the Commission's administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect at that time. The authorized installed capacity for that purpose is 1,050 kilowatts (kW).

For the purpose of reimbursing the United States for the Commission's administrative costs, pursuant to Part I of the Federal Power Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 1,050 kW. However, under the regulations currently in effect, projects with authorized capacity of less than or equal to 1,500 kW will not be assessed an annual charge after September 30, 1994.

Article 202. Exhibit Drawings. Within 45 days of the date of issuance of this license, the licensee shall file the approved Exhibit F drawings in aperture card and electronic file formats.

a) Three sets of the approved exhibit drawings shall be reproduced on silver or gelatin 35mm microfilm. All microfilm shall be mounted on type D (3-1/4" X 7-3/8") aperture cards. Prior to microfilming, the FERC Drawing Number (e.g., P-11472-1 through P-11472-8) shall be shown in the margin below the title block of the approved drawing. After mounting, the FERC Drawing Number shall be typed on the upper right corner of each aperture card. Additionally, the Project Number, FERC Exhibit (e.g., F-1, G-1, etc.), Drawing Title, and date of this license shall be typed on the upper left corner of each aperture card.

Two of the sets of aperture cards shall be filed with the Secretary of the Commission, ATTN: OEP/DHAC. The third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office.

b) The licensee shall file two separate sets of exhibit drawings in electronic raster format with the Secretary of the Commission, ATTN: OEP/DHAC. A third set shall be filed with the Commission's Division of Dam Safety and Inspections New York Regional Office. The drawings must be identified as (CEII) material under 18 CFR § 388.113(c). Each drawing must be a separate electronic file, and the file name shall include: FERC Project-Drawing Number, FERC Exhibit, Drawing Title, date of this license, and file extension [e.g., P-11472-1, G-1, Project Boundary, MM-DD-YYYY.TIF]. Electronic drawings shall meet the following format specification:

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IMAGERY - black & white raster file
FILE TYPE – Tagged Image File Format, (TIFF) CCITT Group 4
RESOLUTION – 300 dpi desired, (200 dpi min)
DRAWING SIZE FORMAT – 24” X 36” (min), 28” X 40” (max)
FILE SIZE – less than 1 MB desired

Article 301. *Exhibit G Drawings.* Within 45 days of the issuance date of the license, the licensee shall file for Commission approval, revised Exhibit G drawings enclosing all the principal project works necessary for operation and maintenance of the project including the recreation facilities required by Article 407, as needed, within the project boundary line meeting the requirements of 18 CFR Sections 4.39 and 4.41.

Article 302. *Contract Plans and Specifications.* At least 60 days before starting construction of the upstream fish passage facilities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – New York Regional Engineer (Regional Engineer) and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of a supporting design report and final contract plans and specifications. The Commission may require changes to the plans and specifications to ensure the work is completed in a safe and environmentally sound manner. Construction may not commence until authorized by the Regional Engineer.

Article 303. *Quality Control and Inspection Program.* At least 60 days before starting construction of the upstream fish passage facilities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – New York Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Quality Control and Inspection Program (QCIP) for the Commission's review and approval. The QCIP shall include a sediment and erosion control plan.

Article 304. *Cofferdam Construction Drawings.* Before starting construction of the upstream fish passage facilities, the licensee shall review and approve the design of contractor-designed cofferdams and deep excavations. At least 30 days before starting construction of the cofferdams, the licensee shall submit one copy to the Division of Dam Safety and Inspections B New York Regional Engineer and two copies to the Commission (one of these copies shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the approved cofferdam construction drawings and specifications and the letters of approval.

Article 305. *Temporary Emergency Action Plan.* At least 60 days before starting

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construction of the upstream fish passage facilities, the licensee shall submit one copy to the Division of Dam Safety and Inspections – New York Regional Engineer and two copies to the Commission (one of these shall be a courtesy copy to the Director, Division of Dam Safety and Inspections), of the Temporary Emergency Action Plan (TEAP) for the Commission's review and approval. The TEAP shall describe emergency procedures in case failure of a cofferdam, large sediment control structure, or any other water retaining structure could endanger construction workers or the public. The TEAP shall include a notification list of emergency response agencies, a plan drawing of the proposed cofferdam arrangement, the location of safety devices and escape routes, and a brief description of testing procedures.

Article 306. As Built Exhibits. Within 3 months of completing the construction of the upstream fish passage facilities, the licensee shall file, for Commission approval, revised Exhibit A, F, and G drawings, as applicable, describing and showing the project as built. The licensee shall submit six copies to the Commission, one copy to the New York Regional Engineer, and one copy to the Director, Office of Energy Projects.

Article 401. Commission Approval of Plans and Studies. The Maine Department of Environmental Protection (MDEP) water quality certification (Appendix A) requires the licensee to develop certain monitoring plans and studies without reference to prior Commission approval. Each such plan and study shall also be submitted to the Commission for approval. These plans and studies are listed below.

MDEP Condition No. (Appendix A)	Plan Name	Due Date
1.E	Water level and minimum flow monitoring plan	Within 6 months of license issuance
2.B(1)	Eel passage study	TBD pursuant to Article 403
2.E	Fish passage facilities plan	TBD pursuant to Article 403
2.F(2)	Fish passage efficiency study plan	TBD pursuant to Article 403
2.F(3)	Results of fish passage efficiency study	TBD pursuant to Article 403
3.A	Macroinvertebrate study	TBD pursuant to Article 403

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For each plan and study, the licensee shall submit to the Commission documentation of its consultation with the MDEP, the U.S. Fish and Wildlife Service, the Maine Department of Inland Fisheries and Wildlife, and the Maine Department of Marine Resources, copies of comments and recommendations made in connection with the plan or report, and a description of how the plan or report accommodates the comments or recommendations. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to make changes to the plan or report. Upon Commission approval, the plan or report becomes a requirement of the license, and the licensee shall implement the plan or report or changes in project operations or facilities, including any changes required by the Commission.

Article 402. *Water Levels and Minimum Flows.* The licensee shall maintain the water level elevation and provide seasonal minimum flows according to the water quality certification conditions 1.A. and 1.B., respectively within 60 days of Commission approval of the monitoring plan stipulated in condition 1.E.

Article 403. *KHDG Agreement and WQC Conditions Report.* Within 60 days of license issuance, the licensee shall file, for Commission approval, a report that provides the status and schedule for completing the fish passage provisions in the KHDG Agreement and for conducting the various studies required in the WQC.

The report shall address the requirements in the KHDG Agreement and the water quality certification and include the status and schedule for: (1) completing the fish passage provisions in the KHDG Agreement; and (2) conducting the various studies required in the WQC.

The licensee shall prepare the report after consultation with the U.S. Fish and Wildlife Service, National Oceanic and Atmospheric Administration, Maine Department of Inland Fisheries and Wildlife, the Maine Department of Marine Resources, and the Maine Atlantic Salmon Authority. The licensee shall include with the report documentation of consultation, copies of comments and recommendations on the completed report after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated in the report. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission for approval. If the licensee does not adopt a recommendation, the filing should include the licensee's reasons, based on project-specific information.

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The Commission reserves the right to require changes to the report. Upon approval, the licensee shall implement the report, including any changes required by the Commission.

Article 404. Reservation of Authority-Fishways. Authority is reserved to the Commission to require the licensee to construct, operate, and maintain, or to provide for the construction, operation, and maintenance of, such fishways as may be prescribed by the Secretary of the Interior under Section 18 of the Federal Power Act.

Article 405. Soil Erosion Plan. At least 90 days before the start of any land-disturbing or land-clearing activities related to fish passage facility, recreation facility construction or archeology data recovery, the licensee shall file, for Commission approval, a plan to control erosion and slope instability and to minimize the quantity of sediment resulting from project construction and operation. The plan may be a component of the plans required for the installation of downstream fish passage required under Article 401, the construction of recreational facilities required under Article 407, and the stabilization or recovery of data associated with archeological Sites 54.1 and 54.17, if determined eligible, required under Article 409.

The plan shall be based on actual-site geological and soil conditions and on project design, and shall include, at a minimum:

- (1) a description of the actual site condition at laydown/mobilization areas and any other areas that the proposed construction would affect;
- (2) measures proposed to control erosion, to prevent slope instability, and to minimize the quantity of sediment resulting from project construction and operation;
- (3) detailed descriptions, functional design drawings, and specific topographic locations of all control measures; and
- (4) a specific implementation schedule and details for monitoring and maintenance programs for stabilization of water-retaining structures, fishways, and recreational facility construction and operation.

The licensee shall prepare the plan after consultation with the Natural Resources Conservation Service and the Maine Department of Environmental Protection. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after they have been prepared and provided to the agencies, and specific descriptions of how the agencies comments are

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accommodated by the plans. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing should include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No ground-disturbing or land-clearing activities shall begin until the licensee is notified by the Commission that the plan is approved. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 406. DO Monitoring Plan. Within 6 months of license issuance, the licensee shall file documentation of the results of consultation with the Maine Department of Environmental Protection (MDEP) to determine the need for mitigation of low dissolved oxygen (DO) levels upstream of the natural sill located near the mid-point in the impoundment. If the consultation concludes there is no need for mitigation of low DO levels, the licensee shall file supporting documentation from the MDEP. If the consultation concludes that mitigation is necessary, then the licensee shall develop and file for Commission approval within one year of license issuance, a plan for enhancing DO levels in the upper impoundment.

The plan shall include, at a minimum:

(a) a description of the measures for enhancing DO including any water quality modeling that would be conducted and conceptual designs for any physical components;

(b) a schedule for implementing the plan;

(c) the cost of implementing the proposed plan; and

(d) identification of any entities that will contribute to a mitigation fund for implementation of the plan, the percentage of the capital, operation and maintenance costs that each entity will provide, and documentation that such entities will participate.

The licensee shall prepare the plan after consultation with the U.S. Fish and Wildlife Service and the MDEP. The licensee shall include with the plan documentation of agency consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission for approval. If the licensee does not adopt a

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recommendation, the filing should include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 407. Recreation Plan. Within 6 months of license issuance, the licensee shall file, for Commission approval, a recreation plan for providing enhanced recreational opportunities in and around the project site.

The recreation plan shall incorporate the recreational requirements in the water quality certification and include: (1) expanding and improving the existing parking area near the project intake structure to accommodate up to 10 vehicles; (2) improving the carry-in boat launch and canoe take-out area upstream of the intake and providing a temporary parking area; (3) developing an enhanced foot trail network with directional signage to angler and canoe put-in sites along the bypassed reach located near the dam and near the powerhouse; (4) constructing a canoe portage rest area along the existing canoe portage trail; (5) redesigning the proposed canoe portage trail improvements to eliminate the need for steps over the penstock; (6) exploring the feasibility of providing a canoe portage trail around the eastern end of the dam to be developed if determined feasible; (7) exploring the feasibility of providing two primitive campsites, one of which is to be developed in the near term if feasible and the second to be developed in the future if demand warrants; and (8) installing signage at the boat launch to prevent trailered boat-launching and to warn of traffic flow.

The plan shall include, at a minimum, the following: (1) final site plans for the recreational facilities cited above; (2) design drawings of the directional signs and a description of where they will be located; (3) a discussion of how the needs of the disabled were considered in planning and designing the parking area near the project intake structure; (4) erosion and sediment control measures consistent with the provisions contained in Article 405, which shall be implemented during construction and which shall minimize destruction of the area's natural vegetation, and provide for revegetation, stabilization, and landscaping of new construction areas and slopes damaged by erosion; and (5) an implementation schedule.

The licensee shall prepare the recreation plan after consultation with the U.S. Fish and Wildlife Service, Maine Department of Inland Fisheries and Wildlife, and the Maine Department of Conservation. The licensee shall include with the plan documentation of consultation, copies of comments and recommendations on the completed plan after it has

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been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the plan with the Commission for approval. If the licensee does not adopt a recommendation, the filing should include the licensee's reasons, based on project-specific information.

The Commission reserves the right to require changes to the plan. No ground-disturbing or land-clearing activities for expanding and improving recreation facilities shall begin until the licensee is notified by the Commission that the plan is approved. Upon approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 408. Recreation Monitoring. The licensee shall, after consultation with the U.S. Fish and Wildlife Service (FWS), Maine Department of Inland Fisheries and Wildlife (MDIFW), and the Maine Department of Conservation (MDOC), monitor recreation use at the Burnham Project area to determine whether recreation facilities meet recreation needs through the license term. Concurrent with the filing of FERC Form 80, required by Section 8 of the Commission's Regulations (18 CFR 8.11), the licensee shall file a report with the Commission on the monitoring results. The report shall include: (1) recreational use figures; (2) a discussion of the adequacy of the licensee's recreation facilities at the project site to meet recreation demand; (3) a description of the methodology used to collect all study data; (4) if there is a need for additional facilities; documentation of agency consultation and agency comments on the report after it has been prepared and provided to the agencies; and (6) specific descriptions of how agencies' comments are accommodated by the report.

The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations prior to filing the report with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information. The Commission reserves the right to require changes to the report.

Article 409. Cultural Properties. The licensee shall implement the "Programmatic Agreement Among the Federal Energy Regulatory Commission, the Advisory Council on Historic Preservation, and the Maine State Historic Preservation Officer for Managing Historic Properties That May Be Affected By A License Issuing to Consolidated Hydro Maine, Inc., For the Continued Operation of the Burnham Hydroelectric Project, Project No. 11472," executed on January 6, 1997, including but not limited to the Cultural Resources Management Plan (CRMP) for the project. In the event that the Programmatic Agreement is terminated, the licensee shall implement the

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provisions of its approved CRMP. The CRMP shall be filed with the Commission within 1 year of license issuance. The Commission reserves the authority to require changes to the CRMP at any time during the term of the license. If the Programmatic Agreement is terminated prior to Commission approval of the CRMP, the licensee shall obtain approval before engaging in any ground disturbing activities or taking any other action that may affect any historic properties within the project's area of potential effect. The CRMP shall at a minimum provide for the Phase III mitigation of Site 54.1, the completion of a Phase I, and if needed, a Phase II archeological survey for Site 54.17 on Lot 54, and the reporting and treatment of any as yet unknown archeological sites that might be discovered during operation of the project over the license term.

Article 410. Use and Occupancy. (a) In accordance with the provisions of this article, the licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy are consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee shall also have continuing responsibility to supervise and control the use and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancements. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the use and occupancies for which it grants permission are

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maintained in good repair and comply with applicable state and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land

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conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit a letter to the Director, Office of Energy Projects, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or state agency official consulted, and any Federal or state approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

(1) Before conveying the interest, the licensee shall consult with Federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to insure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project waters.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude

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land conveyed under this article only upon approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

(G) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(H) This order is issued under authority delegated to the Director and is final unless a request for rehearing is filed within 30 days of the date of its issuance, as provided in Section 313(a) of the FPA. The filing of a request for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. The licensee's failure to file a request for rehearing of this order shall constitute acceptance of this license.

J. Mark Robinson
Director
Office of Energy Projects

APPENDIX A

MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
 CERTIFICATION UNDER SECTION 401 OF THE
 FEDERAL CLEAN WATER ACT

On February 10, 2004, the Maine Department of Environmental Protection granted water quality certification under Section 401 of the Clean Water Act to Ridgewood Maine Hydro Partners, L.P. for the Burnham Hydropower Project with the following conditions:

1. WATER LEVELS AND MINIMUM FLOWS

- A. Water Levels: Except as temporarily modified by (1) maintenance activities approved by DEP, (2) extreme hydrologic conditions, as defined below, (3) emergency electrical system conditions, as defined below, (4) flashboard failure, or (5) agreement between the applicant and appropriate state and/or federal agencies, beginning within 60 days of issuance of a FERC license for the project or upon such other schedule as established by FERC, water levels in the Burnham impoundment shall be maintained within one foot of the full pond elevation of 165.9 feet (crest of flashboards) to the maximum extent possible. Maintenance drawdowns shall be limited to August and September, with attainment of full pond no later than October 15, and the applicant shall notify the MDIF&W Regional Fisheries Biologist and the MDMR Stock Enhancement Division in advance of any approved maintenance drawdown.
- B. Minimum Flows: Except as temporarily modified by (1) maintenance activities approved by DEP, (2) extreme hydrologic conditions, as defined below, or (3) emergency electrical system conditions, as defined below, or (4) agreement between the applicant and appropriate state and/or federal agencies, beginning within 60 days of issuance of a FERC license for the project or upon such other schedule as established by FERC, minimum flows shall be released from the Burnham Project in accordance with the following schedules:

Bypass Minimum Flows

April 1 through June 30	225 cfs or inflow, whichever is less
July 1 through September 15	125 cfs or inflow, whichever is less
September 16 through November 15	225 cfs or inflow, whichever is less
November 16 through March 31	125 cfs or inflow, whichever is less

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Total Minimum Flows

May 15 through June 30

run-of-river operation

July 1 through May 14

225 cfs or inflow, whichever is less

- C. "Extreme Hydrologic Conditions" means the occurrence of events beyond the Licensee's control, such as, but not limited to, abnormal precipitation, extreme runoff, flood conditions, ice conditions or other hydrologic conditions such that the operational restrictions and requirements contained herein are impossible to achieve or are inconsistent with the safe operation of the Project.
- D. "Emergency Electrical System Conditions" means operating emergencies beyond Licensee's control which require changes in flow regimes to eliminate such emergencies which may in some circumstances include but are not limited to equipment failure or other abnormal temporary operating condition, generating unit operation or third-party mandated interruptions under power supply emergencies; and orders from local, state or federal law enforcement or public safety authorities.
- E. The applicant shall, within 6 months of issuance of an Original License for the project by FERC or upon such other schedule as established by FERC, submit plans for providing and monitoring the water levels and flows required by this condition. These plans shall be developed in consultation with the U.S. Fish and Wildlife Service (USFWS), Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Department of Marine Resources (MDMR), and DEP. These plans shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.

2. FISH PASSAGE

A. FISHERIES RESTORATION SUPPORT

The applicant shall provide funding, conduct studies, engage in consultation, install fish passage facilities, report on annual restoration activities, and comply with all additional duties and obligations as set forth in the *Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Service ("KHDG Settlement Agreement")*, dated May 26, 1998.

B. EEL PASSAGE

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- (1) Study. The applicant shall, in consultation with the National Marine Fisheries Service and the US Fish and Wildlife Service, join other KHDG members and the Department of Marine Resources in undertaking a three-year research project to determine (a) the appropriate placement of upstream fish passage for American eel at each of the seven KHDG member-owned dams, and (b) appropriate downstream fish passage measures for American eel at each KHDG member-owned project.
- (2) Consultation. Based on the results of the eel passage study and beginning no later than January 1, 2002 and ending no later than June 30, 2002, the applicant shall join other KHDG members in consulting with NMFS, USFWS, and DMR to attempt to reach agreement on the appropriate location of upstream eel passage at each KHDG member- dam, and the appropriate downstream eel passage measures to apply to each KHDG member-owned project.
- (3) Upstream Passage. If agreement is reached by all consulting parties on the location of upstream eel passage at each project, the applicant shall install such passage facilities at the Burnham Project during 2002. The applicant shall join the other parties in requesting that FERC approve the agreed-to passage measures.
- (4) Downstream Passage. If agreement is reached by all consulting parties on appropriate downstream eel passage measures, the applicant shall join the other parties in requesting that FERC approve the agreed-to passage measures.
- (5) Lack of Consensus. If no consensus is reached on eel passage issues by June 30, 2002, the applicant or any of the consulting parties shall be free to petition DEP or FERC to approve appropriate conditions relating to eel passage at the project.
- (6) Lack of Funding. In the event that DMR does not receive the necessary appropriation or legislative spending authorization required to fund the eel passage study discussed above, all provisions of this condition regarding eel passage shall be null and void.

C. PERMANENT UPSTREAM FISH PASSAGE

Permanent upstream fish passage facilities capable of passing sufficient quantities of alewife, shad and Atlantic salmon to meet stated fisheries management goals shall be constructed and operational at the project no later than one year following (1) passage upstream of alewife at the Fort Halifax Project (by temporary or permanent mechanisms including trapping, sorting and trucking) and (2)

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installation of fish passage facilities for alewife and/or removal of dams at all of four specific locations (the Newport Dam; the outlet of Sebasticook Lake; the outlet of Plymouth Lake at the head of Martin Stream; and below the outlet of Pleasant Pond on Stetson Stream).

D. PERMANENT DOWNSTREAM FISH PASSAGE

Permanent downstream fish passage facilities have been installed at the project, and shall be maintained in accordance with the provisions of the KHDG Settlement Agreement.

E. FISH PASSAGE FACILITIES PLANS

The applicant shall, in accordance with the schedules established by FERC, submit final design and operational plans for all permanent upstream and downstream fish passage facilities and/or operational measures required by this approval, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the DEP prior to construction. In reviewing the plans, the DEP shall consider the recommendations of the MDMR and ASC.

F. FISH PASSAGE EFFICIENCY STUDIES AND RESULTS

- (1) Studies. The applicant shall, in consultation with state and federal fisheries agencies, conduct a study or studies to determine the effectiveness of all permanent upstream and downstream fish passage facilities and/or operational measures required by this approval, in accordance with the terms of the KHDG Settlement Agreement.
- (2) Study plans. The applicant shall, in accordance with the schedule(s) established by FERC, submit plans for a study or studies to determine the effectiveness of all permanent upstream and downstream fish passage facilities and/or operational measures required by this approval, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the DEP prior to implementation. In reviewing the plans, the DEP shall consider the recommendations of the MDMR and ASC.
- (3) Results of studies. The applicant shall, in accordance with the schedule(s) established by FERC, submit the results of any fish passage effectiveness study

or studies, along with any recommendations for changes in the design and/or operation of any permanent upstream or downstream fish passage facilities constructed and/or operated pursuant to this approval. The Department reserves the right, after notice and opportunity for hearing, to require reasonable changes in the design and/or operation of these fish passage facilities as may be deemed necessary to adequately pass anadromous fish through the project site. Any such changes must be approved by FERC prior to implementation.

3. MACROINVERTEBRATE STUDY

- A. The applicant shall, in consultation with the DEP Bureau of Land and Water Quality, conduct a post-licensing study assessing the impact of required minimum flow releases on the macroinvertebrate community in the 855 foot bypass reach below the Burnham Project. The applicant shall submit the details of such a study plan within one year of the issuance of a new FERC license for the project. This plan shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality prior to implementation.
- B. The results of the study shall be submitted to the Department in accordance with the schedule established in the study plan. After reviewing the study results and comments from the applicant, and after notice and opportunity for hearing, the Department shall order such continuation or modification of the minimum flow established in this Order as is deemed necessary to meet Class C aquatic life standards in the bypass reach below the Burnham Project.

4. RECREATIONAL FACILITIES

- A. The applicant shall expand and improve the existing parking area near the project's intake; improve the existing carry-in boat launch just upstream of the intake, improve a series of foot trails for bank fishing access to the bypass reach, and post signs as appropriate.
- B. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans and a schedule for implementing Part A of this Condition. These plans and schedule shall be reviewed by the Maine Department of Conservation and the DEP Bureau of Land and Water Quality, and must receive approval of the DEP Bureau of Land and Water Quality.

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5. LIMITS OF APPROVAL

This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to review and approval of the DEP prior to implementation.

6. COMPLIANCE WITH ALL APPLICABLE LAWS

The applicant shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders required for the operation of the project in accordance with the terms of this certification.

7. EFFECTIVE DATE

This water quality certification shall be effective concurrent with the effective date of the original license issued for the project by the Federal Energy Regulatory Commission.

ATTACHMENT 4

STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION
WATER QUALITY CERTIFICATION

**STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

DEPARTMENT ORDER

IN THE MATTER OF

RIDGEWOOD MAINE.)	MAINE WATER QUALITY PROGRAM;
HYDRO PARTNERS, L.P.)	FEDERAL CLEAN WATER ACT
Pittsfield and Burnham,)	
Somerset and Waldo Counties)	
BURNHAM HYDROELECTRIC PROJECT)	
#L-17810-33-J-N (Approval))	WATER QUALITY CERTIFICATION

Pursuant to the provisions of 38 MRSA Section 464 et seq. and Section 401 of the Federal Water Pollution Control Act (a.k.a. Clean Water Act), the Department of Environmental Protection has considered the application of RIDGEWOOD MAINE HYDRO PARTNERS, L.P. with its supportive data, agency comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

- a. Application: Ridgewood Maine Hydro Partners, L.P. (RMHP) proposes the continued operation of the existing Burnham Hydroelectric Project, located on the Sebasticook River in the Towns of Pittsfield, Somerset County, and Burnham, Waldo County, Maine (See Attachment A).
- b. Existing Project Features: The existing project consists of a dam, penstock, a powerhouse, an impoundment and appurtenant structures (See Attachment B). The dam was originally constructed in 1929.
 - i. The project dam consists of several sections: the spillway, the intake, two earthen dikes, and a stoplog section. The spillway is approximately 208 feet long and is topped by 4.3 foot high hinged steel flashboards. The crest of the flashboards is 165.9 feet (msl). Concrete-filled, earthen dikes extend to the east and west of the spillway.
 - ii. A 495 foot long, 12-foot diameter steel penstock extends from the dam to the powerhouse. The powerhouse has four intake forebays, however only three of the forebays has a turbine unit in it. Two of the turbines have a rated capacity of 300 kW each and the third unit has a rated capacity of 450 kW, all operating at an average head of approximately 27.6 feet.
 - iii. The impoundment formed by the Burnham Dam is approximately 2.5 miles long, with a surface area of 304 acres and a gross volume of 1,904 acre-feet at the full

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pond elevation of 165.9 feet. The impoundment has a usable storage capacity of approximately 302 acre-feet at the proposed one foot drawdown limit.

- c. Existing Project Operation: The project is currently operated in a combined run-of-river/store and release mode. When inflows into the impoundment exceed the project's hydraulic capacity of 650 cfs, the project is operated as run-of-river with flows in excess of 650 cfs passed over the spillway. When inflow is less than 650 cfs, the project may be operated in store and release mode, generally utilizing less than one foot of storage. The project is owned by Ridgewood Maine Hydro Partners, L.P., and operated by CHI Operations, Inc.
- d. Proposed Facilities/Operation Modifications. RMHP proposes no modifications to the project, except those proposed in association with resource protection, enhancement and mitigation measures. The project will continue to be operated in a combined run-of-river/store and release mode, but with minimum flows and restrictions on pond level fluctuation as described below.
- e. Proposed Protection, Mitigation and Enhancement Measures. RHMP proposes the following project operational and non-operational measures for the protection or enhancement of, or mitigation of impacts on, public resources:

- Operate the project such that impoundment levels remain within 1 foot of full pond elevation (165.9 feet) throughout the year;
- Provide minimum flows or inflow, whichever is less, to the bypassed reach in accordance with the following schedule:

April 1 through June 30	225 cfs
July 1 through September 15	125 cfs
September 16 through November 15	225 cfs
November 16 through March 31	125 cfs

- Provide total minimum flows below the project (at the confluence of the tailrace and the bypass reach) in accordance with the following schedule:

May 15 through June 30	Run-of-the-river
July 1 through May 14	225 cfs or inflow, whichever is less

- Provide funding, conduct studies, engage in consultation, install fish passage facilities, report on annual restoration activities, and comply with all additional duties and obligations as set forth in the *Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Service ("KHDG Settlement Agreement")*, dated May 26, 1998; and,

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- Provide public access improvements including: expansion and improvement of the existing parking area near the project's intake; improvement of the existing carry-in boat launch just upstream of the intake; a series of foot trails for bank fishing access to the bypass reach; and posting of appropriate signs.

2. JURISDICTION

- a. Water Quality Certification. The proposed continued operation of the project qualifies as an “activity...which may result in (a) discharge into the navigable water (of the United States)” pursuant to the Clean Water Act (CWA), 33 USC 1251 et seq. Section 401 of the CWA requires that any applicant for a federal license or permit to conduct such an activity obtain a certification that the activity will comply with applicable State water quality standards.

This project is currently unlicensed by the Federal Energy Regulatory Commission (FERC). FERC has found the project to be subject to the Commission’s jurisdiction under the Federal Power Act and has ordered the project be licensed. Consolidated Hydro Maine, Inc. filed a license application for the project with FERC on April 8, 1994. The project was subsequently transferred to RMHP by merger with Consolidated Hydro Maine, Inc.

The Department of Environmental Protection has been designated by the Governor of the State as the certifying agency for issuance of Section 401 water quality certification for all activities in the state not subject to Land Use Regulation Commission permitting and review. The Burnham Project is located in organized municipalities that are not subject to LURC’s regulatory jurisdiction. Therefore, the DEP is the certifying agency for the project.

- b. Terms and Conditions. Section 401(d) of the CWA provides that a water quality certification shall set forth any limitations necessary to assure that an applicant for a federal license or permit will comply with any appropriate requirement of state law, and that such limitations shall become a condition on the federal license or permit issued for the activity.

3. APPLICABLE WATER QUALITY STANDARDS

- a. Classification: The waters affected by the Burnham Project are currently classified as follows:

Sebasticook River, main stem, including all impoundments, from the confluence of the East Branch and the West Branch to its confluence with the Kennebec River - Class C. 38 M.R.S.A. §467(4)(H)(1)(a).

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- b. Designated Uses: Class C waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation and navigation; and as a habitat for fish and other aquatic life. 38 M.R.S.A. § 465(4)(A).
- c. Numeric Standards: The dissolved oxygen content of Class C waters may be not less than 5 parts per million or 60% of saturation, whichever is higher, except that in identified salmonid spawning areas where water quality is sufficient to ensure spawning, egg incubation and survival of early life stages, that water quality sufficient for these purposes must be maintained. 38 MRSA Section 465(4)(B).

In accordance with 38 M.R.S.A. Section 464(13), enacted as Public Law 2003, Chapter 257, compliance with dissolved oxygen criteria in existing riverine impoundments is measured as follows:

- Compliance is not measured within 0.5 meters of the bottom;
-
- Where mixing is inhibited due to thermal stratification, compliance is not measured below the point of thermal stratification when such stratification occurs; and
-
- Where mixing is inhibited due to natural topographical features, compliance is not measured within that portion of the impoundment that is topographically isolated. Such natural topographical features may include, but not be limited to, natural deep holes or river bottom sills.

In a letter dated February 9, 2004, the U.S. Environmental Protection Agency has found the provisions of Chapter 257 to be consistent with the requirements of Section 303 of the Clean Water Act.

- d. Narrative Standards: Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. 38 M.R.S.A. § 465(4)(C).
- e. Antidegradation: The Department may only approve water quality certification if the standards of classification of the waterbody and the requirements of the State's antidegradation policy will be met. The Department may approve water quality certification for a project affecting a waterbody in which the standards of classification are not met if the project does not cause or contribute to the failure of the waterbody to meet the standards of classification. 38 M.R.S.A. § 464(4)(F).

4. DISSOLVED OXYGEN

- a. Existing Conditions: Historically, the Sebasticook River has suffered from poor water quality due to untreated wastewater discharges from industrial, commercial, and residential sources. Agricultural activities within the watershed have also contributed to the eutrophication (nutrient enrichment) of the river. This enrichment has led to algal blooms. The bacterial decomposition of these algae when they die can result in significant depletion of dissolved oxygen levels. These contributors to enrichment are generally not problems in free flowing stretches of river. Water quality also suffers due to the presence of dams which lower reaeration, increase travel times, and increase sediment oxygen demand through the settling of solids. Elimination and treatment of discharges over the past several years have resulted in significant improvements in water quality.

A natural ledge sill in the river channel above the project creates a constriction that separates the large upper impoundment and the narrower, lower impoundment. This sill limits the exchange of water that can take place in the upper impoundment. The sill extends to within 8 feet of the surface while water in the upper impoundment upstream of the sill is in excess of 36 feet deep.

- b. Water Quality Data. In 1991 and 1992 the applicant conducted water quality sampling in the impoundment and the river below the project. Sampling in 1991 indicated violations of Class C dissolved oxygen standards in both the upper and lower impoundment. In 1992, violations were only noted in the upper impoundment. Both studies revealed a large anoxic (oxygen depleted) zone located in the upper impoundment which correlated very closely with the depth of the downstream natural sill in the river channel. The violations in the lower impoundment observed in 1991 were all at depths below the level of the sill. The sampling also demonstrated seasonal thermal stratification occurring in the upper impoundment, which was also correlated with the depth of the natural sill. Additional sampling was undertaken during a drawdown of the impoundment in the summer of 1996 to simulate no-dam conditions and assess the impact of the dam on the anoxic conditions. The 1996 sampling indicated that anoxic conditions persisted under the simulated no-dam conditions.
- c. Applicant's Proposals. The applicant proposes to provide total minimum flows at the project of 225 cfs, or inflow, whichever is less, from July 1 through May 14 each year. The project would be operated in a run-of-river mode from May 15 through June 30.
- d. Discussion. As the anoxic conditions in the Burnham impoundment are very closely correlated with the natural constriction created by the ledge sill in the river channel upstream of the dam, and with thermal stratification occurring in the area upstream of the sill, applying 38 M.R.S.A. Section 464(13) the Department finds that the Burnham Project meets applicable dissolved oxygen standards.

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The proposed construction activities at the project, including fish passage and recreation facilities, have the potential to have short-term adverse effects on water quality in the area immediately surrounding the Project structures. To minimize any potential impacts, the applicant will be required to employ standard erosion control measures such as installing silt fence downgradient of disturbed soils, and mulching and seeding or revegetating disturbed soil areas immediately following construction.

5. FISHERY RESOURCES

- a. Existing Conditions: Historically, anadromous fish such as Atlantic salmon, American shad, and alewife inhabited the waters of the Sebasticook River. Due to the construction of dams without fishways, anadromous fish could no longer ascend the river to reach spawning grounds.

DIF&W has historically stocked brook trout, brown trout and landlocked salmon in various headwater ponds within the Sebasticook drainage. Occurrences of these salmonid species within the project waters are the result of these stockings.

- b. Studies Conducted: In response to requests made by state and federal fisheries agencies, the applicant conducted two studies aimed at assessing project impacts on fish and fish habitat in the bypass reach below the project.

Instream Flow Study. An Instream Flow Incremental Methodology (IFIM) study was conducted to assess habitat suitability (Weighted Usable Area or WUA) for various life stages of Atlantic salmon, brown trout, American shad and smallmouth bass under a variety of flow conditions in the project's 855 foot long bypass. The study was done in consultation with the United States Fish and Wildlife Service, the Maine Department of Marine Resources (DMR), and the Maine Department of Inland Fisheries and Wildlife (DIF&W). The results of the study indicate that the bypass reach habitat is best suited for fry and juvenile smallmouth bass, and that a flow of 125 cfs would optimize habitat for fry and would provide 91% of the maximum potential habitat for juveniles. A minimum flow of 125 cfs would also provide 99% and 97% of the maximum potential habitat for fry and juvenile Atlantic salmon, respectively, although this species is not expected to inhabit the project area in appreciable numbers within the foreseeable future. Adult smallmouth bass would be optimized, while spawning smallmouth would be provided with 85% of their maximum habitat.

Continuous Water Temperature Monitoring. Continuous water temperature readings were measured in the bypass from June to September, 1993. Water quality monitoring in the bypass in 1992 and 1993 led the applicant to believe that high temperatures in the bypass could limit the value of the reach as habitat for brown trout. The 1993 study confirmed that temperatures during the summer are too warm for brown trout.

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- c. Existing Management Plans: The state fisheries agencies rely on a plan entitled "Lower Kennebec River Anadromous Fish Restoration Plan and Inland Fisheries Management Overview" (1986) for the management of inland and anadromous fish species on the Kennebec River. The agencies also rely on a more comprehensive plan entitled "Kennebec River Resource Management Plan: Balancing Hydropower Generation and Other Uses" (1993). The Lower Kennebec River Plan also incorporates the provisions of the 1987 Kennebec Hydro Developers Group (KHDG) agreement which is discussed below.

In January of 1987, the Kennebec Hydro Developers Group (Central Maine Power Company, Scott Paper Company, Pittsfield Hydro Company, Benton Falls Hydro Company, and Merimil Limited Partnership) entered into an agreement with the State of Maine fishery agencies to facilitate the restoration of American shad, Atlantic salmon, and alewife to the Kennebec River Basin. The members of the KHDG agreed to provide funding to the state fishery agencies to conduct trap and truck operations, install and operate upstream and downstream fish passage facilities, and conduct studies relating to the restoration efforts. The Pittsfield Hydro Company transferred ownership of the Burnham Project to the applicant in 1988.

For the 11 years between 1987 and 1997, inclusive, the Department of Marine Resources stocked a total of over 530,000 adult alewife spawners into the Kennebec and Sebasticook Rivers above the Edwards Dam. These fish were trapped and trucked from the Brunswick fishway on the Androscoggin River and from the Edwards Dam using an experimental fish pump installed in 1989.

During the same time period, DMR stocked a total of 7,830 adult shad spawners and over 3.5 million juvenile shad (fry and fingerlings) into the Kennebec and Sebasticook River systems. The adult shad were trapped and trucked from the Narraguagus River in Washington County, Maine, and from the Connecticut River in Holyoke, Massachusetts. Beginning in 1993, juvenile shad were trucked from a new hatchery on the Medomak River in Waldoboro.

Currently, there is no plan for active salmon restoration in the Kennebec drainage. The interim plan was to move whatever salmon became available at the Edwards Dam upriver. Only a few salmon were released above the Edwards Dam during the 11 year restoration period.

In addition, permanent downstream fish passage facilities were constructed at the Fort Halifax and Benton Falls Projects and studies were conducted of alewife downstream passage on the Sebasticook River and a cooperative study among DEP, DMR and DIF&W to determine whether alewife stocking would be detrimental to resident fish species and water quality in lakes in the Kennebec drainage.

As of 1997, and apart from the experimental fish pump that was installed in 1989 and

which proved effective only for alewives, no progress had been made in obtaining permanent state-of-the-art fish passage for all anadromous fish at the Edwards Dam.

d. 1998 Agreements. On May 26, 1998, various parties, including the State of Maine and the KHDG members, signed the Lower Kennebec River Comprehensive Hydropower Settlement Accord. This accord has subsequently been approved by FERC, and was amended to the licenses for each of the KHDG member-owned dams. The accord was designed to accomplish the following:

- A charitable donation of the Edwards Dam from Edwards Manufacturing Company to the State of Maine, and the removal of the Edwards Dam by the State of Maine in 1999;
- Contribution of \$2.5 million for dam removal and related activities by Bath Iron Works and \$4.75 million for fish restoration activities and studies and dam removal by the members of the Kennebec Hydro Developers Group; and
- The amendment of certain fish passage obligations at seven dams on the Kennebec and Sebasticook Rivers owned by KHDG members.

Included as part of the accord is the *Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Service ("KHDG Settlement Agreement")*. The Agreement is intended to: achieve a comprehensive settlement governing fisheries restoration, for numerous anadromous and catadromous species, that will rapidly assist in the restoration of these species in the Kennebec River after the termination on December 31, 1998 of the *1986 KHDG Agreement*; avoid extensive litigation over fish passage methodologies, timetables and funding; assist in the removal of the Edwards Dam; and fund the next phase of a fisheries restoration program for the Kennebec River.

By letter dated July 20, 1998, the KHDG members including RMHP have requested that DEP resume the processing of their pending applications such that the fish passage conditions of the DEP permits and/or certifications for the several KHDG member-owned projects are amended to be consistent with the *KHDG Settlement Agreement*.

e. Applicant's Proposals: The applicant proposes the following measures to mitigate project impacts on fishery resources within the project waters:

- Bypass Minimum Flows

April 1 through June 30	225 cfs or inflow, whichever is less
July 1 through September 15	125 cfs or inflow, whichever is less
September 16 through November 15	225 cfs or inflow, whichever is less
November 16 through March 31	125 cfs or inflow, whichever is less

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- ☐ Total Minimum Flows

May 15 through June 30	run-of-river operation
July 1 through May 14	225 cfs or inflow, whichever is less

- ☐ Impoundment fluctuations: Operate the project such that impoundment levels will remain within 1 foot of full pond elevation throughout the year.

- ☐ Fisheries Restoration Support. Provide funding, conduct studies, engage in consultation, install fish passage facilities, report on annual restoration activities, and comply with all additional duties and obligations as set forth in the *Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Service ("KHDG Settlement Agreement")*, dated May 26, 1998.

- ☐ Eel Passage. Join other KHDG members and the Department of Marine Resources in undertaking a three-year research project to determine (a) the appropriate placement of upstream fish passage for American eel at each of the seven KHDG member-owned dams, and (b) appropriate downstream fish passage measures for American eel at each KHDG member-owned project, and provide eel passage at the Burnham Project in accordance with the schedules and procedures outlined in the KHDG agreement.

- ☐ Downstream Fish Passage. Under the KHDG Agreement, the Burnham Project was required to install an interim bypass facility by 1998. Instead, RMHP opted to install a permanent facility, which was operational by the end of the juvenile alewife out-migration in 1999. In addition, the existing trash racks were screened with an expanded metal overlay, similar to the one in use at the Fort Halifax Project. It serves to exclude fish from the wide-spaced trash rack and thus prevent their entrainment into the penstock.

- ☐ Upstream Fish Passage. Complete construction and initiate operation of permanent upstream fish passage facilities capable of passing sufficient quantities of alewife, shad and Atlantic salmon to meet stated fisheries management goals no later than one year following (1) passage upstream of alewife at the Fort Halifax Project and (2) installation of fish passage facilities for alewife at and/or removal of dams at all of four specific locations (the Newport Dam; the outlet of Sebasticook Lake; the outlet of Plymouth Lake at the head of Martin Stream; and below the outlet of Pleasant Pond on Stetson Stream).

f. Discussion: DIF&W comments that during the period April 1 to June 30 and September 16 to November 15 the applicant should pass a minimum flow of 225 cfs or inflow whichever is less. This is the period when stocked brown trout are most likely to enter the bypass reach, and also when fishing pressure below the dam is greatest. Both DMR and DIF&W agree that the applicants proposed minimum flow of 125 cfs or inflow,

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whichever is less, at all other times of the year, is sufficient to protect resident and anadromous fish species. DIF&W also commented that maintenance drawdowns should be limited to August and September with attainment of full pond no later than October 15. Maine DMR and Maine IF&W have requested that they be notified of maintenance drawdowns so that they may comment on timing relative to fisheries issues.

The Maine Department of Marine Resources, Department of Inland Fisheries and Wildlife, and State Planning Office, the Kennebec Coalition (American Rivers, Inc., the Atlantic Salmon Federation, Kennebec Valley Chapter of Trout Unlimited, the Natural Resources Council of Maine, and Trout Unlimited), the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the Edwards Manufacturing Company, and the City of Augusta, Maine, are all on record in support of the Settlement Accord and the *KHDG Settlement Agreement*.

The applicant's proposals to provide minimum flows below the project and in the bypass, provide fisheries restoration support, and provide eel and fish passage in compliance with the terms of the *KHDG Settlement Agreement*, and to limit impoundment fluctuations to within 1 foot of full pond elevation appear to be adequate to achieve and maintain suitable use of the water affected by the project for fish.

6. HABITAT FOR AQUATIC LIFE

- a. Existing Conditions: Past operations of the project resulted in fluctuations in impoundment elevations and periods when no flow other than leakage was released into the bypass reach of the project.
- b. Applicant's Proposals: The applicant proposes to maintain the impoundment elevation within one foot of the crest of the flashboards during all periods of the year. Although more specifically related to fisheries resources, the applicant proposes the following minimum flows in the bypass reach and tailrace of the project:

Bypass Minimum Flows

April 1 through June 30	225 cfs or inflow, whichever is less
July 1 through September 15	125 cfs or inflow, whichever is less
September 16 through November 15	225 cfs or inflow, whichever is less
November 16 through March 31	125 cfs or inflow, whichever is less

Total Minimum Flows

May 15 through June 30	run-of-river operation
July 1 through May 14	225 cfs or inflow, whichever is less

- c. Discussion: DEA comments that the applicant's proposed minimum flows should be sufficient to meet Class C standards for aquatic life, but data collection in the bypass reach will be necessary to document attainment of standards.

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The applicant's proposal to provide minimum flows, as described above, appear to be adequate to achieve and maintain suitable use of the waters affected by the project as habitat for aquatic life provided a post-licensing study is conducted to assess the impact of those flows on the macroinvertebrate community in the bypass reach.

7. RECREATION

- a. Existing Conditions: Use of the project waters currently includes fishing, canoeing, and duck hunting. The impoundment is relatively shallow and small in size and is not suited for trailered motor boats.
- b. Applicant's Proposals: The applicant proposes the following measures to improve recreational facilities at the project:
 - Expansion and improvement of the existing parking area near the project's intake;
 - Improvement of the existing carry-in boat launch just upstream of the intake, which will also serve as a take-out point for the canoe portage trail;
 - A series of foot trails for bank fishing access to the bypass reach, and for a canoe portage trail; and
 - Posting of signs as appropriate.
- c. Discussion: At the request of the Maine Department of Conservation, the applicant investigated the possibility of providing a canoe portage route around the eastern end of the Burnham Dam. The applicant concluded that the eastern side is no more suitable than the informal trail that exists on the western side of the dam. Further, the eastern side has no roads nearby that could provide vehicle access if needed. The DOC has reviewed the applicant's proposals and comments they are adequate to meet existing and anticipated recreational needs in the project area.

The applicant's proposals appear to be adequate to achieve and maintain suitable use of waters affected by the project for fishing and recreation in and on the water.

8. WETLANDS AND WILDLIFE RESOURCES

- a. Existing Conditions: The Burnham impoundment and surrounding shoreline support a variety of wildlife species including songbirds, small mammals and waterfowl. No Federally-listed threatened or endangered species of wildlife are found in the project area.

Within the project area, the applicant identified approximately 312 acres of wetland. This total includes scrub/shrub, emergent, and forested wetlands.

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- b. Applicant's Proposals: For the protection and enhancement of wildlife and wetlands resources within the project impoundment, the applicant proposes to limit headpond fluctuations to within one foot of full pond elevation throughout the year.
- c. Discussion: DIF&W commented that maintenance drawdowns should be limited to August and September with attainment of full pond no later than October 15. DIF&W has also requested that it be notified of maintenance drawdowns so that it may comment on timing relative to wildlife issues.

The applicant's proposal to limit headpond fluctuations to within one foot of full pond elevation throughout the year appears to be adequate to protect and maintain wetlands and wildlife surrounding the impoundment.

9. HYDROELECTRIC POWER GENERATION

- a. Existing Energy Generation: The Burnham Hydroelectric Project generates an average of 6.3 million kilowatt hours (kWh) of electricity annually. This is the equivalent to the energy that would be produced by burning about 12,000 barrels of oil or 2,920 tons of coal each year.
- b. Energy Utilization. The power generated by the Burnham Project is currently sold to Central Maine Power Company for use by its residential and commercial customers. All power generated by the project is fed into CMP's transmission and distribution system.
- c. Existing Energy Policies/Plans: The State of Maine has developed a comprehensive energy plan (Final Report of the Commission on Comprehensive Energy Planning, May 1992) with the goal of meeting the State's energy needs with reliable energy supplies at the lowest possible cost, while ensuring that energy production and use are consistent with a healthy environment and a vibrant economy. Specifically, the Plan establishes the following targets for Maine's energy future:
- Reduce the State's level of dependence on oil from 50 percent to at least match the national average of 43 percent by the year 2000, with further reductions to at least the 30 percent level by 2010;
 - Increase the percentage of renewable energy resources in the State's primary energy mix from 30 percent to 40 percent by the year 2000, and to at least 50 percent by 2010;
 - Increase statewide energy efficiency relative to 1990 levels by 25 percent by the year 2000 and by at least 50 percent by 2010; and

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- Work to stabilize long-term energy prices, in balance with Maine's other energy related goals, with a specific emphasis on enhancing Maine's competitive position relative to New England and the U.S.

With respect to renewable energy, the Plan recommends that Maine actively encourage the development of wind and solar energy resources and support the continued utilization and further development, where appropriate, of the State's renewable, indigenous hydro and biomass resources.

- c. Applicant's Proposals: The applicant proposes to pass minimum flows from the project as described above. FERC has estimated that the applicant's proposal to provide minimum flows would result in a 14% (860,000 kWh) reduction in average annual production. The applicant has more recently estimated this reduction to be 19%.
- d. Discussion. The Department finds that the applicant's proposals will be adequate to ensure that project waters are suitable for the designated use of hydroelectric power generation. The Department further finds that the losses in power generation due to minimum flows are reasonable and necessary to mitigate project impacts.

BASED on the above FINDINGS OF FACT, the evidence contained in the application, and subject to the conditions listed below, the Department CONCLUDES that the continued operation of the Burnham Hydroelectric Project will result in all waters affected by the project being suitable for all designated uses and meeting all other applicable water quality standards, provided that:

1. Water levels are maintained as proposed;
2. Minimum flows are provided to the bypass reach and below the project as proposed;
3. Fish passage facilities are provided as proposed;
4. Other measures to enhance fish passage and restoration are implemented as proposed;
5. A post-licensing macroinvertebrate study is conducted in the project bypass reach; and
6. Public recreational access and use facilities are provided and maintained as proposed.

THEREFORE, the Department APPROVES the application of RIDGEWOOD MAINE HYDRO PARTNERS, L.P. and GRANTS CERTIFICATION that there is a reasonable assurance that the continued operation of the BURNHAM PROJECT, as described above, will not violate applicable water quality standards, SUBJECT TO THE FOLLOWING CONDITIONS:

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1. WATER LEVELS AND MINIMUM FLOWS

- A. Water Levels: Except as temporarily modified by (1) maintenance activities approved by DEP, (2) extreme hydrologic conditions, as defined below, (3) emergency electrical system conditions, as defined below, (4) flashboard failure, or (5) agreement between the applicant and appropriate state and/or federal agencies, beginning within 60 days of issuance of a FERC license for the project or upon such other schedule as established by FERC, water levels in the Burnham impoundment shall be maintained within one foot of the full pond elevation of 165.9 feet (crest of flashboards) to the maximum extent possible. Maintenance drawdowns shall be limited to August and September, with attainment of full pond no later than October 15, and the applicant shall notify the MDIF&W Regional Fisheries Biologist and the MDMR Stock Enhancement Division in advance of any approved maintenance drawdown.
- B. Minimum Flows: Except as temporarily modified by (1) maintenance activities approved by DEP, (2) extreme hydrologic conditions, as defined below, or (3) emergency electrical system conditions, as defined below, or (4) agreement between the applicant and appropriate state and/or federal agencies, beginning within 60 days of issuance of a FERC license for the project or upon such other schedule as established by FERC, minimum flows shall be released from the Burnham Project in accordance with the following schedules:

Bypass Minimum Flows

April 1 through June 30	225 cfs or inflow, whichever is less
July 1 through September 15	125 cfs or inflow, whichever is less
September 16 through November 15	225 cfs or inflow, whichever is less
November 16 through March 31	125 cfs or inflow, whichever is less

Total Minimum Flows

May 15 through June 30	run-of-river operation
July 1 through May 14	225 cfs or inflow, whichever is less

- C. "Extreme Hydrologic Conditions" means the occurrence of events beyond the Licensee's control, such as, but not limited to, abnormal precipitation, extreme runoff, flood conditions, ice conditions or other hydrologic conditions such that the operational restrictions and requirements contained herein are impossible to achieve or are inconsistent with the safe operation of the Project.
- D. "Emergency Electrical System Conditions" means operating emergencies beyond Licensee's control which require changes in flow regimes to eliminate such emergencies which may in some circumstances include but are not limited to equipment failure or other abnormal temporary operating condition, generating unit operation or third-party mandated interruptions under power supply emergencies; and orders from local, state or federal law enforcement or public safety authorities.

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E. The applicant shall, within 6 months of issuance of an Original License for the project by FERC or upon such other schedule as established by FERC, submit plans for providing and monitoring the water levels and flows required by this condition. These plans shall be developed in consultation with the U.S. Fish and Wildlife Service (USFWS), Maine Department of Inland Fisheries and Wildlife (MDIFW), Maine Department of Marine Resources (MDMR), and DEP. These plans shall be reviewed by and must receive the approval of the DEP Bureau of Land and Water Quality.

2. FISH PASSAGE

A. FISHERIES RESTORATION SUPPORT

The applicant shall provide funding, conduct studies, engage in consultation, install fish passage facilities, report on annual restoration activities, and comply with all additional duties and obligations as set forth in the *Agreement Between Members of the Kennebec Hydro Developers Group, the Kennebec Coalition, the National Marine Fisheries Service, the State of Maine, and the US Fish and Wildlife Service ("KHDG Settlement Agreement")*, dated May 26, 1998.

B. EEL PASSAGE

- (1) Study. The applicant shall, in consultation with the National Marine Fisheries Service and the US Fish and Wildlife Service, join other KHDG members and the Department of Marine Resources in undertaking a three-year research project to determine (a) the appropriate placement of upstream fish passage for American eel at each of the seven KHDG member-owned dams, and (b) appropriate downstream fish passage measures for American eel at each KHDG member-owned project.
- (2) Consultation. Based on the results of the eel passage study and beginning no later than January 1, 2002 and ending no later than June 30, 2002, the applicant shall join other KHDG members in consulting with NMFS, USFWS, and DMR to attempt to reach agreement on the appropriate location of upstream eel passage at each KHDG member- dam, and the appropriate downstream eel passage measures to apply to each KHDG member-owned project.
- (3) Upstream Passage. If agreement is reached by all consulting parties on the location of upstream eel passage at each project, the applicant shall install such passage facilities at the Burnham Project during 2002. The applicant shall join the other parties in requesting that FERC approve the agreed-to passage measures.
- (4) Downstream Passage. If agreement is reached by all consulting parties on appropriate downstream eel passage measures, the applicant shall join the other parties in requesting that FERC approve the agreed-to passage measures.

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- (5) Lack of Consensus. If no consensus is reached on eel passage issues by June 30, 2002, the applicant or any of the consulting parties shall be free to petition DEP or FERC to approve appropriate conditions relating to eel passage at the project.
- (6) Lack of Funding. In the event that DMR does not receive the necessary appropriation or legislative spending authorization required to fund the eel passage study discussed above, all provisions of this condition regarding eel passage shall be null and void.

C. PERMANENT UPSTREAM FISH PASSAGE

Permanent upstream fish passage facilities capable of passing sufficient quantities of alewife, shad and Atlantic salmon to meet stated fisheries management goals shall be constructed and operational at the project no later than one year following (1) passage upstream of alewife at the Fort Halifax Project (by temporary or permanent mechanisms including trapping, sorting and trucking) and (2) installation of fish passage facilities for alewife and/or removal of dams at all of four specific locations (the Newport Dam; the outlet of Sebasticook Lake; the outlet of Plymouth Lake at the head of Martin Stream; and below the outlet of Pleasant Pond on Stetson Stream).

D. PERMANENT DOWNSTREAM FISH PASSAGE

Permanent downstream fish passage facilities have been installed at the project, and shall be maintained in accordance with the provisions of the KHDG Settlement Agreement.

E. FISH PASSAGE FACILITIES PLANS

The applicant shall, in accordance with the schedules established by FERC, submit final design and operational plans for all permanent upstream and downstream fish passage facilities and/or operational measures required by this approval, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the DEP prior to construction. In reviewing the plans, the DEP shall consider the recommendations of the MDMR and ASC.

F. FISH PASSAGE EFFICIENCY STUDIES AND RESULTS

- (1) Studies. The applicant shall, in consultation with state and federal fisheries agencies, conduct a study or studies to determine the effectiveness of all permanent upstream and downstream fish passage facilities and/or operational measures required by this approval, in accordance with the terms of the KHDG *Settlement Agreement*.
- (2) Study plans. The applicant shall, in accordance with the schedule(s) established by FERC, submit plans for a study or studies to determine the effectiveness of all permanent upstream and downstream fish passage facilities and/or operational

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measures required by this approval, prepared in consultation with state and federal fisheries agencies. These plans shall be reviewed by and must receive approval of the the DEP prior to implementation. In reviewing the plans, the DEP shall consider the recommendations of the MDMR and ASC.

- (3) Results of studies. The applicant shall, in accordance with the schedule(s) established by FERC, submit the results of any fish passage effectiveness study or studies, along with any recommendations for changes in the design and/or operation of any permanent upstream or downstream fish passage facilities constructed and/or operated pursuant to this approval. The Department reserves the right, after notice and opportunity for hearing, to require reasonable changes in the design and/or operation of these fish passage facilities as may be deemed necessary to adequately pass anadromous fish through the project site. Any such changes must be approved by FERC prior to implementation.

3. MACROINVERTEBRATE STUDY

- A. The applicant shall, in consultation with the DEP Bureau of Land and Water Quality, conduct a post-licensing study assessing the impact of required minimum flow releases on the macroinvertebrate community in the 855 foot bypass reach below the Burnham Project. The applicant shall submit the details of such a study plan within one year of the issuance of a new FERC license for the project. This plan shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality prior to implementation.
- B. The results of the study shall be submitted to the Department in accordance with the schedule established in the study plan. After reviewing the study results and comments from the applicant, and after notice and opportunity for hearing, the Department shall order such continuation or modification of the minimum flow established in this Order as is deemed necessary to meet Class C aquatic life standards in the bypass reach below the Burnham Project.

4. RECREATIONAL FACILITIES

- A. The applicant shall expand and improve the existing parking area near the project's intake; improve the existing carry-in boat launch just upstream of the intake, improve a series of foot trails for bank fishing access to the bypass reach, and post signs as appropriate.
- B. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans and a schedule for implementing Part A of this Condition. These plans and schedule shall be reviewed by the Maine Department of Conservation and the DEP Bureau of Land and Water Quality, and must receive approval of the DEP Bureau of Land and Water Quality.

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5. LIMITS OF APPROVAL

This approval is limited to and includes the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. All variances from the plans and proposals contained in said documents are subject to review and approval of the DEP prior to implementation.

6. COMPLIANCE WITH ALL APPLICABLE LAWS

The applicant shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders required for the operation of the project in accordance with the terms of this certification.

7. EFFECTIVE DATE

This water quality certification shall be effective concurrent with the effective date of the original license issued for the project by the Federal Energy Regulatory Commission.

DONE AND DATED AT AUGUSTA, MAINE, THIS 10th DAY OF February, 2004.

By: /s/ Dawn R. Gallagher
Dawn R. Gallagher, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of receipt of application: 2/10/03
Date application accepted for processing: 2/18/03
(Initial application received 3/23/95 and subsequently withdrawn and refiled, 3/21/96, 3/18/97, 3/4/98, 3/3/99, 3/1/00, 2/27/01, 2/26/02 and 2/10/03.)

Date filed with the Board of Environmental Protection: February 11, 2004

This Order prepared by Mark Margerum, Bureau of Land and Water Quality
L-17810-33-J-N

ATTACHMENT 5

CERTIFICATE INFORMATION FROM NEPOOL GIS



My Account

Help

Certificate InformationPlant - Unit Name: **UNDER5MW - PITTSFIELD HYDRO**Month and year of generation : **5/2011**Certificate Serial Numbers: Total Certificates: **Part 1 - Fuel Sources****100% - Hydroelectric/Hydropower**Short Description - **Hydroelectric/Hydropower**Description - **Hydroelectric/Hydropower**

Fuel Type Attributes -

- **Hydro-small (30 MW or less) - Automatically qualifies as Connecticut CEO-eligible**
- **Hydro-daily cycle**
- **Hydro - run-of-the-river hydropower facility that has a nameplate generating capacity of not more than five megawatts, does not cause an appreciable change in the river flow, and began operation prior to July 1, 2003**

Part 2 - Renewable Portfolio Standard ("RPS") Eligibility**Connecticut**Class I Renewable Energy Source: **No**Class II Renewable Energy Source: **Yes**State Certification Number: **CT00059-03**Date of Eligibility: **01/2004**Class III Portfolio Standard: **No**Eligible under Clean Energy Options ("CEO"): **Yes**R-O-R Hydro: Percentage Qualifying as Class I: **NA****Massachusetts**RPS Class I Renewable Generation Unit: **No**Solar Carve-Out Unit: **No**Auction Solar Carve-Out Unit: **No**RPS Class II Renewable Generation Unit: **No**RPS Class II Waste Energy Generation Unit: **No**APS Alternative Generation Unit: **No**Generation level per year or Energy imported per year above which qualifies as RPS New Renewable Resource: **NA**

RPS Statement Of Qualification Number:

Eligible MA Renewable for NOx allowances claims from Public Benefit set-a-side: **No**

MA Renewable NOx State Certification Number:

MaineClass I New Renewable Energy Resource Qualification: **No**Class II Eligible Resource: **Yes**Community Based Renewable Energy: **No**Eligible for CO2 Netting: **No**

State Certification Number:

Date of Eligibility: **NA****Rhode Island**New Renewable Energy Resource: **No**

State Certification Number:

Date of Eligibility: **NA**

Existing Renewable Energy Resource: **No**

State Certification Number:

Date of Eligibility: **NA**

New Hampshire

Class I Source: **No**

Average annual electric production (in MWh) from a facility other than hydroelectric from 2004 through 2006, or for the first 36 months after commercial operation if that date is after December 31, 2001: **NA**

Average annual production (in MWh) of a hydroelectric facility from the later of January 1, 1986 or the date of first commercial operation through December 31, 2005 (if such a facility was upgraded or expanded during this baseline period, actual generation should be adjusted to estimate the average annual production that would have occurred had the upgrade or expansion been in place for this entire period): **NA**

Class II Source: **No**

Class III Source: **No**

Class IV Source: **No**

State Certification Number:

Date of Eligibility: **NA**

Part 3 - Emissions

CEM Reporting: **No**

ORIS PL:

Emissions Unit ID(s):

Peer unit name and address (if not reporting actual generator emissions): **NA**

Normalized emission per MWh (pounds)

- Carbon dioxide: **0.00000**

- Carbon monoxide: **0.00000**

- Mercury: **0.00000**

- Nitrogen oxides: **0.00000**

- Particulate matter: **0.00000**

- Particulate Matter 10 Microns: **0.00000**

- Sulfur dioxides: **0.00000**

- Volatile organic compounds: **0.00000**

Emissions Free Energy Certificate: **Yes**

Part 4 - Labor Characteristics

Majority of employees operating at generation plant are employed under collective bargaining agreement: **No**

If generating plant experienced a labor dispute in the most recent calendar year, replacement workers were used: **No**

Part 5 - Vintage

Vintage (month and year of commercial operation): **12/1984**

Repowering/derate date: **NA**

Refurbishment date: **NA** (Relevant to Maine RPS)

Date Operation Recommended after at Least Two Years of Not Operating: **NA** (Relevant to Maine RPS)

Date recognized by System Operators as capacity resource after not being recognized as a capacity resource for at least two years: **NA** (Relevant to Maine RPS)

Capacity addition/subtraction: **NA**

FERC hydroelectric license relicensing date: **NA**

Part 6 - Asset identification

Asset identification: **2290**

Asset owner: **NA**
Status: **ACT**
Capacity: **1.1**
Ability to Cogenerate Electricity and Steam: **No**
Steam was generated with Electricity for the Vintage : **No**

Part 7 - Total MWh generated during the reporting period

Total MWh generated: **[REDACTED]**

Part 8 - Location of GIS Generator

Location of generating unit: **New England (ISO New England Control Area)**
State: **MAINE**

Part 9 - Green-E Eligibility

Green-E eligible: **No**
Green-E fuel type: **Hydroelectric/Hydropower-Hydroelectric/Hydropower2-Less than 30MW**

Part 10 - Third Party Reporting Entity

Third Party Reporting Entity: **ISO-NE**

Part 11 - Status under Regional Greenhouse Gas Initiative

Generating Unit in Control Area that is subject to RGGI requirements ("RGGI-Affected"): **No**
Generating Unit in Control Area that is not RGGI-Affected solely because it has a generating capacity under 25 MW: **No**
Generating Unit in Control Area that is not RGGI-Affected because of its fuel source, regardless of its generating capacity: **Yes**
Generating Unit not in Control Area: **No**

Part 12 - Low Impact Hydro Institute Certification

Low Impact Hydro Institute eligible: **0**

ATTACHMENT 6

AFFIDAVIT

STATE OF NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

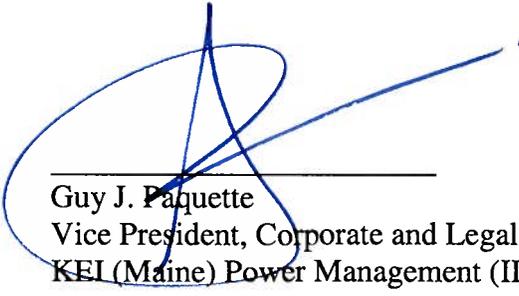
APPLICATION OF KEI (MAINE) POWER MANAGEMENT
(II) LLC FOR CLASS IV RENEWABLE ENERGY SOURCE
ELIGIBILITY OF PITTSFIELD (BURNHAM)
HYDROELECTRIC PROJECT (FERC No. 11472)

Affidavit of Guy J. Paquette

I, Guy J. Paquette, of the City of Westmount, in the Province of Quebec, hereby TAKE OATH AND SAY as follows:

1. I am Vice President, Corporate and Legal Affairs of KEI (Maine) Power Management (II) LLC (“KEI”). As such, I have direct knowledge of the matters referenced herein or access to the relevant corporate records.
2. KEI is submitting an application for qualification as a Class IV renewable energy source for the Burnham (Pittsfield) Hydroelectric Project pursuant to New Hampshire Admin. Code Puc 2500 Rules, (the “Application”);
3. I certify that the information submitted with the Application and all attachments thereto are to the best of my knowledge true and accurate.

DATED THIS 13th DAY OF FEBRUARY 2012



Guy J. Paquette
Vice President, Corporate and Legal Affairs
KEI (Maine) Power Management (II) LLC

SOLEMNLY AFFIRMED TO BEFORE ME THIS 13th DAY OF FEBRUARY 2012.



Janet Shulist
Commissioner for Oaths for
of Quebec and Outside Quebec
Seal No: 130 003



ATTACHMENT 7

ORDER APPROVING TRANSFER OF LICENSE

128 FERC ¶ 62,226
 UNITED STATES OF AMERICA
 FEDERAL ENERGY REGULATORY COMMISSION

Ridgewood Maine Hydro Partners, L.P.

Projects Nos. 2808-011,
 2809-026,
 3562-020,
 4202-020,
 11132-025,
 11472-057,
 11482-027,
 and 11566-017

KEI (Maine) Power Management (I) LLC
 KEI (Maine) Power Management (II) LLC
 KEI (Maine) Power Management (III) LLC
 KEI (Maine) Power Management (IV) LLC

ORDER APPROVING TRANSFER OF LICENSE

(Issued September 23, 2009)

1. By application filed July 30, 2009, Ridgewood Maine Hydro Partners, L.P. (Transferor) seeks Commission approval to transfer 8 licenses to KEI (Maine) Power Management (I) LLC, KEI (Maine) Power Management (II) LLC, KEI (Maine) Power Management (III) LLC, and KEI (Maine) Power Management (IV) LLC, all wholly owned subsidiaries of KEI (USA) Power Management Inc. (Transferees).

Project Number	Current Licensee	Proposed Transferors	Names and Locations
P-11132-025	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (I) LLC	Eustis Project, North Branch Dead River, Franklin County, ME
P-11472-057	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (II) LLC	Burnham Project, Sebasticook River, Somerset and Waldo Counties, ME
P-4202-020	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (II) LLC	Lowell Tannery Project, Passadumkeag River, Penobscot County, ME

Project No. 2808-011, *et al.*

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Project Number	Current Licensee (Transferor)	Proposed Transferees	Names and Locations
P-2808-011	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (III) LLC	Lower Barker Mill, Little Androscoggin River, Androscoggin County, ME
P-2809-026	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (III) LLC	American Tissue Dam Project, Cobbosseecontee Stream, Kennebec County, ME
P-3562-020	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (III) LLC	Upper Barker Mill Project, Little Androscoggin River, Androscoggin County, ME
P-11482-027	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (IV) LLC	Marcal Project, Little Androscoggin River, Androscoggin County, ME
P-11566-017	Ridgewood Maine Hydro Partners, L.P.	KEI (Maine) Power Management (IV) LLC	Damariscotta Project, Damariscotta River, Lincoln County, ME

2. Public notice of the application was issued on August 18, 2009, setting September 1, 2009, as the deadline for filing comments, protests, and motions to intervene. No comments, motions to intervene, or protests were filed.

3. The Transferees have agreed to accept all of the terms and conditions of the licenses and to be bound by the licenses as if they were the original licensees.

Project No. 2808-011, *et al.*

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4. Transferor has generally complied with the terms and conditions of the licenses and agrees to pay annual charges that have accrued to the date of the transfers. Transferees will be required to comply with the requirements of the licenses as though they were the original licensees. Transfers of the licenses for these projects are consistent with the Commission's regulations and are in the public interest.

The Director orders:

(A) Transfer of the licenses listed in the above chart from Ridgewood Maine Hydro Partners, L.P. to KEI (Maine) Power Management (I) LLC, KEI (Maine) Power Management (II) LLC, KEI (Maine) Power Management (III) LLC, and KEI (Maine) Power Management (IV), all wholly owned subsidiaries of KEI (USA) Power Management Inc., are approved.

(B) Ridgewood Maine Hydro Partners, L.P. shall pay all annual charges that accrue up to the effective date of the transfers.

(C) Approval of the transfers is contingent upon: (1) transfer of titles of the properties under license and delivery of all license instruments to KEI (Maine) Power Management (I) LLC, KEI (Maine) Power Management (II) LLC, KEI (Maine) Power Management (III) LLC, and KEI (Maine) Power Management (IV), which shall be subject to the terms and conditions of the licenses as though they were the original licensees; and (2) KEI (Maine) Power Management (I) LLC, KEI (Maine) Power Management (II) LLC, KEI (Maine) Power Management (III) LLC, and KEI (Maine) Power Management (IV), acknowledging acceptance of this order and its terms and conditions by signing and returning the attached acceptance sheets. Within 60 days from the date of this order, the transferees shall submit certified copies of all instruments of conveyance and the signed acceptance sheets.

(D) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 CFR §385.713.

William Guey-Lee
Chief, Engineering & Jurisdiction Branch
Division of Hydropower
Administration and Compliance

Project No. 2808-011, *et al.*

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this order, _____ this ____ day of _____, 20____, has caused its corporate name to be signed hereto by _____, its President, and its corporate seal to be affixed hereto and attested by _____ its Secretary, pursuant to a resolution of its Board of Directors duly adopted on the ____ day of _____, 20____, a certified copy of the record of which is attached hereto.

By _____

Attest:

Secretary
(Executed in quadruplicate)

ATTACHMENT 8
PROJECT PHOTOGRAPHS



Figure 1: Aerial view of dam in Pittsfield, Maine



Figure 2: Aerial view of powerhouse in Burnham, Maine