



We provide practical **solutions** for complex renewable energy, water, and environmental projects.

July 29, 2024

VIA HAND DELIVERY

Laura Paye
Maine Department of Environmental Protection
Bureau of Land and Water Quality
17 State House Station
Augusta, ME 04333

Re: Application for Water Quality Certification (Section 401)
Lowell Tannery Hydroelectric Project (FERC No. 4202)

Dear Ms. Paye:

On behalf of KEI (USA) Power Management Inc. (KEI (USA)) enclosed please find a hardcopy of the application for water quality certification (WQC) for the Lowell Tannery Hydroelectric Project (FERC No. 4202). A payment fee of \$759.00 (Seven hundred and fifty nine dollars) has been provided via the online payment portal. The application is for the Federal Energy Regulatory Commission (FERC) relicensing of the continued operation of the Project under the terms of a new license from the FERC. KEI is filing this application with the MDEP for a WQC pursuant to the provisions of the Federal Clean Water Act, Section 401. The Project is located on the Passadumkeag River in the town of Lowell, Maine.

In accordance with MDEP regulations for WQC application processing, Kleinschmidt provides herein one hardcopy WQC application, one electronic copy of the WQC application (via CD), and two hardcopies of the final FERC license.

If you have any questions regarding this notice, please contact me by phone at 207-416-1271 or at Kayla.Hopkins@Kleinschmidgroup.com.

Sincerely,

KLEINSCHMIDT ASSOCIATES

Kayla A. Hopkins
Regulatory Coordinator

KAH:TMJ

J:\705\121\Docs\WQC June 2024\WQC App CLT.docx

ATTACHMENT

NOTICE OF WQC APPLICATION

DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Resource Regulation
17 State House Station
Augusta, Maine 04333
Telephone: 207-287-7688

FOR DEP USE
ATS # _____
#L- _____
Fees Paid _____
Date Fees Received _____

**APPLICATION FOR
WATER QUALITY CERTIFICATION
(U.S. P.L. 92-500, SECTION 401)**

HYDROPOWER PROJECT LICENSING/RELICENSING ONLY

This form shall be used to request Water Quality Certification for the proposed FERC licensing or relicensing of an existing hydropower generating or storage project where no construction, reconstruction or structural alteration of project facilities which would affect water levels or flows is proposed.

All required fees must be paid before application processing will begin. Please contact the Department for current fee schedule information. Fees are payable to Treasurer, State of Maine.

APPLICANT INFORMATION

Name of Applicant: KEI (USA) Power Management Inc. (KEI USA) _____

Mailing Address: 423 Brunswick Avenue
Gardiner, ME 04345

Name of Contact or Agent: Lewis C. Loon, General Manager

Telephone: 207-203-3025

PROJECT INFORMATION

Name of Project: Lowell Tannery Hydroelectric Project FERC No. P-4202

Address (use "911" address, if available): 129 West Old Main Road, Lowell, ME 04493

Name of Waterbody Affected: Passadumkeag River

Municipality or Township: Lowell, ME County: Penobscot

GPS Coordinates, if known: 45°11'11.96"N Latitude, - 68°27'53.30"W Longitude

REQUIRED INFORMATION

1. Provide all the information requested by this application form.
2. If applicant is a registered corporation, provide either a *Certificate of Good Standing* (available from the Secretary of State) or a statement signed by a corporate officer affirming that the corporation is in good standing.
3. A signed Certification of Publication and a completed Notice of Intent to File an application for Water Quality Certification.

NOTE: All supporting documents summarized above must be attached to this form and sent to the DEP Office listed below:

Department of Environmental Protection
Bureau of Land Resource Regulation
17 State House Station
Augusta, ME 04333
Tel: (207) 287-7688

"I certify under penalty of law that I have personally examined the information submitted in this document and all attachments thereto and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe the information is true, accurate, and complete. I authorize the Department to enter the property that is the subject of this application, at reasonable hours, including buildings, structures or conveyances on the property, to determine the accuracy of any information provided herein. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

DATE: July 26, 2024

(IF SIGNATURE IS OTHER THAN APPLICANT,
ATTACH LETTER OF AGENT
AUTHORIZATION SIGNED BY APPLICANT)



SIGNATURE OF APPLICANT

Lewis Loon

PRINTED NAME & TITLE

WATER QUALITY CERTIFICATION APPLICATION

FILING INSTRUCTIONS AND PROCEDURES

1. When filing, send an original paper copy plus one (1) electronic copy of a completed Application for Water Quality Certification to the Department, along with two (2) copies of the Application for Initial License or New License that has been or will be filed with FERC. The State filing can be made prior to or concurrent with the FERC filing.
2. The Department is required by law to assess fees for processing applications and for monitoring permit compliance. Application processing will not begin until all required fees have been paid. When filing, submit full fee payment as shown on the DEP fee schedule. Please make checks payable to: Treasurer, State of Maine.
3. A number of consulting agencies will be involved in the State review process of hydropower projects. Distribution of copies of the FERC application to these agencies may be coordinated by DEP or may be handled directly by the applicant. When filing, please notify the DEP staff to discuss distribution procedures.
4. Most information requested by this application form can be provided by making reference to the appropriate exhibit of the FERC license application. Space is provided on the form for such references.
5. Within 15 working days of receiving an application and all required fees, the DEP shall determine whether the application as filed is acceptable for processing.
6. Additional information may be required during the review process on any aspect of the project relating to compliance with applicable statutory criteria.

WATER QUALITY CERTIFICATION APPLICATION

1. **NATURE OF ACTIVITY.** Check appropriate item:

_____ Application for Initial License.

 X Application for New License (Relicense).

A COPY OF A COMPLETED FERC APPLICATION FOR LICENSE (THIRD STAGE CONSULTATION) MUST ACCOMPANY THIS FORM.

NOTE: A copy of any document revising, supplementing, amending, or correcting deficiencies in the application as originally filed with FERC must also be filed with D.E.P.

2. **EXISTING ENVIRONMENT.** Provide a description of the physical environment of the project site and its immediate vicinity. The project site includes all land and water areas affected by the project.

REFERENCE: FERC EXHIBIT(S) FERC License Application Exhibit E, Section 2.0 and Section 4.0

In addition, the following information is critical to understanding the existing environment for the Lowell Tannery Project.

[insert the following (and expand upon as needed) to emphasize the location of the dam relative to other dams, and the value of the impoundment to the community]

- Located approximately 13 river miles upstream from the confluence of the Penobscot River, the Lowell Tannery Project is the only dam on the Passadumkeag River. There are two other dams located on tributaries of the Project, one on Eskutassis River at Gristmill Pond approximately 3 miles away, and one on Craig Brook, the Cold Stream Pond Dam, approximately 6 miles away. The Passadumkeag River is part of the Penobscot River watershed, which includes the East and West Branches of the Penobscot River. The reach of the Passadumkeag River located within the Lowell Tannery Project boundary is used for hydroelectric power generation, aquatic and wildlife habitat, and recreation. There are no consumptive uses of water or discharges within the Lowell Tannery Project boundary.
- The Lowell Tannery Project dam and original powerhouse have been in place since 1986, and the hydroelectric facilities have a history of providing clean, renewable, carbon-free electric generation for Maine.

3. **PROJECT DESCRIPTION.** Provide a detailed description of the existing project. A hydropower project includes all powerhouses, dams, water conduits, transmission lines, water impoundments, roads, and other appurtenant works and structures that are part of the development. This description must include:

- A. The physical composition, dimensions, and general configuration of all project structures;

- B. The normal maximum surface area and elevation, gross storage capacity, and usable storage capacity of any impoundments;
- C. The number, type, and rated capacity of any turbines or generators; and
- D. The number, length, and voltage of any primary transmission lines.

REFERENCE: FERC EXHIBIT(S) FERC License Application Exhibit A

In addition, the following information is critical to understanding proposed Project facilities and considerations of water quality from the Project discharge.

- KEI is proposing to continue to operate the existing Project, which generally consists of a dam, spillways, headworks, powerhouse, and an impoundment as a run-of-river (ROR) hydroelectric facility. The current, and proposed continued ROR operation, requires that inflow to the Project approximate outflow, therefore, KEI is proposing to remove the 150 cfs minimum flow requirement that is part of the current license.
- Though not currently contained in the Project Description (Exhibit A of the FERC License Application) KEI has entered into a fish passage settlement agreement that will result in modifications to the project for upstream and downstream fish passage facilities as defined in Appendix B of this application for water quality certification, including provisions for aquatic invasive species management defined in Appendix C, which has been agreed to by Maine Department of Inland Fisheries and Wildlife (MDIFW).

4. **PROJECT OPERATION.** Provide a description of project operation, to include:

- A. The mode of project operation during low, mean, and high-water years, including extent and duration of flow release and impoundment fluctuations;
- B. An estimate of the dependable capacity and average annual energy production, in kilowatt hours, of the project;
- C. An estimate of minimum, mean, and maximum flows, in cubic feet per second, at the project site, including a flow duration curve;
- D. An estimate of the maximum and minimum hydraulic capacities, in cubic feet per second, of any powerplant; and
- E. A statement of the manner in which the power generated at the project is utilized.

REFERENCE: FERC EXHIBIT(S) FERC License Application, Exhibit A

In addition, the following information is critical to understanding the proposed operation of the Lowell Tannery Project and discharges from the Project.

- The Lowell Tannery Project is currently operated as run-of-river (ROR). All inflow to the Project is passed downstream via unit operations, spillage, and through fish passage facilities. Flows that exceed the turbine capacity of 905 cfs are spilled over the dam.

When flows are less than the minimum capacity of the single unit (90 cfs), turbine operations are suspended and flows are passed over the dam.

- The upstream fish passage facility consists of a 3-foot-wide Denil fish ladder that follows three runs and two switchbacks and has a 40 cfs attraction flow. Upstream passage facilities are operated from May 15 through November 10.
- Downstream fish passage is provided by a dedicated 18-inch bypass pipe adjacent to the eastern side of the intake racks, that discharges into a plunge pool next to the tailrace. When river flow exceeds the powerhouse capacity, fish pass with spill over the dam. The downstream passage facility is operated from spring ice-out through early June, and for kelts (post-spawned adults) from November 1 to ice-in.
- Though not currently contained in the description of project operations (Exhibit A of the FERC License Application) KEI has entered into a fish passage settlement agreement that will result in modifications to project operations for upstream and downstream fish passage facilities as defined in Appendix B of this application for water quality certification, including provisions for aquatic invasive species management defined in Appendix C, which has been agreed to by Maine Department of Inland Fisheries and Wildlife (MDIFW).

5. **PROJECT PLANS.** Provide general design drawings showing all major project structures in sufficient detail to provide a full understanding of the project, including:

- A. Plans (overhead view);
- B. Elevations (front view); and
- C. Sections (side view).

REFERENCE: FERC EXHIBIT(S) FERC License Application, Exhibit F

6. **PROJECT MAPS.** Provide maps of the project showing:

- A. The location of the project, including principal project structures and features, with reference to local geographic features; and
- B. A project boundary enclosing all principal project structures and features proposed to be licensed.

REFERENCE: FERC EXHIBIT(S) FERC License Application, Exhibit G

7. **TITLE, RIGHT OR INTEREST.** The Department's Regulations require that any applicant must possess sufficient title, right or interest in all project lands and waters in order to have standing to seek a permit, license, or certification. Please complete the appropriate item(s) below establishing title, right or interest and attach a copy of the indicated document(s):

- _____ Deed.
- _____ Option to buy.
- _____ Lease.
- ☒ Valid FERC License (including all amendments/modifications).
- _____ Exercise of flowage rights through operation of the Mill Act (12 MRSA Section 651).
- _____ Exercise of eminent domain under FERC License.

8. **WATER QUALITY.** Provide a description of the impact of the project on water quality, including:

- A. A description of the applicable water quality standards and stream segment classification for the project impoundment and downstream waters, including a description of designated uses;
- B. A description of existing water quality in the project impoundment and downstream waters affected by the project, including a description of existing instream water uses;
- C. A statement of the existing measures to be continued and new measures proposed for the purpose of protecting and improving water quality, including measures for the mitigation of project impacts on the designated uses of project waters; and
- D. A description of any anticipated continuing impact on water quality from the continued operation of the project, including impacts on the designated uses of project waters.

REFERENCE: FERC EXHIBIT(S) Exhibit E, Section 4.8.1.4

- A. *A description of applicable water quality standards and stream segment classification for the project impoundment and downstream waters, including a description of designated uses*
- B. *A description of existing water quality in the project impoundment and downstream waters affected by the project, including a description of existing instream water uses;*
- KEI conducted water quality studies in 2019 and 2020 in accordance with the MDEP's Sampling Protocol for Hydropower Studies, as part of the FERC relicensing effort. Results of those studies demonstrate that the continued operation of the Lowell Tannery Project, as proposed, will meet the applicable designated uses and water quality standards.
- C. *A statement of the existing measures to be continued and new measures proposed for the purpose of protecting and improving water quality, including measures for the mitigation of project impacts on the designated uses of project waters; and*

- As described in Section 3 of this application, KEI is proposing to continue to operate the existing Project, which generally consists of a dam, spillways, powerhouse, and an impoundment as a run-of-river hydroelectric facility. KEI is proposing no modifications to the basic Project features.
- KEI has entered into a fish passage settlement agreement that will result in modifications to the project facilities and operations for upstream and downstream fish passage facilities as defined in Appendix B of this application for water quality certification, including provisions for aquatic invasive species management defined in Appendix C, which has been agreed to by Maine Department of Inland Fisheries and Wildlife (MDIFW).

D. A description of any anticipated continuing impact on water quality from the continued operation of the project, including impacts on the designated uses of project waters.

- KEI proposes to continue to operate the Lowell Tannery Project as run-of-river, with minimal fluctuations in impoundment levels, and minimal effects to downstream river flows. Operation of the Project in this manner will ensure that the Project continues to meet applicable water quality standards for Class A/AA waters.
 - The Lowell Tannery Project operates upstream and downstream fish passage facilities, and complies with existing upstream and downstream fish passage requirements each migration season. KEI has entered into a fish passage settlement agreement that will result in modifications to the project structures and operations for upstream and downstream fish passage facilities as defined in Appendix B of this application for water quality certification, including provisions for aquatic invasive species management defined in Appendix C, which has been agreed to by Maine Department of Inland Fisheries and Wildlife (MDIFW). Construction and operations of the fish passage facilities will have no impact on existing Project water quality other than short-term effects associated with construction activities which will be addressed through the construction permitting process.
9. **PUBLIC NOTICE.** The Department requires that an applicant provide public notice describing the location and nature of the activity proposed for approval. The public notice requirements that apply to this application are described in the Certification of Publication below, which must be signed and dated by the applicant or authorized agent.

The following information must be submitted with this form:

- A copy of a completed Notice of Intent to File.
- A list of abutters to whom notice was provided. [For the purposes of public notice of this application, an “abutter” is any person who owns property that is both (1) adjoining and (2) within 1 mile of the delineated project boundary, including owners of property directly across a public or private right of way.]

CERTIFICATION OF PUBLICATION

By signing below, the applicant (or authorized agent) certifies that he or she has:

1. Published a Notice of Intent to File once in a newspaper circulated in the area where the project site is located, within 30 days prior to filing the application;
2. Sent a completed copy of the Notice of Intent to File by certified mail or Certificate of Mailing to abutters, as determined by local tax records or other means, within 30 days prior to filing the application; and
3. Sent a copy of the Notice of Intent to File by certified mail or Certificate of Mailing and filed a duplicate of this application with the town clerk of the municipality(ies) where the project is located, within 30 days prior to filing the application.



Signature of Applicant

Lewis Loon, General Manager

Name and title of applicant

July 26, 2024

Date

If signature is other than that of the applicant, attach letter of agent authorization signed by the applicant.

FEE PAYMENT

State of Maine DEP Payment Receipt

Contact Information: Kayla Hopkins - 141 Main Street, Pittsfield, ME, 04967
(207) 416-1271
kayla.hopkins@kleinschmidtgroup.com

Billing Information: Kayla Hopkins - 232 Harlow Road, Dixmont, ME, 04932
(207) 270-3702
kaeasler@gmail.com

Product	Reference Number	Customer Number	Payment Amount	Comments
Dams and Hydroelectric	New Application		\$759.00	Water Quality Certification application for the Lowell Tannery Hydroelectric Project

Receipt ID: 6437
Transaction Date: 7/25/2024 1:14:37 PM

Transaction Summary	
Payment	\$759.00
Service Fee	\$2.00
Total	\$761.00

Thank you for your successful transaction.

If you have questions or concerns, please call (207) 287-7688

or Email: Payments.DEP@maine.gov

Print