

LOW-IMPACT HYDROPOWER POWER INSTITUTE CERTIFICATION APPLICATION

MILO HYDROELECTRIC PROJECT (FERC No. 5647 *FERC EXEMPT*)



Prepared for:

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**LOW-IMPACT HYDROPOWER POWER INSTITUTE
CERTIFICATION APPLICATION**

**MILO HYDROELECTRIC PROJECT
(FERC NO. 5647 EXEMPT)**

1.0 FACILITY DESCRIPTION

The Milo Hydroelectric Project (Project) is located on the Sebec River, approximately two river miles upstream of its confluence with the Piscataquis River, in the town of Milo, Piscataquis County, Maine (Figure 1-1). The Sebec River begins approximately eight miles upstream at Ampersand Sebec Lake Hydro LLC ‘s Sebec Hydroelectric Project (FERC No. 7253), a FERC-exempt, 867 kW hydroelectric project that impounds Sebec Lake (Figure 1-2).

The Project is owned by KEI (Maine) Power Management (II) LLC (hereinafter “Licensee” or KEI (Maine)) and operated by KEI (USA) Power Management Inc. and was granted a non-conduit exemption by FERC on February 23, 1982.¹ Since its issuance, the exemption has been amended twice – by FERC orders dated June 18, 1996² and March 17, 1998³ – to more accurately reflect as-built Project facilities and operating capacities.

An original dam was constructed at the Project site in 1823 and subsequently provided power for half a dozen mills along the Sebec River, including at least one saw mill, grist mill, spool and excelsior mill, and a woolen mill over the next century.⁴ In 1920, Milo Electric Light and Power Company installed two Morgan Smith turbines at the site, with multiple upgrades occurring over the next decade. At the time of Swift River Company’s application to redevelop the site, many repairs to the existing dam structures and redesign of generation facilities to accommodate a run-of-river water power operation were necessary. Once approved, current facilities were constructed late 1982 and initiated for service on December 26, 1982.

According to the current exemption, Project works include (1) an 8 ft. high L shaped spillway topped with 1 foot high flashboards consisting of two overflow rock filled timber crib spillway

¹ [18 FERC ¶ 62,302](#)

² [75 FERC ¶ 62,198](#)

³ [82 FERC ¶ 62,191](#)

⁴ <https://www.milohistorical.org/history/jenkins/>

sections measuring respectively 50-foot-long and 170-foot-long, (2) a small spillway concrete section located at the meeting point of the two spillway section, (3) a power canal separated of the original river channel by an earthen berm, (4) a 20-foot-long and 43-feet wide powerhouse containing three turbine/generating units with a total installed capacity of 695 kW and (5) a tailrace channel running parallel to the original river channel and joining it 750 feet downstream, (6) a 50-acre reservoir with a net storage capacity of 97 acre-feet at a pond elevation of 279 feet above mean sea level (msl); and (3) a powerhouse containing three generating units: Units 1 and 3 with a generator nameplate capacity of 235 kW each, and Unit 2 with a generator nameplate capacity of 235 kW. The total installed capacity based on generator nameplates at the Milo Project is 695 kW.

Project Boundary

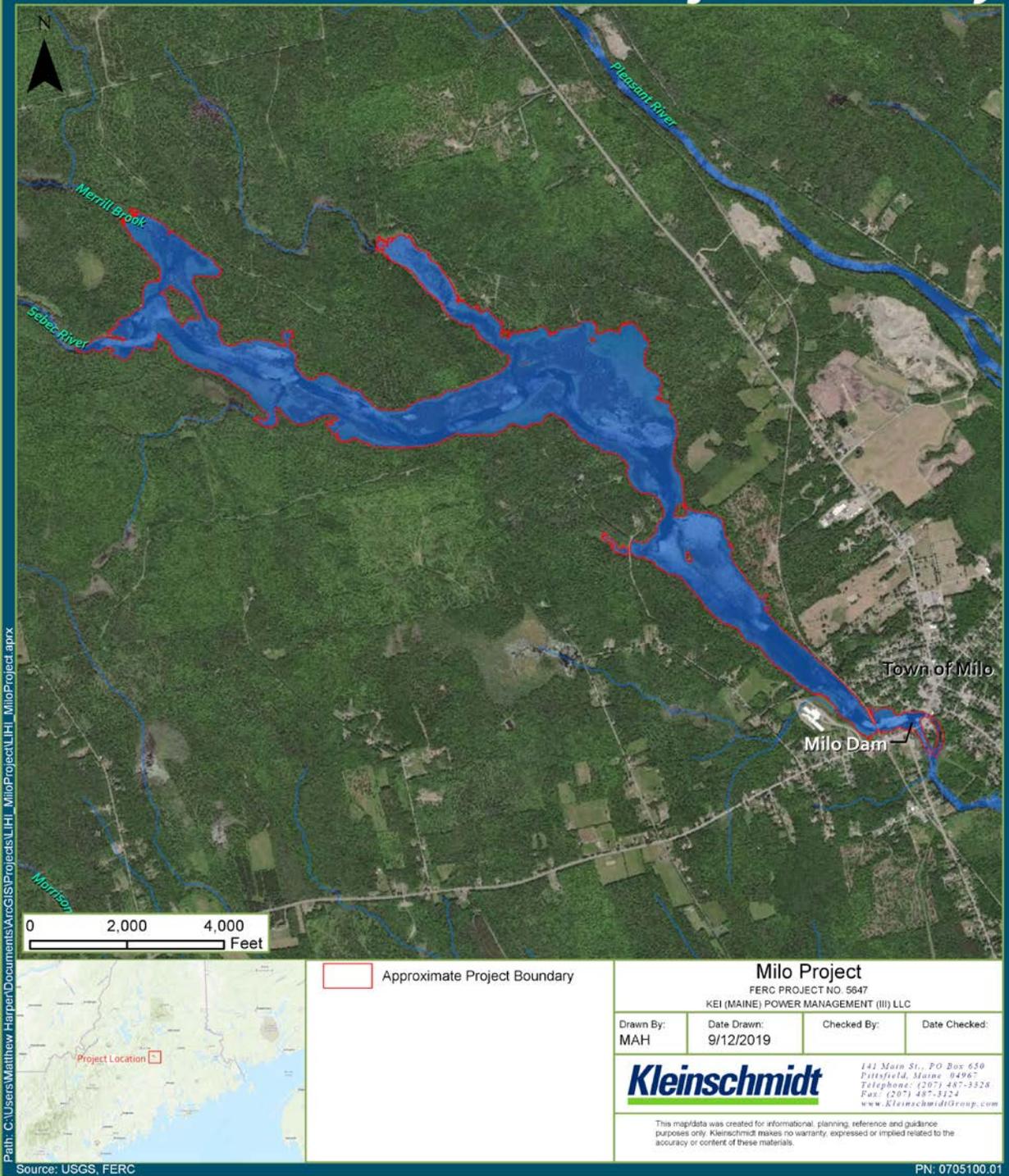


FIGURE 1-1 APPROXIMATE MILO PROJECT BOUNDARY

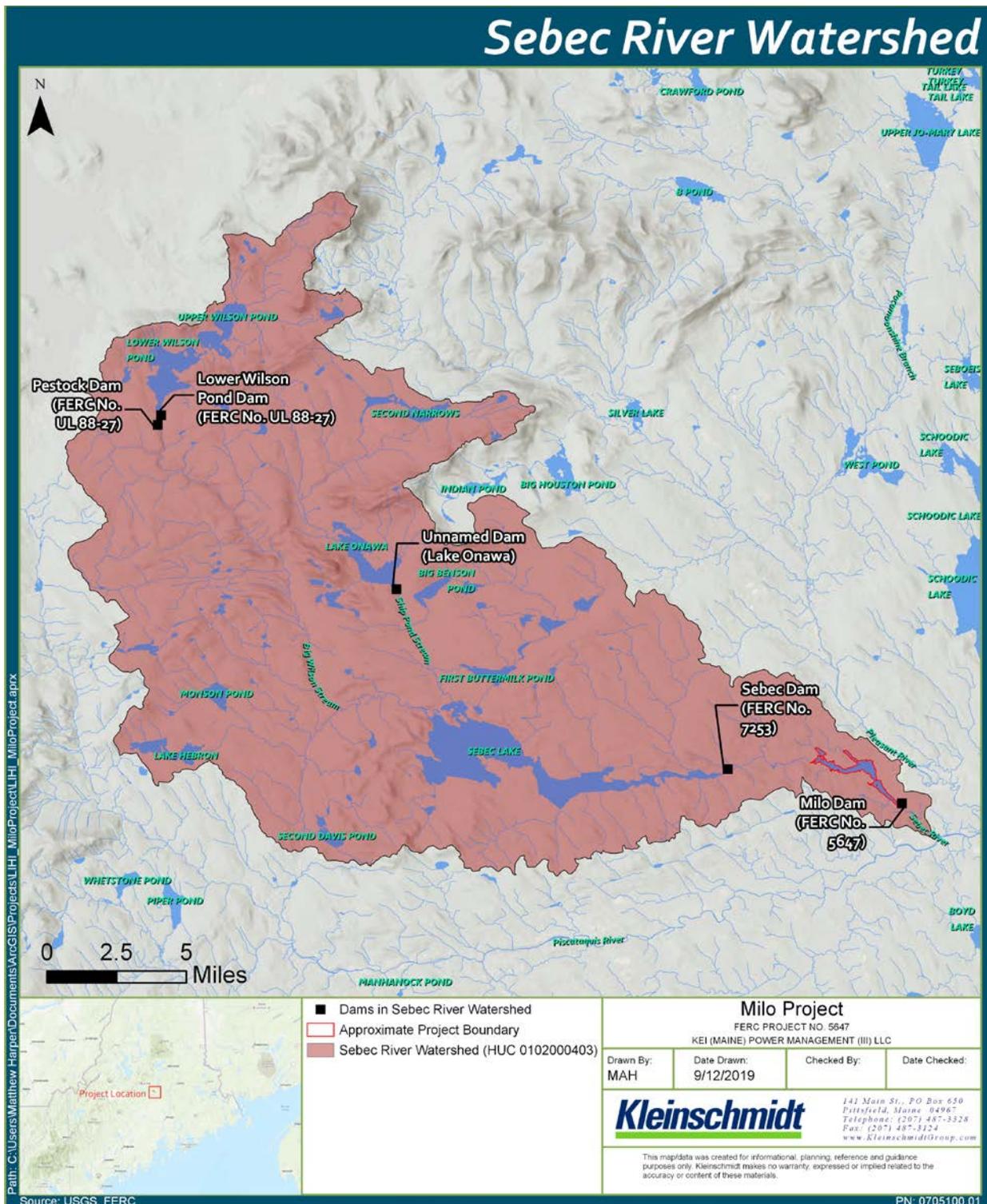


FIGURE 1-2 SEBEC RIVER WATERSHED & DAMS

1.1 FACILITY DESCRIPTION INFORMATION FOR MILO PROJECT (FERC No. 5647)

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
<i>Name of the Facility</i>		Milo Project (FERC No. 5647), also referred to as the Project throughout this application.
<i>Location</i>	River name (U.S. Geologic Survey [USGS] proper name)	Sebec River
	River Mile:	RM 2 (as measured upstream of the confluence with the Piscataquis River)
	River Basin (HUC 10 Code):	Sebec River Watershed (HUC 0102000403); tributary of the Piscataquis River Watershed HUC 8 Code 01020004).
	Nearest town, county, and state:	Milo, Piscataquis County, Maine
	River Mile of Dam above next major river:	<p>There are two dams on the Sebec River:</p> <ol style="list-style-type: none"> 1) Sebec Dam at approximate RM 10 2) Milo Dam at approximate RM 2 <p>Two additional dams are located on tributaries to the Sebec River upstream of Sebec Dam:</p> <ol style="list-style-type: none"> 1) Wilson Dam on Big Wilson Stream 2) An unnamed dam on Ship Pond Stream
	Geographic latitude:	45.2509332 N
	Geographic longitude:	68.9880962 W
<i>Facility Owner</i>	Application Contact Names	KEI (USA) Power Management Inc. Sherri Loon 423 Brunswick Avenue Gardiner, Maine, 04345
	Facility owner (individual and company names):	KEI (Maine) Power Management (II) LLC (KEI (Maine)) Sherri Loon 423 Brunswick Avenue Gardiner, Maine, 04345

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	FERC Licensee Company Name (if different from owner):	This is a FERC-exempt project owned by KEI (Maine).
	Representative in LIHI certification:	Nuria Holmes & Matthew Harper Kleinschmidt Associates 1500 NE Irving Street, Suite 550 Portland, OR 97232
Regulatory Status	FERC Project Number and Issuance and expiration dates	FERC Project No. 5647 Exemption (Non-Conduit) granted by FERC's February 23, 1982 <i>Order Granting Exemption from Licensing of a Small Hydroelectric Project of 5 Megawatts or Less</i>
	FERC license type or special classification (e.g., "qualified conduit")	Exemption (Non-Conduit)
	Water Quality Certificate identifier and issuance date, plus source agency name	Per 18 FERC ¶ 62,032 <i>Order Granting Exemption from Licensing of a Small Hydroelectric Project of 5 MW or Less</i> (February 23, 1982), the Milo Project is exempted from all of the requirements of Part I of the Federal Power Act, including licensing, subject to the standard articles in §4.106 of FERC's regulations ⁵ . While FERC does not require a 401 Water Quality Certification before acting on an exemption application, certain states, such as Maine in this case, may still require a 401 Water Quality Certification for FERC exempted projects as a term or condition to the exemption. The Maine Department of Environmental Protection (Maine DEP) issued under permit #02-7580-21140 a <i>Small Hydroelectric Generating Facilities Permit and Water Quality Certification Findings and Fact Order</i> (Water Quality Certification) for the Milo Project on October 14, 1981, which was subsequently revised on April 28, 1982 and June 30, 1982.

⁵ Standard articles in the order reference Form E-2, 18 C.F.R. §4.106 45 Fed. Reg. 76115 (November 18, 1980). Current reading of the articles can be found here: [§4.106: Standard terms and conditions of case-specific exemption from licensing.](#)

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	<p>Hyperlinks to key electronic records on FERC e-library website (e.g., most recent Commission Orders, WQC, ESA documents, etc.)</p>	<p>1981 <i>Small Hydroelectric Generating Facilities Permit and Water Quality Certification Findings and Fact Order</i> (Not available for download on eLibrary. Document not available.)</p> <p>1981 <i>Application for Exemption from Licensing Small Hydroelectric Power Project of Swift River Company, Inc.</i> (Not available for download on eLibrary. See Appendix B.)</p> <p>1982 <i>Small Hydroelectric Generating Facilities Permit and Water Quality Certification Findings and Fact Order [revised]</i> (Not available for download on eLibrary. Document not available.)</p> <p>1982 <i>Order Granting Exemption from Licensing of a Small Hydroelectric Project of 5 Megawatts or Less</i> (Not available for download on eLibrary. See Appendix C.)</p> <p>1982: <i>Small Hydroelectric Generating Facilities Permit and Water Quality Certification Findings and Fact Order [revised]</i> (Not available for download on eLibrary. See Appendix C.)</p> <p>1996 Order Amending Exemption</p> <p>1998 Order Amending Exemption and Approving As-Built Exhibits</p>
Powerhouse	Date of Initial Operation past or future for operational applications)	The Milo Project was granted exemption from licensing under Part I of the Federal Power Act on February 23, 1982. The facilities were subsequently built or retrofitted for hydroelectric operation in 1982 and initiated for service on December 26, 1982.
	Total name-plate capacity	695 kW
	Average annual generation (MWh)	~2,078 MWh

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Number, type, and size of turbines, including maximum and minimum hydraulic capacity of each unit	<p>The Project powerhouse contains three generating units: Units 1, 2 and 3 with a generator nameplate capacity of 235 kW. The total installed capacity based on generator nameplates at the Milo Project is 695 kW.</p> <p>Unit 1:</p> <ul style="list-style-type: none"> • Minimum – 92 cfs @ 80 kW • Maximum – 268 cfs @ 235 kW <p>Unit 2:</p> <ul style="list-style-type: none"> • Minimum – 92 cfs @ 80 kW • Maximum – 268 cfs @ 235 kW <p>Unit 3:</p> <ul style="list-style-type: none"> • Minimum – 92 cfs @ 80 kW • Maximum – 268 cfs @ 235 kW
	Modes of operation (run-of-river, peaking, pulsing, seasonal storage, etc.)	Operated as a run-of-river facility, with minimum flows of 25 cubic feet per second (cfs) in the east channel (powerhouse tailrace) and 50 cfs in the west channel (bypassed channel).
	Dates and types of major equipment upgrades	Since retrofit/construction in 1982, one major equipment upgrade has taken place at the Project: In 1992, Unit 2’s generator was replaced with a Toshiba induction generator rated at 300 HP (225 kW equivalent).
	Dates, purpose, and type of any recent operational changes	There have been no operational changes since initial operation of the Project.
	Plans, authorization, and regulatory activities for any facility upgrades	There are currently no plans for facility upgrades at the Project.
<i>Impoundment and Watershed</i>	Date of construction	August 1 to December 26, 1982
	Dam height	An 8 ft. high L shaped spillway topped with 1-foot high flashboards consisting of two overflow rock filled timber crib spillway sections measuring respectively 50 ft. long and 170 ft. long, (2) a small spillway concrete section located at the meeting point of the two-spillway section.
	Dam width	250-feet-long

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Dam or Diversion Structure Height including separately, the height of any flashboards, inflatable dams, etc.:	Dam Crest Elevation is 278.00 with 1-foot high flashboards.
	Spillway elevation and hydraulic capacity	Normal pond elevation: 279 feet msl
	Tailwater (downstream water surface) elevation	Normal tailwater elevation: 272 feet msl
	Length and type of all penstocks and water conveyance structures between reservoir and powerhouse	The Project operates as a run-of-river facility with no associated penstocks or conveyance structures between the reservoir and the powerhouse.
	Dates and types of major, generation-related infrastructure improvements	<p>In 1985 Maine DEP approved that the project replace the upstream seal of the timber-crib dam due to leakage.</p> <p>In 1992, Unit 2's generator was replaced with a Toshiba induction generator rated at 300 HP (225 kW equivalent).</p>
	Designated facility purposes	Generation of Power and Municipal Water Supply
	Source Water:	Sebec River, which is largely controlled by flows out of Sebec Lake, a 6,803-acre impoundment created by and operated according to the flow release conditions of Sebec Hydroelectric Project (FERC No. 7253) and located approximately 8 river miles upstream of the Milo Project. These flows are augmented by minor tributaries to Sebec Lake and along the eight-mile reach between the Sebec and Milo Dams.

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Receiving Water and Location of Discharge:	<p>Powerhouse: The Project discharges directly from its powerhouse into an approximately 750-foot-long tailrace before converging with the main Sebec River channel. Discharges are typically made through the turbines when in operation or through a limited gate opening when offline to meet minimum flow requirements (50 cfs or inflow, whichever is less).</p> <p>Milo Dam: A minimum flow of 25 cfs is maintained on the western bypass channel through a one-inch gap under the installed flashboards. The bypass channel flows approximately 700 feet before converging with the main Sebec River channel.</p>
	Gross storage volume and surface area at full pool:	Net storage capacity of 50 acre-feet at a normal pond elevation of 279 feet msl
<i>Characteristics of the Reservoir and Watershed</i>	Authorized maximum and minimum water surface elevations:	Approximately 550 acres ⁶
	Maximum water surface elevation (ft. MSL)	279' msl (top of flashboards)
	Maximum and minimum volume and water surface elevations for designated power pool, if available:	<p>Normal pond elevation of 279' msl (flashboards installed)</p> <p>Normal dam tailwater elevation of 272' msl</p> <p>Normal powerhouse tailwater elevation of 267' msl</p>

⁶ The extent of the upstream Project boundary was not fully depicted on the approved exhibits; therefore, it was estimated to extend approximately 4.4 miles upstream along the 279' msl contour.

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Upstream dam(s) by name, ownership, FERC number (if applicable), and river mile	<p>Two major dams are located on the Sebec River and its tributaries upstream of the Project:</p> <ul style="list-style-type: none"> • Sebec Dam, part of the exempt Sebec Hydroelectric Project (FERC No. 7253), operated by Sebec Hydro Co (ME) at approximate RM 10 upstream of the confluence with the Piscataquis River. • Wilson Dam, part of the Wilson Pond Project/Greenville Dam (UL 88-27), a FERC Non-Jurisdictional Project (Pre-1935 Project Located on Non-Navigable Waterway) on Big Wilson Stream, a tributary to Sebec Lake. <p>A minor, unnamed dam is also located at the outlet to Onawa Lake at the headwaters of Ship Pond Stream, another tributary to Sebec Lake.</p>
	Downstream dam(s) by name, ownership, FERC number (if applicable), and river mile	There are no other dams located in the two-river mile reach of the Sebec River downstream of the Milo Project before the confluence with the Piscataquis River.
	Operating agreements with upstream or downstream reservoirs that affect water availability, if any, and facility operation	No operating agreement is in place to coordinate flows with the upstream Sebec Hydroelectric Project (FERC No. 7253); however, water availability at the Milo Project is largely controlled by flows out of Sebec Lake, as stipulated in the requirements of an August 17, 2005 Water Quality Certification ⁷ issued by the Maine DEP for that project.
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control:	Approximately 554 acres ⁸

⁷ <https://elibrary-backup.ferc.gov/IDMWS/common/opennat.asp?fileID=10986794>

⁸ The FERC Project boundary was approximated based on FERC Drawing No. 5647-5 (Exhibit B, Sheet 2 of 2), as approved by FERC's [March 17, 1988 Order Amending Exemption and Approving As-Built Exhibits](#). Both upstream and downstream boundaries were drawn to generally follow the normal pond elevation. The extent of the upstream

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION																																																				
	Average annual flow at the dam (cfs): ^{9,10}	Approximately 1,732 cfs (Calculation Period: 1924 – 2018)																																																				
<i>Hydrologic Setting</i>	Historic Daily Mean (Monthly) flow at the dam in cfs ^{8,9}	<p style="text-align: center;">Calculation Period: 1924 - 2018</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th>Month</th> <th>Min</th> <th>Mean</th> <th>Max</th> </tr> </thead> <tbody> <tr><td>January</td><td>245</td><td>1149</td><td>3696</td></tr> <tr><td>February</td><td>289</td><td>1053</td><td>3991</td></tr> <tr><td>March</td><td>392</td><td>1660</td><td>10583</td></tr> <tr><td>April</td><td>2034</td><td>5014</td><td>9271</td></tr> <tr><td>May</td><td>752</td><td>3288</td><td>7439</td></tr> <tr><td>June</td><td>311</td><td>1401</td><td>2691</td></tr> <tr><td>July</td><td>202</td><td>825</td><td>3694</td></tr> <tr><td>August</td><td>117</td><td>615</td><td>2689</td></tr> <tr><td>September</td><td>113</td><td>729</td><td>3922</td></tr> <tr><td>October</td><td>237</td><td>1301</td><td>6491</td></tr> <tr><td>November</td><td>263</td><td>2010</td><td>5106</td></tr> <tr><td>December</td><td>278</td><td>1799</td><td>8769</td></tr> </tbody> </table>	Month	Min	Mean	Max	January	245	1149	3696	February	289	1053	3991	March	392	1660	10583	April	2034	5014	9271	May	752	3288	7439	June	311	1401	2691	July	202	825	3694	August	117	615	2689	September	113	729	3922	October	237	1301	6491	November	263	2010	5106	December	278	1799	8769
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Project boundary was not fully depicted on the approved exhibits; therefore, it was estimated to extend approximately 4.4 miles upstream along the 279' msl contour.

⁹ There are no known gages at the Project site or on the Sebec River, so a general mass water balance for the Sebec River was conducted using USGS gages above and below the confluence of the Sebec and Piscataquis Rivers. The Milo Project operates as a run-of-river facility approximately two river miles upstream of this confluence, so an estimate of flow for the river as a whole should provide a general picture of flow at Milo Dam. Note that several minor streams and brooks feed into the Piscataquis River along this reach that are unaccounted for in this analysis, so flow estimates for Sebec River will inherently be overestimated to some degree.

¹⁰ Historic data for USGS Gages 01034000 and 01031500 was available for the periods 1924 – 2018. Data for USGS Gage 01031510 was available for 2009 – 2018.

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Location and name of relevant stream gaging stations above and below the facility	<p>There are no known gaging stations above or below the Project on the Sebec River. The following gages were used to develop a general mass water balance for the Sebec River:</p> <ul style="list-style-type: none"> • USGS 01034000: Piscataquis River at Medford, Maine (<i>Downstream of confluence of Sebec and Piscataquis Rivers</i>) • USGS 01031500: Piscataquis River near Dover-Foxcroft, Maine (<i>Upstream of confluence of Sebec and Piscataquis Rivers</i>) • USGS 01031510: Black Stream near Dover-Foxcroft, Maine (<i>Tributary downstream of USGS 01031500 and upstream confluence of Sebec and Piscataquis Rivers</i>)
	Watershed area at the dam	The Project is within the Sebec River Watershed (HUC 0102000403), an area of approximately 352.3 square miles.
	Number of zones of effect	3: Impoundment, Bypassed Reach, Tailrace
Designated Zones of Effect	Upstream and downstream locations by river miles	<p>Approximate river miles upstream of confluence with Piscataquis River:</p> <ol style="list-style-type: none"> 1) Impoundment: RM 2.02 to RM 6.42 2) Bypass Reach: RM 1.86 to RM 2.0 3) Tailrace: RM 1.86 to RM 2.02
	Type of waterbody (river, impoundment, by-passed reach, etc.)	The Project operates as a run-of-river facility; however, a small amount of usable storage (50 acre-feet) is impounded by those facilities. This upstream impoundment zone, as well as the powerhouse tailrace and bypassed reach, are predominantly classified as Riverine by the U.S. Fish and Wildlife’s National Wetlands Inventory database; however, a few small areas adjacent and within the Project boundary are classified as Freshwater Forested/Shrub Wetland.

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Delimiting structures	<p>Zone of Effect #1: Impoundment</p> <ul style="list-style-type: none"> The Project currently has an impoundment with a net storage capacity of 50 acre-feet at a normal pond elevation of 279' msl, which would impound an approximate surface area of 550 acres. The impoundment is assumed to extend approximately 4.4 miles from Milo Dam upstream along the 279' msl contour. <p>Zone of Effect #2: Bypass Reach</p> <ul style="list-style-type: none"> The Project's bypass reach (western channel) extends approximately 700 feet downstream from Milo Dam to the confluence with the powerhouse tailrace, with an approximate surface area of 1.9 acres. The bypass reach's normal tailwater elevation is 272' msl. <p>Zone of Effect #3: Tailrace</p> <ul style="list-style-type: none"> The Project's powerhouse tailrace (eastern channel) extends approximately 750 feet downstream from the powerhouse to the confluence with the bypassed reach, with an approximate surface area of 2 acres. The bypassed reach's normal tailwater elevation is 267' msl.

INFORMATION TYPE	VARIABLE DESCRIPTION	FACILITY DESCRIPTION
	Designated uses by state water quality agency	<p>Maine DEP has classified the Sebec River Station 827 (sampling area just downstream of Milo Dam) as a Class B River: suitable for the designated uses of drinking water supply after treatment; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, navigation, and as unimpaired habitat for fish and other aquatic life (Maine Statute, Title 38, § 465(3A) (2005)).</p> <p>The Sebec River upstream of the Milo Dam, however, is classified as a Class A River: suitable for the designated uses of drinking water after disinfection; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as natural (Maine Statute, Title 38, § 465(2A) (2005)).</p>
	Names, addresses, phone numbers, and e-mail for local state and federal resource agencies	See Section 4 for the Project Contacts Form.
<i>Additional Contact Information:</i>	Names, addresses, phone numbers, and e-mail for local non-governmental stakeholders	See Section 4 for the Project Contacts Form.
	Photographs of key features of the facility and each of the designated zones of effect	<p>Please see Figure 1-3 for key Project features and Figure 2-1 for Project Zones of Effect. See Appendix A for photographs of key features of the facility.</p> <p>March 17, 1988 Approved Exhibits</p>
<i>Photographs of the Facility</i>	Maps, aerial photos, and/or plan view diagrams of facility area and river basin	<p>Please see Figure 1-3 for key Project features and Figure 2-1 for Project Zones of Effect. See Appendix A for photographs of key features of the facility.</p> <p>March 17, 1988 Approved Exhibits</p>

Milo Project Facilities



Path: C:\Users\Matthew_Harper\Documents\ArcGIS\Projects\LIHI_MiloProject.aprx



Approximate Project Boundary

Milo Project
 FERC PROJECT NO. 5547
 KEI (MAINE) POWER MANAGEMENT (III) LLC

Drawn By: MAH	Date Drawn: 9/12/2019	Checked By:	Date Checked:
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Kleinschmidt
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Source: USGS, FERC

PN: 0705100.01

FIGURE 1-3 PROJECT FACILITY DETAILS

2.0 STANDARDS MATRICES

2.1 ZONE OF EFFECT: IMPOUNDMENT

CRITERION		ALTERNATIVE STANDARDS				
		1	2	3	4	PLUS
A	Ecological Flow Regimes		✓			
B	Water Quality		✓			
C	Upstream Fish Passage	✓				
D	Downstream Fish Passage	✓				
E	Watershed and Shoreline Protection			✓		
F	Threatened and Endangered Species Protection		✓			
G	Cultural and Historic Resources Protection	✓				
H	Recreational Resources			✓		

2.2 ZONE OF EFFECT: BYPASS REACH

CRITERION		ALTERNATIVE STANDARDS				
		1	2	3	4	Plus
A	Ecological Flow Regimes		✓			
B	Water Quality		✓			
C	Upstream Fish Passage	✓				
D	Downstream Fish Passage	✓				
E	Watershed and Shoreline Protection			✓		
F	Threatened and Endangered Species Protection		✓			
G	Cultural and Historic Resources Protection	✓				
H	Recreational Resources			✓		

2.3 ZONE OF EFFECT: TAILRACE

CRITERION		ALTERNATIVE STANDARDS				
		1	2	3	4	Plus
A	Ecological Flow Regimes		✓			
B	Water Quality		✓			
C	Upstream Fish Passage	✓				
D	Downstream Fish Passage	✓				
E	Watershed and Shoreline Protection			✓		
F	Threatened and Endangered Species Protection		✓			
G	Cultural and Historic Resources Protection	✓				
H	Recreational Resources			✓		

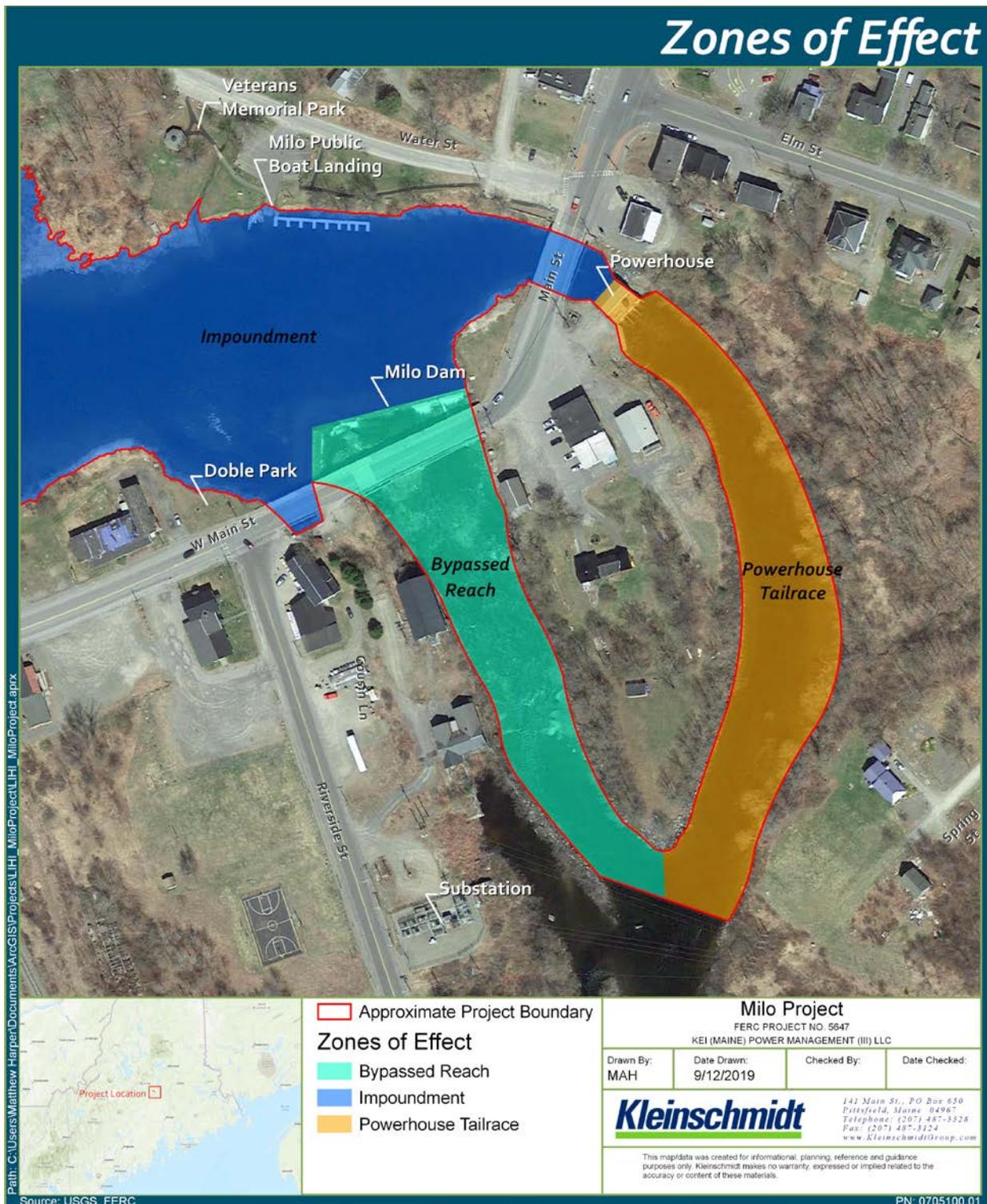


FIGURE 2-1 DESIGNATED ZONES OF EFFECT FOR THE PROJECT

3.0 SUPPORTING INFORMATION

3.1 ECOLOGICAL FLOW STANDARDS

3.1.1 IMPOUNDMENT

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. • Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

- Maine DEP issued under permit #02-7580-21140 a Water Quality Certification for the initial project proposal on October 14, 1981, which was subsequently revised on April 28, 1982 and June 30, 1982, and requires the following minimum flow releases:
 - An instantaneous minimum flow of 25 cfs shall be maintained in the east (tailrace) channel at all times following the commencement of project operation and an instantaneous minimum flow of 50 cfs shall be maintained in the west channel at all times, except that when inflow to the dam is less than 75 cfs the difference between the 25 cfs flow in the east channel and the inflow shall be released in the west channel. 42 cfs is the 7Q10¹¹ low flow for the west channel; the 50 cfs in the west channel is higher than that.
- Annual reports to FERC have confirmed that KEI (Maine) and its predecessors have met the required minimum flow releases per the terms of the Water Quality Certification.

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. As of December 6, 2019, responses from these agencies had not been received, but will be provided if/when they are.

¹¹ The annual minimum 7-day mean streamflow with an annual exceedance probability of 90%.

3.1.2 BYPASS REACH

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none">• Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent).• Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement.• Explain how the recommendation relates to agency management goals and objectives for fish and wildlife.• Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

See Section 3.1.1.

3.1.3 TAILRACE

CRITERION	STANDARD	INSTRUCTIONS
A	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • Identify the proceeding and source, date, and specifics of the agency recommendation applied (NOTE: there may be more than one; identify and explain which is most environmentally stringent). • Explain the scientific or technical basis for the agency recommendation, including methods and data used. This is required regardless of whether the recommendation is or is not part of a Settlement Agreement. • Explain how the recommendation relates to agency management goals and objectives for fish and wildlife. • Explain how the recommendation provides fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations).

See Section 3.1.1.

Additional Information:

The project is operated at the crest of the flashboards. The flashboards have cutouts in the bottom of them to allow for water passage, which has two purposes: (1) Flows pass under flashboards the length of the dam, which allows for even leakage across the dam. That maintains the minimum flow for the main river stem; and (2) This same flow keeps the timber crib dam wet at all time to help prevent dam deterioration. The site is also equipped with pond level control to control pond levels and keep at the crest of the flashboards

3.2 WATER QUALITY STANDARDS

3.2.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
B	2	<p><u>Agency Recommendation:</u></p> <ul style="list-style-type: none"> • If facility is located on a Water Quality Limited river reach, provide an agency letter stating that the facility is not a cause of such limitation. • Provide a copy of the most recent Water Quality Certificate, including the date of issuance. • Identify any other agency recommendations related to water quality and explain their scientific or technical basis. • Describe all compliance activities related to the water quality related agency recommendations for the facility, including on-going monitoring, and how those are integrated into facility operations.

KEI (Maine) is subject to Water Quality Certification under Section 401(a)(1) of the federal Clean Water Act of 1977. The Maine DEP establishes numeric water-quality standards consistent with the Clean Water Act and state law under Title 38, Chapter 3. The Maine DEP granted the licensee a revised Water Quality Certification for the Project on June 30, 1982.

- At the time of Water Quality Certification issuance, the Sebec River was classified as Class C River from the outlet of Sebec Lake to the Milo Dam, and as Class B-1 from Milo Dam to the confluence of the Sebec and Piscataquis Rivers. Thus, the water in the impoundment was judged unsuitable for water contact recreation, and several untreated sewer discharges were noted entering both the bypassed reach and powerhouse tailrace downstream of the dam. The Water Quality Certification states that “the facility will not lower the water quality of the Sebec River and will not violate applicable Water Quality Standards provided that the existing sewer discharges are maintained during and following construction and provided that adequate flows are maintained in each channel to assimilate these discharged wastes.”
- In 1990, Maine DEP re-classified the Sebec River upstream of the Milo Dam, as a Class A River: suitable for the designated uses of drinking water after disinfection; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as natural.¹² ([Maine Statute, Title 38, § 465\(2A\) \(2005\)](#))

¹² River classification confirmed with Maine Department of Environmental Protection on October 22, 2019, see Appendix D.

- “The dissolved oxygen content of Class A waters may not be less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration may not be less than 9.5 parts per million and the one-day minimum dissolved oxygen concentration may not be less than 8.0 parts per million in identified fish spawning areas. The aquatic life and bacteria content of Class A waters must be as naturally occurs, except that the numbers of Escherichia coli bacteria in these waters may not exceed a geometric mean of 64 CFU per 100 milliliters over a 90-day interval or 236 CFU per 100 milliliters in more than 10% of the samples in any 90-day interval.” ([Maine Statute, Title 38, § 465\(2B\) \(2017\)](#))

According to the 2016 Integrated Water Quality Monitoring and Assessment Report issued by the Maine DEP, the Sebec River at Milo [ME0102000403_215R and ME0102000403_215R01] (2.29-mile segment above the confluence with the Piscataquis River)¹³ is listed as Class B. It was previously listed as 5-A for biocriteria non-attainment based on 1985, and then delisted in 2008. Resampling in 2006 at station 827, below the Milo Dam, had shown attainment of Class A biocriteria.

Additionally, the Sebec River at Milo [ME0102000403_215R_02] was formerly affected by E-coli, and was classified as Class B.¹⁴ On 11/24/2014, the Combined Sewer Overflow (CSO) abatement was completed, and no CSO events have occurred since 2008. Recreational use impairments are now a Category 4-A due to approval of a statewide bacteria TMDL.

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. As of December 6, 2019, responses from these agencies had not been received, but will be provided if/when they are.

¹³ pg. 37 https://www.maine.gov/dep/water/monitoring/305b/2016/28-Feb-2018_2016-ME-IntegratedRptLIST.pdf

¹⁴ pg. 71, Ibid.

3.3 UPSTREAM FISH PASSAGE STANDARDS

3.3.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
C	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • Explain why the facility does not impose a barrier to upstream fish passage in the designated zone. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no facility barrier to further upstream movement. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this

- According to the Maine Department of Inland Fisheries and Wildlife (Maine IFW), Milo and Sebec Dams provide important barriers to invasive species such as northern pike that are present in the lower Penobscot drainage and that could be detrimental to the managed population of landlocked Atlantic salmon (*Salmo salar*) in Sebec Lake.¹⁵ Once above the dam there are no further facility-related barriers to passage.
- In 2011, the Maine Legislature passed LD 134: An Act to Protect Native Landlocked Salmon Fisheries from Invasive Species, which specifically prohibits the construction of fish passage devices at Milo and Sebec Dams to prevent northern pike from gaining access to this lake.¹⁶ The act specifically enacted Maine Statute Sec. 2.12 MRSA §12760, sub-§9 to read as follows:

9. Sebec Lake and Sebec River dams; fishways prohibited. *The owners, lessors or other persons in control of a dam on the outlet of Sebec Lake in the Town of Sebec or a dam on the Sebec River in the Town of Milo may not construct or authorize the construction of a fishway or fish bypass structure that would allow the upstream passage of an invasive fish species known to be present downstream in the Piscataquis River or Penobscot River drainage.*

A. A person who violates this subsection commits a civil violation for which a fine of not less than \$500 or more than \$1,000 may be adjudged.

B. A person who violates this subsection after having been adjudicated as having committed 3 or more civil violations under this Part within the previous 5-year period commits a Class E crime.

¹⁵ <https://www.maine.gov/ifw/docs/fisheries-reports/2013/sebeclake.pdf>

¹⁶ http://www.mainelegislature.org/legis/bills/bills_125th/billpdfs/HP011601.pdf Sec. 1. 12 MRSA §12760, sub-§1, as enacted by PL 2003, c. 414, Pt. A, §2 and affected by c. 614, §9

- Due to state management objectives for the native population of landlocked salmon in Sebec Lake, Maine Revised Statutes (MRS) Section 12760 of Title 12, Part 13, Chapter 925, prohibits the Commissioner of Maine Inland Fisheries and Wildlife from authorizing fish passage facilities at Project that would allow the upstream passage of invasive species known to be present in downstream segments of the Piscataquis River.¹⁷

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. As of December 6, 2019, responses from these agencies had not been received, but will be provided if/when they are.

¹⁷ <https://legislature.maine.gov/statutes/12/title12sec12760.html>

3.4 DOWNSTREAM FISH PASSAGE AND PROTECTION STANDARDS

3.4.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
D	1	<p><u>Not Applicable/De Minimis Effect:</u></p> <ul style="list-style-type: none"> • Explain why the facility does not impose a barrier to downstream fish passage in the designated zone, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility does not contribute adversely to the sustainability of these populations or to their access to habitat necessary for successful completion of their life cycles. • Document available fish distribution data and the lack of migratory fish species in the vicinity. • If migratory fish species have been extirpated from the area, explain why the facility is or was not the cause of this.

See Section 3.3.1.

According to the Town of Milo Comprehensive Management Plan, “while brook trout have been on the decline in many other states, Maine continues to have a good number of this popular fish. The fishing report of the Maine Department of Fisheries and Wildlife on May 1, 2006 listed the stocking of the Piscataquis River with brook trout upstream from Milo in Dover-Foxcroft and Guilford. The Sebec River is stocked with brook trout just below the dam / Trafton Falls in downtown Milo. In the past eel have been trapped in marketable numbers in Pleasant River” (pg. G-10).

As noted above, due to state management objectives for the native population of landlocked salmon in Sebec Lake, Maine Revised Statutes (MRS) Section 12760 of Title 12, Part 13, Chapter 925, prohibits the Commissioner of Maine Inland Fisheries and Wildlife from authorizing fish passage facilities at Project that would allow the upstream passage of invasive species know to be present in downstream segments of the Piscataquis River. Once below the dam, bypassed reach and powerhouse, there are no further facility-related barriers to passage.

3.5 SHORELINE AND WATERSHED PROTECTION STANDARDS

3.5.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
E	3	<p><u>Enforceable Protection:</u></p> <ul style="list-style-type: none"> • Demonstrate that there is an approved and enforceable shoreline buffer or equivalent watershed protection plan in place for conservation purposes, including buffered shoreline along river corridors. • In lieu of an existing shore land protection plan, provide documentation that the facility commits to protect and not develop an equivalent land area for conservation purposes as a condition of LIHI Certification, with such commitment to be in effect for the duration of LIHI Certification.

The Project impounds approximately 550 surface acres of water extended 4.4 miles upstream of the dam. The majority of shoreline and lands surround the impoundment consist of wooded hills and forested uplands, predominantly unpopulated and used for hunting, fishing, boating, and snowmobiling. A small portion of the impoundment’s shoreline within 1,000 feet of the dam and in the tailrace and bypass reach are abutted by a handful of commercial and residential properties, and public lands used for recreation (Veterans Memorial Park, Milo Public Boat Launch, and Noble Park). A visual assessment of the impoundment shows that the only non-Project use of the shoreline is by the town of Milo for its Milo Public Boat Launch and what appears to be a private boat launch on the southern shoreline of the impoundment just west of the railroad crossing.

The Project structures are leased from the Town of Milo. While no Shoreline Management Plan is in place to manage non-Project use at the impoundment, the town of Milo has adopted two ordinances to manage land use along the shoreline: Maine State Model for Floodplain Ordinances and Maine State Model for Shoreline Zoning Ordinances:

- 1) [Maine State Model for Floodplain Ordinances](#) regulates construction activity in the town of Milo’s floodplain areas, including the shorelines of the Sebec River.
- 2) [Maine State Model for Shoreline Zoning Ordinances](#) have been created to “further the maintenance of safe and healthful conditions; to prevent and control water pollution; to protect fish spawning grounds, aquatic life, bird and other wildlife habitat; to protect buildings and lands from flooding and accelerated erosion; to protect archaeological and historic resources; to protect commercial fishing and maritime industries; to protect freshwater and coastal wetlands; to control building sites, placement of structures and land uses; to conserve shore cover, and visual as well as actual points of access to inland and coastal waters; to conserve natural beauty and open space; and to anticipate and respond to the impacts of development in shoreland areas... The ordinance applies to all land areas within 250 feet, horizontal distance, of the normal high-water line of any great

pond or river, upland edge of a coastal wetland, including all areas affected by tidal action, or upland edge of a freshwater wetland, and all land areas within 75 feet, horizontal distance, of the normal high-water line of a stream. This Ordinance also applies to any structure built on, over or abutting a dock, wharf or pier, or other structure extending or located below the normal high-water line of a water body or within a wetland.”¹⁸

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. On November 5, 2019, John Perry from MDIFW stated that “much of the river in the project area is mapped as Inland Waterfowl and Wading Bird Habitat, a Significant Wildlife Habitat under Maine’s Natural Resources Protection Act. These habitats provide important breeding, feeding, migration, staging, and wintering habitat for waterfowl and wading bird species.” As the Project is operated as a run-of-river, the Project operations do not impact the habitat.

¹⁸ <http://www.maine.gov/sos/cec/rules/06/096/096c1000.docx>

3.6 THREATENED AND ENDANGERED SPECIES STANDARDS

3.6.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
F	2	<p><u>Finding of No Negative Effects:</u></p> <ul style="list-style-type: none"> • Identify all federal and state listed species in the facility area based on current data from the appropriate state and federal natural resource management agencies. • Provide documentation that there is no demonstrable negative effect of the facility on any listed species in the area from an appropriate natural resource management agency or provide documentation that habitat for the species does not exist within the ZoE or is not impacted by facility operations.

On September 9, 2019, the U.S. Fish and Wildlife’s (USFWS) Information for Planning and Consultation (IPaC) database was accessed to determine federally listed species that could occur in the Project vicinity. According to the IPaC database, the federally endangered Atlantic salmon (*Salmo salar*) and the federally threatened Canada lynx (*Lynx canadensis*) and northern long-eared bat (*Myotis septentrionalis*) could occur in the Project vicinity. No critical habitats were identified for any of these three species in the Project vicinity.

Atlantic Salmon:

The Gulf of Maine Distinct Population Segment of Atlantic salmon (GOP DPS) was originally listed as an endangered species under the ESA on November 17, 2000 and revised on June 19, 2009 to cover an expanded range that encompassed additional large river systems in Maine found to contain Atlantic salmon population genetically similar to those in the previously listed coastal river populations; critical habitat for the GOP DPS was also designated at this time.¹⁹ Excluded from GOP DPS, however, are landlocked salmon and those salmon raised in commercial hatcheries for aquaculture.²⁰

Landlocked salmon are considered native in four river basins in Maine, including the Penobscot/Piscataquis drainage in Piscataquis County. Sebec Lake, located approximately eight river miles upstream of Milo Dam, has a rich cultural history including sporting camps, steam-powered boats, spool and lumber mills, and a hatchery, and is known as one of Maine’s original landlocked salmon waters. Tributaries to Sebec Lake provide important spawning and nursery habitat for the wild landlocked salmon populations here. According to Maine IFW, Milo and Sebec Dams provide important barriers to invasive species such as northern pike that are present in the lower Penobscot drainage and that could be detrimental to the managed population of landlocked Atlantic salmon (*Salmo salar*) in Sebec Lake²¹. In 2011, the Maine Legislature passed LD 134: An Act to Protect Native Landlocked Salmon Fisheries from Invasive Species²²,

¹⁹ <https://www.govinfo.gov/content/pkg/FR-2016-03-31/pdf/2016-07227.pdf#page=1>

²⁰ <https://www.govinfo.gov/content/pkg/FR-2009-06-19/pdf/E9-14268.pdf#page=2>

²¹ <https://www.maine.gov/ifw/docs/fisheries-reports/2013/sebeclake.pdf>

²² http://www.mainelegislature.org/legis/bills/bills_125th/billpdfs/HP011601.pdf

which specifically prohibits the construction of fish passage devices at Milo and Sebec Dams to prevent northern pike from gaining access to this lake. The act specifically enacted Maine Statute Sec. 2. 12 MRSA §12760, sub-§9 to read as follows:

9. Sebec Lake and Sebec River dams; fishways prohibited. *The owners, lessors or other persons in control of a dam on the outlet of Sebec Lake in the Town of Sebec or a dam on the Sebec River in the Town of Milo may not construct or authorize the construction of a fishway or fish bypass structure that would allow the upstream passage of an invasive fish species known to be present downstream in the Piscataquis River or Penobscot River drainage.*

A. A person who violates this subsection commits a civil violation for which a fine of not less than \$500 or more than \$1,000 may be adjudged.

B. A person who violates this subsection after having been adjudicated as having committed 3 or more civil violations under this Part within the previous 5-year period commits a Class E crime

Canada Lynx:

The Canada lynx was listed as a federally threatened species under the ESA on March 24, 2000 and is also a species of special concern in Maine. In the Project vicinity, Canada lynx are most common in spruce/fir flats. Much of northern Maine's spruce/fir forests were damaged or killed by insect outbreak in the 1970s and 1980s, and have since regenerated to support high densities of snowshoe hares, the primary food for Canada lynx.²³ In 2009, the USFWS designated approximately 10,000 square miles of critical habitat in northern Maine, the southern extent of which is approximately 20 miles north of the Project.²⁴ As Project facilities are located within the urban setting of the town of Milo, ongoing operations are not anticipated to negatively affect the Canada lynx.

Northern Long-eared Bat:

The northern long-eared bat (NLEB) was listed as a federally threatened species under the ESA on May 4, 2015 and is also a species of special concern in Maine. These bats are flexible in selecting roost sites, choosing roost trees that provide cavities and crevices. Winter hibernation typically occurs in caves and areas around them and can be used for fall-swarmling and spring-staging. No critical habitat has been designated for the NLEB in the Project Vicinity. The Project is currently located within a county identified as having white-nose syndrome or *Pseudogymnoascus destructans* infected hibernacula or bats, and, therefore, KEI (Maine) will abide by the 4(d) Ruling issued by USFSW for northern long-eared bat in the Project vicinity.²⁵ Ongoing run-of-river operations are not anticipated to negatively affect the NLEB.

Rare and Exemplary Botanical Features:

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. The State of Maine, Department of Agriculture, Conservation &

²³ https://www.maine.gov/ifw/docs/Endangered/Canada_Lynx_2011.pdf

²⁴ <https://www.govinfo.gov/content/pkg/FR-2014-09-12/pdf/2014-21013.pdf#page=1>

²⁵ <https://www.fws.gov/Midwest/endangered/mammals/nleb/pdf/WNSZone.pdf>

Forestry responded on October 21, 2019 with the following: “According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area.”

Additionally, on November 5, 2019, the Maine Department of Inland Fisheries and Wildlife responded to Kleinschmidt’s request. MDIFW stated that these are state-listed Endangered, Threatened, and Special Concern species that have been documented in the general vicinity of the Milo Hydro Project on the Sebec River. Note that this list should not be considered all-inclusive:

- Creeper (Special Concern species of freshwater mussel)
- Bald Eagle--until recently, bald eagles were listed as a Species of Special Concern in Maine. However, eagles continue to be protected under the federal Bald Eagle and Golden Eagle Protection Act as well as other federal laws.

In addition, while a comprehensive statewide inventory for bats has not been completed it is likely that several of species of bats occur within the project area during migration and/or the breeding season.

- Little brown bat (State Endangered)
- Northern long-eared bat (State Endangered)
- Eastern small-footed bat (State Threatened)
- Big brown bat (Special Concern)
- Red bat (Special Concern)
- Hoary bat (Special Concern)
- Silver-haired bat (Special Concern)
- Tri-colored bat (Special Concern)

This list did not include any listed species of wading birds, or migratory birds that are likely found in the area during spring and fall migrations.

In addition to the species above, much of the river in the project area is mapped as Inland Waterfowl and Wading Bird Habitat, a Significant Wildlife Habitat under Maine’s Natural Resources Protection Act. These habitats provide important breeding, feeding, migration, staging, and wintering habitat for waterfowl and wading bird species.

It is not known what effects, if any, the operations of the project may have on any of the species or habitats listed above. Project operations are not expected to affect the state-listed bat species in addition to Northern long-eared bat.

These response can be found in Appendix D.

3.7 CULTURAL AND HISTORIC RESOURCES STANDARDS

3.7.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
G	1	<u>Not Applicable / De Minimis Affect:</u> <ul style="list-style-type: none">• Document that there are no cultural or historic resources located on facility lands that can be affected by construction or operations of the facility.• Document that the facility construction and operation have not in the past adversely affected any cultural or historic resources that are present on facility lands.

According to the Town of Milo Comprehensive Plan 2005²⁶, the Maine Historic Preservation Commission (MHPC) lists 15 known prehistoric archaeological sites in Milo, specifically in deep river alluvium along the Pleasant and Piscataquis River banks. The MHPC further indicated that the Mill Complex, American Mill (ME 282-001), found adjacent to the Project along the western shoreline of the bypass reach, has been identified as a historic archaeological site, though know professional survey of archaeological sites have been conducted in Milo.

Upon review of the initial design and proposal for the Milo Project, the MHPC stated in a September 22, 1981 letter that “the project will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.” No Historic Properties Management Plan is in place for the Milo Project; however, the licensee is aware of its responsibility to follow the appropriate steps to protect previously unidentified historic or cultural resources and to consult with the MHPC prior to any construction that may affect an historic or cultural resource.

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. As of December 6, 2019, responses from the SHPO had not been received, but will be provided if/when they are.

²⁶ <https://www.trcmaine.org/docs/milo//docs/MiloCompPlan.pdf>

3.8 RECREATIONAL RESOURCES STANDARDS

3.8.1 ALL ZOES

CRITERION	STANDARD	INSTRUCTIONS
H	3	<u>Assured Accessibility:</u> <ul style="list-style-type: none">• In lieu of existing recommendations and plans for recreational uses, document the facility's current and future commitment to accommodate reasonable requests from recreation interests for adequate public access for recreational use of lands and waters of the facility, including appropriate recreational water flows and levels, without fees or charges.

Given the small footprint of the Project, it does not feature any recreational facilities; however, excluding areas secured for public safety, public use of Project lands and waters for recreation is permitted.

A few developed recreation sites do exist adjacent to the Project. Veterans Memorial Park is located along the eastern shoreline of the impounded portion of the Sebec River upstream of the dam facilities. According to the Milo Comprehensive Plan²⁷, the park includes benches, picnic tables, walkways with a footbridge, a gazebo, boat ramp and docks (Milo Public Boat Landing), and seasonal toilet facilities. Another small public park, Doble Park, is located along the western shoreline of the impoundment, just upstream of the dam. No formal amenities are located at this site.

On October 18, 2019, Kleinschmidt, on behalf of KEI (Maine), consulted with state and federal agencies, requesting confirmation that the Project is operated in compliance with all relevant requirements and conditions. As of December 6, 2019, responses from these agencies had not been received, but will be provided if/when they are.

²⁷ <https://www.trcmaine.org/docs/milo//docs/MiloCompPlan.pdf>

4.0 REFERENCES

Chadwick, Blaine. 2017. Lower Traftons Falls Milo, Maine. [Autel X-Star Dron Video](#). Accessed September 5, 2019.

5.0 FACILITY CONTACTS FORM

1. All applications for LIHI Certification must include complete contact information to be reviewed.

Project Owner:	
Name and Title	Lewis C. Loon, General Manager, Operations and Maintenance – USA/QC
Company	KEI (Maine) Power Management (II) LLC
Phone	207-203-3026
Email Address	Sherri.Loan@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner, ME 04345
Project Operator (if different from Owner):	
Name and Title	
Company	KEI (USA) Power Management II
Phone	(207) 203-3026
Email Address	Sherri.Loan@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner, ME 04345
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Nuria Holmes & Matt Harper
Company	Kleinschmidt Associates
Phone	971-266-5395
Email Address	Nuria.Holmes@Kleinschmidtgroup.com
Mailing Address	1500 NE Irving Street, Suite 550, Portland, OR 97232
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Sherri Loon, Coordinator - Operations USA
Company	KEI (USA) Power Management II
Phone	207-203-3026
Email Address	Sherri.Loan@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner, ME 04345
Party responsible for accounts payable:	
Name and Title	Sheri Hanson, Staff Accountant
Company	KEI (USA) Power Management II
Phone	207-203-3030
Email Address	Sheri.Hanson@kruger.com
Mailing Address	423 Brunswick Avenue, Gardiner, ME 04345

2. Applicant must identify the most current and relevant state, federal, provincial, and tribal resource agency contacts (copy and repeat the following table as needed).

Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input checked="" type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input checked="" type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input type="checkbox"/>):	
Agency Name	National Marine Fisheries Service
Name and Title	Sean McDermott, Fisheries Biologist
Phone	978-271-9113
Email address	Sean.Mcdermott@noaa.gov
Mailing Address	55 Great Republic Drive, Gloucester, MA 01930

Agency Contact (Check area of responsibility: Flows <input checked="" type="checkbox"/> , Water Quality <input checked="" type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input checked="" type="checkbox"/>):	
Agency Name	Maine Department of Environmental Protection
Name and Title	Kathy Howatt
Phone	207-453-4258
Email address	Kathy.howatt@maine.gov
Mailing Address	17 State House Station, Augusta, ME 04333

Agency Contact (Check area of responsibility: Flows <input checked="" type="checkbox"/> , Water Quality <input checked="" type="checkbox"/> , Fish/Wildlife Resources <input checked="" type="checkbox"/> , Watersheds <input checked="" type="checkbox"/> , T/E Spp. <input checked="" type="checkbox"/> , Cultural/Historic Resources <input checked="" type="checkbox"/> , Recreation <input checked="" type="checkbox"/>):	
Agency Name	U.S. Fish and Wildlife Service
Name and Title	Antonio Bentivoglio
Phone	207-781-8364 x 18
Email address	antonio_bentivoglio@fws.gov
Mailing Address	4 Fundy Road #R, Falmouth, Maine 04105

Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input checked="" type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input type="checkbox"/>):	
Agency Name	Maine Department of Marine Resources
Name and Title	Gail Wippelhauser
Phone	207-624-6349
Email address	Gail.wippelhauser@maine.gov
Mailing Address	21 State House Station, Augusta, ME 04333

Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input checked="" type="checkbox"/> , Recreation <input type="checkbox"/>):	
Agency Name	Maine Historic Preservation Commission
Name and Title	Kirk Mohnney, Director
Phone	207-287-3811
Email address	kirk.mohnney@maine.gov
Mailing Address	65 State House Station, Augusta, ME 04333

Agency Contact (Check area of responsibility: Flows <input type="checkbox"/> , Water Quality <input type="checkbox"/> , Fish/Wildlife Resources <input type="checkbox"/> , Watersheds <input checked="" type="checkbox"/> , T/E Spp. <input type="checkbox"/> , Cultural/Historic Resources <input type="checkbox"/> , Recreation <input checked="" type="checkbox"/>):	
Agency Name	Maine Department of Inland Fisheries and Wildlife
Name and Title	John Perry, Environmental Review Coordinator
Phone	207-287-5254
Email address	John.perry@maine.gov
Mailing Address	284 State Street, 41 SHS, Augusta, ME 04333

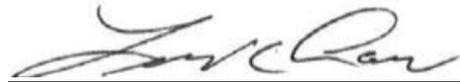
6.0 SWORN STATEMENT

As an Authorized Representative of KEI (USA), the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's Certification Program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The Undersigned further acknowledges that is certification of the applying facility is issues, the LIHI Certification Mark License Agreement must be executed prior to marketing the electricity product as LIHI Certified.

The Undersigned Applicant further agrees to hold the Low Impact Hydropower Institute, the Governing Board, and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's Certification Program.



Signature

Lewis C. Loon

Name

General Manager, Operations and Maintenance – USA/QC

Title

KEI (USA) Power Management Inc.

Company

APPENDIX A
PROJECT PHOTOGRAPHS



PHOTO 6-1 WEST MAIN STREET BRIDGE AND MILO DAM (LOOKING UPSTREAM)



PHOTO 6-2 MILO DAM



PHOTO 6-3 DOWNSTREAM CONFLUENCE OF BYPASS REACH (LEFT) AND TAILRACE (RIGHT)



PHOTO 6-4 TAILRACE BELOW MILO DAM

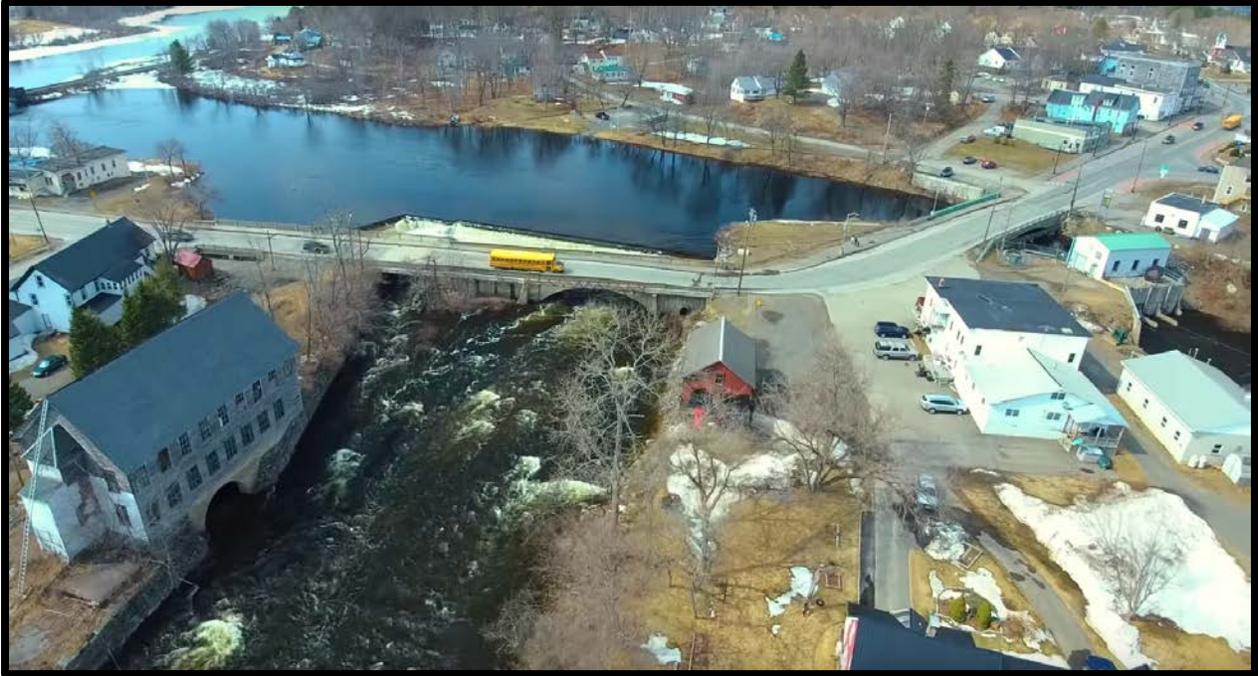


PHOTO 6-5 MILO DAM (LEFT) AND POWERHOUSE (RIGHT)



PHOTO 6-6 MILO PROJECT POWERHOUSE (DOWNSTREAM OF EAST MAIN STREET BRIDGE)



PHOTO 6-7 VETERANS MEMORIAL PARK (UPSTREAM OF MILO DAM)



PHOTO 6-8 VETERAN'S MEMORIAL PARK WALKING TRAIL



PHOTO 6-9 VETERAN'S MEMORIAL PARK VIEW



PHOTO 6-10 MILO PROJECT IMPOUNDMENT (LOOKING UPSTREAM)



PHOTO 6-11 MILO DAM TAILRACE DISCHARGE



PHOTO 6-12 MILO DAM UPSTREAM VIEW OF TAILRACE AND POWERHOUSE

APPENDIX B

1981 APPLICATION FOR EXEMPTION

P-5647-078



Swift River Company

314 State Street, Boston, Mass. 02109. (617) 742-1580.
44 Exchange Street, Portland, Me. 04101 (207) 774-6400.

NOV 13 1981

FEDERAL ENERGY
REGULATORY
COMMISSION

OFFICIAL FILE COPY

TO	INT.	DATE

CENTRAL FILES

November 6, 1981

Federal Energy Regulatory
Commission
825 North Capitol Street
Washington, D.C. 20426

Attention: Mr. Kenneth F. Plumb, Secretary

Re: Application for Exemption
from licensing for a Small
Hydroelectric Power Project
Swift River Company, Inc.

Gentlemen:

The undersigned is transmitting herewith, for filing with the Federal Energy Regulatory Commission, an original and 14 copies of its Application for Exemption from Licensing for a small hydroelectric power project on the Sebec River in Milo, Maine.

The undersigned hereby requests consideration of this Application for Exemption from Licensing at the earliest convenience of the Commission.

If there is any additional information or documentation required by the Commission at this time, please advise and the requested materials will be furnished promptly.

Sincerely,

Christian A. Herter, III
Vice-President

Enclosures

44 Exchange Street
Portland, ME 04101



Swift River Company

P. 47-27

148 State Street, Boston, Mass. 02109, (617) 742-1580
44 Exchange Street, Portland, Me. 04101 (207) 774-6400

FEDERAL ENERGY
REGULATORY
COMMISSION

RECEIVED
GENERAL INVESTIGATION
SECTION

**APPLICATION FOR EXEMPTION OF SMALL
HYDROELECTRIC POWER PROJECT - 5 MW
OR LESS**

MILO HYDRO-ELECTRIC POWER PROJECT

PC
FEDERAL ENERGY REGULATORY COMMISSION
RECEIVED
NOV 13 1981
GENERAL INVESTIGATION SECTION

**APPLICATION FOR EXEMPTION OF SMALL
HYDROELECTRIC POWER PROJECT**

(1) Swift River Company applies to the Federal Energy Regulatory Commission for an exemption for the Milo Hydroelectric Power Project, a small hydroelectric power project that is proposed to have an installed capacity of 5 megawatts or less, from certain provisions of the Federal Power Act.

(2) The location of project is:

State of Maine
Piscataquis County
Town of Milo
Sebec River

(3) The exact name and business address of each applicant is:

Swift River Company
148 State Street
Boston, MA 02109

(4) The exact name and business address of each person authorized to act as agent for the applicant in this application is:

Christian A. Herter III, Vice President
Swift River Company
44 Exchange Street
Portland, ME 04101

(5) Swift River Company is an association of citizens of the United States, incorporated under the laws of the state of Massachusetts, and is the project leasehold owner.

Swift River Company

EXHIBIT A

The Milo Dam is situated on the Sebec River in Milo, Maine at the bridge carrying Maine State Highways 6 and 16 across the river. The dam is in two sections, bracketing an island in the Sebec River at this point, with a timber crib overflow section on the westerly channel, and a concrete non-overflow gated section on the easterly channel. The Sebec River flows in a generally southeasterly direction at the dam, which is also located 1.9 miles above the Piscataquis River. Exhibits B and G included herein show the general location and layout of the project.

Table 1 below gives necessary statistics:

Table 1

<u>Dam</u>	<u>Tailrace</u>
<u>Height</u> - Concrete - 15 ft. Timber Crib - 9 ft. max.	<u>Length</u> - 750 ft.
<u>Length</u> - Concrete - 50 ft. Timber Crib - 250 ft.	<u>Dimensions</u> - Trapezoid, 70 ft. bottom, 1.3 slope
<u>Material</u> - Timber Crib, earth fill, concrete, masonry	<u>Material</u> - gravel, rip-rap banks
<u>Design</u> - Gravity, uncontrolled spillway	
<u>Impoundment</u>	<u>Powerplants</u>
<u>Surface Elevation</u> - 280.54(±) feet m.s.l.	<u>Rating</u> - 1 unit @ 450 kw, 1 unit @ 150 kw
<u>Storage</u> - 50 acre-feet (net)	<u>Manufacture</u> - Leffel Turbines, Electric Machinery Generator
<u>Surface Area</u> -50 acres(±)	<u>Operating Head</u> - 14' net
	<u>Hydraulic Capacity</u> - 550-600 cfs total
	<u>Plant Factor</u> - 48%
	<u>Annual Output</u> -2,500 mwh
<u>Customer</u> - Power Output is proposed for sale to Bangor Hydro- Electric Company under rates established by the Maine Public Utilities Commission pursuant to the Public Utilities Regulatory Policies Act.	
<u>Transmission</u> - 7.6 KV - 50' from powerhouse to existing pole-top transformers.	
<u>Flow Duration Curve</u> - Attached	

Swift River Company proposes to redevelop the existing project, which was originally constructed in 1881. The timber crib section of the dam is in good condition, having been repaired about ten years ago. The concrete section of the dam on the easterly channel has deteriorated badly and needs substantial reconstruction. Swift River Company proposes to replace this section with an integral dam/powerhouse structure, about 50 feet downstream of the existing structure. The installation of new head gates and trash racks will also be required. The existing tailrace and discharge canal has been partially filled in with accumulated trash and sediment from disuse over the past 50-60 years, and will require excavation and dredging to pass the anticipated flows from the new units to be installed here.

The existing project originally harnessed the energy of the Sebec River to provide power for a half dozen mills astride and bordering the river, including at least one each of a saw mill, grist mill, spool and excelsior mill and a woolen mill. In 1920, two 125 horsepower S. Morgan Smith turbines were installed, connected to two generators of 150 kilowatts each, manufactured by Electric Machinery Company. This facility was operated by the Milo Electric Light and Power Company. In 1923, the units were upgraded by the substitution of two 27" Leffel Type "Z" wheels, rated 210 horsepower each. At some point thereafter, the Leffel wheels were further upgraded to 245 horsepower each under a 14 foot head, with corresponding electrical outputs of 160 kilowatts each. The maximum turbine discharge was 380 cfs, with an average discharge of 320 cfs, and annual generation was nearly 2 million kilowatt-hours.

Significant changes in design assumptions have occurred since 1923 which make an installed capacity of 600 kilowatts appropriate. Among these changes are the higher energy value of the power produced and the national goal to reduce dependence on imports of foreign oil. A run-of-the-river operation follows the natural flow of the river at this site, while helping to achieve these goals.

The project dam is located on a granite rock ledge at a natural fall through Milo. Swift River Company plans to begin repairs and the installation of new turbine generators in April 1982.

Our economic analysis indicates that an initial revenue of 60 mils per kilowatt-hour is needed for this project to be economical. The Maine Public Utilities Commission is currently conducting hearings to establish a standard for small power producers, and is considering a rate in the vicinity of 60 mils per kilowatt-hour.

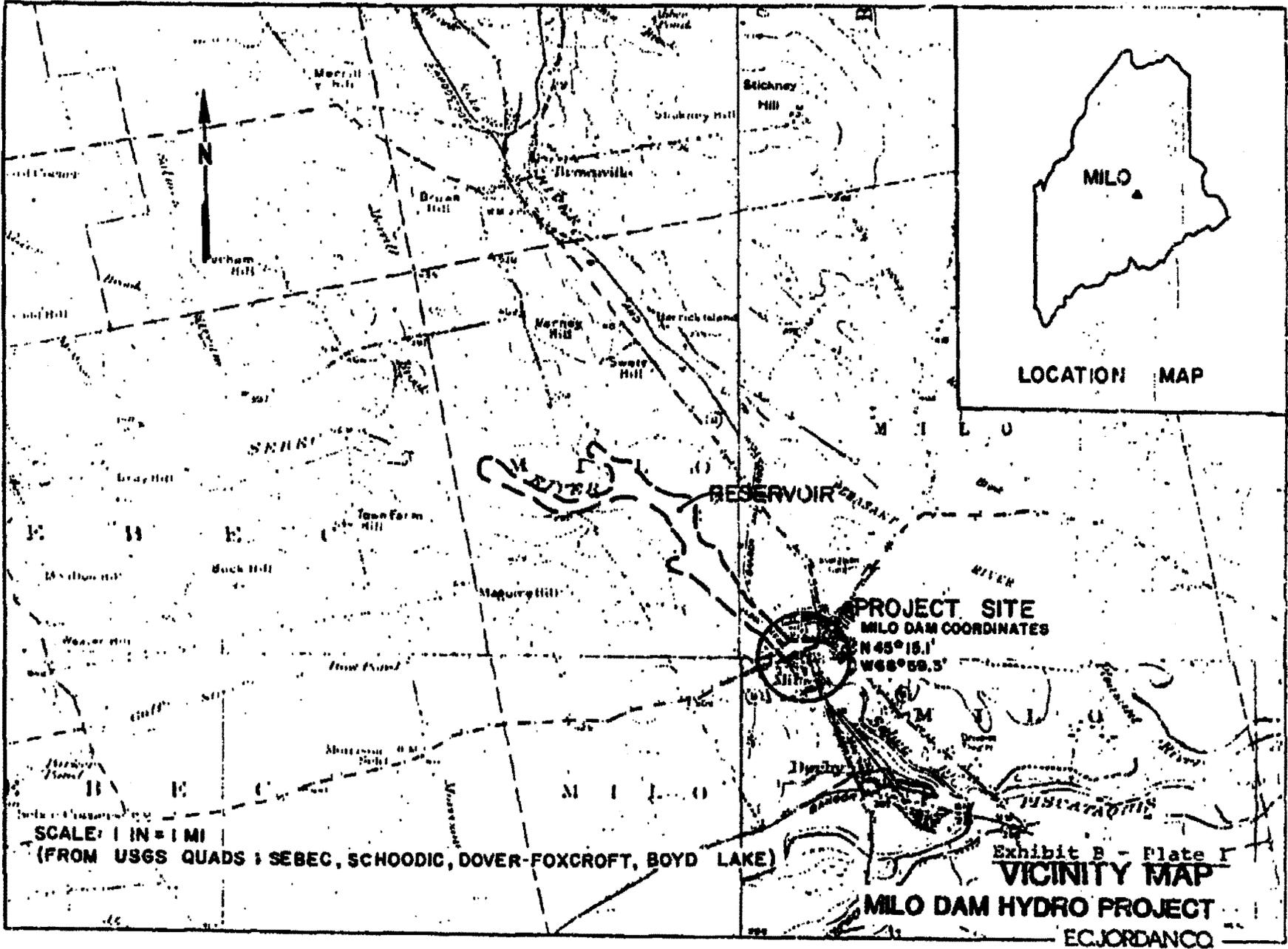


EXHIBIT EEnvironmental Report

The approximately 407 square miles of the watershed, upstream of the project, consists primarily of wooded hills and forested uplands. The river flows through predominantly unpopulated areas which are largely used for recreation-hunting, fishing, boating, snowmobiling, and the like. The project will not effect the recreational uses of these areas.

Within the project boundaries, there are fields on the eastern side of the river which are either unused or mowed for hay. The western side of the river is largely undergrowth, brush, and trees, and a garage/pumphouse building of the Milo Water District, with gravel parking lot and driveway.

During spring runoff, and occasionally following heavy late fall or winter rains, some flooding typically occurs above and below the dam. Immediately downstream of the project, the banks of the river become steep, with the west banks of both channels of the river being the steepest.

Within the project boundaries, upstream of the dam, there is one small brook that flows into the river. Shallow marshes are formed where this brook meets the river. Typical vegetation includes cat-tails, marsh grass, golden rod, dogwood, white and grey birch, alders, elm, white pine, evergreens, maples, wild cherry and oak. Typical bird life includes red-winged black birds, crows, blue jays and robins. Typical wildlife includes muskrat, beaver, raccoon, mice, rabbits and white tail deer.

The water quality of this river is excellent, and it is the only approved local source of water for the Town of Milo. There are no significant upstream sources of pollution. The proposed hydro operation would not significantly affect the quality of the river, as the project would be operated as a run-of-the-river generating station.

The project would utilize existing structures and would require no further encroachment on the river than that which was previously established at this site some one hundred years ago. As a consequence of operating as a run-of-the-river station, the upstream wildlife habitats would not be subject to any significant fluctuations in the water level.

Attached in Appendix B are copies of correspondence with agencies.

All water flowing through the proposed project's turbine would be returned to the river through the existing tailrace, located approximately 750' downstream of the existing dam. The streambed, below the timber crib dam, is primarily gently sloping bedrock ending in a pool at the tailrace exit. It does not appear that the natural environment in this section of the river would be adversely affected even by extremely low flow conditions. A minimum flow would be maintained in areas affected by the project.

Proposed Minimum Flows

The proposed project would be operated as run-of-the-river under the following flow constraints:

The proposed minimum streamflow to be provided in the bypassed streambed is the greater of 50 cfs or inflow above the dam. Forty-two cfs is the seven day, ten year, recurring low flow as estimated by the Maine Department of Inland Fisheries and Wildlife.

At times when the station was not operating, flow in the bypassed streambed would be the same as provided by inflow above the dam. It is the applicant's opinion that provision for additional flow, over this particular stretch of river, would not produce public benefit in excess of the value of energy resources which would be lost as a consequence.

U.S. Fish & Wildlife and the Maine Departments of Inland Fisheries & Wildlife and Marine Resources indicated that they are not aware of any endangered species in the project area.

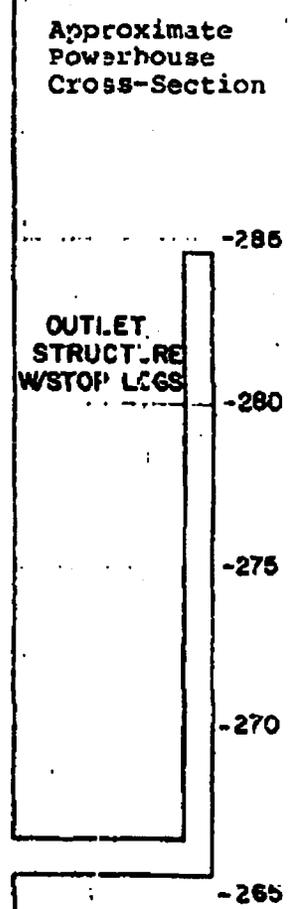
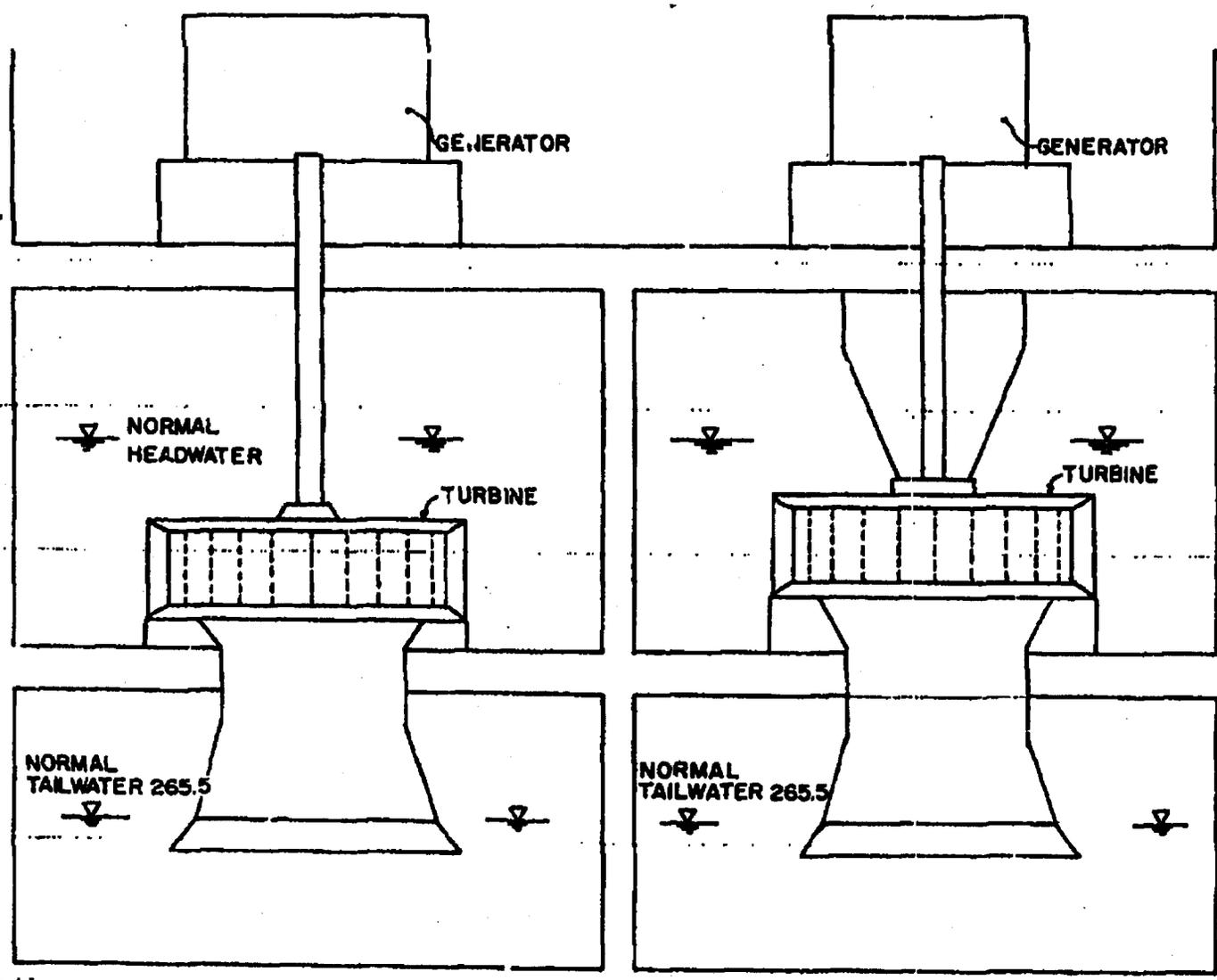
Marine Resources, Inland Fisheries & Wildlife, and the Atlantic Sea-Run Salmon Commission have indicated that they have no immediate plans to reinstate anadromous fish to the Sebec River. An existing dam is located upstream of this project and this dam has no operating fishway installed. The proposed project does not, therefore, include current plans for constructing a fishway.

Public access for fishing would be permitted in the dam area, except in the immediate vicinity of the intake. The intake would be fenced off for reasons of public safety.

An information center near the intake area would describe the proposed project to its visitors.

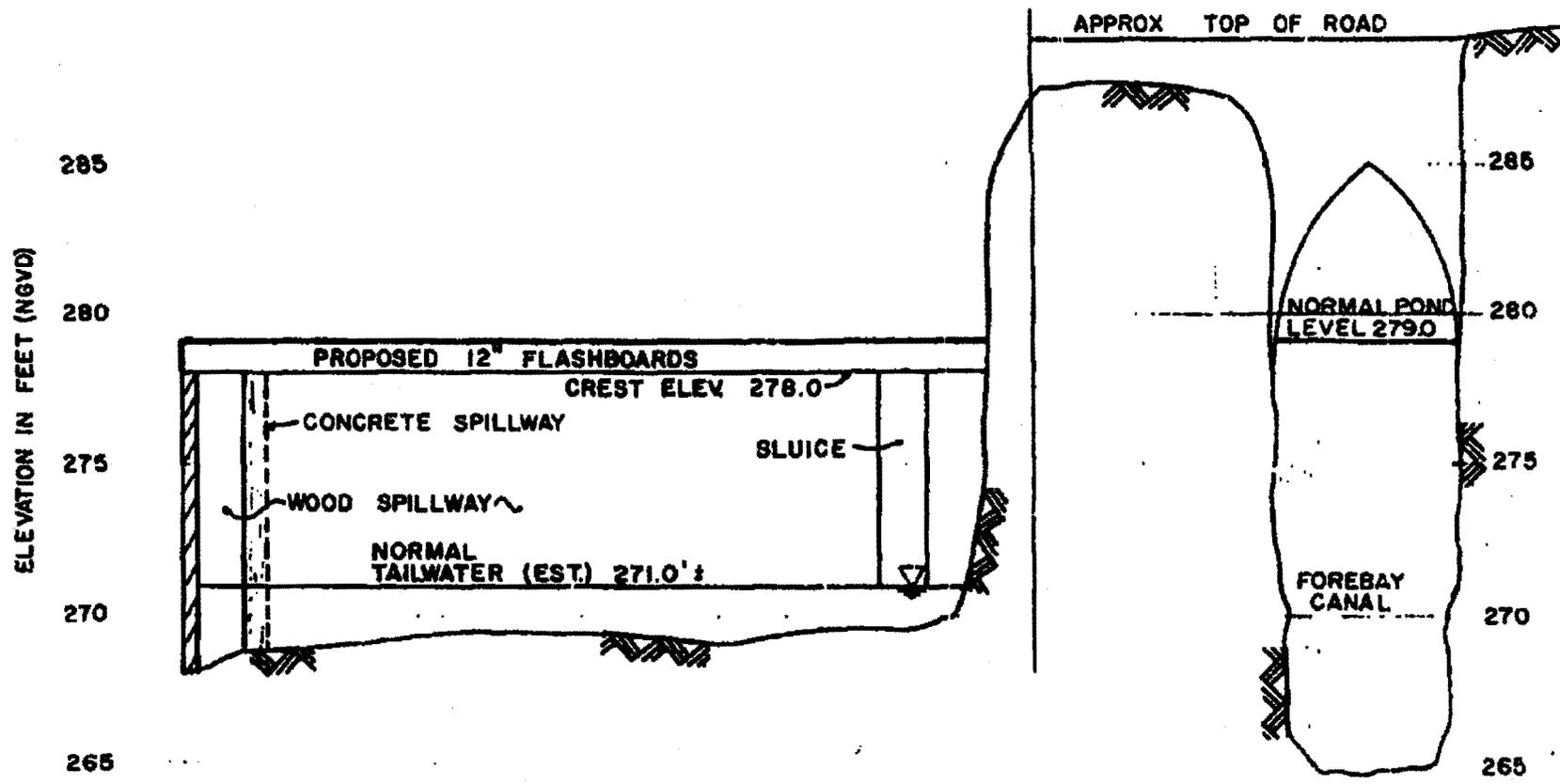
This project would displace the equivalent of 3500 barrels of imported oil annually, based upon an equivalent of 600 kwh per barrel of oil.

Exhibit G - Plate 2



SECTION A-A
1" = 5'

MILO DAM
TOWN OF MILO, ME
E.C. JORDANCO



SECTION B-B

SCALE: HORZ 1"=50'
VERT 1"= 8'

Exhibit G - Plate 3
Approximate Cross-Section
MILO DAM
TOWN OF MILO, ME

ECJORDANCO

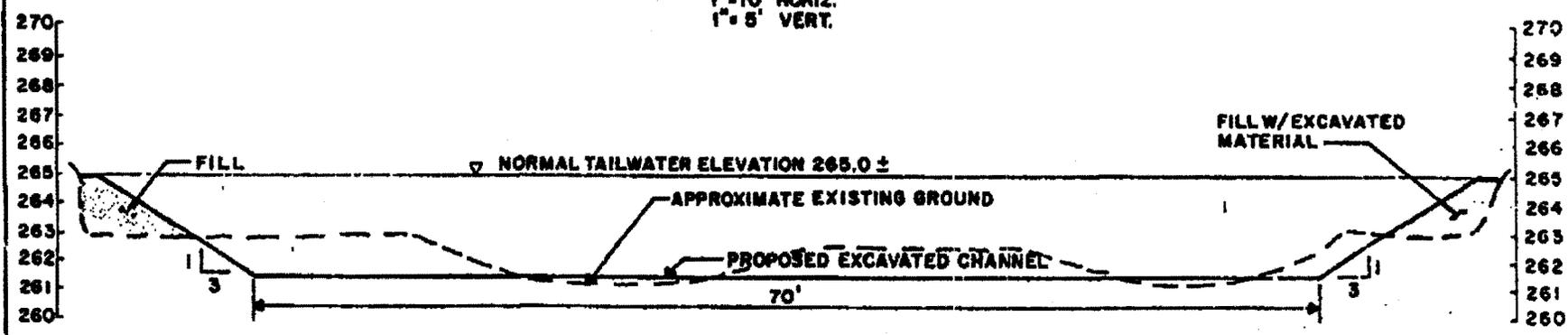
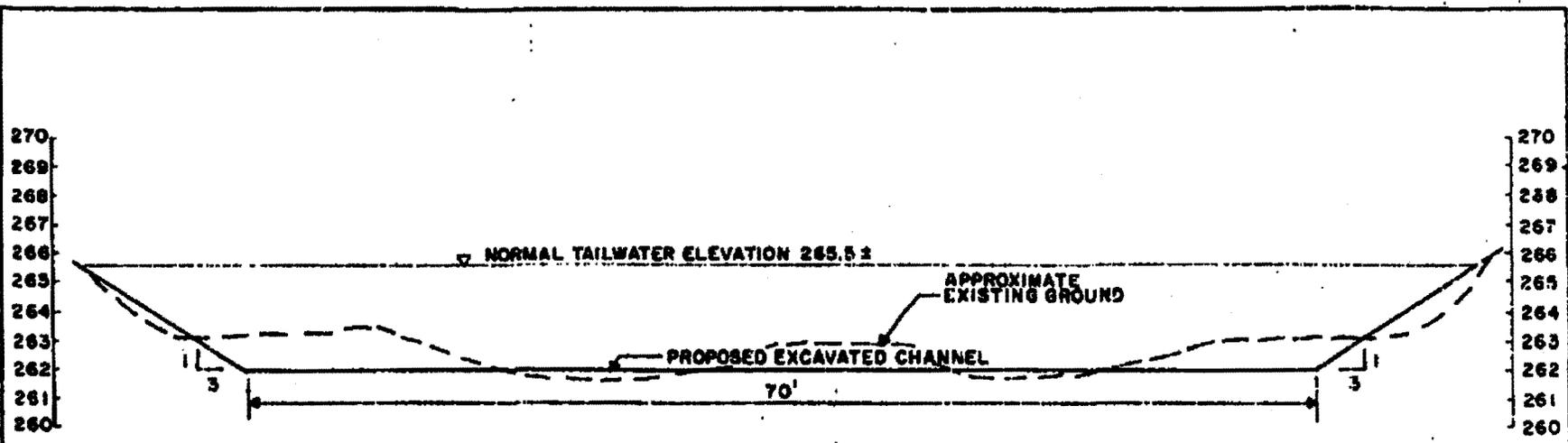
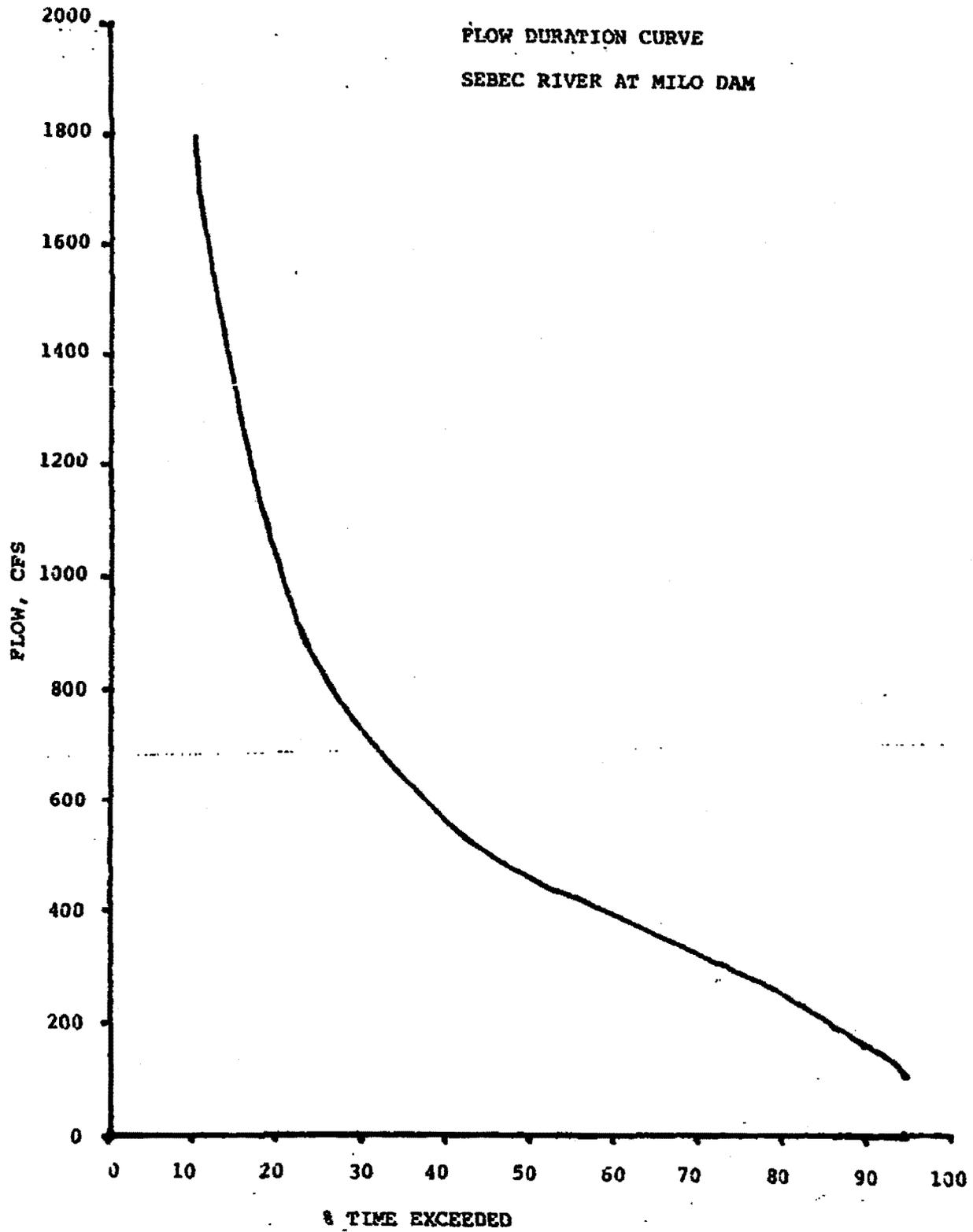


Exhibit G - Plate 4
TAILRACE CROSS-SECTIONS
MLO DAM HYDRO PROJECT

EC.JORDANCO





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

Ref: Milo Dam Hydro Project, ME

SEP 18 1981

Mr. Gary Dawbin
Swift River Company
44 Exchange Street
Portland, ME 04101

Dear Mr. Dawbin:

This responds to your September 4, 1981, request for information on the presence of Federally listed and proposed endangered or threatened species within the impact area of the Milo Dam hydroelectric project, Sebac River, Maine.

Our review shows that except for occasional transient individuals, no Federally listed or proposed species under our jurisdiction are known to exist in the project impact areas. Therefore, no Biological Assessment or further consultation is required with us under Section 7 of the Endangered Species Act. Should project plans change, or if additional information on listed or proposed species become available, this determination may be reconsidered.

This response relates only to endangered species under our jurisdiction. It does not address other legislation or our concerns under the Fish and Wildlife Coordination Act.

A list of Federally designated endangered and threatened species in Maine is enclosed for your information. Thank you for your cooperation and please contact us if we can be of further assistance.

Sincerely yours,

Gordon E. Beckett
Acting Area Manager

Enclosure

FEDERALLY LISTED ENDANGERED AND THREATENED SPECIES
IN MAINE

Common Name	Scientific Name	Status	Distribution
<u>FISHES:</u>			
Sturgeon, shortnose*	<u>Acipenser brevirostrum</u>	E	Kennebec River and Atlantic Coastal waters
<u>REPTILES:</u>			
Turtle, leatherback*	<u>Dermochelys coriacea</u>	E	Oceanic summer resident
Turtle, loggerhead*	<u>Caretta caretta</u>	T	Oceanic summer resident
Turtle, Atlantic ridley*	<u>Lepidochelys kempi</u>	E	Oceanic summer resident
<u>BIRDS:</u>			
Eagle, bald	<u>Haliaeetus leucocephalus</u>	E	Entire state - nesting habitat
Falcon, American peregrine	<u>Falco peregrinus anatum</u>	E	Entire state - re-establishment to former breeding range in progress
Falcon, Arctic peregrine	<u>Falco peregrinus tundrius</u>	E	Entire state Migratory - no nesting
<u>MAMMALS:</u>			
Cougar, eastern	<u>Felis concolor cougar</u>	E	Entire state - may be extinct
Whale, blue*	<u>Balaenoptera musculus</u>	E	Oceanic
Whale, finback*	<u>Balaenoptera physalus</u>	E	Oceanic
Whale, humpback*	<u>Megaptera novaeangliae</u>	E	Oceanic
Whale, right*	<u>Eubalaena spp. (all species)</u>	E	Oceanic
Whale, sei*	<u>Balaenoptera borealis</u>	E	Oceanic
Whale, sperm*	<u>Physeter catodon</u>	E	Oceanic
<u>MOLLUSKS:</u>			
NONE			
<u>PLANTS:</u>			
Silverling	<u>Paronychia argyrocoma</u> var. <u>albinontana</u>	T (proposed)	Oxford County
Small Whorled Pogonia	<u>Isotria medeoloides</u>	E (proposed)	Kennebec, Cumberland, Oxford Counties
Lousewort, Furbish's	<u>Pedicularis furbishiae</u>	E	Aroostook County

* Except for sea turtle nesting habitat, principal responsibility for these species is vested with the National Marine Fisheries Service



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

Ref: Milo Dam,
Sebec R., ME

OCT 23 1981

Mr. Gary Dawbin
Swift River Company
44 Exchange Street
Portland, Maine 04101

Dear Mr. Dawbin:

This responds to your September 4 and September 9 phone calls regarding the proposed Exemption from License for the run-of-river Milo Dam Hydroelectric Project on the Sebec River, Maine, and your request for some indication of areas of specific concern to us. Our response regarding endangered species is being sent in a separate letter.

We understand there is no fish-passage facility in the Milo Dam at present. An ongoing program to re-establish an alewife population in the river system, however, may require fish-passage facilities within about five years; the possible need will be reassessed as required. Present fishery management plans do not require passage for Atlantic salmon or any inland, fresh-water species.

Your proposal for a 50-cfs instantaneous minimum release in the west channel is acceptable for the present. Maintenance of the 50-cfs flow in the west channel may be difficult during extreme low-flow periods when 25 cfs is being released to the east channel as required by the Dept. of Environmental Protection for sustaining water quality. If it is necessary to reduce the flow below 50 cfs in the west channel, it should be done over a period of several hours to avoid stranding fish as the water level recedes. At such time fish-passage facilities are required, instantaneous minimum flows will have to be reassessed.

Consideration is being given to redevelopment of the Sebec Lake outlet dam for hydroelectric power generation. We recommend that further planning for the Milo Dam project be coordinated with the presently-known (or potential) developer at Sebec Lake storage in a manner which will not interfere with lake trout spawning and incubation periods. We understand the Dept. of Environmental Protection has an agreement with the Bangor Electric Company to lower the water level by October 10, to provide for spring storage capacity; negotiations should consider this aspect of water management at the lake.

Because the project will operate on a public waterway, reasonable access should be provided for angling opportunity insofar as safety conditions allow.

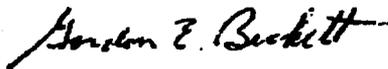
-2-

Pursuant to Sec. 408 of the Energy Security Act, the FWS requests inclusion of the following conditions in the exemption:

1. An instantaneous minimum flow of 50 cfs will be released in the west channel at the same time 25 cfs is maintained in the east channel; if the west channel flow must be reduced to less than 50 cfs because of storage constraints, a reasonable attempt must be made to do it over a period of several hours to minimize stranding of aquatic organisms.
2. Fish-passage facilities will be constructed, operated, and maintained by the Exemptee when so requested by appropriate Federal or State fish and wildlife agencies; instantaneous minimum channel flows and fishway-flow needs will be reassessed.
3. Liaison will be established by the Exemptee with any potential developer of the Sebec Lake Dam hydroelectric facility to explore possible use of storage waters from Sebec Lake in a manner which will not interfere with lake trout spawning and incubation in Sebec Lake, and concurrently contribute to instantaneous downstream releases in either or both of the east and west channels as may be required.
4. The Exemptee will insure that reasonable access is provided to project-area waters for fishing opportunity insofar as safety conditions permit.

Thank you for the opportunity to assist during the planning stage of the hydro-power development.

Sincerely yours,



Gordon E. Beckett
Supervisor



DEPARTMENT OF
INLAND FISHERIES AND WILDLIFE

284 STATE STREET
STATE HOUSE STATION 41
AUGUSTA, MAINE 04333

GLENN H. MANUEL
COMMISSIONER

J. WILLIAM PEPPARD
DEPUTY COMMISSIONER

October 5, 1981

Swift River Company
Attn: Gerald Dawbin
44 Exchange Street
Portland, Maine 04101

RE: Milo Hydroelectric Redevelopment
Sebec River, Milo, Piscataquis Co.

Dear Mr. Dawbin:

This letter is to confirm consultation, with subsequent information exchange and discussion, concerning your hydroelectric redevelopment proposal at Milo. The following comments address various aspects of the proposal:

1. Reconstruction of the dam and construction of new powerhouse on the east channel: We have no objections to this alternative as proposed. We would recommend that erosion control on the pondward side of the cofferdam will be essential to minimize effects of wave action on the gravel fill. Otherwise, erosion control plans appear adequately addressed in the proposal.
2. East channel tailrace excavation: Concepts of erosion and sedimentation control appear to be adequately addressed. Implementation of specific procedures during the construction phase will need conscientious supervision to ensure slope stabilization before full flows are put through channel. Recommend work be undertaken during July - August low flow periods rather than "fall" as outlined. We would also recommend consideration of excavating the tailrace channel in a shallow V cross-section to concentrate low flows rather than spread them out over a broad flat channel. We further understand that existing waste discharges into the east channel may require maintenance of some stream flow during the excavation work. Provisions for maintenance of flow and specific methods of erosion control may need revision from plans submitted to date.
3. Maintenance of flow in east channel after project construction: Provisions for an instantaneous minimum flow may be necessary for maintenance of water quality. Above mentioned concerns for waste discharges into the tailrace channel would indicate probable requirements for at least 25 cfs. (discussion with DEP Water Bureau) at all times when the turbines were not being operated.
4. Maintenance of flow in the west channel: The proposed plan to maintain a minimum flow of 50 cfs in the west channel during generating periods appears adequate at this time. Reconsideration may be

Swift River Company

-2-

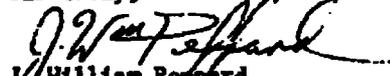
October 5, 1981

necessary if and when fish passage is required. Also, during extreme low flow periods the requirement for 25 cfs in the east channel will probably result in less than 50 cfs available for the west channel. This appears unavoidable unless upstream releases from Sebec Lake can be utilized to augment extreme low flow periods. Provided that reductions below 50 cfs occur gradually, e.g. over a period of days or at least several hours, no major adverse impacts are anticipated. The 7-Q-10 flow for Sebec River at this site is reported as 42 cfs, thus maintenance of at least some flow in the west channel would appear to be possible even in most drought situations.

5. Flow alterations during change from generating to non-generating operations: Rapid fluctuations in flows may result in "stranding" fish and other aquatic organisms in broad flat channels. We would recommend phasing reductions in flows in either channel to avoid such effects. Additional time spent in changeover from operating to non-operating modes in order to gradually reduce flows in either the east or west channels should be incorporated into operating plans. This will need to be reviewed and possibly revised if and when fish passage is installed.
6. Fish passage: We will not require fish passage facilities in the Milo Dam for inland freshwater species at this time. The Department of Marine Resources' proposed deferral of passage for anadromous species for at least five years (letter of September 16, 1981) is quite acceptable to us. This will be subject to review and reconsideration after 5 years. Flow considerations mentioned above will need to be reassessed at that time also. If fish passage is installed in the future, we would anticipate some use by Atlantic and landlocked salmon as well as brook trout.
7. Water level management at Sebec Lake: This is mentioned to respond to the possibility that the Milo Project may utilize water storage and release at Sebec Lake. We have concerns for lake level management during togue (lake trout) spawning and incubation periods. If Sebec Lake storage and release does become part of the Milo Project, we will be happy to discuss this further with you.

In summary, project plans as outlined to date appear to be compatible with inland fisheries and wildlife concerns. Since the project is to be operated as run-of-the-river, no cycling and subsequent pond level fluctuations are proposed. If further clarification or expansion of some of the comments and recommendations above are necessary, please don't hesitate to contact us. We will reserve the right to respond with any necessary final comments during the FERC application review period.

Sincerely,


J. William Payyard
Deputy Commissioner

cc: Enfield Headquarters
G. Beckett, USF&WS
S. Apollonio, DMR
A. Meister, ASRSC
Water Bureau, DEP
Land Bureau, DEP

FISHES OF THE PENOBSCOT RIVER SYSTEM

The rivers of the State of Maine provide countless hours of recreation to outdoor enthusiasts. Among these rivers the Penobscot is widely known within angling circles and the more familiar sport fishes of Maine are found within the lakes and streams of this drainage. Of equal biological importance, but less well known to the angler, are a host of other species of fish. In the listing that follows, the common and scientific names of the fishes are those adopted by the American Fisheries Society. The list follows a phyletic sequence. The families are not given herein but species are listed alphabetically following the format and occurrence designation of A List of Common and Scientific names of Fishes from the United States and Canada, 3rd ed., Reeve M. Bailey, Editor, Special Publication No. 6. 1970. 150 pp. American Fisheries Society, Washington, D. C.

Anadromous and catadromous species present within this river system are important sport and commercial fishes. The term anadromous refers to fish that spawn in fresh water but spend most of their lives in the ocean - while the term catadromous, represented by the eel, refers to fishes that spawn in salt water but live most of their lives in fresh water.

Common estuarial species are listed where information on their distribution is available from personal investigations or studies conducted by colleagues in the Department of Marine Resources. For information on the life histories of the sport fishes, the reader is referred to W. Harry Everhart, Fishes of Maine, 2nd. ed. Rev. 1966., Me. Dept. Inland Fish & Wildlife, Augusta, Maine.

FISH SPECIES - Penobscot River

<u>Common Name</u>	<u>Occurrence</u>	<u>Scientific Name</u>
Sea lamprey	A*-F	<i>Petromyacon marinus</i>
Spiny dogfish	A	<i>Squalus acanthias</i>
Little skate	A	<i>Raja erinacea</i>
Winter skate	A	<i>Raja ocellata</i>
Thorny skate	A	<i>Raja radiata</i>
Shortnose sturgeon	A*	<i>Acipenser brevirostrum</i>
Atlantic sturgeon	A*	<i>Acipenser oxyrinchus</i>
American eel	A*	<i>Anguilla rostrata</i>
Blueback herring	A*	<i>Alosa aestivalis</i>
Alewife	A*-F	<i>Alosa pseudoharengus</i>
American shad	A*	<i>Alosa sapidissima</i>
Atlantic menhaden	A	<i>Brevoortia tyrannus</i>
Atlantic herring	A	<i>Clupea harengus</i>
Lake whitefish	F	<i>Coregonus alupeaformis</i>
Round whitefish	F	<i>Prosopium cylindraceum</i>
Atlantic salmon	A*-F	<i>Salmo salar</i>
Brown trout	A*-F-I	<i>Salmo trutta</i>
Arctic char	F	<i>Salvelinus alpinus</i> esp.
Brook trout	A*-F	<i>Salvelinus fontinalis</i>
Lake trout	F	<i>Salvelinus namaycush</i>
Capelin	A	<i>Mallotus villosus</i>
Rainbow smelt	A*-F	<i>Osmerus mordax</i>
Chain pickerel	F-I	<i>Esox niger</i>
Lake chub	F	<i>Coxesius plumbeus</i>
Golden shiner	F	<i>Notemigonus crysoleucas</i>
Emerald <u>shiner</u>	F-I	<i>Notropis atherinoides</i>

FISH SPECIES - (Cont'd)

<u>Common Name</u>	<u>Occurrence</u>	<u>Scientific Name</u>
Bridle shiner	F	<i>Notropis bifrenatus</i>
Common shiner	F	<i>Notropis cornutus</i>
Northern redbelly dace	F	<i>Phoxinus eos</i>
Finescale dace	F	<i>Phoxinus neogaeus</i>
Fathead minnow	F	<i>Pimephales promelas</i>
Blacknose dace	F	<i>Rhinichthys atratulus</i>
Longnose dace	F	<i>Rhinichthys cataractae</i>
Creek chub	F	<i>Semotilus atromaculatus</i>
Fallfish	F	<i>Semotilus corporalis</i>
Pearl dace	F	<i>Semotilus margarita</i>
Longnose sucker	F	<i>Catostomus sordidus</i>
White sucker	F	<i>Catostomus commersoni</i>
Creek chubsucker	F	<i>Erimyzon oblongus</i>
Brown bullhead	F	<i>Ictalurus nebulosus</i>
Goosefish	A	<i>Lophius americanus</i>
Fourbeard rocklin	A	<i>Enchilyopus combrius</i>
Atlantic cod	A	<i>Gadus morhua</i>
Burbot	F	<i>Lota lota</i>
Silver hake	A	<i>Merluccius bilinearis</i>
Atlantic tomcod	A*	<i>Microgadus tomcod</i>
American pollock	A	<i>Pollachius virens</i>
Red hake	A	<i>Urophycis chuss</i>
White hake	A	<i>Urophycis tenuis</i>
Ocean pout	A	<i>Macroraices americanus</i>
Banded killifish	F	<i>Fundulus diaphanus</i>
Mummichog	A*	<i>Fundulus heteroclitus</i>
Atlantic silverside	A	<i>Menidia menidia</i>

FISH SPECIES (Cont'd)

<u>Common Name</u>	<u>Occurrence</u>	<u>Scientific Name</u>
Fourspine stickleback	A*	<i>Apeltes quadracus</i>
Brook stickleback	F	<i>Culaea inconstans</i>
Threespine stickleback	A-A*-F	<i>Gasterosteus aculeatus</i>
Ninespine stickleback	A-A*-F	<i>Pungitius pungitius</i>
Northern pipefish	A	<i>Synagranthus fuscus</i>
White perch	A*-F	<i>Morone americana</i>
Striped bass	A*	<i>Morone saxatilis</i>
Ke-breast sunfish	F	<i>Lepomis auritus</i>
Pumpkinseed	F	<i>Lepomis gibbosus</i>
Smallmouth bass	F-1	<i>Micropterus dolomieu</i>
Yellow perch	F	<i>Perca flavescens</i>
Snakeblenny	A	<i>Lumpenus lumpreusformis</i>
Daubed shanny	A	<i>Lumpenus maculatus</i>
Radiated shanny	A	<i>Ulvaria subbifurcata</i>
Rock gunnel	A	<i>Pholis gunellus</i>
Wrymouth	A	<i>Cryptacanthodes maculatus</i>
American sand lance	A	<i>Ammodytes americanus</i>
Atlantic mackerel	A	<i>Scomber scombrus</i>
Redfish or ocean perch	A	<i>Sebastes marinus</i>
Northern searobin	A	<i>Prionotus carolinus</i>
Striped searobin	A	<i>Prionotus evolans</i>
Sea raven	A	<i>Henitripteris americanus</i>
Crubby	A	<i>Myoxocephalus aeneus</i>
Slimy sculpin	F	<i>Cottus cognatus</i>
Longhorn sculpin	A	<i>Myoxocephalus octodecemspinosus</i>
Shorthorn sculpin	A	<i>Myoxocephalus corpius</i>
Mailed sculpin	A	<i>Triglopa nybelini</i>

FISH SPECIES (Cont'd)

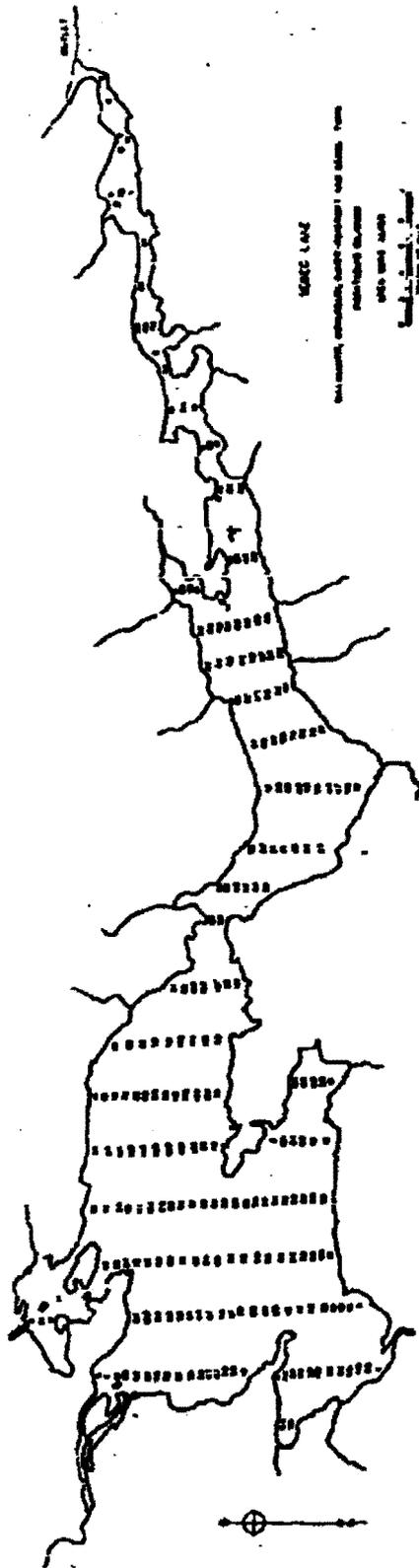
<u>Common Name</u>	<u>Occurrence</u>	<u>Scientific Name</u>
Window pane	A	<i>Scophthalmus aquosus</i>
American plaice	A	<i>Hypoglossoides platessoides</i>
Smooth flounder	A	<i>Liopsetta putnami</i>
Winter flounder	A	<i>Pseudopleuronectes americanus</i>

F - Freshwater

A* - anadromous and catadromous

A - Marine

I - Introduced



SEBEC LAKE
 Willimantic, Bowerbank, & Dover-Foxcroft Twp.,
 Piscataquis Co.
 U.S.G.S. Sebec Lake & Sebec, Me.

Fishes

- | | |
|--------------------------|----------------|
| Salmon | Chain pickerel |
| Brook trout (squaretail) | Smelt |
| Lake trout (togue) | Eel |
| Smallmouth bass | White sucker |
| White perch | Minnows |
| Yellow perch | Cusk |

Physical Characteristics

- | | |
|--|-------------------|
| Area - 6603 acres | Temperatures |
| Maximum depth - 155 feet | Surface - 75° F. |
| Principal Fishery: Salmon, lake trout, smallmouth bass | 150 feet - 45° F. |

Sebec Lake provides ideal water quality for salmonids. A large portion of the water volume is cold with abundant dissolved oxygen at all depths in late summer.

In the past Sebec Lake was managed for its fine natural salmon population. However, in the years 1901 through 1966 lake trout were stocked in order to utilize the large amount of deep water and increase the fishing potential of the lake. These togue have now become a well established population and are reproducing naturally in the lake. They are providing an excellent fishery in addition to the salmon for both summer and winter anglers.

Regulations controlling the size and bag limit of bass have been liberalized in hopes of reducing competition from this species. Presently the minimum length limit for salmon is 12 inches. This allows anglers to take advantage of large numbers of salmon that are slow to reach the normal 14-inch minimum length.

Surveyed - 1950
 (Revised, 1953, 1970)
 Maine Department of Inland Fisheries and Game
 Published under Appropriation No. 4223.

SPENCER APOLLONIO, COMMISSIONER

AREA CODE (207)
289-2291



STATE OF MAINE

DEPARTMENT OF MARINE RESOURCES

STATE HOUSE - STATION 21

AUGUSTA, MAINE 04333

September 16, 1981

Mr. Gerald Dawbin
Swift River Company
44 Exchange Street
Portland, Maine 04101

Dear Mr. Dawbin:

This letter is our follow up response to a recent site inspection of the Milo dam by Tom Squiers. Sebec Lake contains extensive spawning habitat for Anadromous alewives which historically ascended the Sebec River. American shad also utilized the Sebec river as spawning habitat. Due to dam construction on the Sebec river, Piscataquis river, and lower Penobscot river, alewives and shad have not had access to the Sebec drainage for many years.

Since the mid 1970's, fishways constructed in the Penobscot and Piscataquis river have provided upstream passage to the Milo dam. However, due to the low levels of the alewife and shad populations in the lower Penobscot river we have not observed these fish in the vicinity of the project site. In addition, extensive spawning habitat for alewives and shad in the lower Penobscot is underutilized because of the low level of these runs. Therefore, we do not see an immediate need for upstream or downstream fish passage for alewives or shad at the Milo dam. With respect to these species, we recommend deferral of fish passage facilities at this site for at least five years, at which time we will reevaluate fish passage needs. As runs build in the lower river and expand to your project site, we will be interested in fish passage at Milo.

If further comments are necessary, please feel free to contact this office.

Sincerely,

Spencer Apollonio
Commissioner

SA/kp

cc: Glenn Manuel, IF & W
Steve Timpano, IF & W
Al Meister, ASRSC
Lew Flagg, DMR



MAINE HISTORIC PRESERVATION COMMISSION

55 Capitol Street
Augusta, Maine 04333

Earle G. Shettleworth, Jr.
Director

Telephone:
207-289-2133

September 22, 1981

Mr. Gerald G. Dawbin
Swift River Company
44 Exchange Street
Portland, Maine 04101

re: Milo Dam Rehabilitation and Archaeological Resources

Dear Mr. Dawbin:

Thank you for clarifying the few concerns we raised about archaeological sites in the dam vicinity. My staff archaeologist, Dr. Arthur Spiess, is satisfied that the project as designed will not affect the archaeological sites.

I find that this project will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

If I can be of further assistance concerning this matter, please do not hesitate to let me know.

Sincerely,


Earle G. Shettleworth, Jr.
State Historic Preservation Officer

EGS/sim

LEASE

LEASE made this 17th day of August, 1981 between the Inhabitants of the Town of Milo, a body politic and corporate duly organized and existing under and by virtue of the laws of the State of Maine and being located in the County of Piscataquis, State of Maine (hereinafter referred to as Lessor) and Swift River Company, a Massachusetts corporation with a place of business in Boston, County of Suffolk, Commonwealth of Massachusetts (hereinafter referred to as Lessee).

WITNESSETH:

In consideration of the mutual covenants contained herein, Lessor and Lessee agree as follows:

1. PREMISES: Lessor hereby leases to Lessee, and Lessee hereby takes from Lessor, upon the terms hereinafter set forth, the property and rights situated in Milo, Maine, consisting of a dam, buildings, water and riparian rights and other rights, all as described in Exhibit A annexed hereto, (hereinafter collectively referred to as the "Premises").

2. PURPOSE: This lease is being executed in order to provide for the redevelopment and operation of a hydroelectric power production facility (hereinafter sometimes referred to as the "Facility") located on the above-described premises. Lessee's use of the premises and other areas permitted under this lease shall be limited to such purposes as may be specified in a license to be issued by the Federal Energy Regulatory Commission (hereinafter sometimes referred to as "FERC").

3. EFFECTIVE DATE AND TERM: This lease and all obligations on the part of the parties shall become effective on August 17, 1981. The term of this lease shall commence with the effective date of this agreement as stated herein.

Unless sooner terminated as provided herein, the term of this lease shall expire on August 17, 2031 or upon the expiration date of the anticipated FERC license issued for the premises, whichever occurs first.

4. LESSOR'S TITLE AND RIGHTS:

(a) Within 6 months from date hereof Lessee will undertake to satisfy itself as to the status of Lessor's title to the premises and the extent of its existing rights to cause the redevelopment of a hydro-electric project upon the leased premises. If during said 6 month period it is determined by Lessee that there exists any defect in title or question regarding the existence of the necessary rights to enable said redevelopment, the parties to this lease agree to extend said period for a reasonable time to allow the necessary curative action to be undertaken. To the extent that Lessor or one of its inhabitants has no substantial adverse interest, Lessor agrees to cooperate fully in said action, but it is understood that all expenses incurred with regard to same shall be the obligation of Lessee.

(b) If during the periods provided under paragraph (a) above any defect in title or questions as to Lessor's rights cannot be cured or resolved to the satisfaction of Lessee, this lease may be terminated by Lessee.

5. FEASIBILITY:

(a) Study: With the 6 month period established in paragraph 4(a) above Lessee shall also complete a feasibility study to determine whether the reconstruction and operation of the hydroelectric facility is economical and otherwise feasible.

(b) Determination of Feasibility: The final determination of whether the project is feasible shall rest in the judgment of the Lessee; provided, however, the facility shall be designed as much as possible to achieve the maximum practicable power output as may be practical from the premises, giving due consideration to any existing landmarks and other concerns.

(c) Notification of Intent to Proceed: If Lessee determines that the project is feasible it shall notify the Lessor of the results of the studies and that it intends to proceed.

(d) Termination: If Lessee determines that the project is not feasible, it shall so notify the Lessor and this lease shall be terminated.

6. LICENSES AND PERMITS: As soon as is reasonably possible after the execution of this lease, but in any event not more than 120 days after the completion of the feasibility study, Lessee will commence to file appropriate and timely applications for such licenses and permits with the appropriate federal, state and municipal authorities as are determined to be necessary for the construction and operation of the facility. In the event Lessee is unable to obtain any license or permit necessary to construct the facility, Lessee may terminate this lease upon written notice to Lessor.

7. CONSTRUCTION:

(a) Within twelve (12) months of the date of this lease, Lessee shall commence construction of the project, subject however to receipt by Lessee of the FERC license to permit construction and operation of the facility or the granting of an exemption from same and also subject to Lessee obtaining the necessary financing for said construction. In the event of delay in obtaining such license, exemption or financing, which delay is not caused by Lessee, said time for commencing construction shall be extended for a reasonable period of time to allow Lessee to obtain the necessary license, exemption or financing.

(b) Lessee shall be held responsible for all damages incurred during construction to any Milo Water District property, such as water lines, sewer lines, and boxes protecting water lines crossing the Seboc River, including all labor, materials, and equipment costs involved in repairs.

8. FINANCING: If, prior to construction Lessee is unable to secure financing acceptable to Lessee, Lessee shall notify the Lessor and this lease shall be terminated.

9. DOCUMENTS: In the event this lease is terminated at anytime prior to construction Lessee will make available to Lessor copies of all studies, reports or other documents prepared by or on behalf of Lessee in connection with the facility, and the premises.

10. Rental:

(a) Lessee agrees to pay to Lessor rental as follows: a percentage of gross revenues from operations derived from the Facility as follows:

Commencing with start up of operation thru Production year 1 (It being understood that the 1st production year will commence at the end of the first full calendar quarter of operation after start-up.)	5.0%
Production Years 4 - 7 inclusive	7.5%
Production Years 8 - 10 inclusive	8.0%
Production Years 11 - 15 inclusive	10.0%
Production Years 16 - 20 inclusive	11.0%
Production Years 21 - 30 inclusive	15.0%

Rental payments shall be due and payable quarterly as follows:

April 30 for quarter ending March 31
 July 31 for quarter ending June 30
 October 31 for quarter ending September 30
 January 31 for quarter ending December 31

(b) Lessor shall establish a separate revenue account to which said rental for each production year shall be credited pending the rendition of the real estate and personal property tax bills for the current municipal year. When said tax is due all amounts so credited shall to the extent of the tax due be credited to said tax. In the event there is not an amount sufficient to pay the entire tax Lessee shall remit the balance of said tax when the same becomes due and said balance shall act as an offset against future rentals during the production year in which said tax was due until such time as the rental due and taxes paid during each production year are equal. It being understood between Lessor and Lessee that at no time during the term of this lease shall the rental (including real estate and personal property taxes) for any production year be less than the percentages of gross revenues set forth in paragraph (a) above.

11. UTILITIES: Lessee shall pay promptly as and when the same become due and payable all charges for water, sewer, steam, heat, oil, gas, hot water, electricity, light and power and other services furnished to the Premises or used by Lessee in connection therewith during the term of this lease.

12. REPAIRS AND IMPROVEMENTS:

(a) After the commencement of construction Lessee shall have the right, at its own cost and expense, to construct on the Premises such improvements

and to make such alterations to the Premises and the structures and improvements thereon as Lessee shall determine to be proper in connection with the development, construction and operation of the premises, provided that the same shall be in compliance with all applicable federal, state and local requirements.

(b) After the commencement of construction, Lessee shall at all times during the term of this lease, and at its own cost and expense, keep and maintain in repair and good and safe condition (ordinary wear and tear and damage by fire or other casualty excepted), all existing structures and improvements and those erected on the Premises by Lessee and shall use all reasonable precautions to prevent waste, damage or injury to the Premises.

(c) Within six months after completion of construction of the facility Lessee shall remove all temporary structures from the premises.

13. TITLE TO IMPROVEMENTS: Title to the buildings, structures and improvements constructed on the premises during the term of this lease or any extensions thereof, shall be in the Lessee. Upon termination of this lease except as provided in paragraph 22, title to the buildings or other structures shall revert to the Lessor, provided however, that Lessee shall have 180 days to remove personal property including but not limited to generating, electrical, control and transmission equipment, machinery, furnishings and furniture in the event that Lessor does not exercise its option to purchase as hereinafter set forth. Any such property not so removed shall become the property of the Lessor. In the event Lessee chooses to remove the personal property, the buildings and structures shall be left in suitable repair, reasonable wear and tear excepted. Lessor shall, however, have the option to purchase all or part of the property to be removed at fair market value as determined by independent appraisal. Lessor may exercise this option by giving written notice to the Lessee within 90 days after the termination of this lease.

14. FINANCING AFFECTING PREMISES: (a) Lessor is cognizant of the need of Lessee or its sublessee to finance the construction of buildings, structures and improvements on the demised premises, and therefore specifically agrees to permit the Lessee to mortgage, assign or transfer its leasehold interest in

the premises for the purpose of obtaining construction and permanent loan financing for the said buildings, structures, and improvements, provided: (1) the term of such mortgage, security agreement, assignment or transfer shall not exceed the initial term hereof; (2) Lessee shall give notice to Lessor of the existence of such mortgage, security agreement, assignment or transfer, together with the name and address of the mortgagee, other secured party, assignee or transferee and a copy of any mortgage, security agreement, assignment or transfer document that is a matter of public record; (3) that in the event of foreclosure, and in the event that said mortgagee, other security party, assignee or transferee shall become the owner of the Lessee's interest pursuant to such foreclosure, said mortgagee, other secured party, assignee or transferee shall have the right to take possession and shall become the legal owner and holder of the leasehold estate created hereunder and shall hold such estate upon the same terms and conditions as held by Lessee from which such mortgagee, other secured party, assignee or transferee acquired possession, but in such event, said mortgagee, other secured party, assignee or transferee shall only be liable under the terms and conditions hereof during the period of time in which said mortgagee, other secured party, assignee or transferee holds such estate, and not thereafter, nor shall said mortgagee, other secured party, assignee or transferee be liable for any default under the terms or conditions hereof which arose before said estate became vested in said mortgagee, other secured party, assignee or transferee, provided however that the Lessor shall have the right to terminate this lease pursuant to paragraph 23 in the event that rentals accruing before said estate became vested in said mortgagee, other secured party, assignee or transferee are not paid in full; (4) that the existence of such mortgage, security agreement, assignment or transfer, or any foreclosure by a mortgagee or other secured party shall not relieve the Lessee from any liability or responsibility for the obligations on its part to be performed.

(b) Lessor agrees to give written notice to any mortgagee, other secured party, assignee or transferee of which it has written notice if Lessee defaults under any of the terms or conditions of this lease, and said mortgagee, other secured party, assignee or transferee shall have a period of sixty (60) days after receipt of said notice to cure such default, provided, however, that where a default by its nature takes longer than sixty (60) days

to cure, such mortgagee, other secured party, assignee or transferee shall be given the right to commence the curing of such default within sixty (60) days after notice aforesaid, and to cure default within a reasonable period of time thereafter. Lessor also agrees that in the event certain defaults of Lessee are incapable of being cured by such mortgagee, other secured party, assignee or transferee, and if Lessor terminates this lease because of such irremediable default, then a new lease will be executed by Lessor with said mortgagee, other secured party, assignee or transferee as Lessee, upon the same terms and conditions as are contained in this lease. Lessor also agrees with such mortgagee, other secured party, assignee or transferee that no change, modification, agreement, amendment, termination, or surrender of the said lease shall be effective without the prior written consent of such mortgagee, assignee or transferee.

(c) Lessor also agrees that Lessee may mortgage, assign, or transfer its leasehold interest in the premises for the purpose of obtaining capital for other purposes upon terms and conditions as in (a) & (b) above.

15. ASSIGNMENT AND SURRENDER: Lessee shall not sublet all or any part of the Premises or assign or transfer this lease or any interest therein, except as follows:

(a) After completion of construction and start up of operation Lessee may transfer or assign this lease to a third party which agrees with Lessor to perform all of Lessee's obligations hereunder.

(b) Lessee may mortgage or otherwise create a security interest in Lessee's leasehold estate hereunder as set forth in Section 14 above.

(c) Lessor agrees that anytime prior to the commencement of construction this lease may be assigned by Lessee to an entity specifically created by and either substantially owned or controlled by Lessee, which entity is or has been established for the purpose of holding the leasehold interest in the premises.

(d) In the case of any such transfer or assignment, the same shall be evidenced in writing and duly recorded in the Piscataquis Registry of Deeds and said assignment shall provide specifically that the assignee does accept and assume all of the terms, covenants, and conditions of this lease to be kept and performed by Lessee and will agree to comply with and be bound by them and thereafter such assignee shall be deemed to be the Lessee hereunder.

16. INSURANCE:

(a) Lessee shall provide at its expense, and keep in force during the term of this lease, general liability insurance with a good and solvent insurance company or companies, reasonably satisfactory to Lessor, in the amount of at least \$1,000,000 combined single limit with respect to bodily injury or property damage for which Lessee may be liable. Such policy or policies shall include Lessor as insured. It is understood between Lessor and Lessee that until the commencement of construction Lessee shall not be obligated to insure against any liability for a failure of the existing dam, gate structures, concrete spillway or structural integrity of existing buildings.

(b) Commencing with construction, Lessee shall keep all existing structures, and improvements built or erected by Lessee, on the premises insured for the benefit of Lessee, any secured party, and Lessor as their interest may appear, against loss or damage by fire or extended coverage in an amount at least equal to current replacement cost to restore the premises to their condition prior to such occurrence.

17. MAINTENANCE OF WATER LEVEL: Inasmuch as the Sebac River presently and in the foreseeable future is the source of the municipal water supply for the Town of Milo, as provided by the Milo Water District, the minimum water level will be maintained at the present level of the top of the timber crib portion of the timber crib dam to the extent that such control is possible, even if such maintenance of water level should necessitate reduction or temporary cessation of electric power production, until that level is restored. The maximum water level maintained by Lessee shall never exceed 12 inches above the highest point of the existing dam and spillway structures; that point being an elevation above sea level to be determined by the Lessee's survey.

18. DAMAGE OR DESTRUCTION OF IMPROVEMENTS: During the term of this lease if the structures or improvements on the premises, both the existing structures and improvements and structures and improvements placed thereon by the Lessee, are damaged or destroyed by fire or other casualty, Lessee may at its option promptly and at its expense cause all the damage to be repaired or may terminate this lease by written notice to Lessor given within ninety (90) days after such damage or destruction occurs.

In the event that Lessee exercises its option to repair the premises, Lessee shall be entitled to all proceeds of insurance payable as a result thereof.

In the event that Lessee exercises its option to terminate this lease as a result of damage or destruction by fire or other casualty then all proceeds of insurance payable as a result thereof shall be applied in the following order:

(1) to pay all sums due any party holding a security interest in the leasehold premises by virtue of having provided construction financing or refinancing directly related to the facility.

(2) to pay the cost of restoring the buildings and structures in existence at the outset of this lease to their condition prior to the occurrence.

(3) Any remaining proceeds to be allocated between Lessor and Lessee in accordance with the following formula.

(3a) the Lessor shall be paid an amount equal to said remaining proceeds multiplied by a fraction, the numerator of which is the number of months elapsed from the beginning of the lease to the end of the month prior to the date of the occurrence; and the denominator of which shall be 600.

(3b) all that remains of said proceeds shall be paid over to the Lessee.

19. DAM FAILURE: Notwithstanding the provisions of paragraph 18 the Lessor and/or the Milo Water District shall, in the event of a failure of the dam, have the immediate right of entry to the premises for the purposes of making all necessary repairs to said dam to protect the municipal water supply for the town of Milo. In the event of such dam failure the Lessee shall have the option to exercise its rights under paragraph 18 in which event said Lessee shall reimburse the Lessor or the Milo Water District for the cost of such repairs or to terminate this lease in which case any proceeds of insurance payable as a result of such damages shall be payable to said town as provided in paragraph 18.

20. LESSOR'S REPRESENTATIONS: Lessor represents and warrants to Lessee that this Lease has been duly authorized by all necessary action on the part of Lessor's governing bodies.

21. LESSEE'S REPRESENTATIONS: Lessee represents and warrants to Lessor that this lease has been duly authorized by all necessary action on the part of Lessee.

22. DEFAULT:

(a) In the event any one or more of the following events shall have occurred and shall not have been remedied as hereinafter provided: (1) Lessee's failure to pay any installment of Rent due hereunder when the same shall be due and payable and the continuance of such failure for a period of sixty (60) days after receipt by Lessee of notice in writing from Lessor specifying such failure; or (2) Lessee's failure to perform any of the other covenants, conditions and agreements herein contained on Lessee's part to be kept or performed and the continuance of such failure without the curing of the same for a period of sixty (60) days after receipt by Lessee of notice in writing from Lessor specifying such failure; then Lessor may, at its option, terminate this Lease by giving to Lessee at least sixty (60) days written notice of such termination; and upon the date specified in said notice, this Lease shall terminate and be of no further force and effect.

(b) In the event that Lessor gives notice of a default of such a nature that it cannot be cured within such period of sixty (60) days, then such default shall not be deemed to continue so long as Lessee, after receiving such notice, proceeds to cure the default as soon as is reasonably possible and continues diligently to take all steps necessary to complete the same within a reasonable period of time under the prevailing circumstances. This sub paragraph shall not apply to a default arising out of the non-payment of rentals due under this lease agreement.

(c) Upon termination of this Lease as hereinabove provided in this Section, the Lessor may enter and take possession of the premises forthwith without further demand or notice without being liable in trespass or for any damages. In addition, upon such termination and notwithstanding the provisions of paragraph 13 title to the premises and all improvements thereon, including but not limited to, structures, the dam, turbines, and other power generating equipment whatsoever located on the premises on the date of the original default notice or occurrence giving rise to the default as provided hereunder shall vest free and clear of any encumbrances in the Lessor, subject however to the provisions of paragraphs 14 and 26.

23. EMINENT DOMAIN:

(a) If all or part of the Premises or the Facility is taken for public use under any statute or by right of eminent domain during the term of this Lease, and as a result Lessee's right to use and operate the Facility is terminated, either party shall have the right to terminate this Lease by written notice to the other. If such a taking does not terminate Lessee's right to use and operate the Facility but does result in substantial interference with Lessee's operation of the Facility or substantial impairment of its ability to derive revenue therefrom (whether because of loss of available water power or otherwise), Lessor shall have the right to terminate this Lease by written notice given to Lessor. Any other taking of some part of the Premises or the Facility, not having any of the aforesaid results, shall not affect the continuation of this Lease.

(b) In the event of any taking of all or any part of the Premises or the Facility, the parties hereto agree to cooperate in applying for and in prosecuting any claims for an award for such taking. Lessee shall be entitled to the proceeds of any such award attributable to the structures constructed by Lessee and improvements constituting the Facility and to eighty percent (80%) of the proceeds of any such award attributable to loss of revenues from the Facility, and Lessor shall be entitled to the proceeds attributable to the Premises without such structures and improvements and to twenty percent (20%) of the proceeds attributable to loss of rental.

24. UTILITY EASEMENTS: Lessor agrees to grant Lessee and utility companies sufficient easements or other rights in property and public ways owned or controlled by Lessor to permit necessary utility services to be supplied to the Premises, and to permit the interconnections necessary for the sale and delivery of the electric power and other forms of energy generated by the facility, provided always that all installations shall be in accordance with the reasonable requirements of the Lessor with respect to appearance, safety and public convenience.

25. FORCE MAJEURE: In the event that Lessor or Lessee shall be delayed, hindered in or prevented from the performance of any act required hereunder by reason of fire, floods, storms or other Act of God, strikes, labor troubles, inability to procure materials, failure of power, riots, insurrection, the act

or failure to act or default of the other party, or any other reason beyond its control, then performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period of such delay. Nothing herein shall excuse Lessee from making timely payment of the basic rent due hereunder.

26. BANKRUPTCY AND INSOLVENCY: If, at any time during the term of this Lease, Lessee shall

- (a) apply for or consent to the appointment of a receiver, trustee or liquidator of it or of all or a substantial part of its assets;
- (b) admit in writing its inability to pay its debts as they mature;
- (c) make a general assignment for the benefit of creditors;
- (d) be adjudicated bankrupt or insolvent; or
- (e) file a voluntary petition in bankruptcy or a petition or an answer seeking recognition or an arrangement with creditors to take advantage of any insolvency law or any answer admitting the material allegations of a petition filed against it in any bankruptcy, reorganization or insolvency proceedings, or corporate or other action shall be taken by it for the purpose of effecting any of the foregoing;

or an order, judgment or decree shall be entered, without the application, approval or consent of the Lessee, by any court of competent jurisdiction, approving a petition seeking recognition of, or appointing a receiver, trustee or a liquidator of, Lessee or of all or a substantial part of its assets, and such order, judgment or decree shall continue unstayed and in effect for any period of sixty (60) consecutive days; then in any such event, Lessor shall have the right to terminate this Lease forthwith by written notice to Lessee; provided, however, that Lessor shall not have such right of termination if pursuant to Paragraph 14 hereof a mortgage, other Secured Party or any other person acting for or on behalf of the Lessee shall cause to be cured all defaults of Lessee hereunder, whether in the payment of Rent or the performance of any other agreement, excepting any default by Lessee under this paragraph 26, and shall continue to cause such Rent to be paid and Lessee's other agreements to be performed.

27. AMENDMENTS:

- (a) This lease may be modified or amended by mutual agreement in writing signed by Lessor and Lessee.

28. NON-LIABILITY AND INDEMNITY: This lease is made upon the express condition that the Lessor shall be free from all liabilities and claims for damages, together with related costs, for or by reason of any injury or injuries to any person or property of any kind whatsoever relating to the leased premises and the facility. In furtherance of this condition, the Lessee agrees that it shall indemnify and save the Lessor, its officers, inhabitants, employees, and agents, from and against any and all claims, liability, damage, expense, cause of action, suits or judgments, by or on behalf of any person or persons, firm or firms, corporation or corporations, arising from or out of Lessee's use, occupancy, conduct or management of, or from any work or thing whatsoever in or about the leased premises or the facilities located thereon, except that prior to the commencement of construction Lessee is not hereby obligated to assume any liability beyond that for acts of its own employees or agents to indemnify and save harmless the Lessor from any liability result from a failure of the existing dam, gate structures, concrete spillway or structural integrity of existing buildings.

29. MECHANICS' LIENS: The Lessee agrees to promptly discharge or cause to be discharged (either by payment or the filing of a necessary bond or otherwise) any mechanics', materialman's or other liens as may be placed against the demised premises, any buildings, structures or improvements thereon, which liens may arise out of any payment due for labor, services, materials, supplies or equipment which may have been furnished to or for the Lessee, its contractors and subcontractors.

30. INTEREST AND ATTORNEY'S FEES: In the event that Lessee is in default for failure to pay any rental installment due hereunder, Lessee agrees that interest shall be due until the same is paid, said interest to accrue from the date of default at a rate equal to that rate which is established annually by said Lessor for late payment of municipal taxes. The Lessee shall pay to the Lessor a reasonable attorney's fee in the event the Lessor employs an attorney to collect any rents due hereunder and secures a judgment in connection with collection of said rent.

31. NOTICES: All notices, requests, demands, and other communications hereunder shall be in writing and shall be deemed to have been duly given when

delivered in hand to such party or mailed by certified or registered mail,
postage prepaid, addressed:

If to Lessee: Swift River Company
Attn: Christian A. Herter III
44 Exchange Street
Portland, Maine 04101

If to Lessor: Town Manager
Town Office
Millis, Maine 04463

or in each case to such other addresses as may be specified in a written
notice delivered in compliance with the foregoing requirements.

32. MISCELLANEOUS:

- (a) This lease and the performance thereof shall be interpreted and governed by the laws of the State of Maine.
- (b) The Section headings herein are for reference and convenience only and shall not affect the interpretation hereof.
- (c) This lease may be executed in any number of counterparts, each of which when so executed shall be an original, but all of the counterparts together shall constitute one and the same instrument.
- (d) Lessee shall have the sole right and responsibility to operate and maintain the facility in accordance with the license granted Lessee by the Federal Energy Regulatory Commission and all applicable Federal, State and local laws or regulations.
- (e) Lessor shall have the right to annually inspect or audit at its expense all financial statements or reports of Lessee pertaining to the operation of the facility. Lessee shall provide Lessor with a copy of its annual audited financial statement as soon as the same is available.
- (f) Failure on the part of either party to complain of any action or non-action on the part of the other party no matter how long the same may continue shall never be deemed to be a waiver of any of such party's rights hereunder. Furthermore, it is covenanted and agreed that no waiver at any time of any of the provisions hereof by either party shall be construed as a waiver of any of the other provisions hereof and that a waiver at any time of

any of the provisions hereof shall not be construed at any subsequent time a waiver of the same provisions. The approval of either party to or for any action by the other requiring that party's consent or approval, shall not be deemed to waive or render unnecessary the party's consent or approval to or of any subsequent similar act by the other party.

(g) If any term or provision of this lease is held to be invalid or unenforceable, the remainder of this lease shall not be affected thereby and each other term and provision of this lease shall be valid and be enforceable to the fullest extent permitted by law.

(h) Nothing contained herein shall be deemed or construed by the parties hereto, nor by any third party, as creating the relationship of principal and agent or of partnership or of joint venture between the parties hereto, it being understood and agreed that neither the method of computation of rent nor any provision contained herein or any acts of the parties hereto shall be deemed to create any relationship between the parties hereto other than the relationship of landlord and tenant.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals the day and year first written above.

Witness:

William L. ...

Inhabitants of Town of Milo, Lessor

by Edwin P. ...
James L. ...
Michael A. ...
Paul J. ...
Katherine H. ...
Its Selection

Swift River Company, Lessee

Thomas E. ...

by Christina A. ...
Its
Vice-President

40

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A certain lot or parcel of land situate in said Milo, said land being part of lot No. 77 according to plan and survey of said Milo made by Andrew Strong, together with the water privilege appurtenant to said land bounded and described as follows, viz: beginning at a stone at the Northeastly corner of the hotel lot on the island, so called, in the village of Milo; thence Easterly across a passageway seventy (70) feet more or less to the center of the Easterly channel of Sabec River; thence Southerly down and by the center of said river to the Southerly end of said island to the point where the Easterly and Westerly channels of Sabec River unite; thence Northerly on the West bank and Easterly side of a wharf or piling place as it now stands on the West bank of said Easterly channel to a point in said Westerly bank about fifty (50) feet Northerly from the Northerly sill of a storehouse standing on the Westerly bank of said Easterly channel; thence Westerly on a line parallel with the Northerly end of said storehouse across said passageway to the Easterly line of said Hotel Lot 15 1/2 feet Southerly from the point begun at; thence Northerly on the Westerly line of said passageway to the point begun at, meaning and intending to convey only such title as we may possess in said passageway. The above described premises are a part of the same conveyed to Charles W. Pierce by Thos. R. Clifford by deed dated Oct. 19, 1888, Book 102, page 304, and the same conveyed to me by Mr. Owen and Harry A. Snow by deed dated June 20, 1904.

3. All the right, title and interest of the grantor herein in and to the "Timber Dam", so called, the "Coffer Dam", so called, and the "Cement Spillway Dam", so called, situated at the head of the Island at Milo Village in the County of Piscataquis and State of Maine, together with all appurtenances water rights and other rights and privileges thereto appertaining, together with the right to land the easterly end of said Timber Dam and said Coffer Dam to the Island. Also the right to land said Cement Spillway Dam on lands formerly of Boston Excelsior Company and now owned by the grantor herein and situated on the easterly and westerly sides of the easterly channel of said Sabec River.

Also hereby conveying the right to enter on other lands formerly of Boston Excelsior Company and now owned by the grantor herein as may be necessary for the purpose of repairing, replacing, reconstructing and managing any of said dams.

Also hereby conveying all the right, title and interest of the grantor herein in and to the southerly half of that part of Main Street, so called, in said Milo extending between lands formerly of Boston Excelsior Company and situated as aforesaid, on the easterly and westerly sides of the easterly channel of said Sabec River.

4. All the right, title and interest of the grantor herein in and to that part of the bed of Sabec River in said Milo upon which the aforesaid "Timber Dam", "Coffer Dam" and "Cement Spillway Dam" are now located, together with the right to flow by means of said dams at their present height or by any placements thereof at no greater height, such lands as the grantor herein became entitled to flow by virtue of the conveyance to it of flowage rights under the aforesaid deed of Maine Public Service Company.

For further reference as to the source of title of the grantor herein in and to the real property and property rights hereinbefore described and hereby conveyed reference may be had to deed from Milo Electric Light and Power Company to Gould Electric Company (now Maine Public Service Company), said deed being dated December 11, 1938 and being recorded at Piscataquis County Registry of Deeds in Book 134, page 41.

This conveyance of the premises described in paragraphs numbered 1, 2, 3 and 4 hereof is made free of the lien and operation of the existing Mortgage and Deed of Trust entered into between the grantor herein with City Bank

Farmers Trust Company, as trustee, on July 1, 1938, recorded at Piscataquis County Registry of Deeds in Book 237, page 241, as supplemented and amended by an indenture supplemental thereto dated as of December 1, 1943, recorded at said Registry of Deeds in Book 280, page 34, this conveyance being made pursuant to the provisions of Section 59a of said Supplemental Indenture, to which reference may be had.

TO HAVE AND TO HOLD the foregoing premises, with all the privileges and appurtenances thereof, to the said inhabitants of the Town of Milo, its successors and assigns forever; so that neither it the said Bangor Hydro-Electric Company, nor its successors or assigns, or any other person or persons claiming from or under it or them, or in the name, right or stead of it or them, shall or will, by any way or means, have, claim or demand any right or title to the aforesaid premises, or their appurtenances, or to any part of parcel thereof, forever.

IN WITNESS WHEREOF, said Bangor Hydro-Electric Company has caused this deed to be executed and its corporate seal to be affixed hereto by its duly authorized representative, this 15th day of March, A.D. 1940.

Signed, sealed and delivered in the presence of
Earl R. Webster

BANGOR HYDRO-ELECTRIC COMPANY
By E. E. Mahall President

State of Maine

March 15, 1940.

Piscataquis, ss:

Personally appeared the above named E. E. Mahall and acknowledged the above instrument to be his free act and deed, and the free act and deed of said Bangor Hydro-Electric Company.

Before me: Earl R. Webster Justice of the Peace.

Piscataquis, ss. Received April 4, 1940 at 10h 45m A.M.



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conducted by said J. M. Huber Corporation, its successors or assigns, or by any person, firm or corporation claiming by, through or under them. Title to the premises hereby conveyed was acquired by The Huber Company, Incorporated, by three deeds to it, viz: one from Alice F. Dolc et al recorded in Piscataquis Registry of Deeds in Book 173 page 73; one from Grover C. Bradford recorded in said Registry in Book 249 page 424; and one from Grover C. Bradford recorded in said Registry in Book 289 page 448. The said The Huber Company, Incorporated, has since changed its corporate name to J. M. Huber Corporation.

To have and to hold the same, together with all the privileges and appurtenances thereto belonging, to it, the said St. Regis Paper Company, its successors and assigns forever.

And the said grantor does covenant with the said St. Regis Paper Company its successors and assigns that it will forever warrant and defend the premises to it, the said grantee, its successors and assigns forever, against the lawful claims and demands of all persons claiming by, through, or under it. Except 1940 taxes assumed by the grantee.

In witness whereof, the said J. M. Huber Corporation has caused this instrument to be signed with its corporate seal and signed in its corporate name by E. W. Huber, its Chairman, Lawfully authorized, on this 25 day of March in the year one thousand nine hundred and sixty.

Signed sealed and delivered in presence of
Spencer W. Pitts

J. M. Huber Corporation
E. W. Huber
Its Chairman



State of New Jersey, Monmouth, ss: March 25, 1960.

Personally appeared the above named E. W. Huber, Chairman of said J. M. Huber Corporation, and acknowledged the foregoing instrument to be his free act and deed in his said capacity, and the free act and deed of said corporation.

Before me, Mary C. Weston, Notary Public
My commission expires September 12, 1960



Piscataquis, ss. Received April 4, 1960 at 25 On J.M.

DEED

KNOW ALL MEN BY THESE PRESENTS, THAT HANCOCK HYDRO-ELECTRIC COMPANY, a corporation organized and existing under the laws of the State of Maine and having its principal place of business at Bangor in the County of Penobscot and State of Maine, in consideration of One (\$1) Dollar and other valuable considerations to it paid by the INHABITANTS OF THE TOWN OF KILO, a municipal corporation located in Piscataquis County, Maine, the entire consideration paid being less than One Hundred Dollars, the receipt whereof it does hereby acknowledge, does hereby give, grant, bargain, sell and convey unto the said inhabitants of the Town of Kilo, its successors and assigns forever, certain real property and property rights situate in KILO, County of Piscataquis, State of Maine, the same being a part of the premises conveyed to said Hancock Hydro-Electric Company by Maine Public Service Company by its deed dated October 22, 1948 and recorded at Piscataquis County Registry of Deeds in Vol. 294, page 65, to which reference may be had for a further description and location of the real property and property rights hereby conveyed, to-wit:-

R.M.E.
Co.
to
Kilo

1. A certain tract of land with the mills and water powers on the island in Kilo Village conveyed by Harry A. Snow et al. to Kilo Electric Light and Power Company by deed dated December 26, 1903 and recorded in Piscataquis County Registry of Deeds in Book 144, page 118 and described in said deed as follows:

"A tract of land with the mills and water power on the island in Kilo Village bounded by a line begun at a stone in the ground marked 'X' at the Northeastly corner of a lot of land formerly owned by Bartwell & Smith; thence running Westerly on the line of said Bartwell & Smith lot fifty feet to the river; thence Northerly up said river in the same course as the Westerly line of said Bartwell & Smith lot forty feet, or if this distance shall interfere with or infringe upon the road then only to the line of the road; thence Easterly on the line of the road fifty feet; thence Southerly to first mentioned bound. Also the right to draw eighteen inches square of water from the Mill Pond and all the rights pertaining to said privilege, which were conveyed by Daniel Bennett et al. of said privilege, reference being had to all former deeds for reservations and restrictions, and reserving and excepting all rights that Russell Kittredge's heirs or assigns may have or hereafter shall have of conveying water, and that any other person may have to convey water over said premises, and to the flume under said mill, and of restricting or controlling the water in said dam or otherwise.

"Being the same real estate described in the deed from Daniel Humphrey to James Kittredge, Benjamin R. Kittredge, dated September 11, A.D. 1875, Book 68, page 245."

2. Also a certain lot or parcel of land situated in said KILO conveyed by Josiah F. Davis to said Kilo Electric Light and Power Company by deed dated July 18, 1906 and recorded in said Registry of Deeds in Book 135, page 65 and described in said deed as follows:

EXHIBIT A. (Subject to Accedent after survey)



Swift River Company

148 State Street, Boston, Mass. 02109. (617) 742-1580.
44 Exchange Street, Portland, Me. 04101 (207) 774-6400.

July 21, 1981

Mr. E. P. Gould
Department of the Army
New England Division,
Corps of Engineers
424 Trapelo Road
Waltham, MA 02154

Dear Mr. Gould:

Pursuant to our telephone conversation of today, I am writing to confirm to you that the configuration of the Milo Dam on the Sebac River in Milo, Maine, as described and sketched in your Phase I Inspection Report for the National Dam Inspection Program, is in error.

The report depicts the concrete "original dam", containing five bays and four sluice gates, as being "on the downstream side of the bridge, approximately 200 feet from the timber crib dam." (see p. 2, under "Visual Inspection".) Further down the same page, under "Hydraulics and Hydrology", the report states "In the event of a dam failure at Milo Dam the resulting flood wave would have to pass by the two structures immediately downstream, the traffic bridge and the original dam structure."

Sketch B-1, "Milo Dam Photo Location" (copy attached) depicts the timber crib dam and concrete "original dam" as bracketing the traffic bridge, upstream and downstream respectively. The caption to photograph #4 identifies it as a picture of the "original dam structure", and states that the "Timbercrib dam is on the other side of this bridge."

These descriptions are all in error. In actuality, the Sebac River at Milo divides into two channels, divided by an island. The concrete dam with the four gates is on the easterly channel, nearest to the Milo business district, and the timber crib overflow section is on the westerly channel. The concrete non-overflow section diverts the water to the timber overflow section. The two sections are thus in parallel, and not in series as depicted in your report.

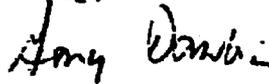
Although this correction will probably not effect the flood analysis for this dam, I felt that you should be aware of the correct configuration of the dam structures.

Mr. E. P. Gould
July 21, 1981
Page 2

I am also attaching copies of an 1882 map of the Town of Milo, and a sketch prepared by E. C. Jordan, both of which depict the correct configuration of the Milo Dam.

I hope that this information clarifies the situation at Milo for you.

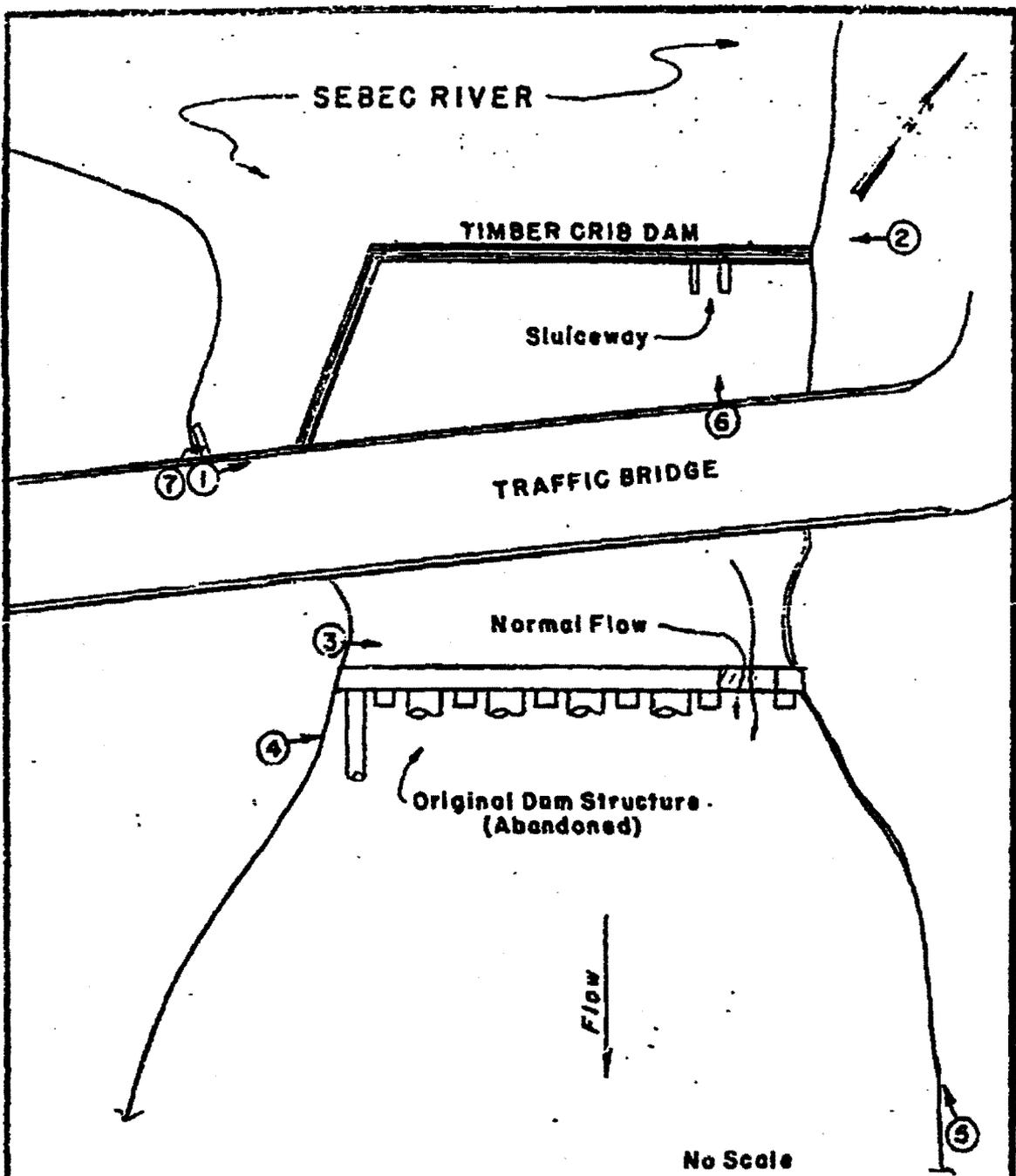
Sincerely,



Gerald G. Dawbin
Senior Technical Analyst

44 Exchange Street
Portland, ME 40101

Swift River Company



No Scale

MILO DAM		
PHOTO LOCATION		
U.S. ARMY CORPS OF ENGINEERS		
PHASE I INSPECTION PROGRAM		
DATE		
MAIN		
SHEET	100	PAGE
1345	072	2

B-1

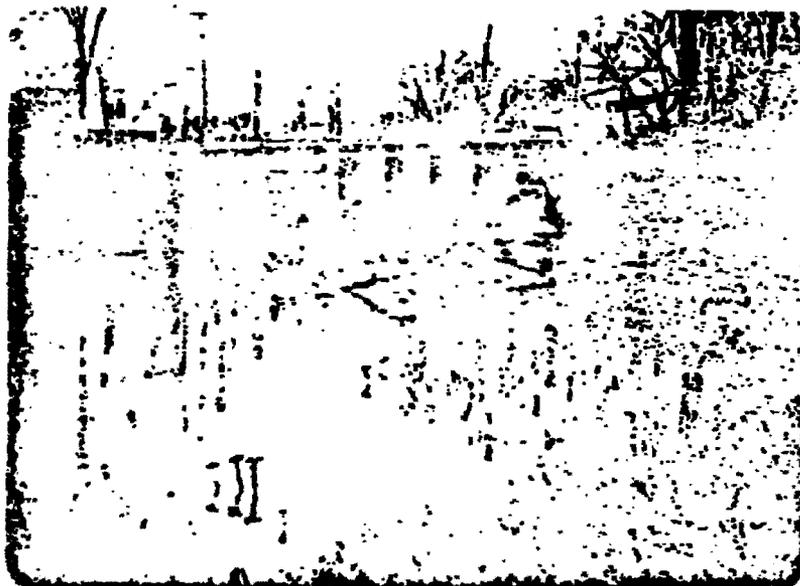


#3
Original dam structure seen from the west bank. Sluiceways are inoperable.



#4
Original dam structure. Notice proximity to traffic bridge to the left. Timber-crib dam is on the other side of this bridge.

wrong!



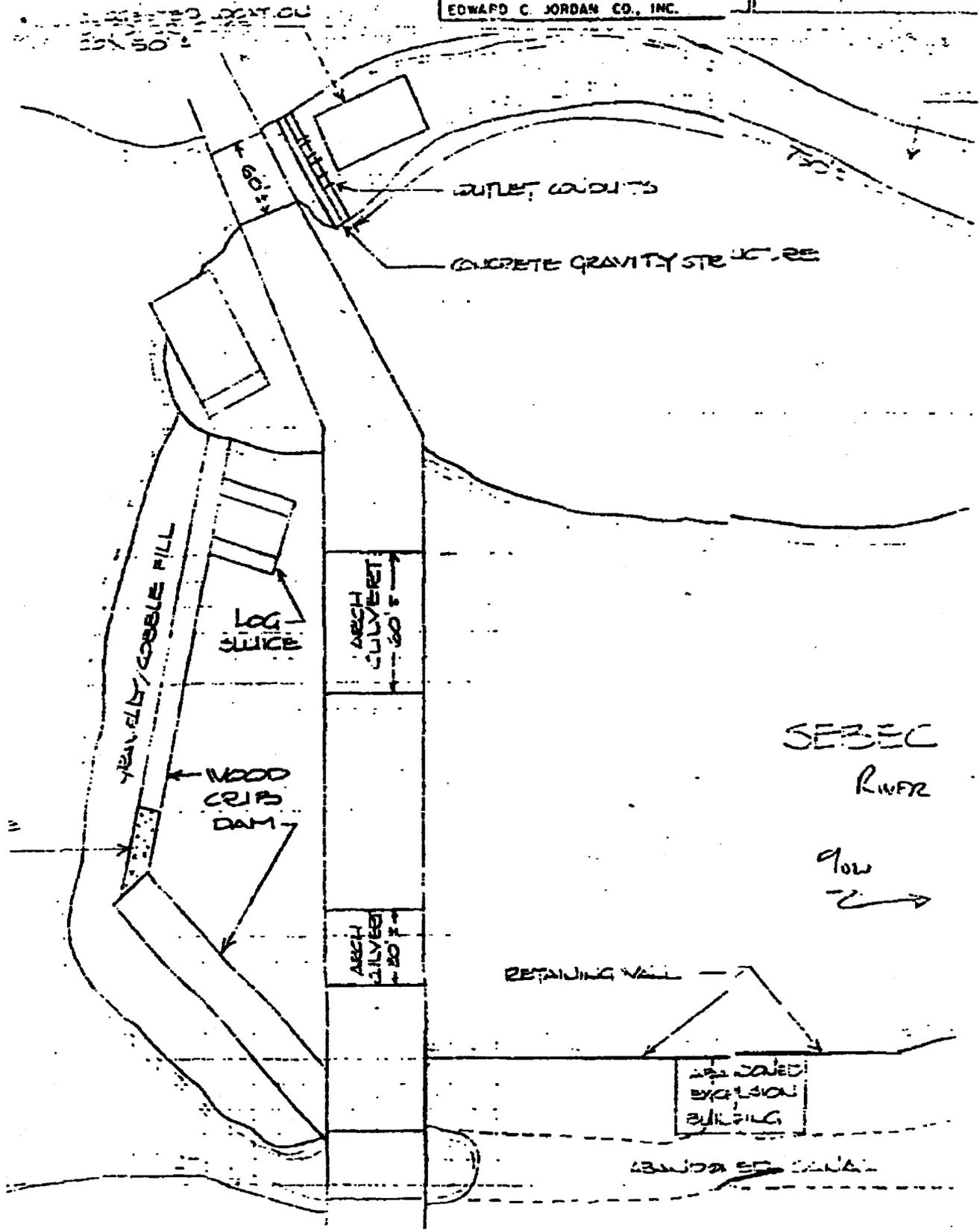
#5
View from downstream looking back at original dam structure. Notice that all of the discharge flows over the one bay against the east bank.

1779ac

PROJECT



EDWARD C. JORDAN CO., INC.



APPENDIX C

1982 EXEMPTION AND WATER QUALITY CERTIFICATION

[¶ 62,302]

Swift River Company, Project No. 5647-000

Order Granting Exemption from Licensing of a Small Hydroelectric Project of 5 Megawatts or Less

(Issued February 23, 1982)

Robert E. Cackowski, Deputy Director, Office of Electric Power Regulation.

The Applicant¹ filed an application for exemption from all or part of Part I of the Federal Power Act pursuant to 18 C.F.R. Part 4 SUBPART K (1980) implementing in part Section 408 of the Energy Security Act (Act) of 1980 for a project as described in the attached public notice.^{2 3}

Notice of the application was published in accordance with Section 408 of the Act and the Commission's regulations and comments were requested from interested Federal and State agencies including the U.S. Fish and Wildlife Service and the State Fish and Wildlife Agency. All comments, protests and petitions to intervene that were filed have been considered. No agency has any objection relevant to issuance of this exemption.

Standard Article 2 included in this exemption, requires compliance with any terms and conditions that Federal or State fish and wildlife agencies have determined appropriate to prevent loss of, or damage to, fish and wildlife resources. The terms and conditions referred to in Article 2 are contained in any letters of comment by these agencies which have been forwarded to the Applicant in conjunction with this exemption.

Should the Applicant contest any terms or conditions that were proposed by Federal or State agencies in their letters of comment as being outside the scope of Article 2, the Commission shall determine whether the disputed terms or conditions are outside the scope of Article 2.

It is ordered that:

(A) Milo Project No. 5647 as described and designated in Swift River Company's application filed on November 13, 1981, is exempted from all of the requirements of Part I of the Federal Power Act, including licensing, subject to the standard articles in § 4.106 of the Commission's regulations, 18 C.F.R. § 4.106, 45 Fed. Reg. 76115 (November 18, 1980).

(B) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d) (1981), as amended, 44 Fed. Reg. 46449 (1981). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in Section 313(a) of the Act does not

operate as a stay of the effective date of this order, except as specifically ordered by the Commission.

— Footnotes —

¹ Swift River Company, Project No. 5647, filed on November 13, 1981.

² Pub. Law 96-294, 94 Stat. 611. Section 408 of the ESA amends *inter alia*, Sections 405 and 408 of the Public Utility Regulatory Policies Act of 1978 (16 U.S.C. § § 2705 and 2708).

³ Authority to act on this matter is delegated to the Deputy Director, Office of Electric Power Regulation under § 375.308 of the Commission's regulations 45 Fed. Reg. 21216 (1980), as amended by Order No. 112 in Docket No. RM81-5 [*FERC Statutes and Regulations* ¶ 30,211], issued November 21, 1980, (45 Fed. Reg. 79024).

Appendix A

Notice of Application for Exemption for Small Hydroelectric Power Project Under 5 mW Capacity

(Issued December 10, 1981)

Take notice that on November 13, 1981, Swift River Company (Applicant) filed an application under Section 408 of the Energy Security Act of 1980 (Act) (16 U.S.C. § § 2705

and 2708 *as amended*), for exemption of a proposed hydroelectric project from licensing under Part I of the Federal Power Act. The proposed small hydroelectric project (Project No. 5647) would be located on the Sebec River in the town of Milo, Piscataquis County, Maine. Correspondence with the Applicant should be directed to: Christian A. Herter, III, Vice-President, Swift River Company, 44 Exchange Street, Portland, Maine 04101

Project Description—The proposed project would consist of: (1) an existing 9-foot high, 250-foot long timber crib dam; (2) a 50 acre reservoir with a net storage capacity of 50 acre-feet at elevation 280.54 feet M.S.L.; (3) a new powerhouse containing two turbine-generators with a total rated capacity of 600 kW which would discharge into the easterly river channel; (4) a new 750-foot long, 70-foot wide tailrace channel excavated out of the easterly river channel; (5) a 50-foot long, 7.6-kV transmission line and (6) appurtenant facilities. The project would generate up to 2,500,000 kWh annually.

[Note: Remainder of Notice omitted in printing.]

RIVER CO.
Maine, Piscataquis County
MIL DAM REDEVELOPMENT
#02-7580-21140 (Revised)

2 SMALL HYDROELECTRIC GENERATING
FACILITIES PERMIT AND WATER
QUALITY CERTIFICATION
FINDINGS OF FACT AND ORDER

PROPOSED (REVISED):

The applicant proposes to revise the initial project proposal by removing the existing outlet structure located in the tailrace channel immediately downstream from the east section of the dam. The new intake structure and powerhouse will be located approximately 80' downstream from the dam in the tailrace channel. Concrete wingwalls will channel the water to the intake gates and the intake area will be riprapped to prevent scouring.

Construction activities are scheduled to begin in July of 1982 and to be completed by the end of the year.

The Board of Environmental Protection has previously approved the initial project proposal by permit #02-7580-21140 issued October 14, 1981 and revised April 28, 1982.

2. JURISDICTION

The proposed redevelopment qualifies as a "small hydroelectric power project" under the terms of Title 38, M.R.S.A., Section 622. The project is thereby exempted from the terms of the Great Ponds Alteration Act, Title 38, M.R.S.A., Sections 386-396 and the Stream Alteration Act, Title 12, M.R.S.A., Sections 7776-7780.

The project is subject to the jurisdiction of the Federal Energy Regulatory Commission, pursuant to the Federal Power Act. The applicant holds a valid Exemption from Licensing to redevelop and operate the hydropower facility (Milo Project, FERC No. 5647). The proposed construction activities are subject in part to the jurisdiction of the Army Corps of Engineers, pursuant to Section 404 of the Federal Water Pollution Control Act, Water Quality Certification is, therefore, considered, pursuant to Section 401 of the Federal Water Pollution Control Act.

The applicant currently possesses a lease from the Town of Milo to utilize all land and water rights necessary for the project.

3. ENERGY PRODUCTION

The proposed run-of-the-river hydroelectric generating facility will have a capacity of 660 KW at a gross head of 13'. The facility will utilize river flows between 69 cfs and 775 cfs. The estimated annual power output of 2,900,000 KWH has the potential of displacing approximately 4,833 barrels of fossil fuel annually.

4. FLOW REGULATION

A dam currently exists upstream of the Milo Dam at the outlet of Sebec Lake. Normal headpond elevation will be increased by 12" with the installation of flashboards. The dredged tailrace channel may provide some additional measure of flood control.

5. FISH AND WILDLIFE

No fish passage facilities exist at the project site at the present time. While no fish passage facilities are recommended by state fisheries management agencies at this time, the potential reestablishment of historic anadromous fish runs may require a reexamination of fish passage requirements in the future.

6. PUBLIC USES

There are no existing recreational facilities in the project area. Poor water quality has resulted in limited recreational uses of the river, though some boating, fishing, and swimming does occur in the area.

7. WATER QUALITY

The Sebec River is classified C from the outlet of Sebec Lake to the Milo Dam, and B-1 from the Milo Dam to the confluence of the Sebec and Piscataquis Rivers. The water in the impoundment is thus judged unsuitable for water contact recreation.

There are several untreated sewer discharges that currently enter both channels of the river in the area downstream of the dam. Some of these discharge pipes are located in the construction area.

8. OTHER ENVIRONMENTAL CONSIDERATIONS

The environment will be affected during the construction phase of the project by the installation and removal of cofferdams, the construction of intake structure and powerhouse, the dredging of debris, and the contouring of the shore of the island. Significant potential for erosion exists due to these activities.

BASED on the above findings of fact, the Board makes the following conclusions:

1. The facility will have no significant impact on maintaining minimum flows and water levels.

SWIFT RIVER CO.
Milo, Maine, Piscataquis County
MILO DAM REDEVELOPMENT
#02-7580-21140 (Revised)

4 SMALL HYDROELECTRIC GENERATING
FACILITIES PERMIT AND WATER
QUALITY CERTIFICATION
FINDINGS OF FACT AND ORDER

2. No significant fish and wildlife habitat will be created by the facility. The facility will not have a significant impact on fish and wildlife habitat provided that the need for fish passage facilities is reexamined at an appropriate time.
3. The facility will not have a significant impact on navigational or recreational uses of the impoundment and river in the project area.
4. The facility will not lower the water quality of the Sebec River and will not violate applicable Water Quality Standards provided that the existing sewer discharges are maintained during and following construction and provided that adequate flows are maintained in each channel to assimilate these discharged wastes.
5. The facility will not significantly harm the natural environs of the Sebec River or cause unreasonable soil erosion provided that adequate provisions are made for the control of erosion during and following construction.

THEREFORE, the Board of Environmental Protection APPROVES the revised application of SWIFT RIVER CO. to redevelop the hydroelectric potential of the Milo Dam on the Sebec River in Milo, Maine, as described in paragraph number one above, and GRANTS certification that there is a reasonable assurance that the activity will not violate applicable Water Quality Standards, subject to the following terms and conditions:

1. An instantaneous minimum flow of 25 cfs shall be maintained in the east (tailrace) channel at all times following the commencement of project operation and an instantaneous minimum flow of 50 cfs shall be maintained in the west channel at all times, except that when inflow to the dam is less than 75 cfs the difference between the 25 cfs flow in the east channel and the inflow shall be released in the west channel.
2. The applicant shall submit the specific details of the following plans: (a) a plan to manage the continued discharge of the existing sewer outfalls within the construction area; and (b) a plan to monitor and control flows during construction and operation to assure compliance with the flow regime outlined in condition #1. These plans must be submitted prior to construction or within 90 days of the issuance of this permit, whichever comes first. These plans shall be reviewed and must receive approval of the Commissioner prior to construction.
3. Within a five year period from the commencement of project operation, the Commissioner shall review the status of anadromous fish restoration in the Sebec River and shall impose such additional conditions as are deemed necessary to provide adequate facilities for the upstream and downstream passage of fish at the Milo Dam.

SWIFT RIVER CO.
Milo, Maine, Piscataquis County
MILO DAM REDEVELOPMENT
#02-7580-21140 (Revised)

5 SMALL HYDROELECTRIC GENERATING
FACILITIES PERMIT AND WATER
QUALITY CERTIFICATION
FINDINGS OF FACT AND ORDER

4. The upstream face of the headpond cofferdam shall be stabilized by the placement of a filter fabric to control erosion of the cofferdam constituents.
5. 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 the review and approval of the Department prior to implementation.
6. The applicant shall secure and appropriately comply with all applicable Federal, State and local licenses, permit, authorizations, conditions, agreements, and Order, prior to or during construction and operation.
7. The applicant shall take all necessary measures to ensure that his activities of those of his agents do not result in measureable erosion of soils on the site during the construction and operation of the project covered by this approval.
8. A copy of this permit must be included in or attached to contract bid specifications for the project.

DONE AND DATED AT AUGUSTA, MAINE, THIS 30TH DAY OF JUNE, 1982.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:


Henry E. Warren, Commissioner

PLEASE NOTE ATTACHED SHEET FOR APPEAL PROCEDURES....

APPENDIX D
AGENCY CONSULTATION RECORD



October 18, 2019

VIA E-MAIL

Distribution List

Low Impact Hydropower Institute Certification
Milo Hydroelectric Project LIHI Intake Application

Dear Resource Agency:

Kleinschmidt Associates (Kleinschmidt), on behalf of KEI (Maine) Power Management (III) LLC, is assisting with the environmental review and resource agency consultation associated with the Low Impact Hydropower Institute Certification (LIHI) of the Milo Hydroelectric Project (FERC No. 5647), located along the Sebec River in Maine.

The Milo Hydroelectric Project (Project) is located in Piscataquis County in northeastern Maine in the town of Milo. The Project is located on the Sebec River, approximately 2 river miles upstream of its confluence with the Piscataquis River. The Sebec River is approximately 8 miles long from its headwaters at Sebec Lake. There are two major dams upstream of the Project – Sebec Dam and Wilson Dam – both used for hydroelectric generation. The Project's dam is the most downstream dam on the Sebec River. Project Figures can be found in Attachment A.

The Project is owned by KEI (Maine) Power Management (III) LLC (hereinafter KEI (Maine)) and was granted a Non-Conduit Exemption by the Federal Energy Regulatory Commission (FERC) (FERC No. 5647) on March 17, 1998. According to the current exemption, Project works include (1) a 250-foot long, 8-foot-high dam topped with 12-inch-high flashboards; (2) a reservoir with a pond elevation of 279 feet above mean sea level (msl); and (3) a powerhouse containing three generating units: Units 1 and 3 with a generator nameplate capacity of 235 kW each, and Unit 2 with a generator nameplate capacity of 225 kW. The total installed capacity based on generator nameplates at the Milo Project is 695 kW.

The LIHI certification process requires the applicant to consult with agencies and receive agency agreement that the continued use of the Project does not have a negative impact on resources. Therefore, KEI (Maine) is requesting confirmation that the Projects are, to your knowledge, being operated consistent with the FERC exemption and Section 401 Water Quality Certificate (if applicable).

We respectfully request any additional information you may provide on this project, and your confirmation of compliant operations within 30 days so that it may be included and considered in the application to LIHI.

Thank you for your assistance in this matter. If you have questions, please contact me at 971-266-5395 or Nuria.Holmes@KleinschmidtGroup.com.

Sincerely,

KLEINSCHMIDT ASSOCIATES



Nuria Holmes
Regulatory & Licensing Project Manager

cc: Distribution List
Attachment A: Project Figures **Attachment A (Project Figures)
were removed from this PDF,
but were provided in the
original letter.**

DISTRIBUTION LIST

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STATE OF MAINE
DEPARTMENT OF AGRICULTURE, CONSERVATION & FORESTRY

177 STATE HOUSE STATION
AUGUSTA, MAINE 04333

JANET T. MILLS
GOVERNOR

AMANDA E. BEAL
COMMISSIONER

October 21, 2019

Nuria Holmes
Kleinschmidt
1500 NE Irving Street, Suite 550
Portland, OR 97232

Via email: nuria.holmes@kleinschmidtgroup.com

Re: Rare and exemplary botanical features in proximity to: #FERC No. 5647, Milo Hydroelectric Project, LIHI Intake Application, Milo, Maine

Dear Ms. Holmes:

I have searched the Maine Natural Areas Program's Biological and Conservation Data System files in response to your request received October 18, 2019 for information on the presence of rare or unique botanical features documented from the vicinity of the project in Milo, Maine. Rare and unique botanical features include the habitat of rare, threatened, or endangered plant species and unique or exemplary natural communities. Our review involves examining maps, manual and computerized records, other sources of information such as scientific articles or published references, and the personal knowledge of staff or cooperating experts.

Our official response covers only botanical features. For authoritative information and official response for zoological features you must make a similar request to the Maine Department of Inland Fisheries and Wildlife, 284 State Street, Augusta, Maine 04333.

According to the information currently in our Biological and Conservation Data System files, there are no rare botanical features documented specifically within the project area. This lack of data may indicate minimal survey efforts rather than confirm the absence of rare botanical features. You may want to have the site inventoried by a qualified field biologist to ensure that no undocumented rare features are inadvertently harmed.

If a field survey of the project area is conducted, please refer to the enclosed supplemental information regarding rare and exemplary botanical features documented to occur in the vicinity of the project site. The list may include information on features that have been known to occur historically in the area as well as recently field-verified information. While historic records have not been documented in several years, they may persist in the area if suitable habitat exists. The enclosed list identifies features with potential to occur in the area, and it should be considered if you choose to conduct field surveys.

This finding is available and appropriate for preparation and review of environmental assessments, but it is not a substitute for on-site surveys. Comprehensive field surveys do not exist for all natural areas in Maine, and in the absence of a specific field investigation, the Maine Natural Areas Program cannot provide a definitive statement on the presence or absence of unusual natural features at this site.

MOLLY DOCHERTY, DIRECTOR
MAINE NATURAL AREAS PROGRAM
BLOSSOM LANE, DEERING BUILDING



PHONE: (207) 287-804490
WWW.MAINE.GOV/DACF/MNAP

Letter to Kleinschmidt
Comments RE: Milo Hydro
October 21, 2019
Page 2 of 2

The Maine Natural Areas Program (MNAP) is continuously working to achieve a more comprehensive database of exemplary natural features in Maine. We would appreciate the contribution of any information obtained should you decide to do field work. MNAP welcomes coordination with individuals or organizations proposing environmental alteration, or conducting environmental assessments. If, however, data provided by MNAP are to be published in any form, the Program should be informed at the outset and credited as the source.

The Maine Natural Areas Program has instituted a fee structure of \$75.00 an hour to recover the actual cost of processing your request for information. You will receive an invoice for \$150.00 for two hours of our services.

Thank you for using MNAP in the environmental review process. Please do not hesitate to contact me if you have further questions about the Natural Areas Program or about rare or unique botanical features on this site.

Sincerely,



Kristen Puryear | Ecologist | Maine Natural Areas Program
207-287-8043 | kristen.puryear@maine.gov

Rare and Exemplary Botanical Features within 4 miles of Project: Milo Hydroelectric Project LIHI Intake, Milo, Maine

Common Name	State Status	State Rank	Global Rank	Date Last Observed	Occurrence Number	Habitat
Alaskan Clubmoss						
	T	S1	G5	1905-06-23	3	Alpine or subalpine (non-forested, upland)
Silver Maple Floodplain Forest						
	<null>	S3	GNR	2014-08-27	52	Forested wetland

STATE RARITY RANKS

- S1** Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2** Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3** Rare in Maine (20-100 occurrences).
- S4** Apparently secure in Maine.
- S5** Demonstrably secure in Maine.
- SU** Under consideration for assigning rarity status; more information needed on threats or distribution.
- SNR** Not yet ranked.
- SNA** Rank not applicable.
- S#?** Current occurrence data suggests assigned rank, but lack of survey effort along with amount of potential habitat create uncertainty (e.g. S3?).

Note: **State Rarity Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines State Rarity Ranks for animals.

GLOBAL RARITY RANKS

- G1** Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extinction.
- G2** Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- G3** Globally rare (20-100 occurrences).
- G4** Apparently secure globally.
- G5** Demonstrably secure globally.
- GNR** Not yet ranked.

Note: **Global Ranks** are determined by NatureServe.

STATE LEGAL STATUS

Note: State legal status is according to 5 M.R.S.A. § 13076-13079, which mandates the Department of Conservation to produce and biennially update the official list of Maine's **Endangered and Threatened** plants. The list is derived by a technical advisory committee of botanists who use data in the Natural Areas Program's database to recommend status changes to the Department of Conservation.

- E** ENDANGERED; Rare and in danger of being lost from the state in the foreseeable future; or federally listed as Endangered.
- T** THREATENED; Rare and, with further decline, could become endangered; or federally listed as Threatened.

NON-LEGAL STATUS

- SC** SPECIAL CONCERN; Rare in Maine, based on available information, but not sufficiently rare to be considered Threatened or Endangered.
- PE** Potentially Extirpated; Species has not been documented in Maine in past 20 years or loss of last known occurrence has been documented.

ELEMENT OCCURRENCE RANKS - EO RANKS

Element Occurrence ranks are used to describe the quality of a rare plant population or natural community based on three factors:

- **Size**: Size of community or population relative to other known examples in Maine. Community or population's viability, capability to maintain itself.
- **Condition**: For communities, condition includes presence of representative species, maturity of species, and evidence of human-caused disturbance. For plants, factors include species vigor and evidence of human-caused disturbance.
- **Landscape context**: Land uses and/or condition of natural communities surrounding the observed area. Ability of the observed community or population to be protected from effects of adjacent land uses.

These three factors are combined into an overall ranking of the feature of **A**, **B**, **C**, or **D**, where **A** indicates an **excellent** example of the community or population and **D** indicates a **poor** example of the community or population. A rank of **E** indicates that the community or population is **extant** but there is not enough data to assign a quality rank. The Maine Natural Areas Program tracks all occurrences of rare (S1-S3) plants and natural communities as well as A and B ranked common (S4-S5) natural communities.

Note: **Element Occurrence Ranks** are determined by the Maine Natural Areas Program for rare plants and rare and exemplary natural communities and ecosystems. The Maine Department of Inland Fisheries and Wildlife determines Element Occurrence ranks for animals.

Visit our website for more information on rare, threatened, and endangered species!
<http://www.maine.gov/dacf/mnap>

Nuria Holmes

From: Nuria Holmes
Sent: Thursday, October 24, 2019 12:53 PM
To: Fatima Oswald
Subject: MILO FW: Sebec River

See below.

[Nuria V. Holmes, M.S.](#)

Regulatory & Licensing Project Manager

Office: 971.266.5395

Cell: 503.380.9888

Kleinschmidt

www.KleinschmidtGroup.com

Providing *practical* solutions for *complex* problems affecting energy, water, and the environment.

From: Loon, Sherri <Sherri.Loon@kruger.com>
Sent: Wednesday, October 23, 2019 5:21 AM
To: Nuria Holmes <Nuria.Holmes@Kleinschmidtgroup.com>; Andy Qua <Andy.Qua@KleinschmidtGroup.com>
Subject: FW: Sebec River

Please see below from Kathy Howatt of the DEP.

Sherri

Sherri L. Loon

Coordinator - Operations USA

Kruger Energy

423 Brunswick Avenue, Gardiner, ME 04345

T. 207-203-3026 / F 207-582-0094 / C 207-458-1524 /

Sherri.Loon@kruger.com

From: Howatt, Kathy [<mailto:Kathy.Howatt@maine.gov>]
Sent: Tuesday, October 22, 2019 4:07 PM
To: Loon, Sherri <Sherri.Loon@kruger.com>
Subject: RE: Sebec River

Hey Sherri,

The Sebec River was upgraded in 1990 to Class A from Sebec Lake to Milo and Class B below Milo to its confluence with the Piscataquis River. I don't know why the impoundment was determined to be unsuitable for swimming at that time, but you can swim there now. I've attached a link to an interactive map (rom the DEP webpages) showing the water classifications for all of Maine.

<https://maine.maps.arcgis.com/apps/MapSeries/index.html?appid=e68ca355821d444b9b66d1cb029f004e>

Kathy

Kathy Davis Howatt

Hydropower Coordinator, Bureau of Land Resources

Maine Department of Environmental Protection

Phone: 207-446-2642

www.maine.gov/dep

Correspondence to and from this office is considered a public record and may be subject to a request under the Maine Freedom of Access Act. Information that you wish to keep confidential should not be included in email correspondence.

From: Loon, Sherri <Sherri.Loon@kruger.com>
Sent: Tuesday, October 22, 2019 11:26 AM
To: Howatt, Kathy <Kathy.Howatt@maine.gov>
Subject: Sebec River

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Hi Kathy,

Is the below still true for the Sebec River near our hydro in Milo, we are trying for LIHI for this site.

At the time of Water Quality Certification issuance, the Sebec River was classified as Class C River from the outlet of Sebec Lake to the Milo Dam, and as Class B-1 from Milo Dam to the confluence of the Sebec and Piscataquis Rivers. Thus, the water in the impoundment was judged unsuitable for water contact recreation, and several untreated sewer discharges were noted entering both the bypassed reach and powerhouse tailrace downstream of the dam

Sherri

Sherri L. Loon

Coordinator - Operations USA
Kruger Energy
423 Brunswick Avenue, Gardiner, ME 04345
T. 207-203-3026 / F 207-582-0094 / C 207-458-1524 /
Sherri.Loon@kruger.com

From: [Perry, John](#)
To: [Nuria Holmes](#)
Cc: [Settele, Rebecca](#)
Subject: RE: Milo Hydro Project LIHI review [response requested]
Date: Tuesday, November 05, 2019 6:48:31 AM
Attachments: [image001.gif](#)
[image002.png](#)

Hi Nuria,

The following state-listed Endangered, Threatened, and Special Concern species have been documented in the general vicinity of the Milo Hydro Project on the Sebec River. Note that this list should not be considered all-inclusive:

- Creeper (Special Concern species of freshwater mussel)
- Bald Eagle--until recently, bald eagles were listed as a Species of Special Concern in Maine. However, eagles continue to be protected under the federal Bald Eagle and Golden Eagle Protection Act as well as other federal laws.

In addition, while a comprehensive statewide inventory for bats has not been completed it is likely that several of species of bats occur within the project area during migration and/or the breeding season.

- Little brown bat (State Endangered)
- Northern long-eared bat (State Endangered)
- Eastern small-footed bat (State Threatened)
- Big brown bat (Special Concern)
- Red bat (Special Concern)
- Hoary bat (Special Concern)
- Silver-haired bat (Special Concern)
- Tri-colored bat (Special Concern)

Finally, please note that this list does not include any listed species of wading birds, or migratory birds that are likely found in the area during spring and fall migrations.

In addition to the species above, much of the river in the project area is mapped as Inland Waterfowl and Wading Bird Habitat, a Significant Wildlife Habitat under Maine's Natural Resources Protection Act. These habitats provide important breeding, feeding, migration, staging, and wintering habitat for waterfowl and wading bird species.

It is not known what effects, if any, the operations of the project may have on any of the species or habitats listed above.

Please let us know if you need additional information.

John

John Perry
Environmental Review Coordinator
Maine Department of Inland Fisheries and Wildlife
284 State Street, 41 SHS

Augusta, Maine 04333-0041
Tel (207) 287-5254; Cell (207) 446-5145
Fax (207) 287-6395
www.mefishwildlife.com



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From: Nuria Holmes <Nuria.Holmes@Kleinschmidtgroup.com>
Sent: Friday, October 18, 2019 6:35 PM
To: Howatt, Kathy <Kathy.Howatt@maine.gov>; Perry, John <John.Perry@maine.gov>; Sean.Mcdermott@noaa.gov; St.Hilaire, Lisa <Lisa.St.Hilaire@maine.gov>; antonio_bentivoglio@fws.gov; Wippelhauser, Gail <Gail.Wippelhauser@maine.gov>; Clark, Casey <Casey.Clark@maine.gov>; Mohney, Kirk <Kirk.Mohney@maine.gov>; Rideout, Megan M <Megan.M.Rideout@maine.gov>; jeff.murphy@noaa.gov
Cc: Sherri.Loon@kruger.com; Andy Qua <Andy.Qua@KleinschmidtGroup.com>; Matthew Harper <Matthew.Harper@Kleinschmidtgroup.com>
Subject: Milo Hydro Project LIHI review [response requested]

EXTERNAL: This email originated from outside of the State of Maine Mail System. Do not click links or open attachments unless you recognize the sender and know the content is safe.

Good afternoon,

Kleinschmidt Associates, on behalf of KEI (Maine) Power Management (III), LLC, is assisting with the environmental review and resource agency consultation associated with the Initial certification for the Low Impact Hydropower Institute of the Milo Hydroelectric Project (FERC No. 5647 *Exempt*). The LIHI certification process requires the applicant to consult with agencies and receive agency agreement that the continued use of the Project does not have a negative impact on resources.

Please see the attached request for confirmation that the Projects are, to your knowledge, being operated consistent with the FERC Exemption and Section 401 Water Quality Certificate (if applicable). We respectfully request your confirmation within 30 days so that it may be included into the application.

If you have any questions about this request, please do not hesitate to contact me.

[Nuria V. Holmes, M.S.](#)

Regulatory & Licensing Project Manager

Office: 971.266.5395

Cell: 503.380.9888



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