Low Impact Hydropower Institute

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LOW IMPACT HYDROPOWER QUESTIONNAIRE

[Excerpted from Part VI, Section E of the Low Impact Hydropower Certification Program. Words in italics are defined in Part VI, Section C, and line-by-line instructions are available in Section D of the program, available on-line in PDF format at http://www.lowimpacthydro.org.

E. LOW IMPACT HYDROPOWER QUESTIONNAIRE

Background Information	
1) Name of the Facility.	Oakland Hydroelectric Station
2) Applicant's name, contact information and relationship to the Facility. If the Applicant is not the Facility owner/operator, also provide the name and contact information for the Facility owner and operator.	Messalonskee Stream Hydro LLC (owner) c/o Essex Hydro Associates 55 Union Street, 4 th Floor Boston, MA 02108 Attn: Richard A. Norman, President V: 617-367-0032 F: 617-367-3796 ran@essexhydro.com & sjh@essexhydro.com
3) Location of Facility by river and state.	Messalonskee Stream, Oakland, ME
4) Installed capacity.	2.8 MW
5) Average annual generation.	9.8 GWh

6)	Regulatory status.	FERC No. 2556 – ME (see Appendix 1)
7)	Reservoir volume and surface area measured at the high water mark in an average water year.	Surface Area: 10 Acres Gross Reservoir Volume: 50 Acre-Feet Net Storage Capacity: 0 (run-of-river)
8)	Area occupied by non-reservoir facilities (e.g., dam, penstocks, powerhouse).	Less than 3 Acres
9)	Number of acres inundated by the Facility.	Approximately 10 Acres
10)	Number of acres contained in a 200-foot zone extending around entire impoundment.	20 acres
11)	Please attach a list of contacts in the relevant Resource Agencies and in non-governmental organizations that have been involved in Recommending conditions for your Facility.	Please see Appendix 2
12)	Please attach a description of the Facility, its mode of operation (i.e., peaking/run of river) and a map of the Facility.	Please see Appendix 3
Qu	estions for For "New" Facilities Only:	
	If the Facility you are applying for is "new" i.e., an existing dam that added or increased power generation capacity after August of 1998 please answer the following questions to determine eligibility for the program	
13)	When was the dam associated with the Facility completed?	
	When did the added or increased generation first generate electricity? If the added or increased generation is not yet operational, please answer question 18 as well.	
15)	Did the added or increased power generation capacity require or include any new dam or other diversion structure?	
16)	Did the added or increased capacity include or require a change in water flow through the facility that worsened conditions for fish, wildlife, or water quality, (for example, did operations change from run-of-river to peaking)?	

	 (a) Was the existing dam recommended for removal or decommissioning by resource agencies, or recommended for removal or decommissioning by a broad representate interested persons and organizations in the local and/or regional community prior to added or increased capacity? (a) If you answered "yes" to question 17(a), the Facility is not eligible for certification you can show that the added or increased capacity resulted in specific measures to improve fish, wildlife, or water quality protection at the existing dam. If such measures a result, please explain. 	ion of the , unless		
	(a) If the increased or added generation is not yet operational, has the increased or ac generation received regulatory authorization (e.g., approval by the Federal Energy Regulatory Commission)? If not, the facility is not eligible for consideration; and Are there any pending appeals or litigation regarding that authorization? If so, the is not eligible for consideration.			
A	Flows	PASS		FAIL
1)	Is the Facility in <i>Compliance</i> with <i>Resource Agency Recommendations</i> issued after December 31, 1986 regarding flow conditions for fish and wildlife protection, mitigation and enhancement (including in-stream flows, ramping and peaking rate conditions, and seasonal and episodic instream flow variations) for both the reach below the tailrace and all bypassed reaches?		ee Appendix A)	
2)	If there is no flow condition recommended by any Resource Agency for the Facility, or if the recommendation was issued prior to January 1, 1987, is the Facility in Compliance with a flow release schedule, both below the tailrace and in all bypassed reaches, that at a minimum meets Aquatic Base Flow standards or "good" habitat flow standards calculated using the Montana-Tennant method?	N/A		
	f the Facility is unable to meet the flow standards in A.2., has the Applicant demonstrated, and obtained a letter from the relevant Resource Agency confirming that demonstration, that the flow conditions at the Facility are appropriately	N/A		

	protective of fish, wildlife, and water quality?		
В.	Water Quality	PASS	FAIL
1)	Is the Facility either:		
a)	In Compliance with all conditions issued pursuant to a Clean Water Act Section 401 water quality certification issued for the Facility after December 31, 1986? Or	Was (see Assessed in D)	
b)	In Compliance with the quantitative water quality standards established by the state that support designated uses pursuant to the federal Clean Water Act in the Facility area and in the downstream reach?	Yes (see Appendix B)	
2)	Is the Facility area or the downstream reach currently identified by the state as not meeting water quality standards (including narrative and numeric criteria and designated uses) pursuant to Section 303(d) of the Clean Water Act?	No	
3)	If the answer to question B.2 is yes, has there been a determination that the Facility is not a cause of that violation?	N/A	
C.	Fish Passage and Protection	PASS	FAIL
1)	Is the Facility in Compliance with <i>Mandatory Fish Passage Prescriptions</i> for upstream and downstream passage of anadromous and catadromous fish issued by Resource Agencies after December 31, 1986?	Yes (see Appendix C)	
2)	Are there historic records of anadromous and/or catadromous fish movement through the Facility area, but anadromous and/or catadromous fish do not presently move through the Facility area (e.g., because passage is blocked at a downstream dam or the fish run is extinct)?	N/A	
	a) If the fish are extinct or extirpated from the Facility area or downstream reach, has the Applicant demonstrated that the extinction or extirpation was not due in whole or part to the Facility?		

	b)	If a Resource Agency Recommended adoption of upstream and/or downstream fish passage measures at a specific future date, or when a triggering event occurs (such as completion of passage through a downstream obstruction or the completion of a specified process), has the Facility owner/operator made a legally enforceable commitment to provide such passage?	
3)	If,	since December 31, 1986:	N/A
	a)	Resource Agencies have had the opportunity to issue, and considered issuing, a Mandatory Fish Passage Prescription for upstream and/or downstream passage of anadromous or catadromous fish (including delayed installation as described in C2a above), and	
	b)	The Resource Agencies declined to issue a Mandatory Fish Passage Prescription,	
	c)	Was a reason for the Resource Agencies' declining to issue a Mandatory Fish Passage Prescription one of the following: (1) the technological infeasibility of passage, (2) the absence of habitat upstream of the Facility due at least in part to inundation by the Facility impoundment, or (3) the anadromous or catadromous fish are no longer present in the Facility area and/or downstream reach due in whole or part to the presence of the Facility?	
4)	If C	C3 was not applicable:	NA
a)	cata	e upstream and downstream fish passage survival rates for anadromous and adromous fish at the dam each documented at greater than 95% over 80% of run using a generally accepted monitoring methodology? Or	
b)	Ap Ser the	he Facility is unable to meet the fish passage standards in 4.a., has the plicant demonstrated, and obtained a letter from the US Fish and Wildlife vice or National Marine Fisheries Service confirming that demonstration, that upstream and downstream fish passage measures (if any) at the Facility are propriately protective of the fishery resource?	

5) Is the Facility in Compliance with Mandatory Fish Passage Prescriptions for upstream and/or downstream passage of <i>Riverine</i> fish?	None prescribed.	
6) Is the Facility in Compliance with Resource Agency Recommendations for Riverine, anadromous and catadromous fish entrainment protection, such as tailrace barriers?	None prescribed.	
D. Watershed Protection	PASS	FAIL
1) Is there a buffer zone dedicated for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low-impact recreation) extending 200 feet from the high water mark in an average water year around 50 - 100% of the impoundment, and for all of the undeveloped shoreline	See Appendix D	
2) Has the facility owner/operator established an approved watershed enhancement fund that: 1) could achieve within the project's watershed the ecological and recreational equivalent of land protection in D.1.,and 2) has the agreement of appropriate stakeholders and state and federal resource agencies?	N/A	
3) Has the facility owner/operator established through a settlement agreement with appropriate stakeholders and that has state and federal resource agencies agreement an appropriate shoreland buffer or equivalent watershed land protection plan for conservation purposes (to protect fish and wildlife habitat, water quality, aesthetics and/or low impact recreation)	see Appendix D	
4) Is the facility in compliance with both state and federal resource agencies recommendations in a license approved shoreland management plan regarding protection, mitigation or enhancement of shorelands surrounding the project.	N/A	
E. Threatened and Endangered Species Protection	PASS	FAIL
Are threatened or endangered species listed under state or federal Endangered Species Acts present in the Facility area and/or downstream reach?	No (see Appendix E)	
2) If a recovery plan has been adopted for the threatened or endangered species pursuant to Section 4(f) of the Endangered Species Act or similar state provision,	N/A	

	is the Facility in Compliance with all recommendations in the plan relevant to the Facility?		
3)	If the Facility has received authority to incidentally <i>Take</i> a listed species through: (i) Having a relevant agency complete consultation pursuant to ESA Section 7 resulting in a biological opinion, a habitat recovery plan, and/or (if needed) an incidental Take statement; (ii) Obtaining an incidental Take permit pursuant to ESA Section 10; or (iii) For species listed by a state and not by the federal government, obtaining authority pursuant to similar state procedures; is the Facility in Compliance with conditions pursuant to that authority?	N/A	
4)	If a biological opinion applicable to the Facility for the threatened or endangered species has been issued, can the Applicant demonstrate that:	N/A	
	a) The biological opinion was accompanied by a FERC license or exemption or a habitat conservation plan? Or		
	b) The biological opinion was issued pursuant to or consistent with a recovery plan for the endangered or threatened species? Or		
	c) There is no recovery plan for the threatened or endangered species under active development by the relevant Resource Agency? Or		
	d) The recovery plan under active development will have no material effect on the Facility's operations?		
5)	If E.2. and E.3. are not applicable, has the Applicant demonstrated that the Facility and Facility operations do not negatively affect listed species?	N/A	
F	Cultural Resource Protection	PASS	FAIL
	If FERC-regulated, is the Facility in Compliance with all requirements regarding Cultural Resource protection, mitigation or enhancement included in the FERC license or exemption?	YES (see Appendix F-1)	

2)	If not FERC-regulated, does the Facility owner/operator have in place (and is in Compliance with) a plan for the protection, mitigation or enhancement of impacts to Cultural Resources approved by the relevant state or federal agency or <i>Native American Tribe</i> , or a letter from a senior officer of the relevant agency or Tribe that no plan is needed because Cultural Resources are not negatively affected by the Facility?	N/A	
G.	Recreation	PASS	FAIL
1)	If FERC-regulated, is the Facility in Compliance with the recreational access, accommodation (including recreational flow releases) and facilities conditions in its FERC license or exemption?	YES (See Appendix G)	
2)	If not FERC-regulated, does the Facility provide recreational access, accommodation (including recreational flow releases) and facilities, as Recommended by Resource Agencies or other agencies responsible for recreation?	N/A	
3)	Does the Facility allow access to the reservoir and downstream reaches without fees or charges?	Yes	
H.	Facilities Recommended for Removal	PASS	FAIL
1)	Is there a Resource Agency Recommendation for removal of the dam associated with the Facility?	NO	

APPENDIX 1

Ownership/Regulatory Status Oakland Hydroelectric Facility

Appendix 1

Ownership/Regulatory Status Oakland Hydroelectric Facility

The Messalonskee Project is owned and operated by Messalonskee Stream Hydro LLC ("MSH"). It consists of four developments governed under FERC license No. 2556 issued July 28, 1999, as amended on October 12, 2000, June 1, 2001, and again on February 21, 2002. (see Appendices 1-1, 1-2, 1-3, 1-4): Messalonskee Lake; the Oakland hydroelectric project; the Rice Rips hydroelectric project and the Union Gas hydroelectric project.

Messalonskee Lake contains approximately 39 billion gallons of water and the lake's water discharges into the Messalonskee Stream at the town of Oakland. Messalonskee Lake is operated for recreational purposes. The Messalonskee Stream gatehouse controls reservoir levels and discharges into Messalonskee stream. Conditions of the FERC license No. 2556, require MSH to release instantaneous minimum flows of 15 cfs at all times through the project developments. When inflow to Messalonskee Lake is greater than 570 cfs, the hydroelectric projects on the Messalonskee Stream are operated as run of river projects. The projects are cycled when lake inflow is less than approximately 570 cfs run-of-river.

The Oakland hydroelectric facility ("the Oakland Project"), the first hydroelectric project below Messalonskee Lake, is a 2.8MW station located on the Messalonskee Stream in Oakland, Maine. The Oakland project initially was developed in 1899 by attorney Harvey Eaton and engineer Walter Wyman, the founding partners of Central Maine Power Company (CMP), who constructed the Oakland Project and provided street lighting and service to about 100 customers in the village of Oakland, Maine. The Oakland Project was operated as an unlicensed facility from that time until 1969 when, on February 24, 1969, the Federal Energy Regulatory Commission (FERC) (FERC Project No. 41) issued it a 30-year License.

On December 4, 1991, CMP filed an application for a new license for the Messalonskee Project pursuant to Sections 15 and 4(e) of the Federal Power Act. The application proposed the issuance of a consolidated license for the four projects, Messalonskee Lake, and the Oakland, Rice Rips and Union projects. In 1998, subsequent to the filing of the application for a new

license for the Messalonskee Project, ownership of the Messalonskee Project was transferred from CMP to FPL Energy Maine Hydro LLC (FPL Hydro). Since 1999 the Oakland Project has been operated in conjunction with two immediately downstream plants, the Rice Rips and Union hydroelectric stations.

Ownership of the project was transferred from FPL to Messalonskee Stream Hydro LLC ("MSH") in 2003. At that time MSH was wholly owned by Maine Renewables, LLC. On April 15, 2010 whole ownership of MSH was transferred from Maine Renewables to Concord Hydro Associates, L.L.C. As you will note in many of the attached documents, there are many references to the predecessor owners, CMP, and FPL.

APPENDIX 2

Agency Contacts

Appendix 2

Agency Contacts

Maine Department of Conservation:

Amy Hudnor; 207-287-2163

Maine Department of Inland Fisheries and Wildlife:

Roland Martin, Commissioner; 207-287-8000

U.S. Fish and Wildlife Service:

Fred Seavey; 541-867-4558 x239

National Park Service, Rivers and Special Studies Branch:

Kevin Mendik; 617- 223-5299

Federal Energy Regulatory Commission

Kimberly D. Bose, Secretary; 202-502-8400

Federal Energy Regulatory Commission - New York Regional Office

Peter R. Valeri, Regional Engineer; 212-273-5930

Maine Historic Preservation Commission (SHPO)

Dr. Arthur Spiess, Senior Archaeologist; (207) 287-2132

Maine Department of Marine Resources

Gail Wippelhauser; 207-624-6349

Maine Department of Environmental Protection

Dana Murch; 207-287-7784

APPENDIX 1-3

Order Modifying and Approving Minimum Flow Release Issued June 1, 2001

95 FERC | 62, 191

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

FLP Energy

Project No. 2556-030 &-035

ORDER MODIFYING AND APPROVING MINIMUM FLOW RELEASE AND MONITORING PLANS UNDER ARTICLE? 405 AND 404, RESPECTIVELY

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(Issued June 1, 2001)

FLP Energy (licensee) filed, on April 3, 2000, and supplemented on April 17, 2000, under article 405 of the original license, its plan to release minimum flows required by article 401, for the Messalonskee I pject. The April 2000 filings also included the licensee's plan filed under amended article 404, to monitor the flow releases, impoundment drawdown limits, and dewnramping requirements, required by amended articles 401 and 402, and 403 of the original license, respectively. The project is located on Messalonskee Stream, a tributary of the Kennebec River in Kennebec County, Maine.

Article 405 required the licensee to file for Commission approval a plan to release the minimum flow required by article 401. The plan is to include the method for flow release at each development, specific measures to ensure that the minimum flow would be met at all times, an explanation of any modifications to existing facilities necessary to release the minimum flows, and design drawings, hydraulic calculations, and technical specifications for any modifications necessary to meet the minimum flow requirements.

Article 404 required the licensee to file for Commission approval a plan to install, operate, and maintain water level and streamflow monitoring equipment necessary to monitor and document compliance with the minimum flow requirement of article 401,4

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DID604.0157.3

Order Issuing New License, issued July 28, 1999, 88 FERC ¶ 61,122.

Article 404, requiring the licensee to file a flow monitoring plan, was amended by the October 12, 2000, Order on Rehearing, 93 FERC ¶ 61,047.

Articles 401 and 402 were amended by the October 12, 2000, Order on Rehearing, 93 FERC ¶ 61,047.

Amended article 401 requires the licensee to release an instantaneous minimum flow of 15 cfs from Messalonskee Lake and from the Oakland, Rice Rips, and Union Gas

-2-

with the impoundment drawdown limits of article 402, and with the article 403 downramping requirement for the Union Gas development. The plan is to include a schedule for installing the monitoring equipment, the proposed location, design and calibration for the monitoring equipment, the method of data collection, and a provision to provide monitoring data to the consulted agencies within 30 days of the request for data. The licensee is to prepare the plan after consultation with the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), U.S. Geological Service (USGS), Maine Department of Inland Fisheries and Wildlife (D!FW), Maine Department of Marine Resources (DMR), and the Maine Department of Environmental Protection (DEP), and documentation of consultation is to be included in the filing.

BACKGROUND

The Messalonskee Project consists of four developments. These are, from upstream to downstream, Messalonskee Lake dam, and the Oakland, Rice Rips, and Union Gas developments. The Messalonskee Lake dams serves to control flows into the stream below; it has no generating facilities. The dams at each of the three developments downstream have one generating unit. The units are normally set to pass 570 cubic feet per second (cfs). The units do not operate below a flow of 300 cfs. Each of the developments has one or more manually operated gates at the dam. Only one gate, a taintor gate at Messalonskee Lake, can be operated remotely. Generation and pond levels can be monitored remotely.

Union Gas dam, and an instantaneous minimum flow of 15 cfs into Messalonskee Stream as measured immediately downstream from the Rice Rips dam.

Amended article 402 requires the licensee to limit the maximum drawdown of Messalonskee Lake water levels to 0.5 ft below the full pond elevation of 235.4 ft mean sea level from June I through August 31, and to 1.0 ft the rest of the year. The top 0.5 ft is to be managed to provide the required 15 cfs continuous minimum flow. The licensee is to limit the maximum drawdown of the Oakland impoundment to 1.0 ft below the full pond elevation of 207.1 ft mean sea level. The licensee is to limit the maximum drawdown of the Rice Rips impoundment to 1.0 ft below the full pond elevation of 139.1 ft mean sea level

Article 403 requires the licensee to restrict the rate at which the wicket gates at the Union Gas development are closed, to prevent fish stranding. Closures from 70 percent open to 40 percent open are to occur over a fixed 30-minute period, resulting in a gradual gate reduction of one percent closing per minute. No restrictions apply to wicket gate closings from 100 percent open to 70 percent open, or from 40 percent open to completely closed.

-3-

The decision to operate the system is wholly dependent on inflow to Messalonskee Lake from upstream lakes, which are managed for recreational water levels. If there is adequate flow for operation, an operator visits each development in the morning, opening or checking gates at Messalonskee Lake, and proceeds downstream to start or check the units. The same sequence is followed at the end of the generating shift(s), to shut the units down. Only the Union Gas development can be started and stopped remotely. Further, Union Gas cycles automatically, based on a pond level sensor, which starts the unit at full pond and shuts it off when the pond is lowered by 1.3 feet (ft).

Article 401 of the original license required the licensee to maintain a continuous minimum flow of 100 cfs from Messalonskee Lake through the project's developments. The October 12, 2000 Order on Rehearing amended article 401 to require a continuous minimum flow of 15 cfs from Messalonskee Lake through the project's developments (see footnote 4). A further Order on Rehearing issued April 2, 2001 upheld the amended minimum flow requirement of 15 cfs.

LICENSEE'S MINIMUM FLOW RELEASE PLAN UNDER ARTICLE 405

Currently, at Messalonskee Lake, a single taintor gate can be opened remotely; a slide gate and a second taintor gate are set manually on site. A single manually operated radial gate exists at the Oakland development. The licensee proposes to install a new spillway gate at the Rice Rips development. At the Union Gas development, there are three manually-operated deep release gates.

The licensee proposed to open one of two taintor gates at the Messalonskee Lake dam, to maintain the required minimum flow during periods of non-generation. One of the two gates can be operated remotely from the project control center at Weston Station. Switching between generation and non-generation modes would require changing the opening of the taintor gate from the setting for effective generation to the setting necessary to pass inflow, or the minimum flow, whichever is greater.

At Messalonskee Lake, passing the minimum flow will require reading the pond level hourly and controlling the opening of a taintor gate to keep a constant pond level, to assure that inflow is passed. At a point when the inflow and release becomes less than 15 cfs, the pond level would be allowed to drop as necessary to supplement inflow to maintain minimum flows, until the pond reaches 0.5 ft below full pond in summer or 1.0 ft below full pond during the remainder of the year. At the time the pond reaches the

⁹⁵ FERC ¶ 61,016.

-4-

drawdown limit, the gate would be closed to maintain pond level within the required limit

At the Oakland development, the licensee proposed to pass the minimum flow through the generating unit during periods of generation. Because this pond is very small and is normally operated near full, the flow would quickly begin passing over the spillway whenever generation stops. There is also a gate at the dam, which can be opened manually, if necessary. The gete is capable of passing 100 cfs at its fully open position.

At the Rice Rips development, the licensee would install two new gates at the dam in order to consistently pass the minimum flow into the bypassed reach. The new gates would be installed in the dam bay where, currently, a set of hinged steel flashboards exist. One gate will be remotely adjustable to accommodate varying headpond levels or inflow volumes. The gate's maximum capacity would be 100 cfs at fully open with the headpond one foot below full. During periods of generation the minimum flow would be passed through the generating unit. During periods of non-generation, the gate would be opened to pass minimum flow or inflow, which ever is greater.

At the Union Gas development, the minimum flow would be passed through the generating unit during periods of generation. During periods of non-generation, the minimum flow would be passed through a deep gate. There are three motor-operated deep gates at the dam, each capable of releasing 100 cfs at an opening of 0.75 ft with the pond at 1.3 ft below full pond. One gate would be modified to be opened remotely when the generating unit shuts down.

The licensee stated it has a preliminary design for the Rice Rips gates, which requires the removal of the existing hinge boards from the sluiceway, modification of the concrete sill, and installation of the new gates and supporting steel. The design calls for two gates, one 4 ft, six inches wide, the other 8 ft, 8 inches wide. The smaller gate would pass 25 cfs when open 0.75 ft, and 90 cfs when fully open; the larger gate would pass 50 cfs when open 0.75 ft, and 180 cfs when fully open. One of the gates would be remotely adjustable to allow the licensee to accommodate varying headpond elevations and inflows.

The licensee proposed to implement the plan following its approval by the Commission.

-5-

LICENSEE'S MONITORING PLAN UNDER ARTICLE 404

The licensee proposed to record the minimum flows (required by article 401) and pond levels (required by article 402) using a computer system which manages the project's automated functions. This recorded data would be used to document compliance with the minimum flow and pond level requirements at the project. The computer system currently records headpond elevation (except for Rice Rips) and generator output for the developments of the project. The licensee proposed to install additional monitoring equipment, with data from the additional equipment to be recorded by the computer system.

The minimum flow release at Messalonskee Lake would be documented by recording gate openings at the developments, and converted to flow volume with calculated capacity curves for the gate opening settings. The Union Gas and Rice Rips developments' gate settings would be similarly read and recorded. The gate setting would be recorded any time the gate opening is changed.

Each development would have a pond level sensor (transducer) monitor on the intake structure headwall. The sensors read water pressure and convert the data to pond level. Pond level sensors currently exist at the Messalonskee Lake, Oakland, and Union Gas developments. A sensor would be installed at the Rice Rips development. The existing sensors would be calibrated against staff gages at the dams and replaced if necessary. The sensor reading would be transmitted to the licensee's computer system continuously. The readings would be recorded hourly. The record would be maintained in electronic form for 45 days, and would be printed in hard copy daily.

The computer system will send an alarm signal to the control center anytime pond levels or minimum flows are not being met. A gate would be remotely opened and/or an operator sent to the site to take corrective action, as necessary.

The licensee proposed to control the ramping rate at the Union Gas development using a programmable logic controller. This controller would be programmed to close the generating unit gate at a rate in compliance with the ramping requirements of article 403. Alteration of the ramping rate would require a manual override of the controller system. Should the manual override of the programmed ramping rate ever be used, a record of the event would be entered in the project log, and reported as required.

The licensee stated the monitoring equipment would be in place, programmed and operational within 18 months of the plan's approval by the Commission.

-6-

RESOURCE AGENCIES' COMMENTS AND LICENSEE'S RESPONSES

The licensee consulted with resource agencies in preparation of the plans. The FWS commented on the licensee's minimum flow release and monitoring proposals in a March 27, 2000 letter to the licensee. The FWS stated that it generally concurred with the licensee's minimum flow release and monitoring proposals, but made additional recommendations, as follows.

The FWS recommended that, at Messalonskee Lake, at the Rice Rips and Union Gas developments, the remotely operated taintor gate be designated as the minimum flow release gate, and that its setting be automatically recorded along with the hourly pond level readings. The computer software could then, if it has the capability, automatically calculate and record the hourly minimum flow.

The licensee plans to provide minimum flows at the Oakland development during non-generation periods by allowing the water to overtop the spillway. The FWS noted that this would result in an interruption of the minimum flow during the time that the headpond rises to a level which would provide the required flow following generation shutdown. The FWS recommended that the manually operated gate always be opened when generation ceases to ensure that the minimum flow is continuously provided.

The FWS also recommended that the licensee develop a standard operating procedure that would ensure that the required minimum flow is maintained throughout the Messalonskee project at all times. It suggested that all project operator should be familiar with the procedure, including temporary and interim operators, and that copies of the procedure should be available at each development as a reference for the operators.

The NMFS, USGS, DIFW, DEP, and DMR, did not comment on the plan.

DISCUSSION AND CONCLUSIONS

The licensee's proposed minimum flow release plan should maintain the continuous minimum flow through the project's developments, as required by article 401, with the exception of the Oakland development. The licensee's proposal to maintain minimum flow during non-generation periods by allowing the water to rise to overtop the spillway when generation ceases would result in a period of flows below the required minimum, until the headpond rises to a level sufficient to spill 15 cfs. At the Oakland development, the licensee should either install equipment to remotely open the gate, or manually open the gate, whenever generation ceases, to ensure that the minimum flow is continuously provided. The licensee should inform the resource agencies and the Commission of which method it will use to open the gate to ensure that the minimum

-7-

flow requirement is continuously met at the Oakland development within 60 days of this order.

The FWS recommended that the remotely operated gates at Messalonskee Lake dam and at the Rice Rips and Union Gas developments should be designated as the minimum flow release gate at each of the developments. It also recommended that the remotely adjusted gate settings be automatically recorded along with the hourly pond level readings, and the computer software could then automatically calculate and record the hourly minimum flow. Implementation of these recommendations would provide the licensee with more complete operations information and provide a useful management tool. The licensee should routinely use the remotely controlled gates to release the minimum flow. Manually operated gates should be used only when the the remotely operated gates cannot be used, for whatever reason.

The licensee stated it would implement its plan to release the minimum flow upon Commission approval. The licensee's minimum flow release plans also includes plans to install new gates in the place of the current flashboards at the Rice Rips development, and to install equipment to allow remote operation of gates at the Rice Rips and the Union Gas developments. The licensee did not propose a schedule for installing the new equipment and project features. Pursuant to paragraphs 12.4, 12.11, and 12.40 of the Commission's regulations, a plans and specifications package should be submitted to the Commission's Regional Director. Authorization to start construction activities will be given by the Regional Director after all preconstruction requirements are satisfied. Within 90 days of completion of the new gates at the Rice Rips development, the licensee should file for Commission approval revised as-built drawings reflecting the change in project facilities.

The licensee proposed to have the monitoring equipment in place, programmed and operational within 18 months of the plan's approval by the Commission. This is an unusually long period of time to delay the documentation of project operations. The licensee should have the monitoring equipment in place, programmed and operational at each of the project developments within 60 days of its completion of the installation of new flow release equipment and facilities at that development. Within 60 days of the date of this order, the licensee should file with the Commission a schedule for the installation of the monitoring equipment at Messalonskee Lake and at each of the project's developments.

The licensee's proposed plan to monitor minimum flow releases, impoundment elevation, down ramping, as required by article 401, 402, and 403, should allow the licensee to document project operations and compliance with the license requirements.

-8-

The licensee's proposed minimum flow release and menitoring plans, with the discussed modifications, should allow the licensee meet the license requirements and, therefore, be approved.

The Director Orders:

- (A) The licensee's minimum flow release and monitoring plans, filed on April 3. 2000, and supplemented on April 17, 2000, under articles 405 and 404, respectively, as modified by paragraphs (B) through (G), are approved.
- (B) The licensee shall, at the Oakland development, either install equipment to remotely open the gate or manually open the gate, whenever generation ceases, to ensure that the minimum flow is continuously provided. The licensee shall submit to the resource agencies and file with the Commission the details of the method it will use to open the gate to ensure that the minimum flow requirement is continuously met at the Oakland development within 60 days of this order.
- (C) The licensee shall designate the remotely operated gates at Messalonskee Lake and at the Rice Rips and Union Gas developments as the minimum flow release gate at each of the developments. The licensee shall routinely use the remotely controlled gates at each of the developments to release the minimum flow.
- (D) Pursuant to paragraphs 12.4, 12.11, and 12.40 of the Commission's regulations, the licensee shall submit a plans and specifications package to the Commission's Regional Director, prior to starting construction activities to install new gates in the place of the current flashboards at the Rice Rips development, and to install equipment to allow remote operation of gates at Messalonskee Lake dam and the Union Gas development. Authorization to start construction activities will be given by the Regional Director after all preconstruction requirements are satisfied.
- * (E) Within 90 days of completion of the new gates at the Rice Rips development, the licensee shall file for Commission approval revised exhibit drawings to describe and show the gates as built.
 - (F) The licensee shall have the monitoring equipment in place, programmed and operational at each of the project developments within 60 days of its completion of the installation of new flow release equipment and facilities at that development. Within 60 days of the date of this order, the licensee shall file with the Commission a schedule for the installation of the monitoring equipment at Messalonskee Lake and at the Oakland, Rice Rips, and Union Gas developments.

-9-

- (G) If the minimum flow, as measured by the approved gage, falls below the 15 cfs minimum flow required flow under amended article 401, and inflows exceed the required minimum flow, the licensee shall file a report with the Commission within 30 days of the incident. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report shall also include: 1) operational data necessary to determine compliance with article 401; 2) a description of any corrective measures implemented at the time of occurrence and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence received from the resource agencies regarding the incident. Based on the report and the Commission's evaluation of the incident, the Commission reserves the right to require modifications to project facilities and operations to ensure future compliance.
- (H) Unless otherwise directed in this order, the licensee shall file an original and seven copies of any filing required by this order with:

The Secretary
Federal Energy Regulatory Commission
Mail Code: DHAC, PJ-12.3
888 First Street, NE
Washington, DC 20426

In addition, the licensee shall serve copies of these filings on any entity specified in this order to be consulted on matters related to these filings. Proof of service on these entities shall accompany the filings with the Commission.

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

Group Leader

Division of Hydropower Administration and Compliance

APPENDIX 3-1

Oakland Hydroelectric Station

OAKLAND HYDROELECTRIC STATION



APPENDIX A-1

State of Maine Department of Environmental Protection Water Quality Certification



STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION STATE HOUSE STATION 17 AUGUSTA, MAINE 04333

AUTOMATIC DEVELOPMENT SUBSEQUENTLY TRANSFERRED

DEPARTMENT ORDER

IN THE MATTER OF

CENTRAL MAINE POWER	COMPANY)			
SIDNEY, BELGRADE, O	AKLAND, WATERVII	LLE)	MAINE WATER	QUALITY	PROGRAM
KENNEBEC COUNTY, MA	INE .)	FEDERAL CLE	AN WATER	ACT
MESSALONSKEE PROJEC'	Ţ)			
#L-17585-33-D-N)	WATER QUALI	TY CERTI	FICATION
#L-17585-32-D-N	(APPROVAL))			

Pursuant to the provisions of 38 M.R.S.A. Section 464 <u>et seq</u>. and Section 401 of the Federal Water Pollution Control Act (a.k.a. Clean Water Act), the Department of Environmental Protection has considered the application of CENTRAL MAINE POWER COMPANY with its supportive data, agency review comments, and other related materials on file and FINDS THE FOLLOWING FACTS:

1. APPLICATION SUMMARY

- a. <u>Application</u>: The applicant proposes the continued operation of the existing Messalonskee Project, located on Messalonskee Stream in the Towns of Sidney, Belgrade, Oakland, and the City of Waterville, Kennebec County, Maine (See Exhibit 1).
- b. Existing Project Features: The project consists of a water storage dam and 4 discrete hydroelectric generating facilities. The only commonality between the projects is that they are all operated to utilize flow provided by the uppermost dam, the Messalonskee Lake Dam.

Messalonskee Lake Development: The Messalonskee Lake Dam was rebuilt in 1992. The dam consists of a 54-foot long, 7-foot high concrete spillway dam with a crest elevation of 231.9 feet, plus 3.5 foot high flashboards, and a gatehouse section containing two 12-foot wide, 10.75 foot high, taintor gates (See Exhibit 2). The normal full pond level of Messalonskee Lake is at elevation 235.4 feet, has a surface area of 3,600 acres and an estimated 3,400 acre-ft of usable storage at a 1 foot drawdown. This dam is operated to maintain the level of Messalonskee Lake and provide storage for the 4 downstream hydro stations.

Oakland Development: Oakland consists of a dam, intake structure, penstock, powerhouse, and impoundment (See Exhibit 3). The dam is a gravity structure measuring 115 feet in length which includes a spillway and a gated section. The total head of the dam is 67.3 feet. The crest of the spillway is at elevation 207.1 feet. The intake is integral with the dam and has trashracks upstream of the gates. Water flows through the intake and into a 10-foot-diameter fiberglass and steel penstock. The concrete surge tank is 21 feet high. The powerhouse is a concrete structure measuring 38 feet 10 inches square. The powerhouse contains a single vertical Francis turbine rated at 2,800 kW at a head of 67.3 feet. The maximum hydraulic capacity of the unit is 590 cfs. The impoundment formed by the dam is 1,900 feet long, has a normal surface elevation of 207.1 feet, and has a surface area of 10 acres. The bypass reach that is created by the penstock is approximately 500 feet long and the substrate is exposed ledge.

CENTRAL MAINE POWER COMPANY 2 SIDNEY, BELGRADE, OAKLAND, WATERVILLE) KENNEBEC COUNTY, MAINE	MAINE WATER QUALITY PROGRAM; FEDERAL CLEAN WATER ACT
MESSALONSKEE PROJECT) #L-17585-33-D-N) #L-17585-32-D-N (APPROVAL)	WATER QUALITY CERTIFICATION

Rice Rips Development: Rice Rips is located 1.9 miles downstream from Oakland. It consists of a dam, an intake structure, penstock, surge pond, powerhouse, and impoundment (See Exhibit 4). The dam is a concrete Ambursen dam measuring 220 feet in length and has an intake section, a hinged flashboard section, an overflow spillway section, and two earthen embankments. The flashboards are 5 feet high with a crest elevation of 139.1 feet. The concrete intake section is integral with the dam and conveys water to the 10-footdiameter penstock of wood stave construction. The penstock is 2,292 feet long and empties into a surge pond that is 150 feet in diameter. Water flows from the surge pond into the concrete powerhouse which measures 42.5 feet by 30.5 feet. The powerhouse contains a single, vertical Francis turbine rated at 1,600 kW at a head of 42.4 feet. The maximum hydraulic capacity of the unit is 630 cfs. The impoundment formed by Rice Rips dam is approximately 1.6 miles long, has a normal surface elevation of 139.1 feet, and has a surface area of 87 acres. The bypass that is created by the penstock is approximately 2400 feet in length and consists of coarse and cobble/gravel substrate.

Automatic Development: Automatic is approximately 5 miles downstream of Rice Rips and consists of a dam with integral powerhouse and an impoundment (See Exhibit 5). The dam is a concrete gravity structure measuring 80 feet in length. The dam has a spillway section, a gated section, and a non-overflow section. The dam is also equipped with flashboards that are 1.9 feet high. The crest of the spillway is at elevation 92.4 feet. The powerhouse contains 1 horizontal Francis turbine rated at 800 kW at a head of 23 feet. The maximum hydraulic capacity of the turbine is 615 cfs. The impoundment formed by Automatic is approximately 4.5 miles long, has a normal surface elevation of 94.3 feet, and has a surface area of approximately 68 acres.

Union Gas Development: Union Gas is the furthest downstream of the Messalonskee Project generating facilities (See Exhibit 6). Union Gas consists of a dam, an adjacent powerhouse, and an impoundment. The dam has an earthen section and a stone masonry structure consisting of a non-overflow section, a gated section, a spillway and an intake section. Total length of the dam is 343 feet. The spillway has a crest elevation of 67.6 feet. The dam is equipped with flashboards that are 1.5 feet in height. The powerhouse contains a single vertical Francis turbine rated at 1,500 kW at a head of 37.8 feet. The maximum hydraulic capacity of the unit is 660 cfs. The impoundment formed by Union Gas is approximately 1.5 miles in length, has a normal surface elevation of 69.1 feet, and a surface area of 25 acres. The usable storage of the impoundment is estimated to be 30 acre-feet at a 1.3 foot drawdown.

c. Existing Project Operation: As previously discussed, the Messalonskee Project consists of a water storage dam and four hydroelectric generating facilities. The Messalonskee Lake water storage development is operated to provide water releases of approximately 570 cfs to the four downstream hydro stations. This is the most efficient flow for overall generation at the four stations. Once flow is released from Messalonskee Lake, each station is manually brought on-line by a traveling operator. During the summer months the 570 cfs is passed downstream until Messalonskee Lake is

CENTRAL MAINE POWER COMPANY	3	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVILL	E)	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE	j	
MESSALONSKEE PROJECT	j	
#L-17585-33-D-N	,	WATER QUALITY CERTIFICATION
#L-17585-32-D-N (APPROVAL)	j	

drawn down by 0.5 foot; at that lake level, the gates are closed and the lake begins to refill with inflow. During the winter months the lake is drawn down by 1.0 foot. Water flow from the upstream lakes is controlled by DEP water level order L-11097-36-A-N, dated October 30, 1985. Historically, during periods when generation flows were not being released, only leakage flows were passed downstream from Messalonskee Lake. Leakage was estimated at 12-15 cfs. In 1992 the Messalonskee Lake Dam was rebuilt and two new gates were installed. The gates are capable of passing the historical leakage flow.

When inflow to Messalonskee Lake is greater than 570 cfs, the projects are essentially operated run-of-river. All water that does not go through the turbines is passed as spillage.

When inflow to Messalonskee Lake is less than 570 cfs, the project cycles. Generation releases will generally occur daily from mid-September through early June. For the first part of this period, September through February, the generation cycle usually lasts either 8 or 16 hours per day. From February into June, the cycles are usually longer, lasting either 16 or 24 hours. During the remainder of the year, mid-June through mid September, there may only be sufficient inflow to generate for a single 8-hour cycle per week. These generation periods are dependent upon inflow into Messalonskee Lake. After the generation flow ceases, the four generation stations are taken off-line. The first three hydro stations below Messalonskee Lake operate run-of-river, with outflow equaling inflow. The fourth project, Union Gas Development, has a computer controlled water level management system which automatically brings the station on-line when its impoundment level is full and automatically goes . off-line when the impoundment has been drawn down 1.3 feet. When Messalonskee Lake is cycled, the lake level fluctuates by 0.5 feet during the summer months and 1.0 foot during the winter months.

- d. <u>Summary of Proposal</u>: The applicant proposes to operate the project in accordance with several measures for the protection or enhancement of, or mitigation of impacts on, public resources. These measures include:
 - Maintaining water levels in each of the project impoundments to within one foot of full pond elevation, except Messalonskee Lake which will be limited to a 6-inch fluctuation during the summer months, 1.0 foot during the winter, and Union Gas impoundment which will fluctuate up to 1.3 feet below normal full pond elevation;
 - Providing a year-round minimum flow of 15 cfs through the Project including the Rice Rips bypass;
 - Initiating a new downramping sequence at the Union Gas Development;
 - Implementing the provisions of the "Messalonskee Lake Waterfowl Management Plan";
 - Developing a new improved picnic site/day use area below the Messalonskee Lake Dam;

CENTRAL MAINE POWER COMPANY	_	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVIL	LE)	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE)	
MESSALONSKEE PROJECT)	
#L-17585-33-D-N)	WATER QUALITY CERTIFICATION
#t17585-32-D-N (APPROVAL))	

- Installing an informational/interpretive sign at the Oakland Development, and installing project identification signs at all of the projects;
- Investigating the need for establishing a "green belt/multi use" area along the east side of Messalonskee Stream between the Oakland Development and the Rice Rips Development;
- · Improving parking at the Rice Rips Development;
- Evaluating the feasibility of creating a carry-in access site to the Rice Rips impoundment;
- · Developing a carry-in access at Colby College; and
- Installing a hard surface boat ramp on the Kennebec River.

2. JURISDICTION

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

All the projects were originally licensed as water power projects under the Federal Power Act (Oakland, including the Messalonskee Lake Dam, Project No. 2559; Rice Rips, Project No. 2557; Automatic, Project No. 2555; and Union Gas, Project No. 2556). All project licenses were issued with an effective date of May 1, 1965, and an expiration date of December 31, 1993. On February 10, 1990, the Federal Energy Regulatory Commission (FERC) granted approval for the licensee to license the four projects as a single project including five hydraulically related developments. FERC assigned the Messalonskee Project FERC No. 2555. The licensee has filed an application to continue to operate the Messalonskee Project. This application is currently pending before FERC. In accordance with FERC Relicensing Regulations, the project developments are currently operating under annual licenses which will be automatically renewed each year until a relicensing decision is made.

The Department of Environmental Protection has been designated by the Governor of the State as the certifying agency for issuance of Section 401 Water Quality Certification for hydropower projects located in whole or in part in organized municipalities subject to the Department's regulatory jurisdiction. The Messalonskee Project is located in whole in the Towns of Sidney, Belgrade, Oakland, and the City of Waterville, which are organized municipalities subject to the Department's jurisdiction.

3. APPLICABLE WATER QUALITY STANDARDS

a. <u>Classification</u>: The waters of the Messalonskee Project are currently designated as follows:

CENTRAL MAINE POWER COMPANY	5	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVILL	E)	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE)	
MESSALONSKEE PROJECT)	
#L-17585-33-D-N)	WATER QUALITY CERTIFICATION
#L-17585-32-D-N (APPROVAL))	

Messalonskee Lake - Class GPA. 38 M.R.S.A. §465-A.

From the outlet of Messalonskee Lake to its confluence with the Kennebec River, including all impoundments except Rice Rips Lake - Class C. 38 M.R.S.A. §467(4)(E)(1)(a).

Rice Rips Lake - Class GPA. 38 M.R.S.A. §465-A.

b. <u>Designated Uses</u>: Class GPA waters shall be of such quality that they are suitable for the designated uses of drinking water after disinfection, recreation in and on the water, fishing, industrial process and cooling water supply, hydroelectric power generation and navigation and as habitat for fish and other aquatic life. The habitat shall be characterized as natural. 38 M.R.S.A. §465-A(1)(A).

Class C waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, and navigation; and as habitat for fish and other aquatic life. 38 M.R.S.A. §465(4)(A).

c. <u>Numeric Standards</u>: Class GPA waters do not have numeric standards for dissolved oxygen (DO).

The dissolved oxygen content of Class C waters shall be not less than 5 parts per million or 60% of saturation, whichever is higher. 38 M.R.S.A. §465(4)(B).

d. Narrative Standards: Class GPA waters shall be described by their trophic state based on measures of the chlorophyll "a" content, Secchi disk transparency, total phosphorous content and other appropriate criteria. Class GPA waters shall have a stable or decreasing trophic state, subject only to natural fluctuations and shall be free of culturally induced algal blooms which impair their use and enjoyment. 38 M.R.S.A. §465-A-(1)(B)

Discharges to Class C waters may cause some changes to aquatic life, provided that the receiving waters shall be of sufficient quality to support all species of fish indigenous to the receiving waters and maintain the structure and function of the resident biological community. 38 M.R.S.A. § 465(4)(C).

e. Antidegradation: The Department may only approve water quality certification if the standards of classification of the waterbody and the requirements of the State's antidegradation policy will be met. The Department may approve water quality certification for a project affecting a waterbody in which the standards of classification are not met if the project does not cause or contribute to the failure of the waterbody to meet the standards of classification. 38 M.R.S.A. § 464(4)(F).

4. DISSOLVED OXYGEN

a. Existing Conditions: The water quality in Messalonskee Stream is characterized as poor. Point source and non-point source discharges provide phosphorous loading to the stream which in turn results in

CENTRAL MAINE POWER COMPANY 6 SIDNEY, BELGRADE, OAKLAND, WATERVILLE)	WILLDIN COUNTILL ENCOUNTY.
KENNEBEC COUNTY, MAINE	
MESSALIONSKEE PROJECT)	
#L-17585-33-D-N)	WATER QUALITY CERTIFICATION
#L-17585-32-D-N (APPROVAL)	

algal blooms. The Oakland waste water treatment facility is the major point source for phosphorous loading into Rice Rips Lake. The bacterial decomposition of dead algae causes significant depletion of dissolved oxygen in the lower levels of the lake. The levels of dissolved oxygen observed have in many instances violated State water quality standards. Water quality problems in Messalonskee Stream and Rice Rips Lake are exacerbated by the existence of the dams which reduce flushing rates and natural reaeration of the water. These reduced flushing rates enhance the residence time of phosphorus which accumulates in bottom sediments. Phosphorus that is in bottom sediments can internally recycle itself, perpetuating phosphorus loading and algal blooms in the stream.

The applicant conducted a study entitled "Hydrologic Analysis of the Messalonskee Stream Drainage". The purpose of the analysis was to provide an understanding of the watershed and examine the availability of water in Messalonskee Stream. This report can be found in Appendix E-V of the application.

The Messalonskee Stream drainage is 210 mi² at its mouth. The headwaters of the stream are formed by the Belgrade Lakes. They are North Pond, East Pond, Salmon Lake, Great Pond, Long Pond, and Messalonskee Lake. The drainage area at the outlet of Messalonskee Lake is 177 mi². 68% (121 mi²) of the drainage is above Messalonskee Lake at the Wings Mills Dam, which is the outlet dam on Long Pond.

Operation of the Messalonskee Lake hydro developments is dependent on inflow to Messalonskee Lake. As described under Existing Project Operation (pg. 2), the applicant utilizes the top 0.5 feet of Messalonskee Lake as storage for generation during the summer months (1.0 foot during the winter months). The applicant only utilizes the top 0.5 feet during the summer because camp owners on the lake complain when the water goes lower than that. The top 0.5 feet of lake provides roughly 1,500 acre-feet of storage, which is the equivalent of 25 cfs for one month (exclusive of evaporation).

The hydrologic analysis first estimated flow duration characteristics of Messalonskee Stream in an unregulated state. This was accomplished by reviewing flow information from the Nezinscot and Sheepscot Rivers. Both rivers are unregulated, in close proximity, and have similar drainage areas. The flow duration curves that were developed estimate the unregulated August median inflow to Messalonskee Lake to be 44 cfs. The analysis then accounted for evaporation. The evaporation rate was calculated to be a net loss of 0.7 inches during the month of August. This represents the loss of over 1,100 acre-feet of water, or 18 cfs of continuous flow. Applying this evaporation rate, the estimated unregulated median inflow to Messalonskee Lake in August is 26 cfs.

Once the unregulated flow into Messalonskee Lake was estimated, the effect of the DEP water level order on the availability of flows was examined. The order governs the operation of the dams at Salmon Lake, Great Pond, and Long Pond and requires that all lake levels above Long Pond be maintained as close to their respective spillway crests as possible between June 1 and Labor Day. Because the order maintains water levels for recreational purposes, there is literally no capacity to store the runoff during significant precipitation

CENTRAL MAINE POWER COMPANY	7	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVI	(LLE	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE)	
MESSALONSKEE PROJECT)	
#L-17585-33-D-N)	WATER QUALITY CERTIFICATION
#L-17585-32-D-N (APPROVAL))	

events. Based on flow duration curves, the median August flow from the exit of Long Pond is anticipated to be about 15 cfs. However, the order only requires a minimum flow of 8 cfs from the Wings Mills Dam; the rest of the flow is used to maintain stable water levels that may drop due to evaporation. Considering the additional 56 mi² of drainage area between Long Pond and Messalonskee Lake and the regulation of flows by the DEP Order, the adjusted August median inflow to Messalonskee Lake is estimated to be 22 cfs. This is the amount of flow available into Messalonskee Lake during the critical summer months.

The 1990 DEP report "Messalonskee Stream Summary", discusses several options for improving the water quality of Messalonskee Stream. These options included increasing minimum flows from Messalonskee Lake; complete source elimination of effluent from the Oakland treatment plant; rerouting the effluent discharge to a location downstream of Rice Rips Lake; and removal of effluent during the summer months. Complete source elimination and rerouting the effluent were ruled out as being too expensive.

The Oakland waste water treatment plant is proposing to seasonally land apply the majority of its discharge on land owned by the applicant. CMP is leasing approximately 60 acres of land to Oakland in order to greatly reduce the amount of effluent that would otherwise be discharged into the Rice Rips impoundment. Based on calculations performed by the Department, it is estimated that approximately 56,000 gallons of waste water can be applied to each acre of land per week. The treatment facility is currently licensed to discharge 480,000 gallons/day.

- b. <u>Applicant's Proposal</u>: The applicant proposes to pass a year-round minimum flow of 15 cfs below all four developments and in the Rice Rips bypass.
- c. <u>Discussion</u>: The DEP Division of Environmental Assessment (DEA) comments that implementation of a minimum flow of 15 cfs, in combination with the proposed seasonal land application of effluent from the Oakland Waste Water Treatment Plant, should allow Messalonskee Stream to meet Class C dissolved oxygen standards; however, water quality sampling should be conducted in Messalonskee Stream to document attainment of standards.

The Town of Oakland has a pending application with the Department to renew the Town's discharge license for the Oakland Waste Water Treatment Plant. As a condition of that license renewal, the Department is assigning the Town responsibility for conducting water quality sampling in Rice Rips Lake. As a condition of this certification, the Department is assigning the applicant the responsibility for sampling dissolved oxygen in Messalonskee Stream. Based on a review of dissolved oxygen sampling performed by the applicant and the sampling performed by the Town of Oakland, the Department reserves the right, after notice and opportunity for hearing, and upon consideration of the joint responsibility of the Town of Oakland and the applicant, to require structural and/or operational changes at the Oakland Waste Water Treatment Plant and/or the Messalonskee Developments as necessary to meet Class C dissolved oxygen standards.

CENTRAL MAINE POWER (COMPANY	8	MAINE WAT	er qua	LITY PROGRAM;
SIDNEY, BELGRADE, OAI	KLAND, WATERVII	LLE)	FEDERAL	CLEAN	WATER ACT
KENNEBEC COUNTY, MAIN	VE)			
MESSALONSKEE PROJECT)			
#L-17585-33-D-N)	WATER QU	ALITY	CERTIFICATION
#r.~17585-32-D-N	(APPROVAL)	ì			

There is a reasonable assurance that Class C dissolved oxygen standards in Messalonskee Stream will be met if the applicant passes a minimum flow of 15 cfs through all project developments, including the Rice Rips bypass, provided the applicant monitor water quality in Messalonskee Stream. The top 0.5 feet of Messalonskee Lake shall be used for generation flows and to augment natural flows during the summer months as necessary.

5. TROPHIC STATE

a. Existing Conditions: The only significant point source discharge to project waters occurs in Rice Rips Lake. The Oakland waste water treatment plant is licensed to discharge 480,000 gallons per day into the impoundment. Currently the plant is providing the equivalent of tertiary treatment for phosphorus removal.

A september 1992 report prepared by Department biologist Jeff Dennis, indicates the Rice Rips impoundment is not meeting classification as a result of algal blooms in the impoundment. The algal blooms are a result of high phosphorus loading from the Oakland treatment plant, internal recycling of phosphorus from the bottom sediments within the impoundment, reduced flushing due to the presence of dams, and algal washout from Messalonskee stream flow (partially controlled by the applicant), and phosphorus loading from urban and agricultural sources in the direct watershed of the impoundment.

Rice Rips Lake does not meet its GPA classification due to eutrophication from phosphorus loading. The eutrophication results in an increasing trophic state. DEA comments that the only other project water classified GPA, Messalonskee Lake, has a stable or decreasing trophic state.

- b. <u>Applicant's Proposals</u>: The applicant proposes to provide a minimum flow of 15 cfs through the Project including the Rice Rips bypass.
- c. <u>Discussion</u>: Department staff comments a minimum flow of 15 cfs should be provided below each of the Messalonskee Stream projects in order to increase the flushing in Rice Rips Lake. This minimum flow should also minimize the effect of internal recycling of phosphorus in Rice Rips Lake. It is likely that implementation of a minimum flow of 15 cfs from the Messalonskee Lake Dam, in combination with the proposed seasonal land application of effluent from the Oakland Waste Water Treatment Plant, will allow Rice Rips Lake to meet its assigned GPA classification.

The Town of Oakland has a pending application with the Department to renew the license for the Oakland Waste Water Treatment Facility. As discussed in Section 4, Dissolved Oxygen, the Town of Oakland is proposing to seasonally land apply the majority of its waste water on land owned by the applicant. As a condition of that license renewal, the Department will be requiring the Town to conduct water quality sampling of Rice Rips impoundment to ensure that Class GPA standards are being met. Sampling shall consist of seasonal sampling of temperature, dissolved oxygen, total phosphorus, chlorophyll a, and Secchi depth. Based on the results of this sampling, the Department reserves the right, after notice and opportunity for hearing, and

CENTRAL MAINE POWER COMPANY	9	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVI	LLE)	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE)	
MESSALONSKEE PROJECT)	
#L-17585-33-D-N)	WATER QUALITY CERTIFICATION
#I-17585-32-D-N (APPROVAL)	i	

upon consideration of the joint responsibility of the Town of Oakland and the applicant, to require structural and/or operational changes at the Oakland Waste Water Treatment Plant and/or the Messalonskee Developments as necessary to meet Class GPA standards.

Therefore, in order to meet class GPA narrative standards, a year-round minimum flow of 15 cfs shall be maintained at the outlet of Messalonskee Lake and from each of the downstream developments. The top 0.5 feet of Messalonskee Lake shall, in addition to being used for generation flows, be used to augment natural flows during the summer months as necessary.

6. FISH RESOURCES

a. Existing Resources: Messalonskee Stream has a warm water fish population which includes black bass, pickerel, perch, and sunfish. The stream also has brown trout which were introduced into the waterway as an experiment by the Maine Department of Inland Fisheries and Wildlife (DIF&W). There are no Federally listed threatened or endangered fish species known to occur within the project area. American shad, an anadromous specie can be expected to utilize some of the habitat in the Union Gas Development tailwater. These fish move up from the Kennebec River where the Maine Department of Marine Resources (DMR) stocks them.

Messalonskee Lake contains the same composition of fish species as Messalonskee Stream with the addition of northern pike, landlocked salmon, and rainbow smelt.

There are no upstream or downstream fishways located at any of the hydroelectric developments along Messalonskee Stream. At the outlet of Messalonskee Lake there is a fish screen installed which prevents fish from passing down into Messalonskee Stream. The screen is owned by the Town of Oakland. The applicant periodically cleans the screen when it becomes clogged with leaves and other debris. When the screen becomes clogged it affects flows into Messalonskee Stream and therefore affects generation. The applicant proposes to continue cleaning the screen as needed.

Based on requests from state fisheries agencies, the applicant conducted several studies aimed at evaluating impacts of project flows and flow fluctuations and impoundment water level practices on fish habitat.

"Fishery Resources of the Messalonskee Project" is presented in Appendix E-IX of the application. Surveys of the impoundments and free flowing stretches of stream were conducted at all five developments. Three sections of the stream noteworthy of discussion are the Rice Rips bypass, the Automatic impoundment, and the stretch of stream below the Union Gas Development. The Rice Rips bypass is approximately 2,400 feet long and receives only leakage flows (estimated at 12-15 cfs) from the dam. The rest of the flow from the dam passes through a penstock prior to reaching the Rice Rips powerhouse. Automatic impoundment is a 4.5 mile riverine stretch which starts below the Rice Rips powerhouse. The stretch below the Union Gas Development is approximately 5,000 feet long before it enters the Kennebec River. All of these areas have been targeted by

CENTRAL MAINE POWER COMPANY	10	MAINE WATER QUALITY PROGRAM;
SIDNEY, BELGRADE, OAKLAND, WATERVII	LE)	FEDERAL CLEAN WATER ACT
KENNEBEC COUNTY, MAINE)	
MESSALONSKEE PROJECT	}	
#L-17585-33-D-N	}	WATER QUALITY CERTIFICATION
#L-17585-32-D-N (APPROVAL)	}	

the Maine Department of Inland Fisheries and Wildlife as providing suitable habitat for adult brown trout. The Automatic impoundment is used by trout during the summer months when water temperatures are too high in the Rice Rips bypass. The area below Union Gas has also been identified by DMR as having habitat for various life stages of American shad.

"Rice Rips Bypass Channel Habitat Based Flow Study" is presented in Appendix E-X of the application. The study evaluated adult brown trout habitat in the 2,400 foot stretch of Messalonskee stream below the Rice Rips Development. Currently the bypass receives only leakage flows from the Rice Rips dam estimated at 12-15 cfs. As discussed below under Existing Management Plans, DIF&W wants to provide flows to optimize adult brown trout habitat during the spring (April 1 - June 15) and fall (Sept 15 - Sept 30) fishing seasons.

Due to the lack of habitat and unsuitable nature of the Oakland Development bypass reach, this area was not studied and no recommendations from the fisheries agencies to provide flows into this reach were made.

By linear measurement, the bypass consists of the following types of habitat: 56.5% riffle; 21.5% pool; and 32.0% riffle/run. The study team evaluated three flows in the bypass: 16.7 cfs, 27 cfs, and 51 cfs. Habitat for this study was based on Weighted Area (WA) which considers both quality and quantity of habitat. Although the study concluded that adult brown trout habitat is maximized at 27 cfs, 16.7 cfs provides approximately 94% of the maximum habitat for adult brown trout.

"Union Gas Instream Flow Study" is presented in Appendix E-XI of the application. The study incorporated the following components: Instream Flow Incremental Methodology (IFIM) study of the free flowing reach below the Union Gas dam; an assessment of habitat duration; and a ramping study. The IFIM assessed the uppermost 1,300 feet of the reach below the dam under a full range of flows (15 cfs-610 cfs). Adult brown trout and spawning and juvenile shad habitat were examined. The IFIM study concluded that adult brown trout habitat below the project was optimized at a flow of 100 cfs.

The ramping study evaluated impacts operational flows were having on fish and other aquatic life below the Union Gas dam. Changes in flow between 100% and 70% gate settings have little impact during both start-up and shut down. However, flow changes between 70% and 0% gate openings during operating shutdown result in an abrupt change in flow with rapid declines in water levels below the project. An area approximately 1/3 acre in size becomes dewatered once the project is shutdown.

b. Existing Management Plans: Since 1986, DIF&W has managed the waters of the Messalonskee Project for an accessible urban brown trout fishery. The two locations of specific interest to DIF&W are the Rice Rips bypass and the Union Gas development tailwater. The program is only experimental and natural reproduction of brown trout is not anticipated in Messalonskee Stream. An evaluation of the program will be conducted by DIF&W in the near future.

CENTRAL MAINE POWER COMPANY	11	MAINE WATER QUALITY PROGRAM;
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- c. <u>Applicant's Proposals</u>: The applicant proposes the following measures to mitigate impacts to or otherwise enhance the fisheries resources of the Messalonskee Project.
 - Providing a year-round minimum flow of 15 cfs below Messalonskee Lake Dam and through all four projects including the Rice Rips bypass;
 - Restricting water level fluctuations of Messalonskee Lake (with cycling) to within 0.5 feet of full pond during the period June 1-August 31, and within 1.0 foot of full pond during the remainder of the year;
 - Maintaining water levels in the Oakland, Rice Rips and Automatic impoundments (operated run-of-river) within 1.0 foot of full pond, year-round; and maintaining water levels in the Union Gas Development (with cycling) to within 1.3 feet of full pond elevation;
 - Continuing to clean the fish screen at the outlet of Messalonskee Lake; and
 - Implementing a new downramping sequence at the Union Gas Development.
- d. <u>Discussion</u>: Based on the results of the bypass study and the IFIM, DIF&W recommends a minimum flow of 25 cfs through the Rice Rips bypass and a minimum flow of 100 cfs or inflow, whichever is less, below each of the projects. DIF&W comments that brown trout will utilize Rice Rips bypass during the spring, early summer, and fall months when water temperatures are cooler. During the summer months the brown trout will probably move into the Automatic impoundment where there is suitable year-round habitat.

As previously discussed in Sections 4 & 5, a minimum flow of 15 is necessary to enhance and maintain chemical water quality in Messalonskee Stream and Rice Rips Lake. It is staff's finding that a flow of 15 cfs is also adequate to protect fish resources in the bypass. It is also staff's finding that a minimum flow does not need to be provided in the Oakland Development bypass.

The Union Gas Project currently operates with a leakage flow of approximately 15 cfs and a maximum flow of 610 cfs. At 15 cfs (leakage) 76% of the peak Weighted Usable Area (WUA) for brown trout is available and at 600 cfs (maximum station discharge) 73% is available. American shad habitat is optimized at a flow of approximately 300 cfs. During normal station operation, 73% to 100% of WUA for brown trout is realized at all times. This percentage of WUA will increase with the implementation of a 15 cfs minimum flow during the summer months.

The applicant's proposals to maintain water levels in Messalonskee Lake, Rice Rips Lake, and the Oakland, Automatic, and Union Gas impoundments will be beneficial to the fish resources of the project waters.

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The applicant reviewed the results of the downramping study that was conducted below the Union Gas development and has proposed to implement a new downramping sequence at the project. As inflow to the Union Gas impoundment decreases, the wicket gate openings close from 100% open to 70%. The gates are held at 70% until the pond drops 0.7 feet. At this level, the unit gradually downramps at 1% gate closure/minute, from 70% down to about 40% while the pond drops the additional 0.6 feet. This sequence allows ample time for fish moving in the area to redistribute themselves while water levels decrease in the tailrace. State fisheries agencies agree with the applicant's proposal. DMR and DIF&W are in agreement that this new sequence will minimize fish stranding.

The applicant's proposals to provide a minimum flow of 15 cfs below all of the project developments, including 15 cfs in the Rice Rips bypass, restrict water level fluctuations in Messalonskee Lake, Rice Rips Lake, and the Oakland, Automatic, and Union Gas impoundments, and to implement a new downramping sequence at the Union Gas development appear to be adequate to achieve and maintain suitability of the project waters affected by the project as habitat for fish and other aquatic life.

7. WETLANDS AND WILDLIFE

a. Existing Resources: In January of 1991, the applicant prepared a report entitled "Wetlands, Botanical and Wildlife Resources of the Messalonskee Project". This report is presented in Appendix E-VII of the application. The purpose of the study was to document the presence of these resources within the project, evaluate the effects of water level management on those resources, and evaluate opportunities for resource enhancement.

The most significant resources identified within the project area are in and surrounding the wetlands at the southern end of Messalonskee Lake. There are approximately 700 acres of inland deep water marsh and approximately 500 acres of oligotrophic lakeside bog. Loons, mink, river otter, muskrat, and beaver all utilize these wetlands for food and nesting habitat. The wetland is also recognized as a valuable migratory resting and staging area for waterfowl. The southern end of the lake is a Registered Critical Area due to the presence of the uncommon black tern. It is reported that this area is the largest and only continuously used nesting site in Maine for this bird.

The only rare plant species documented during the study was the rush aster. This was also found at the southern end of Messalonskee Lake.

b. <u>Applicant's Proposals</u>: Under normal operating conditions, the applicant proposes to restrict water level fluctuations in Messalonskee Lake to within 0.5 feet of full pond during the summer months and within 1.0 foot of full pond the remainder of the year to provide flood control benefit.

The Oakland, Rice Rips, and Automatic impoundments will continue to be operated to restrict water level fluctuations to within 1.0 foot of full pond. Union Gas will continue to be operated to restrict water level fluctuations to within 1.3 feet of full pond elevation.

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c. <u>Discussion</u>: DIF&W's overriding concern is providing and maintaining stable water levels to insure maximum waterfowl nesting and production. Of primary concern are the wetlands and water levels in Messalonskee Lake. DIF&W has also raised questions regarding the apparent loss of emergent marshland and whether declines in uncommon black tern numbers are related.

In response to DIF&W's comments, the applicant has prepared the "Messalonskee Lake Waterfowl Management Plan". The plan provides for management and maintenance of waterfowl nesting and brood-rearing habitat within the project area. The plan includes a specific survey of black tern use in Messalonskee Lake and provisions for consulting with state and federal resource agencies. The applicant proposes to conduct wetland assessments and waterfowl surveys within 2 years of the issuance of a new FERC license for the project. DIF&W agrees with the applicant's proposed Waterfowl Management Plan.

The applicant's proposals to restrict water level fluctuations in all the project impoundments and manage waterfowl through the "Messalonskee Lake Waterfowl Management Plan" appear to be adequate to protect and maintain wetlands and wildlife in Messalonskee Lake and all other project impoundments.

8. RECREATION IN AND ON THE WATER

a. Existing Facilities and Use: Messalonskee Lake receives the most recreational use of any of the other water bodies within the project boundaries. Existing recreational facilities include various hard-surface boat launch facilities on Messalonskee Lake; day-use sites; unimproved fishing sites along Messalonskee stream; a carry-in boat access facility at North Street Park in Waterville; several informal carry-in access sites along the stream; two nature trails below the Automatic project; and the Couture Field Boat Launch, a hard-surface boat ramp installed by the applicant in 1989 on the Kennebec River near the Union Gas Development.

Recreational use in the project area is significant. Throughout the year the waters of the project receive use by boaters, swimmers, water skiers, fisherman, snowmobilers, cross county skiers, ice fishermen, hunters, and trappers.

b. Existing Management Plans: In 1989, the applicant developed a Comprehensive Recreational Facilities Plan which was designed to meet current and anticipated public recreational needs at CMP-owned hydro and water storage projects. The plan analyzes recreational needs on a local and regional basis.

The Maine Bureau of Parks and Recreation's 1988 Statewide Comprehensive Outdoor Recreation Plan (SCORP), has identified unmet recreational needs in this area of the state. Some of those needs include horseback riding, camping, ski touring, picnicking, bicycling, inland swimming, nature interpretation, and boat access.

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#L-17585-32-D-N (APPROVAL)	ì	

- c. <u>Applicant's Proposals</u>: The applicant proposes the following recreational enhancements to the project area:
 - Maintaining the water level of Messalonskee Lake to within 0.5 feet of full pond throughout the summer recreation season, and to within 1.0 feet during the winter months;
 - Providing a minimum flow of 15 cfs through the Rice Rips bypass to support DIF&W's efforts to develop a recreational fishery for adult brown trout;
 - Developing a new improved picnic site/day use area below the Messalonskee Lake Dam (Site 5 on Exhibit 7);
 - Installing an informational/interpretive sign at the Oakland Development, and installing project identification signs at all of the projects;
 - Investigating the need for establishing a "green belt/multi use" area along the east side of Messalonskee Stream between the Oakland Development and the Rice Rips Development;
 - Developing a carry-in site at Colby College (Site 8 on Exhibit 7);
 - Evaluating the feasibility of creating a carry-in access site to the Rice Rips impoundment; and
 - Installing a hard surface boat ramp on the Kennebec River (Site 12 on Exhibit 7). This was completed by the applicant in 1989.
- d. <u>Discussion</u>: The Maine Department of Conservation (DOC) comments that the applicant's recreational proposals will enhance public use opportunities within the project area. DOC also comments the applicant should monitor water oriented public use and review recreation development potential needs with DOC in accordance with FERC Form 80 requirements.

The applicant's proposals, as outlined above, appear to be adequate to achieve and maintain suitable use of waters affected by the project for recreation in and on the water, provided a minimum flow of 15 cfs is maintained in the Rice Rips bypass during the period June-September to establish a recreational fishery for brown trout.

8. HYDROELECTRIC POWER GENERATION

- a. Existing Energy Generation: The project generates an average of 22,999,000 kilowatt-hours (kWH) of electricity annually. This is equivalent to the energy that would be produced by burning 43,807 barrels of oil or 10,657 tons of coal each year. Project power is fed into the transmission and distribution system of the applicant for use by its customers.
- b. Existing Energy Policies/Plans: The State of Maine has developed a comprehensive energy plan (Final Report of the Commission on Comprehensive Energy Planning, May 1992) with the goal of meeting the State's energy needs with reliable energy supplies at the lowest possible cost, while ensuring that energy production and use are

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SIDNEY, BELGRADE, OAKLAND, WATERVI	LLE)	FEDERAL CLEAN WATER ACT
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#L-17585-32-D-N (APPROVAL))	-

consistent with a healthy environment and a vibrant economy. Specifically, the Plan establishes the following targets for Maine's energy future:

- Reduce the State's level of dependence on oil from 50 percent to at least match the national average of 43 percent by the year 2000, with further reductions to at least the 30 percent level by 2010:
- Increase the percentage of renewable energy resources in the State's primary energy mix from 30 percent to 40 percent by the year 2000, and to at least 50 percent by 2010;
- Increase statewide energy efficiency relative to 1990 levels by 25 percent by the year 2000 and by at least 50 percent by 2010; and
- Work to stabilize long-term energy prices, in balance with Maine's other energy-related goals, with a specific emphasis on enhancing Maine's competitive position relative to New England and the U.S.

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

- c. <u>Applicant's Proposal</u>: The applicant proposes to provide a year-round minimum flow of 15 cfs below each of the project developments including the area known as the Rice Rips bypass. The agency recommended year-round minimum flow of 100 cfs or inflow below each of the projects would result in a 22% loss in generation annually.
- d. <u>Discussion</u>: As proposed, the Messalonskee Lake Project will continue to provide cost-effective indigenous renewable electricity to the customers of Central Maine Power Company.

BASED on the above Findings of Fact, and the evidence contained in the application and supporting documents, and subject to the Conditions listed below, the Department makes the following CONCLUSIONS:

- 1. The continued operation of the project will result in the affected surface waters being suitable for all Class GPA and Class C designated uses provided that:
 - A minimum flow of 15 cfs is passed from the Messalonskee Lake Dam and all other downstream developments, including 15 cfs in the Rice Rips bypass;
 - ii. Water levels in Messalonskee Lake are maintained within 0.5 feet of full pond during the period June 1-August 31 and within 1.0 feet during the remainder of the year (with cycling); water levels in Oakland, Rice Rips, and Automatic impoundments are maintained within 1.0 foot of their respective full pond elevations (operated as run-

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of-river); and water levels in the Union Gas impoundment are maintained within 1.3 feet of full pond elevation (with cycling);

- iii. The new downramping sequence is implemented below the Union Gas development;
- iv. The "Messalonskee Lake Waterfowl Management Plan" is implemented; and
- v. Recreational facility improvements/enhancements are made in accordance with the applicant's proposals.
- 2. The continued operation of the project will result in Class C dissolved oxygen standards being met in the affected waters provided that a minimum flow of 15 cfs is passed from all project developments, and the applicant conduct dissolved oxygen sampling in Messalonskee Stream.
- 3. The continued operation of the project will result in Class GPA and Class C narrative standards for aquatic life being met provided that a minimum flow of 15 cfs is provided below all project developments including 15 cfs in the Rice Rips bypass, water levels in Messalonskee Lake are maintained within 0.5 feet between June 1-August 31, Oakland, Rice Rips, and Automatic impoundments are maintained within 1.0 feet of their full pond elevations, and Union Gas is maintained within 1.3 feet of full pond elevation.
- 4. The continued operation of the project will comply with the State's antidegradation policy provided that the project is modified and operated in accordance with the conclusions reached above.

THEREFORE, the Department GRANTS certification that there is a reasonable assurance that the continued operation of the Messalonskee Project, as described above, will not violate applicable water quality standards, SUBJECT TO THE FOLLOWING CONDITIONS:

1. MINIMUM FLOWS

- A. Except as temporarily modified by approved maintenance activities, emergencies beyond the applicant's control, as defined below, or upon mutual agreement between the applicant and Department, the applicant shall discharge an instantaneous minimum flow of 15 cfs through all project developments, including the Rice Rips bypass, at all times.
 - The top 0.5 feet of Messalonskee Lake shall, in addition to being used for generation flows, be used to augment natural flows to meet the 15 cfs minimum flow requirement.
- B. Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other abnormal condition, and orders from local, state, or federal law enforcement or public safety authorities.
- C. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans for providing and

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monitoring the minimum flows required by Part A of this condition. These plans shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality.

2. WATER LEVELS

A. Except as temporarily modified by (1) approved maintenance activities (2) inflows to the project area, (3) by operating emergencies beyond the applicant's control, as defined below, (4) by flashboard failure, or (5) upon mutual agreement between the applicant and Department, the following water levels shall be maintained:

Messalonskee Lake Within 0.5 feet of full pond from 6/1-(cycling) 8/31 and within 1.0 feet from 9/1-5/31;

Oakland, Rice Rips, and Within 1.0 feet of full pond elevations; Automatic (run-of-river)

Union Gas (cycling) Within 1.3 feet of full pond elevation.

- B. Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other temporary abnormal condition, and orders from local, state, or federal law enforcement or public safety authorities.
- C. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit plans for providing and monitoring the water levels in each of the project impoundments as required by Part A of this condition. These plans shall be reviewed by and must receive approval of the DEP Bureau of Land and Water Quality.

3. WATER QUALITY SAMPLING

- A. The applicant shall sample dissolved oxygen, temperature, and chlorophyll a in Messalonskee Stream. The applicant shall also record flow out of the Messalonskee Lake dam and identify periods of generation during sampling. The Department will review the results of this sampling in conjunction with sampling being performed by the Oakland Waste Water Treatment Plant in Rice Rips Lake.
- B. Within 6 months following the issuance of a new FERC license for the project, the applicant shall submit a water quality sampling plan to the Department for review and approval.
- C. If it is determined, based on a review of the sampling discussed in Part A of this condition and the sampling performed by the Oakland Waste Water Treatment Plant, that Messalonskee Stream is not meeting Class C standards for dissolved oxygen or Rice Rips Lake is not meeting Class GPA standards for trophic state, the Department reserves the right, after notice and opportunity for hearing, and upon consideration of the joint responsibility of the Town of Oakland and the applicant, to require such reasonable structural and/or operational changes to the Oakland Waste Water Treatment Plant or the Messalonskee Project as are deemed necessary to meet applicable Class C or Class GPA standards, except that no changes to the Messalonskee

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Project will be required until at least 5 years have passed from the effective date of a new FERC license for the project.

4. DOWNRAMPING

The applicant shall implement the new downramping sequence at the Union Gas development as outlined in the supporting documentation for the application for 401 certification.

5. WATERFOWL NESTING

- A. The applicant shall implement the provisions of the "Messalonskee Lake Waterfowl Management Plan" and begin conducting wetland assessments and waterfowl surveys within 2 years of the issuance of a new FERC license for the project.
- B. The applicant shall consult with the Maine Department of Inland Fisheries and Wildlife regarding the findings of the wetland assessments and waterfowl surveys. The results of these assessments and the applicant's proposals for maintaining or enhancing wetlands and waterfowl nesting shall be submitted to the DEP Bureau of Land and Water Quality. After reviewing the results, any applicant proposals, and DIF&W comments, the Department shall order such continuation or modification of water levels established by this approval as is deemed necessary and appropriate to protect nesting waterfowl.

6. RECREATIONAL FACILITIES

- A. The applicant shall maintain and improve recreational facilities and public access within the project boundaries including: installing project identification signs at all projects, evaluating the feasibility of a 'green belt/multi use' area between the Oakland and Rice Rips Development, improving parking at the Rice Rips Development, evaluating the feasibility of creating a carry-in access site to the Rice Rips impoundment, and improving parking at the Automatic Development.
- B. The applicant shall, in accordance with the schedule established in a new FERC license for the project, submit a schedule for implementing Part A of this condition. This schedule shall be reviewed by the Department of Conservation and the DEP Bureau of Land and Water Quality and must be approved by the DEP Bureau of Land and Water Quality.

7. LIMITS OF APPROVAL

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

8. COMPLIANCE WITH APPLICABLE LAWS

CENTRAL MAINE POWER COMPANY	19	MAINE WATER QUALITY PROGRAM:
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MESSALONSKEE PROJECT)	
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The applicant shall secure and appropriately comply with all applicable federal, state and local licenses, permits, authorizations, conditions, agreements and orders required for the operation of the project.

9. EFFECTIVE DATE

This water quality certification shall be effective on the date of issuance of a new hydropower project license by the Federal Energy Regulatory Commission (FERC) and shall expire with the expiration of the FERC license.

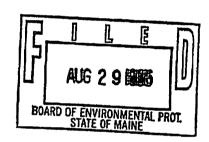
DONE AND DATED AT AUGUSTA, MAINE, THIS 28 DAY OF AUGUST, 1995.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

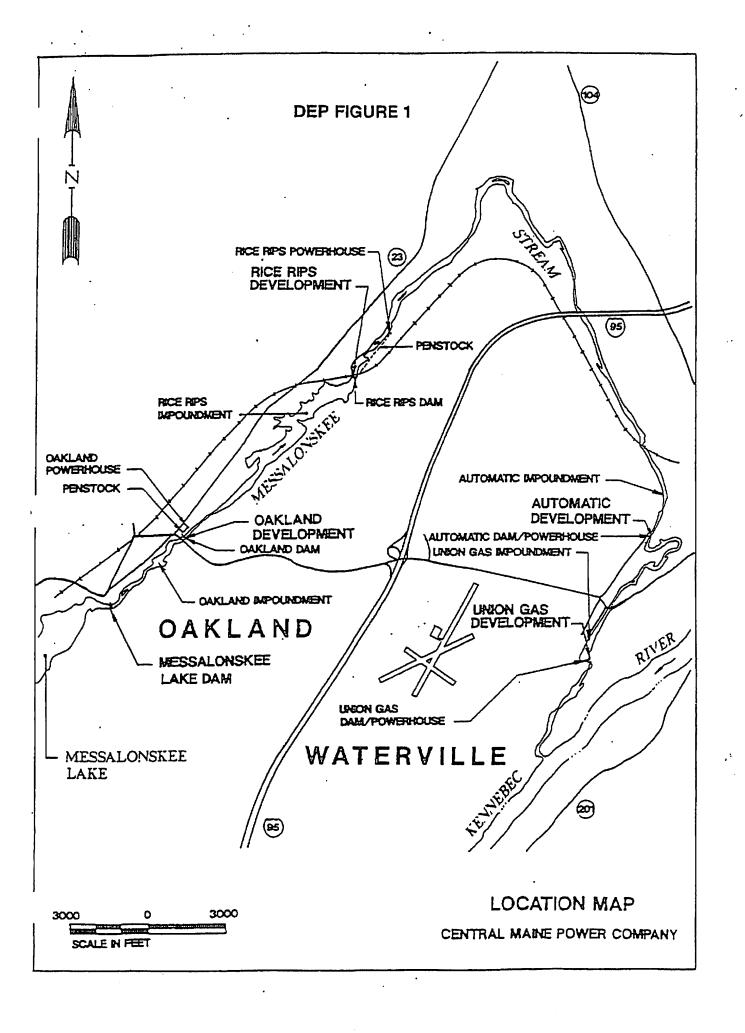
By: Mellie William, Commissioner

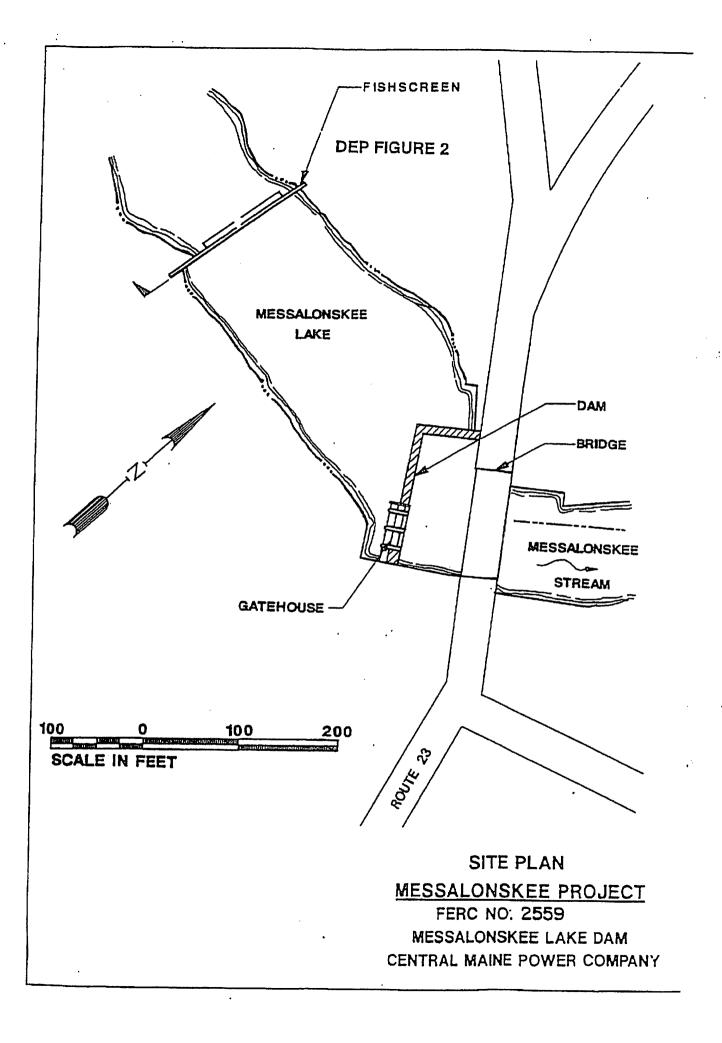
PLEASE NOTE ATTACHED SHEET FOR APPEAL PROCEDURES

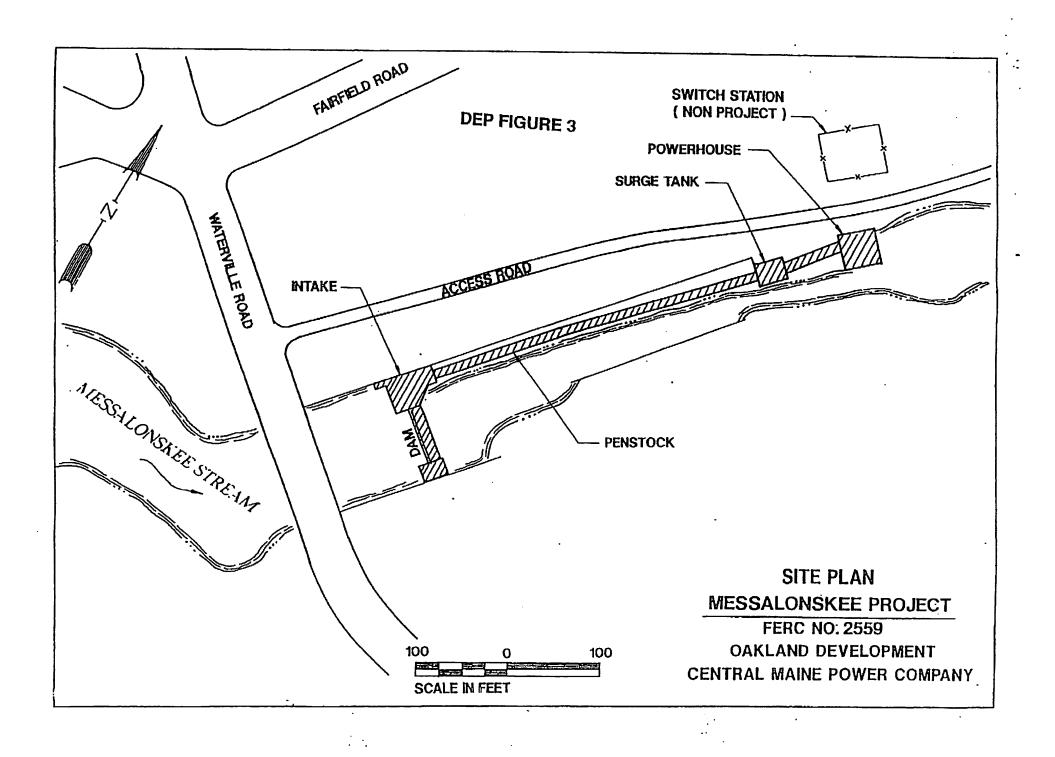
Date of initial receipt of application 11/25/91. Last date application withdrawn and refiled 11/16/94. Date application accepted for processing 11/16/94.

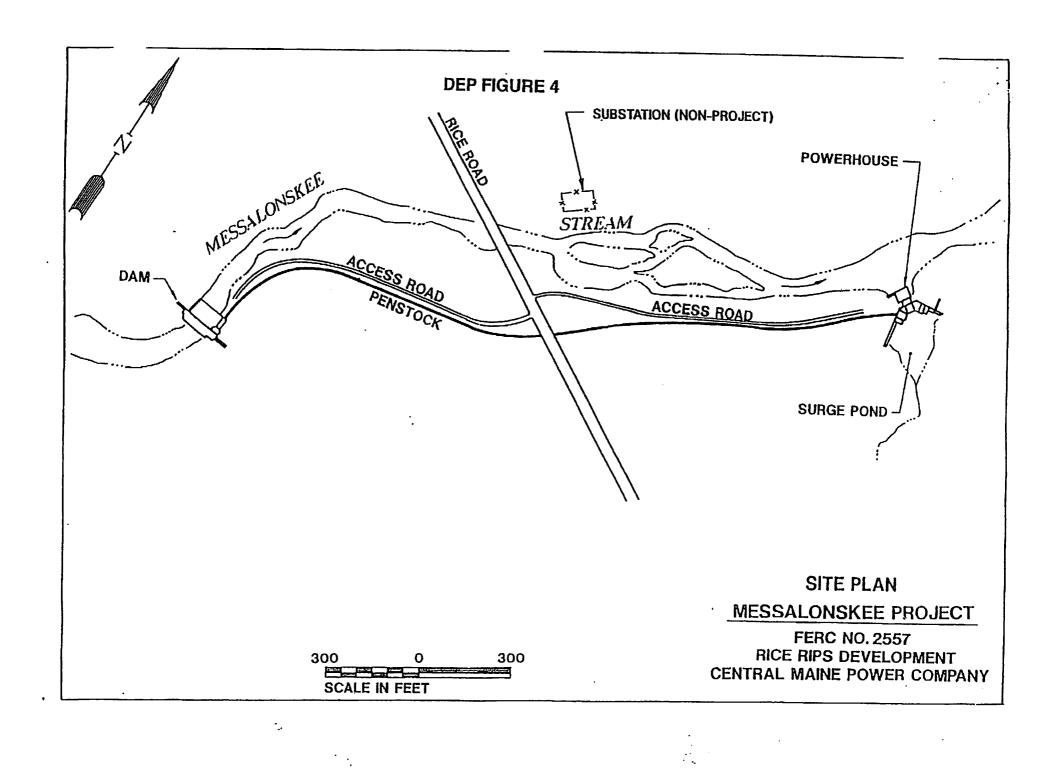


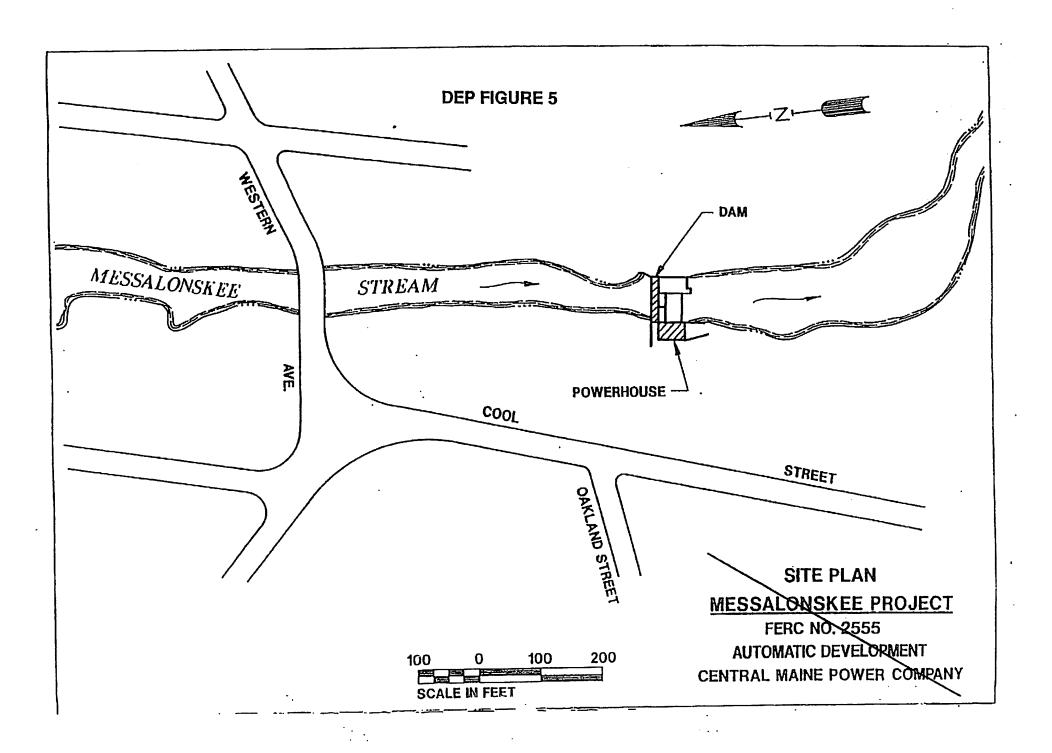
Date filed with the Board of Environmental Protection

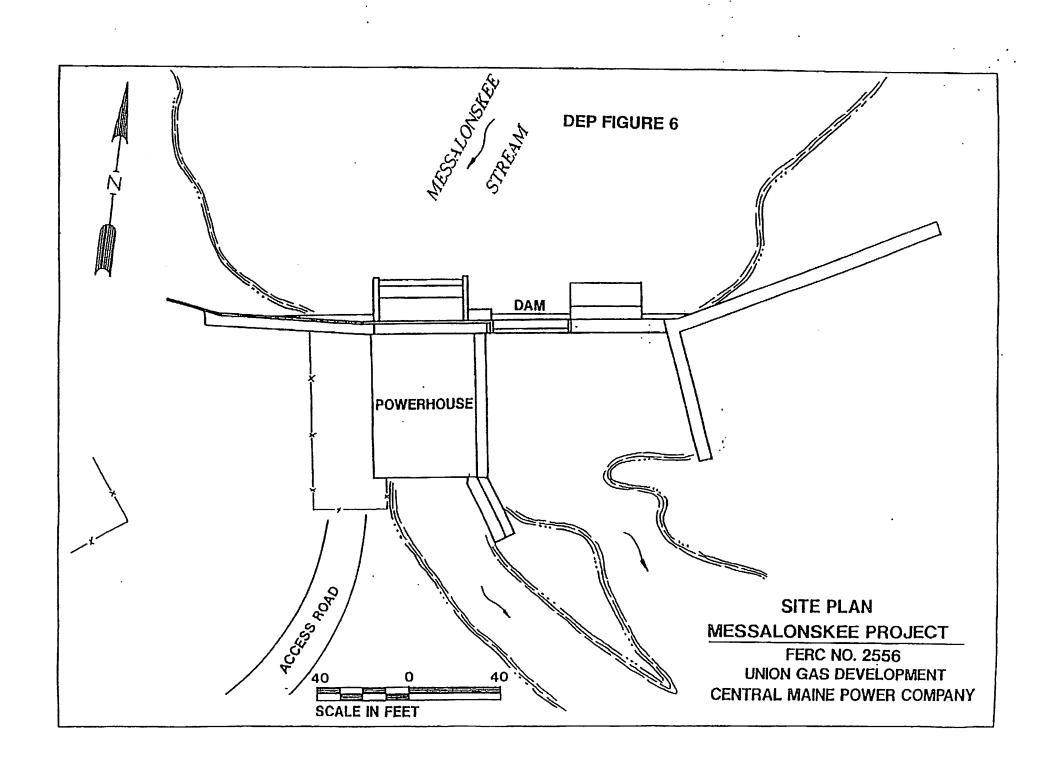


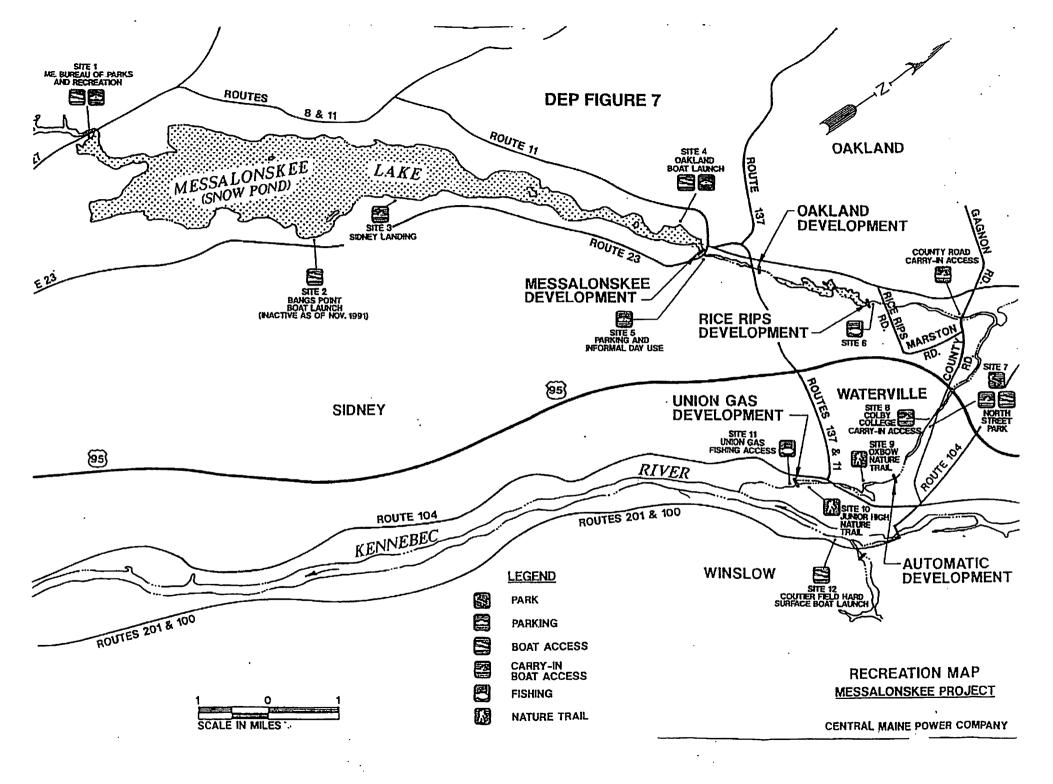












APPENDIX B

Oakland Hydroelectric Project Water Quality

Appendix B

Oakland Hydroelectric Project Water Quality

The Project received a 401 Water Quality Certificate (WQC) from the State of Maine Department of Environmental Protection ("MDEP") on August 29, 1995 (see Appendix A-1). The WQC noted that waters from the outlet of the Messalonskee Lake to its confluence with the Kennebec River including all waters within the parameters of the Oakland Project are currently designated Class C by the MDEP. Class C waters are of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, and navigation; and as habitat for fish and other aquatic life. The project is required to maintain a minimum flow of 15 cfs below the project in order to minimize the effect of internal recycling of phosphorus.

The Project received a Maine Pollutant Discharge Elimination System Permit and Maine Waste Discharge License from the Department of Environmental Protection, Bureau of Land and Water Quality on January 27, 2009 (Permit No. ME0001163) and remains in compliance with all terms and conditions of said permit (see appendix B-1).

APPENDIX C

Oakland Hydroelectric Project Fish Passage and Protection

Appendix C

Oakland Hydroelectric Project

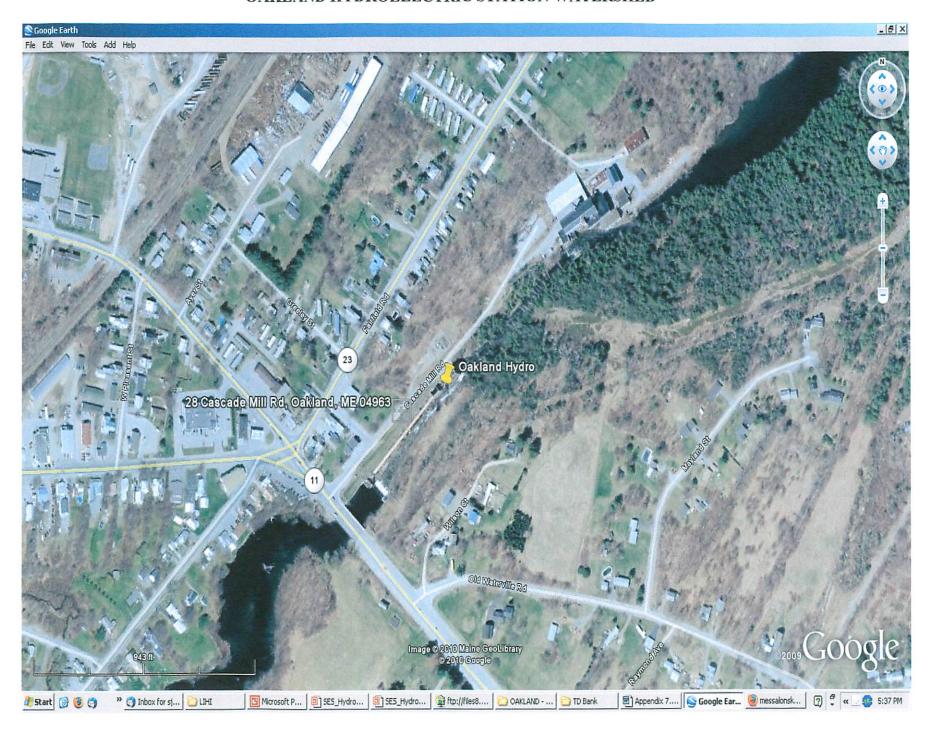
Fish Passage and Protection

There have been no recommendations made by any fishery agency to provide fish passage facilities at the project. As a condition of issuance, the FERC License requires the Oakland project to comply with any subsequent terms and conditions that Federal and State fish and wildlife agencies determine appropriate for the project. The FERC reserved the right to revoke the license if any term or condition of the license is violated.

APPENDIX D-1

Oakland Hydroelectric Station Watershed

OAKLAND HYDROELECTRIC STATION WATERSHED



APPENDIX E-1

Maine Department of Inland Fisheries and Wildlife response to Threatened and Endangered Species inquiry to be forwarded to the Low Impact Hydropower Institute upon receipt.	

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APPENDIX E-2

U.S. Fish and Wildlife response to Threatened and Endangered Species inquiry to be forwarded to the Low Impact Hydropower Institute upon receipt.

APPENDIX G-1

FERC Recreation Report

Licensed Hydropower Development Recreation Report

Form Approved OMB No. 1802-0106 Expires: 09/30/2010 Burden 3.0 hours

This form collects data on recreational resources at projects licensed by the Federal Energy Regulatory Commission under the Federal Power Act (18 USC 791a-825r). This form must be submitted by licensess of all projects except those specifically exempted under 18 CFR 8.11 (c). Submit this form on or before April 1, 2009. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2015, 2021, etc.). Submit an original and two copies of the form to the Commission's Regional Office (specified in the cover letter to this form). The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing date sources, gathering and maintaining the data needed, and completing the collection of information. Please send your comments about this burden estimate, or any other aspect of this collection of information, including suggestions to reduce the burden, to: Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 and the Office of Information and Regulatory Affairs, Desk Officer-FERC, Office of Management and Budget, Washington, D.C. 20503.

Failure to comply with this collection of information will not result in a penalty, if you were unaware that a valid control number assigned by the Office of Management and Budget must be displayed on this collection of information.

Instructions:

- a. All data reported on this form must represent recreational facilities and services located within the development/project boundary.
- b. To ensure a common understanding of terms, please refer to the Glossary on page 3.
- c. Report actual data for each item. If actual data are unavailable, then please eatimate.

Schedule 1. General Information

1. Licensee Name: Syr	1. Licensee Name: Synergics 8		8. Reservoir Surface Area at Normal Pool (acres): 3,600.00	
2. Project Name: Oakland		9. Shoreli	ne Miles at Normal Pool: 33.00	
3. Project Number: 255	56	10. Perce	nt of Shoreline Safely Accessible to the General Public by rel without Trespessing: 40.00	
4. Development Name:	Messalonskee Lake	Land Hav	er without Trespassing: 40.00	
	oject Traverses (List state with largest area /project boundary first):	11. Data Collection Methods (enter percent for each method used; total must equal 100%):		
5. State #1: ME 6. State #2;		30.00 traffic count/trail count attendance records		
			ff observation	
7. Type of Project Licen	se: Major 🔀		tor assessment Imate	
(check one)	Minor			
For the provious calend	ar year, aniar only the licensee's enguel more	olional con	struction, operation, and maintenance costs for the	
development (project).	Also, enter the corresponding annual recreation	nai revenue	struction, operation, and maintenance costs for the is.	
Licensee's Annual Recreation Costs and Revenues (In Whole Dollars)				
Item	Construction, Operation and Maintenance	Costs	Recreation Revenues for Calendar Year	
12. Dollar Values	\$3,500.00		\$0.00	
13. Length of Recreation Summer: From (MM/DD) <u>05/23</u> To <u>09/07</u> Wint		M/DD) 12/01 To 04/01	
Period	Number of visits to all recreational areas at	developmen	Vproject (in Recreation Days)	
	Annual Total		Peak Weekend Average	
14. Daytime	82,828.00		1,309.00	
15. Nightlime	0.00		0.00	
Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided here! are true, complete, and accurate.				
ARTHUR HAGOOD VICE PRESIDENT 410-268-8820				
I Maldand	affit		Acon Codo/Ohogo No	

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Reporting Year Ending

Fage 2 of 3

Licensed Hydropower Development Recreation Report

Federal Energy Regulatory
Commission (FERC)

PERC Form 80

Schedule 2. Inventory of Recreational Resources

16. Enter data for each Recreational Resource Type (a). For Facility Capacity (f), of total available resources (b) + (c), compare the average that overall level of use. Do not consider peak weekend use (see Glossary). For example, if all available Boat Ramps are used to half capacity during non-peak weekend days, enter 50%. For all available Boat Ramps that are used beyond their combined capacity, enter the appropriate percentage above 100.

	IIII KARANA MARKATA				Other - such as informal/dispersed camping areas, unimproved trails, etc. (specify):
09		7		ε	Winter Sports. Any facility or site providing sports like skiing, sledding, ice skailing, or ice fishing.
i					usually require registration or advance reservation.
	Acres				Group Camps. Camping areas which are equipped with facilities to accommodate use by the general public. These areas
	60100			ľ	persons or groups (scout camps, military base recreation camps, church camps, handicapped children camps).
	sensA				Organizational Camps. Camping areas that are maintained and operated by a specific entity but which may be used by other
	Sense				OT RV use. This category does not include sites within group camps.
					TentTrailenRV Sites. The total number of sites within Camping Areas that have been specifically developed for tent, trailer,
	Acres				Camping Areas/(Campgrounds). Areas containing two or more campsites, tent sites, or traiter/recreational vehicle (RV) sites which accommodate overnight camping. This category does not include group camps.
	HIGHER BONNEY STREET BOTH				Cottage/Cabin Sites. Recreational dwellings which are seasonally rended by the public for recreational purposes.
	SenoA				Golf Courses. All types of golf areas, except ministure golf.
Ot	3600 Acres			ı	Hunding Areas. Pubic or private areas open to the general public for hunding.
	Acres				Overhooks. Public areas to view natural areas/project features (e.g., pull-offs or vistas).
					objects, structures, sftes, areas, activities, artifacts, and materials.
					Interpretive Displays. Facilities (exhibits and museums) which describe or explain archaeological, historic, or prehistoric
					development project, its operation, recreational faculties, and related items of interest.
					Visitor Centers. Redibles located in a klosk, pavilion or similar structure from which persons may obtain information about the
					The viewing of wildlife in their natural habitat
	Seres				Wildlife Areas, Natural areas and reserves specifically created and managed for the protection and propagation of wildlife and
SZ	l l	,		ı	includes a picinic table and in some cases cooking grills, trash receptacles, and a parking area.
	Acres				Picnic Areas. Areas designated and maintained for picnicking and which contain one or more picnic sites, each of which
\ <u>\$</u> 2		l l		i	swim steas, parking, and sanitation (scilities) are available.
	SenoA				Swimming Areas, Sites providing access to development/project waters where swimming facilities (bath houses, designated
	1				cause bougades:
	SeliM				ste designated according to type of use (hiking, bridle, trail bikes, snow mobiles, cross-country skiing). This category excludes
SZ	Acres	ı		l	Trails, Improved pathways used for non-automobile recreational travel which (a) can be located on a reference map, and (b)
	1			_	Playground Areas. Have playground equipment, game courts/fields, jogging backs, etc.
SY.		L		L	boat ramps). Individual factites within each park should be reported under the appropriate resource type (e.g. playground areas, picnic areas, etc.)
}	Sense	•		,	Parks. Designated areas which usually contain multiple use facilities (e.g., picnic sites, playgrounds, swimming beaches, and
					exchades tallwaser rishing racifines.
					Fishing Plers, Structures which are installed and maintained in development/project waters specifically for fishing. This code
	注题的图像图像图像图像图像图像图像图像图像图像图像图像图像图像图像图像图像图像图像				(silwater Hahing Facilities, Platforms, walkways, or similar structures to facilitate below-dam fishing.
i					csuoes; sud the improved, designated, and maintained trails connecting such sites.
	seliM				Canoe Portages. Site located above and below a dam, diversion, or other obstruction where persons can launch and take out
	THE REPORT OF THE PERSON NAMED AND THE PERSON NAMED				White Water Boating, Access areas below a dam that can be used for raffing/kayaking.
	SenoA				storage of boats, and which may rent boats and equipment, or sell bait or food.
					Marinas. Public and Private facilities on or adjacent to the development project waters for the docking, fueling, repair and
92		7		ε	designated boat launch areas at one time.
	PURCHASING STRUGGENERA PURCHASING STRUGGENERA			<u> </u>	Bost Launch Lanes. The number of lanes are determined by the total number of boats that can be launched easily at the
SY.		2		ε	compacted gravel or concrete surfaces, and (c) usually have adjacent parking lots.
	THE REPORT OF THE PROPERTY OF THE PARTY OF T				Bost Launch Areas. Introved areas having one or more boat launching lanes and (a) are usually marked with signs, (b) have
52				.	waters (including waters below a dam) without trespassing on other property. Such areas can be used for launching boats, fishing, swimming, or other water recreational purposes.
]	ĺ	Access Areas. (No Facilites). Unimproved but well-known/popular sites which can be used to reach development/project waters (including waters lend as a dam) without trespector on other property. Such assess one he used for length and the property of the
		(p)			Access Areas (No Earlither) Heimenbad but until transfer and a control of the con
		Resonces		}	
		Approved	(c) 99 ⁻	(d) 9의귀	(2)
RISKIN MENNEN	HANNERS AND CHRISTIAN	No. FERC	User	User	(8)
(f) (frecent)	(a)				Recrestional Resource Type
Facility Capacity	seroA\zeliM	urces	ot Available Resc	.oN	
,dillog Z	letoT				

Licensed Hydropower Development Recreation Report

Page 3 of 3

Glossary of FERC Form 80 Terms

Available Resources. Quantifies the availability of natural or man-made property or facilities for given recreational resource type. This includes all recreational resources available to the public within the development/project boundary. The resources are broken into the following categories:

User Free (Schedule 2, column b) - Those resources within the development/project that are free to the public;

User Fee (Schedule 2, column c) - Those resources within the development/project where the licensee/facility operator charges a fee;

FERC Approved Resources (Schedule 2, column d) - Those resources within the development/project that are FERC approved. This includes specific recreation amenities, facilities, or sites required by the Commission in the license or license amendment document, including an approved recreation plan or report. This number does not necessarily have to equal the sum of user free and user fee resources.

Development. The portion of a project which includes:

- (a) a reservoir; or
- (b) a generating station and its specifically-related waterways.

Exemption from Fiting. Exemption from the filing of this form granted upon Commission approval of an application by a licensee pursuant to the provisions of 18 CFR 8.11(c).

General Public. Those persons who do not have special privileges to use the shoreline for recreational purposes, such as waterfront property ownership, water-privileged community rights, or renters with such privileges.

Licensee. Any person, state, or municipality licensed under the provisions of Section 4 of the Federal Power Act, and any assignee or successor in interest. For the purposes of this form, the terms licensee, owner, and respondent are interchangeable *except where*:

- (a) the owner or licensee is a subsidiary of a parent company which has been or is required to file this form; or
- (b) there is more than one owner or licensee, of whom only one is responsible for filing this form. Enter the name of the entity that is responsible for filing this report in Schedule 1, Item 2.1.

Peak Use Weekend. Weekends when recreational use is at its peak for the season (July 4th weekend and other holiday weekends). On these weekends, recreational use may exceed the capacity of the area to handle such use.

Major License. A license for a project of more than 2,000 horsepower (1.5 megawatts) installed capacity.

Minor License. A license for a project of 2,000 horsepower (1.5 megawatts) or less installed capacity.

Recreation Day. Each visit by a person to a development (as defined above) for recreational purposes during any portion of a 24-hour period.

Revenues. Income generated from recreation facilities at project development. Includes fees for access or use of area.

Licensed Hydropower Development Recreation Report

Form Approved OMB No. 1902-0106 Expires: 09/30/2010 Burden 3.0 hours

This form collects data on recreational resources at projects ilcensed by the Federal Energy Regulatory Commission under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). Submit this form on or before April 1, 2009. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2015, 2021, etc.). Submit an original and two copies of the form to the Commission's Regional Office (specified in the cover letter to this form). The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Please send your comments about this burden estimate, or any other aspect of this collection of information, including suggestions to reduce the burden, to: Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 and the Office of Information and Regulatory Affairs, Desk Officer-FERC, Office of Management and Budget, Washington, D.C. 20503.

Failure to comply with this collection of information will not result in a penalty, if you were unaware that a valid control number assigned by the Office of Management and Budget must be displayed on this collection of information.

instructions:

- a. All data reported on this form must represent recreational facilities and services located within the development/project boundary.
- b. To ensure a common understanding of terms, please refer to the Glossary on page 3.
- c. Report actual data for each item. If actual data are unavailable, then please estimate.

Schedule 1. General Information

1. Licensee Name: Syr		P Person	ois Cardona Aron at Named Dad (arres), 40.00				
	*** ****	8. Reservoir Surface Area at Normal Pool (acres): 10,00					
2. Project Name: Oakl	and	9. Shoreline Miles at Normal Pool: 1.00					
3. Project Number: 2556			10. Percent of Shoreline Safely Accessible to the General Public by				
4. Development Name: Oakland			Land Travel without Trespassing: 3.00				
States Development/Project Traverses (List state with largest area within the development/project boundary first):			11. Data Collection Methods (enter percent for each method used; total must equal 100%):				
5. State #1: ME 6. State #2:			traffic count/trail count altendance records 100.0f staff observation				
7. Type of Project Licen (check one)	Minor	visitor assessment estimate					
For the previous calend development (project).	Also, enter the corresponding annual recreation	nal revenue					
Item	Licensee's Annual Recreation Costs and Revenues (in Whole Dollars)						
	Construction, Operation and Maintenance	Costs	Recreation Revenues for Calendar Year				
12. Dollar Values	\$900.00	\$0.00					
13. Length of Recreation Summer: From (MM/DD) 05/23 To 09/07 Wint		M/DD) 12/01 To 04/01				
Period	Number of visits to all recreational areas at	developmen	nent/project (in Recreation Days)				
	Annual Total		Peak Weekend Average				
14. Daytime	3,058.00		98.00				
15. Nighttime	0.00		0.00				
Respondent Certificati	on: The undersigned certifies that he/she exa	mined this r	report; and to the best of his/her knowledge, all data provided here				

Respondent Certification: The undersigned certifies that he/she examined this report; and to the best of his/her knowledge, all data provided herein are true, complete, and accurate.

ARTHUR HAGOOD VICE PRESIDENT 410-288-8820
Title 3-27-69
Date Signalure Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Page 2 of 3

Licensed Hydropower Development Recreation Report

Schedule 2. Inventory of Recreational Resources

16. Enter data for each Recreational Resource Type (a). For Facility Capacity (f), of total available resources (b) + (c), compare the average total amount of weekend use (during the recreation season reported on Schedule 1, Item 13) with the total combined capacity of these resources to handle such use and enter a percentage that indicates their overall level of use. Do not consider peak weekend use (see Glossary). For example, if all available Boat Ramps are used to half capacity during non-peak weekend days, enter 50%. For all available Boat Ramps that are used beyond their combined capacity, enter the appropriate percentage above 100.

Reseasting I Passure Tree	No. of Available Resources			Total Miles/Acres (e)	Facility Capacity (percent) (
Recreational Resource Type (a)	User Free (b)	User Fee (c)	No. FERC Approved Resources (d)		
Access Areas. (No Facilities). Unimproved but well-known/popular sites which can be used to reach development/project waters (including waters below a dam) without trespassing on other property. Such areas can be used for launching boats, fishing, swimming, or other water recreational purposes.	1				20
Boat Launch Areas. Improved areas having one or more boat launching lanes and (a) are usually marked with signs, (b) have compacted gravel or concrete surfaces, and (c) usually have adjacent parking lots.					
Boat Launch Lanes. The number of lanes are determined by the total number of boats that can be launched easily at the designated boat launch areas at one time.					
Marinas. Public and Private facilities on or adjacent to the development/project waters for the docking, fueling, repair and storage of boats, and which may rent boats and equipment, or sell bait or food.				Acres	
White Water Boating, Access areas below a dam that can be used for raffing/kayaking					
Canoe Portages. Site located above and below a dam, diversion, or other obstruction where persons can launch and take out canoes; and the improved, designated, and maintained trails connecting such sites.				Miles	
Talkwater Fishing Facilities. Platforms, walkways, or similar structures to facilitate below-dam fishing. Fishing Piers. Structures which are installed and maintained in development/project waters specifically for fishing. This code excludes tailwater fishing facilities.	1	-		ELECTRICAL PROPERTY OF THE PERTY OF THE PERT	20
Parks. Designated areas which usually contain multiple use facilities (e.g., picnic sites, playgrounds, swimming beaches, and boat ramps). Individual facilities within each park should be reported under the appropriate resource type (e.g. playground areas, picnic areas, etc.)				Acres	
Playground Areas. Have playground equipment, game courts/fields, jogging tracks, etc.				Acres	
Trails. Improved pathways used for non-automobile recreational travel which (a) can be located on a reference map, and (b) are designated according to type of use (hiking, bridle, trail bikes, snow mobiles, cross-country skiing). This category excludes cance portages.	-			Miles	
Swimming Areas. Sites providing access to development/project waters where swimming facilities (bath houses, designated swim areas, parking, and sanitation facilities) are available.				Acres	
Picnic Areas. Areas designated and maintained for picnicking and which contain one or more picnic sites, each of which includes a picnic table and in some cases cooking grills, trash receptacles, and a parking area.				Acres	
Wildlife Areas. Natural areas and reserves specifically created and managed for the protection and propagation of wildlife and the viewing of wildlife in their natural habitat.				Acres	
Visitor Centers. Facilies located in a klosk, pavilion or similar structure from which persons may obtain information about the development/project, its operation, recreational facilities, and related Items of interest.					
Interpretive Displays. Facilities (exhibits and museums) which describe or explain archaeological, historic, or prehistoric objects, structures, sites, areas, activities, artifacts, and materials.	1		1		20
Overlooks. Public areas to view natural areas/project features (e.g., pull-offs or vistas). Hunting Areas. Public or private areas open to the general public for hunting.				Acres	
Golf Courses. All types of golf areas, except miniature golf.				Acres	
Cottage/Cabin Sites, Recreational dwellings which are seasonally rented by the public for recreational numbers			· · · · · · · · · · · · · · · · · · ·	Acres	
Camping Areas/(Campgrounds). Areas containing two or more campsites, tent sites, or trailer/recreational vehicle (RV) sites which accommodate overnight camping. This category does not include group camps				Acres	
Tent/Trailer/RV Sites. The total number of sites within Camping Areas that have been specifically developed for tent, trailer, or RV use. This category does not include sites within group camps.				Acres	
Organizational Camps. Camping areas that are maintained and operated by a specific entity but which may be used by other persons or groups (scout camps, military base recreation camps, church camps, handicapped children camps).				Acres	
Group Camps. Camping areas which are equipped with facilities to accommodate use by the general public. These areas usually require registration or advance reservation.				Acres	
Winter Sports. Any facility or site providing sports like skiling, sledding, ice skatling, or ice fishing.				SECULIARIZAÇÃO DE LA CONTRACTION DEL CONTRACTION DE LA CONTRACTION	
Other - such as Informal/dispersed camping areas, unimproved trails, etc. (specify):				RESERVE ASSESSMENT	

Licensed Hydropower Development Recreation Report

Page 3 of 3

Glossary of FERC Form 80 Terms

Available Resources. Quantifies the availability of natural or man-made property or facilities for given recreational resource type. This includes all recreational resources available to the public within the development/project boundary. The resources are broken into the following categories:

User Free (Schedule 2, column b) - Those resources within the development/project that are free to the public;

User Fee (Schedule 2, column c) - Those resources within the development/project where the licensee/facility operator charges a fee;

FERC Approved Resources (Schedule 2, column d) - Those resources within the development/project that are FERC approved. This includes specific recreation amenities, facilities, or sites required by the Commission in the license or license amendment document, including an approved recreation plan or report. This number does not necessarily have to equal the sum of user free and user fee resources.

Development. The portion of a project which includes:

- (a) a reservoir; or
- (b) a generating station and its specifically-related waterways.

Exemption from Filing. Exemption from the filing of this form granted upon Commission approval of an application by a licensee pursuant to the provisions of 18 CFR 8.11(c).

General Public. Those persons who do not have special privileges to use the shoreline for recreational purposes, such as waterfront property ownership, water-privileged community rights, or renters with such privileges.

Licensee. Any person, state, or municipality licensed under the provisions of Section 4 of the Federal Power Act, and any assignee or successor in interest. For the purposes of this form, the terms licensee, owner, and respondent are interchangeable *except where:*

- (a) the *owner* or licensee is a subsidiary of a parent company which has been or is required to file this form; or
- (b) there is more than one owner or licensee, of whom only one is responsible for filing this form. Enter the name of the entity that is responsible for filing this report in Schedule 1, Item 2.1.

Peak Use Weekend. Weekends when recreational use is at its peak for the season (July 4th weekend and other holiday weekends). On these weekends, recreational use may exceed the capacity of the area to handle such use.

Major License. A license for a project of more than 2,000 horsepower (1.5 megawatts) installed capacity.

Minor License. A license for a project of 2,000 horsepower (1.5 megawatts) or less installed capacity.

Recreation Day. Each visit by a person to a development (as defined above) for recreational purposes during any portion of a 24-hour period.

Revenues. Income generated from recreation facilities at project development. Includes fees for access or use of area.

Licensed Hydropower Development Recreation Report

Form Approved OMB No. 1902-0108 Expires: 09/30/2010 Burden 3.0 hours

This form collects data on recreational resources at projects licensed by the Federal Energy Regulatory Commission under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). Submit this form on or before April 1, 2009. Submit subsequent fillings of this form on or before April 1, every 6th year thereafter (for example, 2015, 2021, etc.). Submit an original and two copies of the form to the Commission's Regional Office (specified in the cover letter to this form). The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Please send your comments about this burden estimate, or any other aspect of this collection of information, including suggestions to reduce the burden, to: Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 and the Office of Information and Regulatory Affairs, Desk Officer-FERC, Office of Management and Budget, Washington, D.C. 20503.

Failure to comply with this collection of information will not result in a penalty, if you were unaware that a valid control number assigned by the Office of Management and Budget must be displayed on this collection of Information.

Instructions:

- a. All data reported on this form must represent recreational facilities and services located within the development/project boundary.
- b. To ensure a common understanding of terms, please refer to the Glossary on page 3.
- c. Report actual data for each item. If actual data are unavailable, then please estimate.

1. Licensee Name: Syr	ergics	8. Reservoir Surface Area at Normal Pool (acres): 87.00					
2. Project Name: Rice		9. Shoreline Miles at Normal Pool; 4.00					
3. Project Number: 2556			10. Percent of Shoreline Safely Accessible to the General Public by				
4. Development Name: Rice Rips			Land Travel without Trespassing: 28.00				
States Development/Project Traverses (List state with largest area within the development/project boundary first):			11. Data Collection Methods (enter percent for each method used: total must equal 100%):				
5. State #1: ME			20.00 traffic count/trail count attendance records 80.00 staff observation				
7. Type of Project Licen (check one)	se: Major Minor	visitor assessment estimate					
For the previous calend development (project).	ar year, enter only the licensee's annual recre Also, enter the corresponding annual recreatio	allonal cons nel revenue	struction, operation, and maintenance costs for the s.				
Item	Licensee's Annual Recreation Costs and Re	venues (in	Whole Dollars)				
	Construction, Operation and Maintenance	Costs	Recreation Revenues for Calendar Year				
12. Dollar Values	\$4,000.00	\$0.00					
13. Length of Recreation Summer: From (MM/DD	n Season) <u>05/23</u> To <u>09/07</u> Winte	er: From (Mi	M/DD) 12/01 To 04/01				
Period	Number of visits to all recreational areas at	developmen	nenVproject (in Recreation Days)				
Fellou	Annual Total		Peak Weekend Average				
14. Daytime	10,551.00		209.00				
15. Nighttime	0.00		0.00				

Area Code/Phone No. Reporting Year Ending

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any laise, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Licensed Hydropower Development Recreation Report

Page 2 of 3

Schedule 2. Inventory of Recreational Resources

16. Enter data for each Recreational Resource Type (a). For Facility Capacity (f), of total available resources (b) + (c), compare the average total amount of weekend use (during the recreation season reported on Schedule 1, Item 13) with the total combined capacity of these resources to handle such use and enter a percentage that indicates their overall level of use. Do not consider peak weekend use (see Glossary). For example, if all available Boat Ramps are used to half capacity during non-peak weekend days, enter 50%. For all available Boat Ramps that are used beyond their combined capacity, enter the appropriate percentage above 100.

	No. of Available Resources			Total Miles/Acres (e)	Facility Capacity (percent) (f
Recreational Resource Type (a)	User Free (b)	User Fee (c)	No. FERC Approved Resources (d)		
Access Areas. (No Facilities). Unimproved but well-known/popular sites which can be used to reach development/project waters (including waters below a dam) without trespassing on other property. Such areas can be used for launching boats, fishing, swimming, or other water recreational purposes.	3		1		15
Boat Launch Areas. Improved areas having one or more boat launching lanes and (a) are usually marked with signs, (b) have compacted gravel or concrete surfaces, and (c) usually have adjacent parking lots.	1		1		15
Boat Launch Lanes. The number of lanes are determined by the total number of boats that can be launched easily at the designated boat launch areas at one time.					
Marinas. Public and Private facilities on or adjacent to the development/project waters for the docking, fueling, repair and storage of boats, and which may rent boats and equipment, or sell bait or food.				Acres	
White Water Boating. Access areas below a dam that can be used for rafting/kayaking. Canoe Portages. Site located above and below a dam, diversion, or other obstruction where persons can launch and take out				Miles	
canoes; and the improved, designated, and maintained trails connecting such sites. Tailwater Fishing Facilities. Platforms, walkways, or similar structures to facilitate below-dam fishing.					_
Fishing Piers. Structures which are installed and maintained in development/project waters specifically for fishing. This code excludes tailwater fishing facilities.					
Parks. Designated areas which usually contain multiple use facilities (e.g., picnic sites, playgrounds, swimming beaches, and boat ramps). Individual facilities within each park should be reported under the appropriate resource type (e.g. playground areas, picnic areas, etc.)				Acres	
Playground Areas. Have playground equipment, game courts/fields, jogging tracks, etc.				Acres	
Trails. Improved pathways used for non-automobile recreational travel which (a) can be located on a reference map, and (b) are designated according to type of use (hiking, bridle, trail bikes, snow mobiles, cross-country skiing). This category excludes cance portages.	1	-	1	Miles 3	50
Swimming Areas. Sites providing access to development/project waters where swimming facilities (bath houses, designated swim areas, parking, and sanitation facilities) are available.				Acres	
Picnic Areas. Areas designated and maintained for picnicking and which contain one or more picnic sites, each of which includes a picnic table and in some cases cooking grills, trash receptacles, and a parking area.				Acres	
Wildlife Areas. Natural areas and reserves specifically created and managed for the protection and propagation of wildlife and the viewing of wildlife in their natural habitat.				Acres	
Visitor Centers. Facilities located in a klosk, pavilion or similar structure from which persons may obtain information about the development/project, its operation, recreational facilities, and related items of interest.					
Interpretive Displays. Facilities (exhibits and museums) which describe or explain archaeological, historic, or prehistoric objects, structures, sites, areas, activities, artifacts, and materials.					
Overlooks. Public areas to view natural areas/project features (e.g., pull-offs or vistas).				Acres	
Hunting Areas. Public or private areas open to the general public for hunting. Golf Courses. All types of golf areas, except miniature golf.	1			87 Acres	25
Cottage/Cabin Sites. Recreational dwellings which are seasonally rented by the public for recreational purposes.				Acres	
Camping Areas/(Campgrounds). Areas containing two or more campsites, tent sites, or trailer/recreational vehicle (RV) sites which accommodate overnight camping. This category does not include group camps.			 	Acres	·
Tent/Trailer/RV Sites. The total number of sites within Camping Areas that have been specifically developed for tent, trailer, or RV use. This category does not include sites within group camps.				Acres	
Organizational Camps. Camping areas that are maintained and operated by a specific entity but which may be used by other persons or groups (scout camps, military base recreation camps, church camps, handicapped children camps).				Acres	
Group Camps. Camping areas which are equipped with facilities to accommodate use by the general public. These areas usually require registration or advance reservation.				Acres	
Winter Sports. Any facility or site providing sports like skiling, sleeding, lce skating, or ice fishing.				ARMINING PARTICIPATION	
Other - such as Informal/dispersed camping areas, unimproved trails, etc. (specify):				ANNUAL ENGINEERS	

Licensed Hydropower Development Recreation Report

Page 3 of 3

Glossary of FERC Form 80 Terms

Available Resources. Quantifies the availability of natural or man-made property or facilities for given recreational resource type. This includes all recreational resources available to the public within the development/project boundary. The resources are broken into the following categories:

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Development. The portion of a project which includes:

- (a) a reservoir; or
- (b) a generating station and its specifically-related waterways.

Exemption from Filing. Exemption from the filing of this form granted upon Commission approval of an application by a licensee pursuant to the provisions of 18 CFR 8.11(c).

General Public. Those persons who do not have special privileges to use the shoreline for recreational purposes, such as waterfront property ownership, water-privileged community rights, or renters with such privileges.

Licensee. Any person, state, or municipality licensed under the provisions of Section 4 of the Federal Power Act, and any assignee or successor in interest. For the purposes of this form, the terms licensee, owner, and respondent are interchangeable *except where*:

- (a) the owner or licensee is a subsidiary of a parent company which has been or is required to file this form; or
- (b) there is more than one owner or licensee, of whom only one is responsible for filing this form. Enter the name of the entity that is responsible for filing this report in Schedule 1. Item 2.1.

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Revenues. Income generated from recreation facilities at project development. Includes fees for access or use of area.

Licensed Hydropower Development Recreation Report

Form Approved OMB No. 1902-0106 Expires: 09/30/2010 Burden 3.0 hours

This form collects data on recreational resources at projects licensed by the Federal Energy Regulatory Commission under the Federal Power Act (16 USC 791a-825r). This form must be submitted by licensees of all projects except those specifically exempted under 18 CFR 8.11 (c). Submit this form on or before April 1, 2009. Submit subsequent filings of this form on or before April 1, every 6th year thereafter (for example, 2015, 2021, etc.). Submit an original and two copies of the form to the Commission's Regional Office (specified in the cover letter to this form). The public burden estimated for this form is three hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing the collection of information. Please send your comments about this burden estimate, or any other aspect of this collection of information, including suggestions to reduce the burden, to: Director, Division of Hydropower Administration and Compliance, Federal Energy Regulatory Commission, 888 First Street NE, Washington, D.C. 20426 and the Office of Information and Regulatory Affairs, Desk Officer-FERC, Office of Management and Budget, Washington, D.C. 20503.

Failure to comply with this collection of Information will not result in a penalty, if you were unaware that a valid control number essigned by the Office of Management and Budget must be displayed on this collection of information,

Instructions:

- a. All data reported on this form must represent recreational facilities and services located within the development/project boundary.
- b. To ensure a common understanding of terms, please refer to the Glossery on page 3.
- c. Report actual data for each item. If actual data are unavailable, then please estimate.

Schedule 1. General Information

		•					
1. Licensee Name: Syn	ergics	8. Reserve	oir Surface Area at Normal Pool (acres): 25.00				
2. Project Name: Unio	n Gas	9. Shoreline Miles at Normal Pool: 3.00					
3. Project Number: 255	56	10. Percent of Shoreline Safely Accessible to the General Public by Land Travel without Trespassing: 30.00					
4. Development Name:	Union Gas						
States Development/Project Traverses (List state with largest area within the development/project boundary first):		11. Data Collection Methods (enter percent for each method used; lotal must equal 100%):					
5. State #1: ME 6. State #2:		80.00 stat	fic count/trail count endance records if observation tor assessment				
7. Type of Project Licen (check one)	se: Major		mate				
	ar year, enter only the licensee's annual recreated annua		struction, operation, and maintenance costs for the s.				
	Licensee's Annual Recreation Costs and R	evenues (in	Whole Dollars)				
llem	Construction, Operation and Maintenance	Costs	Recreation Revenues for Calendar Year				
12. Dollar Values	\$1,600.00		\$0.00				
13. Length of Recreation Summer: From (MM/DD	n Season) 05/23 To 09/07 Win	ter: From (M	M/DD) 12/01 To 04/01				
Period	Number of visits to all recreational areas at	developmen	Vproject (In Recreation Days)				
Fallod	Annual Total		Peak Weekend Average				
14. Dayilme	20,208.00		207.00				
15. Nighttime	0.00		0.00				
Respondent Certificat are true, complete, and		amined this r	report; and to the best of his/her knowledge, all data provided here				

Title 18 U.S.C.1001 makes it a crime for any person knowingly and willingly to make to any Agency or department of the United States any false, fictitious or fraudulent statement or misrepresentation as to any matter within its jurisdiction.

Reporting Year Ending

Licensed Hydropower Development Recreation Report

Page 2 of 3

Schedule 2. Inventory of Recreational Resources

16. Enter data for each Recreational Resource Type (a). For Facility Capacity (f), of total available resources (b) + (c), compare the average total amount of weekend use (during the recreation season reported on Schedule 1, Item 13) with the total combined capacity of these resources to handle such use and enter a percentage that indicates their overall level of use. Do not consider peak weekend use (see Glossary). For example, if all available Boat Ramps are used to half capacity during non-peak weekend days, enter 50%. For all available Boat Ramps that are used beyond their combined capacity, enter the appropriate percentage above 100.

Recreational Resource Type		No. of Available Resources			Facility Capacity (percent) (f)
(a) ·	User Free (b)	User Fee (c)	No. FERC Approved Resources (d)	(θ)	
Access Areas. (No Facilities). Unimproved but well-known/popular sites which can be used to reach development/project waters (including waters below a dam) without trespassing on other property. Such areas can be used for launching boats, fishing, swimming, or other water recreational purposes.	1				20
Boat Launch Areas. Improved areas having one or more boat launching lanes and (a) are usually marked with signs, (b) have compacted gravel or concrete surfaces, and (c) usually have adjacent parking lots.	1		1		20
Boat Launch Lanes. The number of lanes are determined by the total number of boats that can be launched easily at the designated boat launch areas at one time.	1		1		20
Marinas. Public and Private facilities on or adjacent to the development/project waters for the docking, fueling, repair and storage of boats, and which may rent boats and equipment, or sell bait or food.				Acres	*******
White Water Boating. Access areas below a dam that can be used for rafting/kayaking.			1	RESERVED MASSESSES	
Canoe Portages. Site located above and below a dam, diversion, or other obstruction where persons can launch and take out canoes; and the improved, designated, and maintained trails connecting such sites.				Miles	
Tailwater Fishing Facilities. Platforms, walkways, or similar structures to facilitate below-dam fishing.	2		11	SERVICE PROPERTY OF THE PARTY O	20
Fishing Piers. Structures which are installed and maintained in development/project waters specifically for fishing. This code excludes tailwater fishing facilities.					
Parks. Designated areas which usually contain multiple use facilities (e.g., picnic sites, playgrounds, swimming beaches, and boat ramps). Individual facilities within each park should be reported under the appropriate resource type (e.g. playground areas, picnic areas, etc.)				Acres	
Playground Areas. Have playground equipment, game courts/fields, jogging tracks, etc.		·.	·	Acres	
Trails. Improved pathways used for non-automobile recreational travel which (a) can be located on a reference map, and (b) are designated according to type of use (hiking, bridle, trail bikes, snow mobiles, cross-country skiing). This category excludes canoe portages.				Miles	
Swimming Areas. Sites providing access to development/project waters where swimming facilities (bath houses, designated swim areas, parking, and sanitation facilities) are available.				Acres	
Picnic Areas. Areas designated and maintained for picnicking and which contain one or more picnic sites, each of which includes a picnic table and in some cases cooking grils, trash receptacles, and a parking area.				Acres	
Wildlife Areas. Natural areas and reserves specifically created and managed for the protection and propagation of wildlife and the viewing of wildlife in their natural habitat.				Acres	
Visitor Centers. Facilities located in a kiosk, pavilion or similar structure from which persons may obtain information about the development/project, its operation, recreational facilities, and related items of interest.					
Interpretive Displays. Facilities (exhibits and museums) which describe or explain archaeological, historic, or prehistoric objects, structures, sites, areas, activities, artifacts, and materials.					
Overlooks. Public areas to view natural areas/project features (e.g., pull-offs or vistas),				Acres	
Hunting Areas. Public or private areas open to the general public for hunting. Golf Courses. All types of golf areas, except miniature golf.				Acres	
Cottage/Cabin Sites. Recreational dwellings which are seasonally rented by the public for recreational purposes.	ļ		<u> </u>	Acres	
Camping Areas/(Campgrounds). Areas containing two or more campsites, tent sites, or trailer/recreational vehicle (RV) sites	 		 	BUTTER BETTER BE	
which accommodate overnight camping. This category does not include group camps. Tent/Trailer/RV Sites. The total number of sites within Camping Areas that have been specifically developed for tent, trailer,		·		Acres	
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Licensed Hydropower Development Recreation Report

Page 3 of 3

Glossary of FERC Form 80 Terms

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APPENDIX G-3

FERC Order Approving Recreation Monitoring Report Issued February 9, 2004

CC: Whittier, Patton Peluca, Wiley, Comptell Reference Notebook File: MESS. ENG 10-4-8

UNITED STATES OF AMERICA 106 FERC ¶ 62, 135 FEDERAL ENERGY REGULATORY COMMISSION

FPL Energy Maine Hydro LLC

Project No. 2556-049

ORDER APPROVING RECREATION MONITORING REPORT PURSUANT TO ARTICLE 412

(Issued February 19, 2004)

On September 30, 2003, FPL Energy Maine Hydro LLC (licensee) filed a Recreation Monitoring Report (report) pursuant to article 412 of the license for the Messalonskee Hydroelectric Project¹, FERC Project No. 2556. There are three hydroelectric generation developments (Oakland, Rice Rips, and Union Gas) and one storage development (Messalonskee Lake) that comprise the project. The project is located on the Messalonskee Stream in Kennebec County, Maine.

BACKGROUND

Article 412 of the project license required that within three months of the effective date of the license, the licensee shall create a plan to monitor recreational use of the Oakland, Rice Rips, and Union Gas developments to determine whether existing and new access facilities were meeting public use demands without harm to wetlands and wildlife. The order approving the recreation monitoring plan for the Messalonskee Project was issued on June 21, 2000. Every six years a report is to be filed in conjunction and in the same time frame as the FERC Form 80. An order issued August 12, 2003², changed the due date for the monitoring reports to September 30 to make them consistent with the reports for the licensee's other projects. The monitoring report should include the following information: (1) annual recreation use figures; (2) a discussion of the adequacy of the recreation facilities; (3) a discussion regarding the need for additional recreation facilities at the project site; (4) if there is a need for additional facilities, a recreation plan; and (5) documentation of consultation with a specific description of how the agencies' comments are accommodated by the report.

The Order Modifying and Approving Recreation Plan issued June 26, 2000, required the licensee to reevaluate the need for fishing access for people with disabilities

Project No. 2556-049

2

at the Union Gas development during the Form 80 recreation monitoring. The results of the monitoring are to be included with the report pursuant to article 412. The <u>order</u> also required the licensee to designate a "greenbelt" or multiple use area along the <u>Rice Rips development impoundment pursuant to article 410 of the project license</u>. The recreation monitoring report should contain an update on the land designation. Subsequent to the filing of the recreation monitoring report the licensee has filed information for the completion of the requirements associated with article 410. Therefore, this issue will be addressed in a separate order.

The licensee shall prepare the report after consultation with the U.S. Fish and Wildlife Service (FWS), the Maine Department of Conservation (MDOC), the Maine Department of Inland Fisheries and Wildlife (MDIFW), and the National Park Service (NPS). The licensee shall include with the plan documentation of consultation, copies of comments and recommendations, and specific descriptions of how the agencies' comments are accommodated by the plan. A minimum of 30 days is required for the agencies to comment and to make recommendations before filing the plan with the Commission.

DESCRIPTION OF REPORT

The recreation monitoring report includes recreational use figures, methodology of data collection, a discussion on the facilities' adequacy, a reevaluation of the need for fishing access for people with disabilities at the Union Gas development, an update on the "greenbelt" at the Rice Rips development, and documentation of consultation.

Data was collected using four methods. Spot counts were conducted during the recreation season (March-October) at least twice during the week and once each weekend. Winter and nighttime collection did not occur. Spot counts recorded number of vehicles, boats, and people at a facility. Calibration counts occurred at the same places as spot counts, but for time periods ranging from one to three hours. An employee recorded number of people, observed activities, number of vehicles, time in and time out. Traffic counts were conducted using mechanical traffic counters designed to record the number of vehicles accessing boat ramps during six hour increments. Finally, the licensee interviewed several people that live and work in the area to determine percent capacity use as observed by those individuals.

At the Messalonskee Lake and Oakland developments only summer data was collected. Traffic counters were installed at the Oakland and Belgrade Boat Ramps. At the Rice Rips development data was collected in the spring, summer, and fall. No traffic counters were used since there are no boat ramps at this site. At the Union Gas

Order Issuing New License (Major Project) 88 FERC ¶ 61,122 (1999)

Order Amending License Articles to Change Reporting Schedule 104 FERC ¶ 62.117 (2003)

Letter filed December 19, 2003. Pending approval.

Project No. 2556-049

3

development summer and fall counts were taken, and spring was assumed to be the same as fall. During the summer season, a traffic counter was in use at the Waterville Boat Ramp.

The data revealed that summer is the most popular time for recreation use at all of the project developments. Boating and swimming are the most popular activities. Messalonskee Lake and the Oakland development have four recreation areas. The most highly used at around 75% of capacity are the Oakland and Belgrade Boat Launches. The MDOC day-use park and the tailwater fishing area are used between 20 and 25% of capacity. Fishing is the most popular activity at the Oakland development and at Messalonskee Lake.

The Rice Rips development has one recreation area with a parking lot. The fishing area in the bypass is used at about 15% of capacity. Fishing is the most popular activity at the development.

At the Union Gas development a nature trail maintained by the City of Waterville is not regularly monitored by the licensee because it is outside the project boundary. Those interviewed for the purpose of collecting data believe that the trail does not receive much use and parking may be an issue. The tailrace fishing area receives low to moderate use. The Waterville Boat Launch is mostly used in the spring fishing season at about 20% of capacity. Sight-seeing is the most popular activity at the development.

The licensee has included as part of the report an update on the recreation facilities at the developments. Of importance is that at the Belgrade Boat Launch at Messalonskee Lake has been closed for use unless state inspectors are onsite in order to control the spread of milfoil, an invasive species. The MDIFW is experimenting with herbicides, but believes this precaution is necessary until matters are fully resolved.

The need for handicap-accessible fishing access at the Union Gas development has been reevaluated by the licensee. Data collected for this report show that there appears to be little angling interest in the area below the powerhouse. None of the consulting agencies have expressed a need for the fishing access. Therefore, based on these findings, the licensee does not propose installing a fishing platform at this time, and will continue to evaluate the need for one as part of its FERC Form 80 recreational monitoring.

Project No. 2528-067

-4.

AGENCY CONSULTATION

On April 16, 2002, the licensee submitted a preliminary consultation letter to FWS, MDOC, MDIFW, City of Waterville, NPS, and the Town of Oakland. No comments were received regarding the initial consultation letter. A copy of the draft monitoring report was sent to the above agencies and to the Maine Department of Environmental Protection (MDEP) and the Maine State Historic Preservation Officer (SHPO). A separate letter concerning the agreement between the licensee and the Town of Oakland and the Rice Rips carry-in boat access was also sent to all of the above-mentioned agencies. FWS provided written comments concurring with the methods and results in the report.

The MDOC replied with a comment about a graph label used in the report.

MDOC suggested clarifying winter use data by writing "winter not sampled", deleting
the winter label, or having the label read "Winter <X%". The licensee deleted the winter
label and clarified in the report that winter data was not collected.

The SHPO responded to the letter concerning the Rice Rips carry-in boat access. No affects on historical resources should occur from the construction of the carry-in.

DISCUSSION AND CONCLUSION

The plan fulfills the requirements of article 412. The boat launches at Messalonskee Lake appear to be the most popular recreation sites; however, they are not close to reaching capacity. The licensee should continue to monitor the situation at the Belgrade Boat Launch and alert the Commission if the site is forced to close entirely. It is understood that invasive species must be controlled; however, the licensee has the responsibility to provide the public with access to the impoundment.

The licensee believes a handicap-accessible fishing platform at the Union Gas development is not needed at this time based on the low use of the site in general. Commission staff agrees that the current recreation facilities are adequate, and the licensee should reevaluate the need for the fishing platform during data collection for the next monitoring report. None of the other sites are in need of improvements or expansion based on the data collected for the report. The recreation monitoring report should be approved. The next recreation monitoring report is due on or before September 30, 2009.

The Director orders:

- (A) The recreation monitoring report filed September 30, 2003, pursuant to article 412 of the project license is approved.
- (B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of this order, pursuant to 18 C.F.R. 385-713.

John E. Estep Division of Hydropower Administration and Compliance

104 FERC¶ 62.109

UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

FPL Energy Maine Hydro LLC

Project Nos 2519-044, 2528-066, and 2556-047

ORDER AMENDING ARTICLES TO CHANGE REPORTING SCHEDULE

(Issued August 12, 2003)

On June 20, 2003, FPL Energy Maine Hydro LLC, licensee for the North Gorham, Cataract, and Messalonskee Hydroelectric Projects, filed a request for a permanent article amendment concerning the schedules for filing reports on the results of recreation monitoring, as required by the licenses for these projects. The articles require the licensee to monitor annual recreation use of the project areas to determine whether existing recreation facilities are meeting recreation demand. The North Gorham Project is located on the Presumpscot River in the Cumberland County, the Cataract Project on the Saco River in York County, and the Messalonskee Project on the Messalonskee Stream in Kennebec County, all in Maine.

The articles require that reports on the monitoring results be filed in conjunction with the FERC Form 80. The licensee states that it needs additional time following the Form 80 filing to analyze and accurately describe the monitoring results for the North Gorham and Cataract Projects. It requests a permanent amendment of the articles to allow 6 months after the Form 80 is due to file its reports on the monitoring results for these two projects. In order for the data analysis and reporting for the Messalonskee Project to be consistent with the other two projects, the licensee requests that the April 1, 2004, deadline for that project be changed to September 30, 2003.

The reasons advanced by the licensee in support of the requested changes in due date are reasonable and justify the changes. The additional time will allow the licensee to

File: Catagae OR 6-9 No. Gosham COR 6-9 Mossadons hee Pin COR 6-9

Project Nos. 2519-044 eral

- 2 -

more accurately analyze the monitoring results and to determine if existing recreational facilities are adequate

The Director orders

- (A) The deadlines for filing the reports on the results of recreation use monitoring, as required by article 407 of the licenses for Project Nos. 2519 and 2528, and by article 412 for Project No. 2556, are changed to six months after the due date of the Form 80 for each project.
- (B) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of this order, pursuant to 18 C.F.R. 185.71:

John F. Estep Division of Hydropower

Administration and Compliance

¹65 FERC ¶ 62,154 (1993), article 407; 47 FERC ¶ 62,296 (1989), article 407; and 88 FERC ¶ 61,122 (1999), article 412, respectively. The licensee's request to extend the due date for all three projects until September 30, 2003 was approved by Order Granting Extension Of Time To Report Results Of Recreation Monitoring issued July, 17, 2003.

²Form 80's are due April 1 of every sixth year, e.g., April 1, 2003 and April 1, 2009. Article 412 establishes April 1, 2004, as the deadline for the first Form 80 and monitoring report for the Messalonskee Project.