# 14 FERC P 62004 (F.E.R.C.), 1981 \*\*1 Office Director Orders

# Central Maine Power Company

## Project No. 2322 Order Amending License and Issuing New Major License (Issued January 5, 1981)

\*63004 William W. Lindsay, Director, Office of Electric Power Regulations.

Central Maine Power Company filed two applications on August 11, 1980, relating to the Shawmut Project No. 2322. One application seeks to amend the license for Project No. 2322 by accelerating its expiration date. The other application seeks a new license for the project under Part I of the Federal Power Act (Act), including the installation of 3.44 MW of additional capacity.

In view of the additional capacity proposed to be installed, the Applicant has requested a new 50-year license term. Applicant requested that the expiration date of its original license coincide with the effective date of a new license.

The project is located on the Kennebec River, a navigable waterway of the United States, in Kennebec and Somerset Counties, Maine.<sup>1</sup>

Notice of the application has been published and comments have been received from interested federal, state and local agencies. No protests or petitions to intervene have been received, and none of the agencies objected to issuance of the license.

## Project Description and History

The existing Shawmut Project, originally built approximately 67 years ago, was licensed by the Commission on March 5, 1964, with an effective date of June 1, 1954. The existing project consists of: (1) a 23-foot high, 1,135-foot long concrete gravity dam; (2) a 1,310-acre reservoir extending upstream for approximately 12 miles; (3) a forebay; (4) a powerhouse containing six generating units with a total capacity of 4,650 kW; and (5) appurtenant facilities.

Applicant proposes to construct an additional powerhouse, utilizing the existing forebay, adjacent to the existing powerhouse, that would contain two generating units with a total rated capacity of 3,440 kW. The proposed construction would increase the project's total generating capacity to 8,090 kW and would necessitate the excavation of a new tailrace. The project would continue to be operated as a run-of-the-river facility and the reservoir elevation and river flows would not be affected.<sup>2</sup>

A more detailed project description is contained in Ordering Paragraph (C).

### Safety and Adequacy

The staff of the New York Regional Office recently inspected the project and, in its report submitted August 28, 1980, concluded that no conditions were observed that would adversely affect the safety of the project.

Independent consultant inspection reports of the project submitted under Part 12 of the Commission's regulations were made during 1968, 1973, and 1978. The reports concluded that the project structures are generally sound and in a satisfactory condition and that the project spillway is adequate. The consultants also concluded that the structures are safe under standard project flood, ice, and earthquake loading conditions. Our staff's analyses confirm the consultants' conclusions.

The Shawmut Project dam is intermediate size and has a low hazard classification. Should the dam fail during a flood in excess of the standard project flood, it would not significantly increase flood flows sufficiently to endanger downstream life and property.

**\*\*2** In accordance with standard Commission practice, this license includes conditions that require the maintenance of an emergency action plan for the project and the installation of any necessary safety devices to protect the public in its use of project lands and waters. It is concluded that the project, under the conditions of this license, is safe and adequate.

The staff has analyzed the economic feasibility of the installation of additional equipment at the Shawmut Project. The cost of energy produced at the project, in its first year of full operation, will be less than equivalent oil-fired generation. It is concluded that the proposed project redevelopment is economical and in the public interest.

### Comprehensive Development

The "Planning Status Report, Water Resources Appraisals for Hydroelectric Licensing, Kennebec River Basin" published in 1964 and revised in 1980, discusses existing **\*63005** water resources developments and reconnaissance level plans and studies of possible future development within the Kennebec River Basin. None of the potential developments in the basin would effect the Shawmut Project. It is concluded that, as conditioned in this license, Project No. 2322 is best adapted to a comprehensive plan for development for the Kennebec River basin for beneficial public uses and that issuance of this license is in the public interest.

### License Term

Along with the application for new license, Applicant has filed an application to amend its existing license for the Shawmut Project to advance the expiration date to coincide with the relicensing of the project. Applicant has requested a new 50-year license term.

If total redevelopment was proposed to take place, including complete replacement of project works, a 50-year term would be appropriate, as was done with the Applicant's Brunswick-Topsham Project No. 2284.<sup>3</sup> However, in this application, two additional turbine-generator units are proposed to be installed adjacent to the existing powerhouse utilizing the existing dam and forebay. The proposed scale of development is considerably less than that which would warrant a full 50-year term. Therefore, pursuant to the Commission's policy for relicensing projects involving moderate redevelopment,<sup>4</sup> this license term will be for a period of 40 years. It is concluded that it is in the public interest and consistent with the provisions of the Federal Power Act to amend the license for Project No. 2322 by advancing its expiration date as described above.

#### Recreation

Recreational opportunities at the project include fishing, waterfowl hunting, and a minimal amount of recreational boating. The State of Maine operates a boat-launching ramp and picnic area at the project, located on non-project lands. Several private campgrounds are also found along the shoreline. Applicant does not propose any future recreational development.

The U.S. Department of the Interior (Interior) concluded that present recreational development at the project, which is operated by the State, is sufficient to handle current demand and that there is no need to develop additional recreational facilities at this time. Interior recommended that provisions be included in any license issued that would require periodic review of the need for additional recreational development.

**\*\*3** Article 17 of Standard Form L-3 (October 1975) would require Applicant to provide additional project recreational facilities, if future needs are identified. Applicant will be required to file, biennially, a Licensed Project Recreational Report (Form 80), which will require the Applicant to assess changing needs.

# Other Environmental Impacts

The excavation of the tailrace and construction of an additional powerhouse would result in short-term adverse environmental impacts such as erosion and sedimentation from disturbance of land surfaces, and noise and air pollution from construction activities. There are no architectural, archeological, or historical sites or structures listed on the National Register of Historic Places (1979 and 1980, as amended) within the vicinity of the project. In addition, no archeological resources were found at the proposed construction site during a field study conducted by the Maine Historic Preservation Commission.

In accordance with standard Commission practice,<sup>5</sup> Article 31 of this license also requires cultural resources protection measures in the event of any future construction or development at the project.

The Main Department of Inland Fisheries and Wildlife (IFW) issued a Stream Alteration Permit on August 29, 1980. A Water Quality Certificate was issued on October 14, 1980, by the Maine Department of Environmental Protection in accordance with Section 401 of the Federal Water Pollution Control Act.

Approximately 300 feet of streambed would be permanently rip-rapped. The Streambank Alteration Permit requires that

Applicant: implement appropriate erosion and sedimentation control measures to minimize impacts on water quality; and stabilize all disturbed areas. No long-term adverse impacts to the terrestrial and aquatic environments would result.

The proposed increase in the project's generating capacity would have no effect on reservoir elevation or river flows. Therefore, continued operation of the project would not have an adverse impact on the environment.

Issuance of this license will permit continued project operation, which began over 67 years ago. The impacts of continued operation are discussed earlier in this order. On the basis of the record, including agency comments and our staff's independent analysis, it is found that issuance of a license for this project, as conditioned, is not a major **\*63006** federal action significantly affecting the quality of the human environment.

## Federal Takeover

Section 14 of the Federal Power Act reserves to the United States the right to take over a non-publicly owned project upon expiration of the license, after paying the licensee's net investment in the project, not to exceed the fair value of the property taken, plus any severance damages. No federal department or agency, state, or municipality has recommended takeover or redevelopment of the project by the United States or any other entity. The project is not in conflict with any project that has been authorized or is under study by the United States. There appears to be no reason why federal takeover of the project would better serve the public interest than would issuance of this license. Thus, federal takeover will not be recommended.

It is ordered:

**\*\*4** (A) The current license for the Shawmut Project No. 2322 is amended by changing its expiration date from December 31, 1993, to the last day of the month in which this order is issued.

(B) A new license is issued to Central Maine Power Company (Licensee) of Augusta, Maine, under Part I of the Federal Power Act (Act), for a period of 40 years effective the first day of the month following the month in which this license is issued, for the redevelopment and continued operation and maintenance of the Shawmut Project No. 2322, located in Kennebec and Somerset Counties, Maine, on the Kennebec River, a navigable water of the United States. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(C) The Shawmut Project No. 2322 consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

Superseding

Exhibit G

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(2) Project works consisting of: (a) a fixed crest concrete gravity type overflow section about 1,135 feet in length, including a 25-foot gated log sluice, with 4 foot flashboards; (b) a headworks section; (c) concrete retaining walls and a short earthen dike; (d) a reservoir having an area of about 1,310 acres at normal full pool elevation 112.0 (USGS), extending upstream about 12 miles; (e) a forebay; (f) a powerhouse containing six 1,200 hp turbines connected to five 750-kW generators and one 900-kW generator; (g) a second powerhouse containing two 1,720-kW turbine-generator units; (h) the 4.16 kV generator leads, the 4.<sup>16</sup>/<sub>34</sub>.51 kV, 5 MA step-up transformer; and (i) appurtenant facilities.

The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits that also form a part of the application for license and that are designated and described as:

Superseding

Exhibit F

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Exhibit A (Section 1.5); six typewritten pages, "General Description and Specifications of Equipment and Appurtenances." Exhibit A (Section 2.4); one typewritten page, "General Descriptions of Mechanical, Electrical and Transmission Equipment and Appurtenances—New Development."

Exhibit E (Section 3); three typewritten pages, "Report on Fish, Wildlife, and Botanical Resources." Exhibit E (Section 5); two typewritten pages, "Recreational Resources."

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

**\*\*5** (D) Exhibits A (Sections 1.5 and 2.4), E (Sections 3 and 5), F and G, designated in ordering paragraph (C) above, are approved and made a part of the license.

(E) This license is also subject to the terms and conditions set forth in Form L-3 (Revised **\*63007** October 1975), entitled "Terms and Conditions of License for Constructed Major Project Affecting Navigable Waters of the United States," attached to (See 54 FPC 1817) and made a part of this license. The license is also subject to the following additional articles:

*Article 29:* The Licensee shall implement, and modify when appropriate, an emergency action plan designed to provide an early warning to upstream and downstream inhabitants, property owners, and recreational users if there should be an impending or sudden release of water caused by an accident to, or failure of, project works. That plan shall include: instructions to be provided on a continuing basis to operators and attendants for actions they are to take in the event of an emergency; detailed and documented plans for notifying law enforcement agents, appropriate federal, state, and local agencies, operators of water-related facilities, and those residents, owners of properties, and recreational users that could be endangered; actions that would be taken to reduce the inflow to the reservoir, if possible, by limiting the outflow from upstream dams or control structures; and actions to reduce downstream flows by controlling the outflow from dams located on tributaries to the stream on which the project is located. The Licensee shall also submit a summary of the study used as a basis for determining the areas that may be affected by an emergency, including criteria and assumptions used. The Licensee shall monitor any changes in upstream or downstream conditions which may influence possible flows or affect areas susceptible to damage, and shall promptly make and file with the Commission appropriate changes in the emergency action plan. The Commission reserves the right to require modifications to the plan.

Article 30: The Licensee shall, to the satisfaction of the Commission's authorized representative, install and operate any barriers, signs, lights, sirens, or other devices that may reasonably be needed to warn the public of fluctuations in flow from

the project and to protect the public in its recreational use of project lands and waters.

*Article 31:* Prior to commencement of any construction or development of any project works or other facilities at the project, other than the proposed redevelopment in this license, the Licensee shall consult and cooperate with the State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall provide funds in a reasonable amount for such activity. If any previously unrecorded archeological or historic sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

**\*\*6** *Article 32:* The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 10,800 horsepower.

*Article 33:* Pursuant to Section 10(d) of the Act, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. One-half of the project surplus earnings, if any, accumulated under the license, in excess of the specified rate of return per annum on the net investment, shall be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year under the license, the amount of that deficiency shall be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, shall be set aside in the project amortization reserve account shall be maintained until further order of the Commission.

The annual specified reasonable rate of return shall be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. the annual capital ratio for each component of the rate of return shall be calculated based on an average of 13 monthly balances of amounts properly **\*63008** includable in the Licensee's long-term debt and proprietary capital accounts as listed in the Commission's Uniform System of Accounts. The cost rates for long-term debt and preferred stock shall be their respective weighted average costs for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department's 10-year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

*Article 34.* (a) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and occupancy of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

**\*\*7** (b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health

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

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

(d) The Licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within \*63009 the project boundary, for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (d), the Licensee must file a letter to the Director, Office of Electric Power Regulation, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

**\*\*8** (e) The following additional conditions apply to any intended conveyance under paragraphs (c) or (d) of this article:

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

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

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

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

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

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

(F) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, [as provided in §1.7(d) of the Commission's regulations, 18 C.F.R. 1.7(d) (1980)]. The filing of a petition appealing this order to the Commission or an application for rehearing does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. Failure of the Licensee to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this license, the license shall be signed for the Licensee and returned to the Commission within 60 days from the date of issuance of this order.

### Federal Energy Regulatory Commission

### Footnotes

- <sup>1</sup> Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under §375.308 of the Commission's regulations, 45 Fed. Reg. 21216 (1980), *amending* 44 Fed. Reg. 46449 (1979) and 18 C.F.R. 3.5(g) (1979).
- <sup>2</sup> The redeveloped project would generate an additional 20 million kWh annually, saving the equivalent of 32,840 barrels of oil or 9,260 tons of coal. Energy generated at the project would continue to be distributed to the Applicant's customers.
- <sup>3</sup> See Central Maine Power Company, Brunswick-Topsham Project No. 2284, Order Amending License and Issuing New License (Major) (issued February 9, 1979).
- <sup>4</sup> Seehe Montana Power Company, Mystic Lake Project No. 2301, Order Issuing New License (Major) (issued October 5, 1976).
- <sup>5</sup> See S.D. Warren, Project No. 2897, Order Denying Rehearing (issued February 19, 1980).

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