

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Methuen Falls Hydro Electric Company)	Project No. 8093-000
John R. Anderson & Joseph D. Brostmeyer)	Project No. 7482-000

ORDER ISSUING LICENSE (MINOR) AND DISMISSING
APPLICATION FOR PRELIMINARY PERMIT WITH PREJUDICE

(Issued March 27, 1986)

Methuen Falls Hydro Electric Company (Applicant) has filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Methuen Falls Project No. 8093. The project would be located on the Spickett River, in Essex County, Massachusetts, in the Merrimack River Basin, and would affect the interests of interstate or foreign commerce.

Notices of the applications have been published and comments have been received from interested Federal, state, and local agencies. No protests or motions to intervene have been received, and none of the agencies objected to issuance of the license.

Project Description

The proposed project would consist of: 1) an existing 20-foot-high, 188-foot-long stone masonry dam; 2) a reservoir; 3) a 120-foot-long penstock; 4) a refurbished powerhouse containing 2 generating units with a total installed capacity of 357 kW; and appurtenant facilities. The power would be sold to a local utility. A more detailed project description is contained in Ordering Paragraph (B).

Competing Preliminary Permit Application

The license application was filed in competition with a preliminary permit application previously filed by John R. Anderson and Joseph D. Brostmeyer for Project No. 7482-000. The permit applicant failed to substantiate the technical, environmental, economic, and other aspects of its proposal. Since such substantiation is a necessary prerequisite to a comparative

analysis with a competing application for license, the permit application was dismissed without prejudice. 1/

Section 4.37(c) of the Commission's regulations 18 CFR §4.37 (1985), states that if an applicant for license has demonstrated its ability to carry out its plans, the Commission will favor the applicant for license over a preliminary permit applicant proposing to develop the same water resource.

Safety and Adequacy

The site was inspected by the Staff of the Commission's New York Regional Office (NYRO) on March 20, 1984, and there were no matters of concern to the Commission. The NYRO classified the dam as high hazard potential because failure of the dam under flood flows could create a hazard to downstream life or property. Staff analysis shows that the dam would be safe for conditions of normal pool, normal pool plus ice, normal pool plus earthquake and extreme floods up to the Probable Maximum Flood. The spillway is considered adequate. It is concluded that the proposed structures would be safe and adequate if constructed in accordance with sound engineering practices and under the conditions of this license.

ENVIRONMENTAL CONSIDERATIONS

Cultural Resources

The Methuen Falls Project is located within the Spickett Falls Historic District (Historic District). The Historic District is part of the Methuen Multiple Resource Area which is listed on the National Register of Historic Places. The proposed project development consists largely of repair and rehabilitation of existing historic structures. After review of the proposed project, the Massachusetts State Historic Preservation Officer (SHPO) states that there will be no adverse effect on the Historic

1/ See 32 FERC ¶62,512 (1985). See also Dennis V. McGrew, 32 FERC ¶61,229 (1985). The permit applications were dismissed without prejudice so that, if the competing development application were subsequently denied, the permit applications would be automatically reinstated. 32 FERC at ¶ 63,607. Upon issuance of this order, however, the dismissal of the permit application for Project No. 7482-000 is with prejudice, thereby triggering the permit applicant's right to appeal.

District and that the Applicant's plan for rehabilitation 2/ of existing historical structures for project operation will improve the historical integrity of the site. The Advisory Council on Historic Preservation has approved the Applicant's rehabilitation plan. Article 20 requires the Licensee, prior to any construction, to implement its plan to rehabilitate the Methuen Falls Mill Building in a manner compatible with the historical character of the existing mill building. The plan shall adhere to the Secretary of the Interior's standards for Historic Preservation Projects. In addition, Article 21 requires the protection of archeological or historic sites in the event that such sites are discovered during construction, and in the event of any future construction at the project.

Instream Flow

To protect aquatic resources in the Spickett River, the U.S. Fish and Wildlife Service of the Department of the Interior (Interior) recommends an instantaneous instream flow release from the project of at least 37.0 cubic feet per second (cfs) or inflow to the project, whichever is less. The Massachusetts Department of Environmental Quality Engineering (DEQE) issued a water quality certificate for the Methuen Falls Hydro Project on January 24, 1984, and recommends a continuous flow release from the project of 14.6 cfs, or inflow to the project, whichever is less. The Environmental Protection Agency (EPA) expresses concern that flows less than 14.76 cfs (the mean average seven consecutive day low-flow with a recurrence interval of one in ten years) may not provide adequate assimilative capacity to prevent violations of water quality standards in the Spickett River downstream from the proposed project. Therefore, EPA recommends that the project should at no time, except as limited by inflow, release flows less than 14.76 cfs.

Applicant proposes to operate the project in a run-of-river mode, and discharge over the project dam a continuous minimum flow of 3.0 cfs through the 150-foot-long bypass reach. Operation of the project in a run-of-river mode would ensure a continuous flow release, from the project, of at least 37.0 cfs or inflow to the project area, whichever is less.

2/ The Applicant's plan for rehabilitation of the historical structures at the project are outlined in its filing of June 17, 1985.

Run-of-river operation would not result in significant adverse impacts on the aquatic resources and water quality of the Spickett River downstream from the proposed project. Article 22 requires the Licensee to operate the project in a run-of-river mode.

A continuous minimum flow release of at least 3.0 cfs over the project dam at all times, as recommended by the Methuen Conservation Commission, would retain the current aesthetic appearance of the Spickett River between the dam and tailrace. Article 23 requires the Licensee to discharge a minimum flow of at least 3.0 cfs over the project dam at all times.

Fish Passage Facilities

Interior indicates that the Applicant shall construct, operate, and maintain fish passage facilities at the project when such facilities are deemed necessary. The proposed Methuen Falls Project would not now contribute to cumulative adverse impacts on anadromous fish and the resident recreational fish populations, which were identified by staff as target resources of the Merrimack River Basin (Supplement to Environmental Assessment, Methuen Falls Project, FERC No. 8093, Massachusetts, March 6, 1986). Further, the terms and conditions of this license reserve adequate authority for the Commission to require fish passage facilities and other necessary protective measures at the project to preclude adverse impacts to anadromous fish, if, in the future, the Spickett River is included in the on-going anadromous fish restoration program for the Merrimack River Basin.

FINDING OF NO SIGNIFICANT IMPACT

Construction of the proposed project would result in short-term increases in noise levels, exhaust emissions, dust, sedimentation, and erosion. Aquatic biota in the river below the project would be protected by the maintenance of a run-of-river flow. A small area (less than 1 acre) of herbaceous wetland vegetation along the northeast edge of the reservoir would be affected by the proposed increase in reservoir water level. The aesthetic appearance of the river between the project dam and tailrace would be maintained by a 3.0-cfs minimum flow release over the project dam. Cultural resources would be protected. No Federally listed threatened or endangered species would be affected.

In accordance with the National Environmental Policy Act of 1969, an Environmental Assessment was prepared for the Methuen Falls

Hydroelectric Project (FERC No. 8093-000). 3/ On the basis of the record and Staff's independent analysis, the issuance of a license for the project as conditioned herein will not constitute a major Federal action significantly affecting the quality of the human environment.

Economic Feasibility

The project would operate run-of-river and generate an estimated 1,600,000 kWh annually. 4/ The project is economically feasible based on selling project power at the avoided cost in the State of Massachusetts adjusted for escalation.

Other Aspects of Comprehensive Development

Refuse Fuels commented on the application stating that project operation could impact the water flow in its cooling pond a mile downstream and shut down its turbine-generators. The project proposes a run-of-river operation and would not change the flow regime downstream of the project.

The project is not in conflict with any planned development and would make good use of the flow and fall of the Spickett River and its operation is best adapted to the comprehensive development of the Merrimack River Basin under present conditions for beneficial uses upon compliance with the terms and conditions of the license.

License Term

The proposed development of this project using an existing dam is similar to the relicensing of an existing licensed project at which a moderate amount of new development is proposed;

3/ Environmental Assessment, Methuen Falls Hydroelectric Project, FERC No. 8093, May 30, 1985, prepared by the Division of Environmental Analysis, Office of Hydropower Licensing, Federal Energy Regulatory Commission. The document is available in the Division of Public Information and in the Commission's public file associated with the project. As stated previously, a supplement to the EA of March 6, 1986, was prepared and is also available.

4/ The proposed project with its average annual generation of 1.6 million kWh, will utilize a renewable resource that will save the equivalent of approximately 2600 barrels of oil or 740 tons of coal per year.

therefore, consistent with Commission policy, a 40-year license term is reasonable in this instance. 5/

The Director orders:

(A) This license is issued to Methuen Falls Hydro Electric Company (Licensee), of Methuen, Massachusetts under Part I of the Federal Power Act (Act), for a period of 40 years, effective the first day of the month in which this order is issued, for the construction, operation, and maintenance of the Methuen Falls Project No. 8093, located in Essex County, Massachusetts, on the Spickett River, and affecting the interests of interstate or foreign commerce. 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.

(B) The Methuen Falls Project No. 8093 consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area. The project area is shown and described by a certain exhibit that forms part of the application for license and that is designated and described as:

<u>Exhibit</u>	<u>FERC No. 8093 -</u>	<u>Titled</u>
G-1	5	Project Map

(2) Project works consisting of: (a) a 20-foot-high, 188-foot-long stone masonry dam; (b) a reservoir with a surface area of 30-acres, a storage capacity of 210 acre-feet, and a normal water surface elevation of 104.3 feet msl; (c) a 120-foot-long, 6-foot-diameter steel penstock; (d) a powerhouse containing two generating units having a total installed capacity of 357 kW; (e) a 20-foot-long, 2-foot-wide, and 2-foot-deep tailrace; (f) the 50-foot-long 0.600-kV generator leads; (g) the 0.600/4.16 kV 0.950 MVA transformer bank; (h) a 250-foot-long 3.74-kV transmission line; and (i) appurtenant facilities.

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

Exhibit A - Page A-1, parts i, ii, iv, and vii of the application filed on February 16, 1984.

5/ Village of Lyndonville, 7 FERC ¶61,324 (1979)

<u>Exhibit F</u>	<u>FERC No. 8093 -</u>	<u>Showing</u>
F-1	1	Project Plan
F-2	2	Profile
F-3	3	Powerhouse Details
F-4	4	Plan, Elevation, and Section of Dam

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

(C) Exhibits A, F, and G, designated in ordering paragraph (B) above, are approved and made a part of the license.

(D) Pursuant to Section 10(i) of the Act, it is in the public interest to waive the the following Sections of Part I of the Act, and they are excluded from the license:

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

(E) This license is also subject to Articles 1 through 18, except Article 15, set forth in Form L-15, (revised October, 1975), entitled "Terms and Conditions of License for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce," attached to and made a part of this license. The license is also subject to the following additional articles:

Article 19. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from clearing of lands or from the maintenance or alteration of the project works. In addition all trees along the periphery of project reservoirs which may die during operation of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the

satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 20. Licensee shall, prior to any construction, implement its plan to rehabilitate the Methuen Falls Mill Building in a manner compatible with the historical character of the existing mill building, as filed by letter with the Commission dated April 15, 1985. The plan shall adhere to the Secretary of the Interior's Standards for Historic Preservation Projects, and shall include procedures for operating and maintaining these facilities in a manner so as to minimize or avoid any impacts on the significant historical attributes of the existing Methuen Falls Mill Building. Licensee shall, prior to the commencement of any construction at the project, also consult with the Massachusetts State Historic Preservation Officer (SHPO) about the need for any cultural resource survey and salvage work.

Within 2 years of the date of this order, and prior to the implementation of the plan, Licensee shall file a letter from the Massachusetts State Historic Preservation Officer (SHPO) commenting on the final design specifications for rehabilitating the Methuen Falls Mill Building, and on operating and maintaining the facilities, in accordance with the Secretary of the Interior's Standards. The plan must be implemented in a manner satisfactory to the SHPO. Unless the Director, Office of Hydropower Licensing, within 60 days from the filing date instructs otherwise, Licensee may commence ground-disturbing activities and construction associated with the powerhouse and the implementation of the plan. Licensee shall, prior to the commencement of any construction at the project, also consult with the Massachusetts State Historic Preservation Officer (SHPO) about the need for any cultural resource survey and salvage work. Licensee shall make available funds in a reasonable amount for any such work as required. If any previously unrecorded archeological or historical sites are discovered during the course of construction or development of any project works or other facilities at the project, 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 mitigative plan for the protection of significant archeological or historical resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical 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.

Article 21. Licensee shall operate the Methuen Falls Project in an instantaneous run-of-river mode for the protection of fish and wildlife resources in the Spickett River. Licensee, in operating the project in an instantaneous run-of-river mode, shall at all times act to minimize the fluctuations of the reservoir surface elevation, i.e., maintain discharge from the project so that flow in the Spickett River, as measured immediately downstream from the project tailrace, approximates the instantaneous sum of inflow to the project reservoir. Instantaneous run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of Licensee, and for short periods upon mutual agreement between the Licensee and the Massachusetts Division of Fisheries and Wildlife.

Article 22. Licensee shall discharge over the Methuen Falls Project dam a continuous minimum flow of at least 3 cubic feet per second, as measured immediately downstream from the project dam. This flow may be temporarily modified if required by operating emergencies beyond the control of Licensee, and for short periods upon mutual agreement between Licensee and the Methuen Conservation Commission.

Article 23. The Licensee shall commence construction of project works within two years from the issuance date of the license and shall complete construction of the project within four years from the issuance date of the license.

Article 24. The Licensee shall provide one copy to the Commission's Regional Director and two copies to the Director, Division of Inspections, of the final contract drawings and specifications for pertinent features of the project, such as water retention structures, powerhouse, and water conveyance structures, at least 60 days prior to start of construction. The Director, Division of Inspections, may require changes in the plans and specifications to assure a safe and adequate project.

Article 25. The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the Licensee shall provide to the Commission's Regional Director and Director, Division of Inspections, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

Article 26. The Licensee shall within 90 days of completion of construction file with the Commission for approval by the Director, Division of Project Management revised Exhibits A, F, and G to described and show the project as-built.

Article 27. The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

- (a) 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 480 horsepower.

Article 28. Licensee shall continue to consult and cooperate with appropriate Federal, State and other natural resource agencies for the protection and development of the environmental resources and values of the project area. The Commission reserves the right to require changes in the project works or operations that may be necessary to protect and enhance those resources and values.

Article 29. (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 control the uses and occupancies for which it grants permission, and to monitor the use of, and to ensure compliance with the covenants of the instrument of conveyance for any interests that it has conveyed under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time where

said facility is intended to serve single-family type dwellings; 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 modification of those standards, guidelines, or procedures.

(c) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges 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 titles 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 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 Hydropower Licensing, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under 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) The preliminary permit application for Project No. 7482 is dismissed with prejudice.

(G) This order is issued under authority delegated to the Director and is final unless appealed to the Commission under Rule 1902 within 30 days from the date of this order. The Licensee's failure to file a petition appealing this order to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.

Don Barber

Kenneth M. Pusateri
Acting Director, Office of
Hydropower Licensing

Project No. 8093-000

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this order, Methuen Falls Hydro Electric Company, this _____ day of _____, 1985, has caused its corporate name to be signed hereto.

APR. 2 1986

By Geraldine F. McNamara
Methuen Falls Hydro Electric
Company

Attest:

Notary

(Executed in quadruplicate)