



STATE OF MAINE

DEPARTMENT OF ENVIRONMENTAL PROTECTION

ORIGINAL

JOHN R. McKERNAN, JR. GOVERNOR

DEAN C. MARRIOTT COMMISSIONER

DEBRAH RICHARD DEPUTY COMMISSIONER

COMMENTS

August 14, 1992

Lois D. Cashell, Secretary Federal Energy Regulatory Commission 825 North Capitol street, N.E. Washington, DC 20426

RE: Water Quality Certification Cataract Hydro Project FERC No. 2528

Dear Secretary Cashell:

The purpose of this correspondence is to review and report on the conclusion of the proceedings in the above captioned matter. The Cataract Hydro Project is located on the Saco River in the Cities of Biddeford and Saco and the Towns of Buxton and Dayton, York County, Maine.

By Order issued June 29, 1989 (47 FERC ¶ 62,296), the Commission Staff (Director, Office of Hydropower Licensing) issued a new 40-year license for the existing Cataract Hydro Project to Central Maine Power Company (CMP). In issuing this new license, the Commission Staff concluded that the State of Maine had waived water quality certification for the project.

By filing dated July 28, 1989, this Department, as the designated certifying agency for the State of Maine, filed a timely appeal of the new license. In this appeal, we argued that the Director had improperly waived certification, and we asserted that we had until January 26, 1990 to act on the pending request for certification for the project before a waiver could be deemed to have occurred.

By Order dated November 29, 1989 (#L-016084-33-A-N), the Board of Environmental Protection granted certification for the project, subject to certain specified conditions. These conditions required, among other things, that public recreation access facilities and fish passage facilities be provided at the project, that the effectiveness of fish passage facilities be evaluated, and that a 200 cfs minimum flow be provided during periods of project non-generation.

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By filing dated January 9, 1990, CMP filed a timely Petition for Reconsideration by the Board of Environmental Protection of the certification decision. In its petition, CMP argued that the Board had exceeded the scope of the State's water quality certification jurisdiction when imposing conditions relating to recreational and fish passage facilities and minimum flow releases. CMP also challenged the factual basis for the specific minimum flow requirement of the certification.

By Order issued July 12, 1990 (52 FERC ¶ 61,033), the Commission granted our appeal of the new license. In this decision, the Commission concluded, in light of the 4th Circuit Court's decision in City of Fredericksburg, Va. v. FERC interpreting the waiver provisions of Commission Order No. 464, that CMP did not satisfy the filing requirements of the applicable State regulations until January 26, 1989, and that therefore this agency had one year from the date of filing--until January 25, 1990--to grant or deny the certification request. The Commission went on to acknowledge that the issuance of the license without a certification and prior to the expiration of the waiver period was in error, and that certification had been issued by the State subsequent to the Commission's June 29, 1989 licensing decision. To accommodate the State's certification decision, the Commission revised the effective date of the new license to be December 1, 1989.

We now wish to report that action has been taken on CMP's Petition for Reconsideration of the State's water quality certification. By Order dated August 12, 1992 (#L-016084-33-B-Z, copy attached), the Board has denied in part and granted in part CMP's petition. The Board has denied reconsideration insofar as the petition related to limiting the scope of the Board's water quality certification jurisdiction. The Board has granted reconsideration for the purpose of modifying the Board's findings, conclusions, and conditions relating to minimum flows so as to reflect the change in project operation represented by a new Water Release Agreement between CMP and the Cities of Biddeford and Saco.

The Board's interpretation of the scope of State authority in a water quality certification review is in keeping with current case law in the State of Maine (see Bangor Hydro-Electric Company, et. al. v. Board of Environmental Protection, 595 A.2d 438 (Me. 1991)).

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The Department's Regulations provide that, upon the granting of a petition for reconsideration, the Board's earlier decision on an application is vacated, and the Board must act on the application anew. Thus, the attached Order on Reconsideration dated August 12, 1992 now constitutes the State's water quality certification for the Cataract Project.

In summary, and as modified upon reconsideration, the continued operation of the Cataract Project has been certified to be in compliance with applicable State Water Quality Standards, subject to the following special conditions:

1. Public recreational access facilities shall be provided in the project area as described in CMP's Recreational Facilities Plan (February, 1989).
- 2.A. Upstream fish passage facilities, consisting of a new fish lift at the East Channel Dam and new denil fishways at the West Channel, Springs and Bradbury Dams, shall be installed and operational within 2 years following the issuance of a new FERC license for the project.
- B. Downstream fish passage facilities shall be installed and operational at the East Channel and West Channel Dams within 2 years following the issuance of a new FERC license for the project.
3. The applicant shall conduct a study to monitor and evaluate the effectiveness of all required fish passage facilities. The Board reserves the right to order such structural and/or operational changes to these facilities as are warranted by the results of the study.
4. Except as temporarily modified by approved maintenance activities, by inflows to the project area, or by operating emergencies beyond the applicant's control, water levels in the Cataract impoundment shall be maintained at a normal surface elevation of 44 feet (top of flashboards) and in the Springs/Bradbury impoundment shall be maintained between elevations 49.2 feet and 47.2 feet (top to bottom of flashboards).

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5. Except as temporarily modified by operating emergencies beyond the applicant's control, minimum flows shall be maintained as follows:
 - (1) During periods of generation at the Cataract Powerhouse, a total instantaneous minimum flow of 851 cfs or inflow, whichever is less, shall be maintained from the East Channel and West Channel Dams.
 - (2) During periods of non-generation at the Cataract Powerhouse, a minimum flow of 250 cfs shall be provided from the East Channel and West Channel Dams in accordance with the Water Release Agreement signed on October 25, 1991 by CMP and the Cities of Biddeford and Saco. Any minimum flow shall be released in its entirety from the East Channel Dam whenever flows are requested by the Maine Energy Recovery Company, except for such flows as are necessary to provide effective fish passage in the West Channel.
6. Pending approval of an alternate plan, annual maintenance drawdowns of the Cataract impoundment to facilitate debris removal shall be restricted to the period from December 1 through March 31.

The attached Order on Reconsideration constitutes final agency action on the request for water quality certification for the Cataract Project, subject to judicial review upon appeal to Superior Court. We understand that CMP has no plans at this time to pursue an appeal of the Board's August 12, 1992 decision.

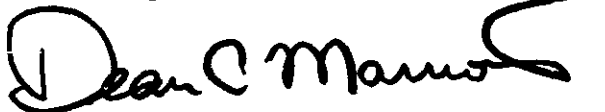
In accordance with the provisions of Sections 401(a) and (d) of the Clean Water Act, the conditions of certification described above should be considered as conditions of the new license for the Cataract Project issued June 29, 1989 and effective December 1, 1989.

By Executive Order of the Governor of the State of Maine, the terms and conditions contained in the attached Order represent the State's official recommendations regarding the Cataract Hydro Project, superceding all preliminary recommendations by individual State agencies.

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Please direct any questions regarding these comments to
Dana Murch of the Department's staff at 207-289-2111.

Sincerely,



Dean C. Marriot, Commissioner
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DCM:dpm\comment
Attachment

cc: Director, DPR-OHL, FERC
Director, DCPA-OHL, FERC
Gerald Poulin, CMP
Sarah Verville, CMP
Michael Bolduc, City of Saco
Bonita Belanger, City of Biddeford
David Pincumbe, US EPA
David Turin, US EPA
Gordon Russell, USF&WS
Thom Harnett, AAG
FERC Review Coordinating Committee



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

BOARD ORDER

IN THE MATTER OF

CENTRAL MAINE POWER COMPANY) MAINE WATER QUALITY PROGRAM;
 BIDDEFORD & SACO, YORK COUNTY, MAINE) FEDERAL CLEAN WATER ACT
 CATARACT HYDRO PROJECT)
 #L-016084-33-B-Z (RECONSIDERATION)) WATER QUALITY CERTIFICATION

Pursuant to the provisions of 38 M.R.S.A. Sections 341-D and 464 et seq., 06-096 CMR Chapter 1, Regulations for the Processing of Applications (effective date May 20, 1985), and Section 401 of the Federal Clean Water Act, the Board of Environmental Protection has considered the project file, including the application with its supportive data, staff summaries, agency review comments, public comments, and other related materials, and the petition of CENTRAL MAINE POWER COMPANY requesting reconsideration of the Board's decision on this application, and finds the following facts:

I. PROCEDURAL HISTORY

On January 26, 1989, Central Maine Power Company (CMP) filed with the Department an Application for Water Quality Certification for the proposed relicensing and continued operation of the Cataract Hydro Project, located on the Saco River in the Cities of Biddeford and Saco and the Towns of Buxton and Dayton, York County, Maine.

On November 29, 1989, the Board issued an Order granting certification for the project, subject to certain specified conditions. These conditions required, among other things, that:

- public recreational access facilities be provided in the project area as proposed in the applicant's Recreational Facilities Plan;
- upstream fish passage facilities be installed and operated at all four project dams;
- downstream fish passage facilities be installed and operated at two of the project dams;
- a study be conducted to monitor and evaluate the effectiveness of all required fish passage facilities; and
- an instantaneous minimum flow of 200 cubic feet per second (cfs) be provided from the project during periods of non-generation.

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II. PETITION FOR RECONSIDERATION

On January 9, 1990, CMP filed a timely Petition for Reconsideration of the Board's November 29, 1989 Order. Petitioner, as the applicant in the proceeding for which reconsideration is sought, qualifies as an aggrieved person within the meaning of the Department's Regulations.

Petitioner asks that the Board reconsider its decision, consider and review the additional evidence presented with the petition, and issue a new or amended water quality certification which amends the condition relating to minimum flows and deletes the conditions relating to recreational and fish passage facilities.

Under 38 MRSa §341-D(5), any person aggrieved by the Board's decision may petition the Board for (1) correction of any part of the decision believed to be in error and not intended by the Board, (2) an opportunity to present new or additional evidence to secure reconsideration of any part of the decision, and (3) a challenge to any fact of which official notice was taken.

III. BASIS FOR THE PETITION

In brief, Petitioner objects to the findings, conclusions and conditions regarding the requirement to maintain an instantaneous minimum flow of 200 cfs during periods of non-generation at the Cataract powerhouse because 1) there has been no finding of fact that CMP's discharges violate water quality standards, 2) the Board does not have jurisdiction to place conditions in CMP's Water Quality Certification which are necessary to assure the compliance by downstream dischargers with state water quality standards, and 3) there is insufficient evidence to show that 200 cfs is necessary to assimilate the downstream discharges.

Petitioner also objects to the findings, conclusions and conditions regarding recreational and fish passage facilities because 1) the Board impermissibly requires CMP to provide designated uses and, 2) the imposition of these conditions are beyond the Board's jurisdiction.

IV. PETITIONER'S ARGUMENTS

A. RECREATIONAL AND FISH PASSAGE FACILITIES

1. Provisions For Designated Uses: Petitioner argues that the State's water quality standards consist of designated uses (including recreation in and on the water, fishing, and habitat for fish and other aquatic life) and the water quality criteria (including dissolved oxygen and bacteria limitations) necessary to sustain the designated uses. Petitioner further argues that if a discharge does not cause the quality of the receiving water to violate the criteria, then the waters are of such quality that they are suitable for the designated uses, and that the standards do not require each applicant to actually provide each designated use. Finally, Petitioner argues that, in accordance with EPA regulations, a state establishes

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designated uses as an expression of its water quality goals for a water body, and that when the applicable water quality criteria are met, these goals will be supported.

2. Scope Of The Board's Jurisdiction: Petitioner argues that, in keeping with a recent New York State court decision (Fourth Branch Associates v. The Department of Environmental Conservation), a State's authority under the Clean Water Act is limited to the consideration of the impact of a project on water quality standards, and that these standards do not extend to issues of fish passage or recreation. Petitioner further argues that the Federal Energy Regulatory Commission, through the Federal Power Act, is vested with practically exclusive jurisdiction over the licensing of hydroelectric projects on navigable waterways, and that this pervasive federal regulatory scheme precludes duplication of regulatory control by the States. Based on these arguments, Petitioner concludes that the Board does not have the authority to prescribe fish passage and recreational facilities in its issuance of water quality certifications.

B. MINIMUM FLOWS

1. Project Discharges: Petitioner argues that the only issue before the Board is whether any discharges from the activity for which CMP is applying for a federal license will comply with applicable water quality standards. Petitioner further argues that the Board's Order identifies no discharge from the project and makes no finding that CMP's discharges violate water quality standards. Finally, Petitioner argues that CMP's discharges of cooling and sump waters from the project have been licensed by the Department. Based on these arguments, Petitioner concludes that the Board has impermissibly required CMP to pass a minimum flow despite the fact that CMP's discharges have no effect on water quality.
2. Compliance By Downstream Dischargers: Petitioner argues that what the Board's Order certifies is that the discharges from downstream waste water treatment plants will comply with applicable water quality standards on the condition that CMP provide a minimum flow of 200 cfs. Petitioner argues that it should not be responsible for assimilating the discharges of another entity, and that the discharges from the downstream treatment plants must either receive better effluent treatment or be mixed with additional water at no cost to CMP. Petitioner further argues that, contrary to the findings made in the Board's Order, the 200 cfs flow is required not only to assimilate licensed discharges from the Biddeford and Saco treatment plants but also to assimilate unlicensed discharges from the Biddeford plant.
3. Sufficiency Of Evidence: Petitioner argues that there is no documentation of the model used by the DEP staff to support the minimum flow recommendation of 200 cfs and that there is no evidence

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that this model was ever correctly calibrated and verified to data observed in the Saco estuary. Petitioner further argues that, given the absence of evidence that the model was correctly calibrated and verified and given the uncertainty of the assumptions used in the model, it is probable that the dissolved oxygen concentrations predicted by the model have no bearing in reality. Finally, Petitioner argues that the model runs which derived the 200 cfs minimum flow recommendation used a value for dissolved oxygen concentration in the discharges from the treatment plants which is less than the applicable state standard, and that these discharges thus violate the state's antidegradation policy.

V. PROCESSING OF PETITION FOR RECONSIDERATION

A. RELATED PROCEEDINGS; STAY ON PETITION

At or about the time that CMP filed its Petition for Reconsideration of the Board's decision on the Cataract Hydro Project, several related proceedings were underway which could have had a significant bearing on the Cataract reconsideration.

On June 29, 1989, the Federal Energy Regulatory Commission (FERC) had issued a new 40-year license for the Cataract Project. On July 28, 1989, the Department had challenged on appeal the validity of this licensing action, which was based on FERC's conclusion that the DEP had waived water quality certification for the project in January of 1987, when in fact the DEP had not received an application for water quality certification until January of 1989. This appeal was still pending before FERC when CMP filed its Petition for Reconsideration. If the appeal were to be granted, the Board's certification action would stand, and action would be needed on the Petition for Reconsideration. However, if the appeal were to be denied, action on reconsideration would be moot, since certification would be deemed waived.

On February 2, 1990, Bangor Hydro-Electric Company filed an appeal for judicial review of the Board's December 13, 1989 order denying without prejudice the Company's request for water quality certification in conjunction with the proposed relicensing of the Milford Hydro Project. The Board's denial was based on the fact that Bangor Hydro had not provided sufficient evidence for the Board to determine the impact of the project on the designated uses of project waters for fishing, recreation, and as habitat for fish and other aquatic life. In its appeal, Bangor Hydro challenged, among other things, the Board's authority to examine issues relating to recreation, fish passage, and aquatic habitat in a water quality certification proceeding. Because CMP had made a similar argument in its Petition for Reconsideration, the outcome of the litigation on the Milford Project would have a direct bearing on the Board's reconsideration of the Cataract Project.

On or before April 26, 1990, the Environmental Protection Agency (EPA) notified the Cities of Biddeford and Saco (Cities) that the renewal of the

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discharge permit for each municipality's wastewater treatment facility would not be possible under current effluent limitations unless an adequate minimum flow was provided in the Saco River. As noted in the Board's November 29, 1989 certification order, each municipality has a wastewater treatment plant discharging into the tidal estuary immediately downstream from the Cataract project dams. By letter dated July 5, 1990, CMP notified the Department that it had proposed to the Cities to release a continuous flow of 250 cfs from the Cataract Project for the Cities' benefit, and that the details of a formal agreement regarding a flow release were being worked out.

In view of the related proceedings summarized above, CMP and the Department's staff agreed informally to stay action on the Petition for Reconsideration until appropriate action had been taken in these proceedings. Pending action on its Petition, CMP further agreed to abide by all conditions set forth in the Board's November 29, 1989 certification order for the Cataract Project. Specifically, CMP agreed to provide a minimum flow release from the project of 200 cfs and to construct and to operate fish passage facilities as required by the DEP and FERC.

As noted in the Board's November 29, 1989 Order, minimum flow releases from the Cataract Project were historically limited to leakage (about 25 cfs) during non-generation periods on weeknights and weekends, and fish passage facilities were in place at only one of four project dams.

B. ACTION IN RELATED PROCEEDINGS

On July 12, 1990, FERC issued an Order on the Department's appeal of the new license for the Cataract Project. In its Order, FERC concluded that the DEP had until January 25, 1990 to act on CMP's request for water quality certification for the project, and that the issuance of a new license on June 29, 1989 without certification and prior to the expiration of the one-year waiver period for certification was in error. To correct this error, FERC changed the effective date of the new license to December 1, 1989, thereby giving full legal effect to the State's certification, which was issued on November 29, 1989.

In an Opinion and Order dated October 25, 1990, the Kennebec County Superior Court sustained Bangor Hydro's appeal of the Board's denial of certification for the Milford Project. In its Opinion, the Court concluded in part that the issues raised by the Department (recreation, fish passage, aquatic habitat) were not relevant to the review for water quality certification.

The Board subsequently filed an appeal of the Superior Court judgment to the Maine Supreme Judicial Court. In a decision dated July 30, 1991, the Supreme Court vacated the lower court judgment and reinstated the Board's denial of certification for the Milford Project. In reaching its decision, the Court concluded that designated uses (including recreation in and on the water, fishing, and habitat for fish and other aquatic life) are an integral part of the State's water quality standards, and that it

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was proper for the Board to seek information in a water quality certification proceeding regarding attainment of these designated uses.

Finally, on October 25, 1991, CMP and the Cities of Biddeford and Saco signed a Water Release Agreement. In this Agreement, CMP agreed to release 250 cfs on a continual basis from the Cataract Project dams, except in the event of maintenance requirements, emergencies, or seasonal variations beyond CMP's control. The Cities of Biddeford and Saco agreed to conduct a waste load allocation study to evaluate the impact of discharges on water quality in the Saco River estuary. All three parties agreed to renegotiate the flow release from the Cataract Project based on the results of the waste load allocation study, on future expansions to the Biddeford and/or Saco treatment plant(s), or on permit requirements imposed by DEP or EPA. CMP has been operating the Cataract project with a 250 cfs minimum flow release since the Agreement was signed.

C. ACTION ON PETITION

By letter dated May 28, 1992, CMP notified the Department that an agreement had been executed with the Cities of Biddeford and Saco to provide the Cities with a minimum flow. CMP stated that, in view of this agreement, the 200 cfs minimum flow condition in the Cataract Project certification was unnecessary and should be removed. CMP also restated its objection to the conditions in the certification regarding recreation and fish passage.

VI. DISCUSSION

A. GENERAL

Congress' stated objective in adopting the Clean Water Act was "to restore and maintain the chemical, physical and biological integrity of the Nation's waters." P.L. 92-500, Section 101(a). In order to meet this objective, the Act requires, among other things, that 1) the states adopt water quality standards, subject to federal review and approval; that 2) these standards consist of designated uses and water quality criteria based on such uses; that 3) the states certify compliance of certain activities with the Act and with applicable water quality standards; and that 4) such certifications include any conditions necessary to assure compliance with appropriate requirements of state law.

The State of Maine has adopted water quality standards which have been duly approved by the Environmental Protection Agency (see Water Classification Program, Title 38, MRSA, Article 4-A). In establishing goals to achieve the objective to restore and maintain the chemical, physical and biological integrity of the State's waters, the Legislature has declared that the discharge of pollutants into the waters of the state be eliminated where appropriate, that no pollutants be discharged into any waters of the State without first being given the degree of treatment necessary to allow those waters to attain their classification, and that water quality be sufficient to provide for the protection and propagation

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of fish, shellfish and wildlife and provide for recreation in and on the water. 38 M.R.S.A. Section 464(1).

Petitioner essentially questions the legal basis of the Board's decision to impose conditions relating to minimum flows and recreational and fish passage facilities in its Order granting Water Quality Certification for the Cataract Hydro Project, and by implication questions the legality of such conditions in any certification for any hydro project. Petitioner also questions the factual basis of the Board's 200 cfs minimum flow requirement.

B. SCOPE OF STATE JURISDICTION

In order to grant certification for a hydropower project, the Department must find that the construction and/or operation of the project will not violate applicable water quality standards. The legislative history of Section 401 of the Clean Water Act makes it clear that the use of the term "discharge" was not intended to be limiting, and that all hydropower projects subject to licensing by the Federal Energy Regulatory Commission are also subject to the certification provisions of Section 401. EPA, FERC, and various state and federal courts have all consistently supported this interpretation.

Furthermore, the Clean Water Act makes it clear that designated uses and numerical and narrative criteria are each integral, but distinct, components of a state's water quality standards. Thus, the impact of a hydropower project on the designated uses and the numerical and narrative criteria of the affected waters must be independently evaluated. The Department has consistently conducted such an evaluation in reviewing requests for Section 401 certification.

Finally, both the Clean Water Act and EPA's implementing regulations make it clear that any conditions necessary to assure that an activity will comply with applicable water quality standards must be included in the state's certification, and that if compliance with such standards cannot be reasonable assured, certification cannot be issued. The Department has consistently acted in accordance with these statutory requirements in granting or denying water quality certifications for hydropower projects.

In a recent decision, the Maine Supreme Judicial Court upheld the Department's interpretation of the scope of state authority in a water quality certification review. Bangor Hydro-Electric Company, et al. v. Board of Environmental Protection, 595 A.2d 438 (Me. 1991). The case involved the Board's denial of water quality certification for the Milford Hydro Project, which Bangor Hydro was seeking to relicense. The Court found that the standards for each class of Maine waters contain a list of designated uses, a set of numerical criteria for water chemistry, and a set of narrative criteria on the permissible level of pollutant discharges. The Court concluded that the language of Maine's water quality standards legislation contemplates that the designated uses actually be present. The Court further concluded that, while all water

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quality standards may not be achieved at a given time, the designated uses provide goals for the State's management of its classified waters, and that it is proper for the Board to consider such goals in reviewing a proposed 40-year license for compliance with Maine's classification standards.

C. SCOPE OF FERC JURISDICTION

Section 401 of the Clean Water Act establishes a mechanism whereby the states, in certifying compliance of hydropower projects with state water quality standards, have the authority to condition or prevent the issuance of a federal license or permit, irrespective of any federal agency's jurisdiction pursuant to federal law. Therefore, to the extent that project facilities and operation bear on the attainment of designated uses, and where designated uses are an integral part of Maine's water quality standards, then these matters--including fish passage facilities, recreational facilities and minimum flow releases--are subject to the Department's jurisdiction.

In its decision in the case of Bangor Hydro-Electric Company, et al. v. Board of Environmental Protection, the Maine Supreme Judicial Court found that, in the overlapping schemes of the Federal Power Act and the Clean Water Act, the Board's veto is confined to the narrow question of whether there is a reasonable assurance that a hydropower project will comply with state water quality standards. The Court concluded that the Board did not exceed its jurisdiction in reviewing Bangor Hydro's measures for future compliance with those standards, including designated uses.

Furthermore, it is a settled matter of federal judicial and administrative interpretation that the Section 401 certification process gives the states a controlling role in the maintenance of water quality standards. Federal agencies have no authority to review a state's certification, and any conditions included in a certification are binding on the federal licensing or permitting agency.

In its July 12, 1990 Order granting the Department's appeal of the new license issued for the Cataract Project, FERC stated its opinion that several of the conditions of the Board's certification for the Cataract Project were not related to water quality and conflicted with the conditions of the new license. However, FERC went on to acknowledge that review of the appropriateness of water quality certification conditions is the purview of state courts.

D. RECREATIONAL AND FISH PASSAGE FACILITIES

In its November 29, 1989 decision granting a conditional water quality certification for the Cataract Hydro Project, the Board found, in summary, that the continued operation of the project could result in significant adverse impact on the designated uses of the affected waters of the Saco River for fishing, recreation in and on the water, and as habitat for fish and other aquatic life unless, among other things, adequate measures were

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taken to meet current and anticipated recreational needs and adequate facilities were provided to pass migrating anadromous fish through the project site. On the basis of these findings, the Board then reached appropriate conclusions of law and conditioned its certification for the project to require that public recreational access facilities be provided in the project area, as proposed by CMP, and that specified upstream and downstream fish passage facilities be installed and operated at the project dams and that the effectiveness of these facilities be monitored and evaluated, all as proposed by CMP.

In concluding that public recreational access facilities must be provided in order to satisfy applicable water quality standards, the Board determined that the designated uses of fishing and recreation in and on the water would not be attained unless adequate measures were taken to mitigate for the physical impediment and hydrologic changes caused by the presence and operation of the project dams. Thus, conditioning the water quality certification to require that public recreational access facilities be provided was necessary and proper to meet the State's water quality management goals and to restore and maintain the chemical, physical and biological integrity of the Saco River.

In concluding that upstream and downstream fish passage facilities must be installed, operated and evaluated, the Board determined that the designated use of habitat for fish would not be attained unless adequate measures were taken to mitigate for the physical impediment and hydrologic changes caused by the presence and operation of the project dams. Thus, conditioning the water quality certification to require that fish passage facilities be installed, operated and evaluated was necessary and proper to meet the State's water quality management goals and to restore and maintain the chemical, physical and biological integrity of the Saco River.

At the present time, CMP is providing improved public access to the Saco River in the Cataract Project area in accordance with the actions outlined in the Company's 1989 Recreational Facilities Plan. At the present time, CMP also has designed and has or is installing new fish passage facilities at the two lowermost Cataract Project dams.

E. Minimum Flows

In its November 29, 1989 decision granting a conditional water quality certification for the Cataract Hydro Project, the Board found, in summary, that the continued operation of the project could result in significant adverse impact on the designated uses of the affected waters of the Saco River as habitat for fish and other aquatic and estuarine life unless, among other things, adequate minimum flows were released to assure proper attraction to and operation of the required fish passage facilities and to maintain the freshwater and estuarine habitat downstream from the project. The Board also found that the continued operation the project could result in violations of the applicable dissolved oxygen standards in the Saco River estuary unless adequate minimum flows were provided to assimilate

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existing license discharges from the Biddeford and Saco wastewater treatment plants. On the basis of these findings, the Board then reached appropriate conclusions of law and conditioned its certification for the project to require that a minimum flow of 851 cfs or inflow, whichever is less, be maintained from the East and West Channel Dams during periods of project generation, and that a minimum flow of 200 cfs be maintained from the East and West Channel Dams during periods of project non-generation.

In concluding that minimum flows must be provided, the Board determined that the designated uses of habitat for fish and other aquatic and estuarine life would not be attained and that the numerical criteria for dissolved oxygen would not be maintained unless adequate measures were taken to mitigate for the physical impediment and hydrologic changes caused by the presence and operation of the project dams.

CMP does not object to the Board's requirement for a minimum flow release of 851 cfs or inflow, whichever is less, during periods of project generation. The upstream Skelton Project, which controls inflow to the Cataract Project dams, operates at set generating flows of 1500, 3000, or 3800 cfs. The Cataract generating station is normally set for the same flow rate as the Skelton Project, thus maintaining a flow release equal to inflow from Skelton. As a result, normal project operations will accommodate the Board's minimum flow requirement during periods of project generation. A similar requirement has been imposed by FERC in the new license for the project.

CMP does object, however, to the Board's requirement for a minimum flow release of 200 cfs during periods of project non-generation to assimilate discharges from downstream waste water treatment plants. For a number of years, flows in the Saco River from CMP's Bonny Eagle Project to the Cataract Project, a distance of about 21.5 miles, have been limited to leakage (about 25 cfs) during weeknights and weekends under all but high spring and fall flow conditions. This reduced flow condition has allowed the impoundments along the river to be refilled following the release of increased flows to maximize generation during periods of peak electrical demand.

The Board notes that the installation and operation of fish passage facilities at the East and West Channel Dams will result in a continuous minimum flow release of about 130-160 cfs from April 1 through November 30 annually. CMP has not objected to providing these minimum flows for fish passage.

The Board further notes that, subsequent to filing the Petition for Reconsideration in this proceeding, CMP voluntarily negotiated and signed a Water Release Agreement with the Cities of Biddeford and Saco in which the parties agreed to a flow release from the Cataract Project sufficient to assimilate the effluent discharges from the Biddeford and Saco treatment plants. CMP has in effect proposed to alter its historic operation of the project to provide a minimum flow release in accordance with the new Agreement.

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Finally, the Board notes that it is appropriate to modify the Order granting water quality certification for the Cataract Project to reflect the change in project operation now proposed by CMP in accordance with the new Water Release Agreement.

BASED on the above Findings of Fact, the Board concludes that the Petitioner has presented no new evidence that calls into question the legal basis of the Board's findings, conclusions and conditions relating to recreational and fish passage facilities. Therefore, it is appropriate that the Board deny CMP's Petition for Reconsideration insofar as that petition relates to limiting the scope of the Board's Section 401 water quality certification jurisdiction.

However, the Board further concludes that the Petitioner has presented new evidence, in the form of a Water Release Agreement with the Cities of Biddeford and Saco, sufficient to warrant modification of the Board's findings, conclusion and condition relating to minimum flows. The Board also concludes that it is appropriate to update certain aspects of the Board's decision (findings on jurisdiction, and condition compliance schedules) to reflect the passage of time since the Board's original decision. Therefore, it is appropriate that the Board grant CMP's Petition for Reconsideration for the limited purposes discussed here.

THEREFORE, the Board, for the reasons stated above, DENIES IN PART and GRANTS IN PART the Petition for Reconsideration filed by CENTRAL MAINE POWER COMPANY of Board Order #L-16084-33-A-N dated November 29, 1989 granting water quality certification for the relicensing and continued operation of the Cataract Hydro Project, and VACATES said Order.

Upon Reconsideration, and pursuant to the provisions of 38 M.R.S.A. Section 464 et seq. and Section 401 of the Federal Clean Water Act, the Board 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. PROJECT DESCRIPTION

The applicant proposes the relicensing and continued operation of the Cataract Hydro Project, located on the Saco River in the Cities of Biddeford and Saco and the Towns of Buxton and Dayton, York County, Maine (See Exhibit 1).

A. PHYSICAL FEATURES

The existing project consists of two dams and associated generating facilities adjoining Factory Island, two dams adjoining Springs Island, two impoundments, and appurtenant facilities (See Exhibit 2).

CATARACT (EAST CHANNEL) DAM AND POWERHOUSE. The Cataract (East Channel) Dam, located at head-of-tide on the east side of Factory Island, is a

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concrete gravity dam measuring about 175 feet in length and 26 feet in height. The dam consists of a 90-foot-long overflow spillway section topped by 4-foot-high hinged flashboards, a gate section, and an intake section. The Cataract Powerhouse is integral with the dam and contains a single turbine-generator unit with a rated capacity of 6,650 kilowatts (KW) at a maximum head of 44 feet. Available head varies with tidal fluctuations (See Exhibit 3).

UPPER YORK (WEST CHANNEL) DAM AND NKL UNITS. The Upper York (West Channel) Dam, located on the west side of Factory Island, is a stone masonry and concrete gravity dam measuring about 265 feet in length and 18 feet in height. The dam consists of two overflow spillway sections topped by 4-foot-high pinned flashboards, a fishway section, and a gate section (See Exhibit 4). A covered flume and penstock leads from a headworks structure located on the east end of the dam to two currently unlicensed turbine-generator units located within an adjacent mill building. These units, purchased by the applicant from NKL Tanning Inc. in 1983, have a combined generating capacity of 900 KW at a maximum head of 44 feet (available head on these units is also variable with tidal fluctuations). Flows through these units are discharged back into the river about 900 feet downstream from the dam.

CATARACT IMPOUNDMENT. Together, the Cataract (East Channel) and Upper York (West Channel) Dams create an impoundment with a surface area of about 14 acres at a full pond elevation of 44 feet (USGS). This impoundment extends upstream about 0.3 miles to the Springs and Bradbury Dams.

SPRINGS DAM. The Springs Dam, located on the east side of Springs Island, is a concrete gravity dam measuring about 230 feet in length and 14 feet in height. The dam consists of an overflow spillway section topped by 18-inch-high pinned flashboards, and a gate section (See Exhibit 5).

BRADBURY DAM. The Bradbury Dam, located on the west side of Springs Island, is a concrete gravity dam measuring about 250 feet in length and 14 feet in height. The dam consists of two overflow spillway sections topped by 20-inch-high pinned flashboards, and a gate section (See Exhibit 5).

SPRINGS/BRADBURY IMPOUNDMENT. Together, the Springs and Bradbury Dams create an impoundment with a surface area of about 360 acres at a full pond elevation of 49.2 feet (USGS). This impoundment extends upstream about 9.3 miles to the tailrace of the Skelton Dam, which is licensed to the applicant as FERC Project No. 2527.

B. PROJECT OPERATION

i. SYSTEM OPERATION

The operation of the applicant's five hydro projects on the lower Saco River is controlled on the basis of operating efficiency, system

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load and river flow. There are no storage reservoirs on the Saco River, so flows are generally used when available.

Under high flow conditions (normally occurring during spring and fall runoff), all of the applicant's generating stations on the river are operated continuously on a run-of-river basis (that is, outflow equals inflow on an instantaneous basis).

At flows of less than 4,500 cubic feet per second (cfs), the river is regulated at the Bonny Eagle Project (FERC No. 2529), located about 21.5 miles upstream from the Cataract Project. Under these conditions, water is released from the Bonny Eagle Dam on weekdays to maximize generation during periods of peak electrical demand. Water is then ponded on weeknights and on weekends to restore the reservoir level.

The four generating stations below Bonny Eagle are generally started and stopped sequentially so as to take advantage of flow releases from Bonny Eagle. However, because of its large impoundment capacity, the Skelton Project re-regulates flows from upstream dams. When operating, Skelton typically passes controlled flows of either 1500, 3000, or 3800 cfs. Weeknight and weekend operation is normally reduced to allow the Skelton impoundment to refill.

ii. CATARACT OPERATION

The Cataract powerhouse is normally started at the same time and set for the same flow rate as the Skelton powerhouse. Because of the time delay (about two hours) for water from Skelton to reach the Cataract powerhouse, the Springs/Bradbury impoundment is normally drawn down by about two feet at the start of the day as water is supplied for generation at Cataract. At the end of daily operation, the Skelton and Cataract powerhouses are normally shut down together, with the delayed flow from Skelton used to refill the Springs/Bradbury impoundment.

Flow releases from the Skelton and Cataract Projects have historically been reduced to leakage (about 25 cfs) during non-generating periods. Since 1986, however, the applicant has provided a flow of up to 250 cfs through the Cataract impoundment on demand from the Maine Energy Recovery Company (MERC). The purpose of this flow is to control water temperature increases resulting from the discharge into the Cataract impoundment of cooling water from MERC's adjacent municipal solid waste resource recovery facility.

The Cataract impoundment has historically been drawn down once a year to allow for project maintenance and for the removal of accumulated debris and sediment from the area in front of the Cataract powerhouse intake. This drawdown takes place over a 3-5 day period around the Fourth of July or Labor Day holidays.

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iii. POWER GENERATION

The Saco River at the Cataract Project has an average annual flow of 2,860 cfs from a drainage area of 1,703 square miles. The operation of the Cataract powerhouse and NKL units, with a combined hydraulic capacity of 3,125 cfs, utilizes all available river flow about 63% of the time.

Following rehabilitation of the recently acquired NKL units, the Cataract project will generate an average of 50.5 million kilowatt-hours of electricity annually. This is equivalent to the energy that would be generated by consuming 34,166 barrels of oil or 23,401 tons of coal each year. Project power is fed into the applicant's electrical transmission and distribution system for use by its customers.

2. JURISDICTION; STANDING

The project was initially licensed on August 20, 1968 as a water power project pursuant to the Federal Power Act (Project No. 2528). On April 4, 1986, the applicant filed an Application for New License to operate the existing project, including the rehabilitated NKL units, for another 40 years. A new license for the project was issued by the Federal Energy Regulatory Commission (FERC) on June 29, 1989. On appeal by the Department, FERC subsequently revised the effective date of the new license from June 1, 1989 to December 1, 1989.

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, 33 USC 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. The Board 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 within its jurisdiction. The project is located in the Cities of Biddeford and Saco and the Towns of Buxton and Dayton, all of which are organized municipalities subject to the Board's jurisdiction.

FERC has adopted a rule (18 CFR 4.38) which specifies that certification shall be deemed waived if the certifying agency has not denied or granted certification by one year after its receipt of a request for certification. The Application for Water Quality Certification for the Cataract Project was received by the Department in full compliance with applicable processing rules and regulations on January 26, 1989.

The proposed continued operation of the existing project does not qualify as the "construction, reconstruction or structural alteration of a hydropower project" under the terms of the Maine Waterway Development and Conservation Act, Title 38 M RSA Sections 630-637. Therefore, no permit is required under this statute for this project.

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The applicant is a public utility operating under the regulation of the Maine Public Utilities Commission. The applicant currently holds title to all lands, structures and water rights necessary for the operation of the project.

3. APPLICABLE WATER QUALITY STANDARDS

The waters of the Saco River are currently classified as follows: Class B from its confluence with the Little Ossipee River in East Limington to its confluence with Thatcher Brook in Biddeford; Class C from its confluence with Thatcher Brook to tidewater; and Class SC below head-of-tide. 38 MRSA Sections 467 and 469.

Class B and 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, navigation, and as habitat for fish and other aquatic life. The dissolved oxygen (DO) content of Class B waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher. The DO content of Class C waters shall be not less than 5 parts per million or 60% of saturation, whichever is higher. 38 MRSA Section 465.

Class SC waters shall be of such quality that they are suitable for recreation in and on the water, fishing, aquaculture, propagation and restricted harvesting of shellfish, industrial process and cooling water supply, hydroelectric power generation, navigation, and as a habitat for fish and other estuarine and marine life. The DO content of these waters shall be not less than 70% of saturation. 38 MRSA Section 465-B.

The Board may only approve water quality certification if the standards of classification of the water bodies affected by the project and the requirements of the State's anti-degradation policy will be met. 38 MRSA Section 464(4)(F).

4. PROJECT IMPACTS ON WATER QUALITY STANDARDS

A. FISHING AND RECREATION IN AND ON THE WATER

i. USE AND FACILITIES

The Saco River in the project area is receiving increasing recreational use for boating, fishing, and swimming. Existing river-related recreational facilities in the project area include:

- public canoe and boat access sites, provided and maintained by the applicant, located immediately below the Skelton Dam;
- a commercial campground, including beach and boat launch facilities, located adjacent to the Route 5 highway bridge in Saco;

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- an informal canoe and cartop boat access site, located across the river from the Route 5 commercial campground;
- a municipal park, including a beach and boat launching ramp, located in Biddeford; and
- a municipal park, including a boat launching ramp, located in Saco.

Additionally, there are a total of five public and private boat launch facilities located along the tidewater portion of the Saco River below the Cataract Project dams.

ii. PROPOSALS FOR RECREATIONAL ACCESS AND FACILITIES

The applicant has recently developed a Recreational Facilities Plan (February, 1989), designed to meet current and anticipated public recreation needs at CMP-owned projects. The Plan calls for specific actions to improve the Cataract and Skelton project sites (performing landscaping, installing interpretive and warning signs), to enhance existing recreational facilities (improving informal fishing access trail below Cataract Dam, upgrading boat access site below Skelton Dam), and to develop new recreational facilities (securing land adjacent to Route 5 bridge for future development, exploring means for portaging canoes around the project dams).

The applicant has also recently committed \$25,000 to the City of Saco to assist in the development of a public park below the Cataract Dam.

The project could result in significant degradation of the use of project waters for fishing and recreation unless adequate measures are taken to meet current and anticipated recreational needs. The Department of Conservation has stated that the applicant's proposals, as detailed in its Recreational Facilities Plan, will provide adequate public recreational access within the project area.

The project could result in significant degradation of the use of project waters for fishing unless water levels, minimum flows, fish passage, and dissolved oxygen levels are adequate to maintain and protect fishery resources. These issues are discussed in succeeding paragraphs.

B. FISH AND OTHER AQUATIC, ESTUARINE AND MARINE LIFE

i. HABITAT AND RESOURCES

The Saco River above head-of-tide currently supports a number of cold water and warm water fish species, including smallmouth and largemouth bass, chain pickerel, white perch, brook trout, and brown trout. Historically, the river also supported significant populations of anadromous (sea-run) fish, including Atlantic salmon, American shad, and alewives.

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The tidal portion of the river currently supports catadromous American eels and remnant populations of anadromous alewives, American shad, and blueback herring. In addition, the estuary sports a striped bass fishery which is supported by spawning populations from the mid-Atlantic states and which is one of the most significant recreational fisheries for striped bass on the coast of Maine. Historically, the estuary also supported a commercial fishery for anadromous rainbow smelt.

Waterfowl and wetland furbearer species common to urban and rural southern Maine riverine and estuarine environments are inhabitants or transients in the project area. The lands abutting the project reservoirs support typical terrestrial wildlife species. A deer wintering area borders along two miles of the Springs/Bradbury impoundment in Buxton. Federally endangered bald eagles and peregrine falcons are occasional transients in the project area.

The Springs/Bradbury impoundment includes three freshwater wetland areas covering a total of about 22 acres. Overall, these wetlands are of low to moderate value for waterfowl and wildlife.

Six tidal wetlands covering a total of about 215 acres are located in the 4 1/2 mile-long estuary between the Cataract Project and Camp Ellis. These wetlands include 115 acres of coastal salt meadow, 34 acres of regularly flooded salt marsh, and 66 acres of coastal open fresh water and combination shallow and deep fresh marsh. Much of these wetlands is of high value for waterfowl feeding, migration, and overwintering.

ii. FISHERIES MANAGEMENT PLANS

The Atlantic Sea Run Salmon Commission (ASRSC), the Department of Inland Fisheries and Wildlife (DIF&W), the Department of Marine Resources (DMR), and the U. S. Fish and Wildlife Service (USF&WS) have jointly developed a Saco River Strategic Plan for Fisheries Management (January, 1987). According to this Plan, management objectives for the tidal portion of the river include re-establishing a spawning population of rainbow smelt and promoting existing and potential recreational and/or commercial fisheries for alewives, American shad, American eels, Atlantic salmon, rainbow smelt, and striped bass. Management objectives for the river from the East Channel/West Channel Dams to Skelton Dam include providing a migratory pathway for anadromous fish and promoting recreational fisheries for Atlantic salmon and inland cold water and warm water species. The Strategic Plan estimates that the Saco River Basin could support annual runs of 300-1500 Atlantic salmon, 150 thousand American shad, and 0.7-1.4 million alewives.

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Juvenile Atlantic salmon (parr and smolts) have been stocked in the river since 1982. Returning adult salmon have been observed as far upstream as the West Buxton Dam.

iii. FISH PASSAGE

Existing upstream fish passage facilities on the Saco River consist of notched weir and pool fishways at the West Channel Dam and at Skelton Dam. No other dams on the river currently have upstream passage facilities. Under the right flow conditions, Atlantic salmon will swim upstream through the Springs and Bradbury Dams after successfully negotiating the West Channel Dam fishway or spillway. Neither alewives nor American shad, however, can currently pass the Cataract Project dams.

Downstream fish passage facilities are currently absent from all dams on the river.

ASRSC, DIF&W, and DMR all report that existing provisions for fish passage along the Saco River are inadequate for the planned restoration of anadromous fish. These agencies are currently negotiating with the applicant on a plan for the installation of fish passage facilities at all of its Saco River dams.

Over the past several years, the applicant has undertaken various measures designed to improve fish passage at the Cataract Project by concentrating flows in the West Channel leading to the existing fishway.

The applicant now proposes to provide fish passage at the Cataract Project by:

- Installing a new fish lift and downstream passage facilities at the Cataract Dam, installing a new denil (single-plane baffle) fishway and downstream passage facilities at the West Channel Dam, and installing new denil fishways at the Springs and Bradbury Dams, with all of these facilities to be operational within two years after issuance of a new FERC license for the project;
- Developing procedures for operation and maintenance of fish passage facilities at the project dams; and
- Studying the effectiveness of upstream and downstream fish passage at the project dams.

The project could result in significant adverse impact on fish resources unless adequate facilities are provided to pass migrating anadromous fish through the project site. The applicant's proposals for upstream passage facilities at all four project dams and downstream passage facilities at the East Channel and West Channel

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Dams have been accepted by ASRSC, DIP&W, and DMR. Due to the absence of generating equipment at the Springs and Bradbury Dams, no downstream fish passage facilities are required at these dams.

A coalition of conservation groups (Saco River Salmon Club, American Rivers, Atlantic Salmon Federation, Natural Resources Council of Maine, and North Conway Chapter of Trout Unlimited) has commented that the Board should defer action on or deny certification for the Cataract Project until such time as final agreement is reached by all parties, including the conservation groups, on a comprehensive fish passage plan for the Saco River.

In response, the DEP Staff has concluded that, while agreement on a comprehensive fish passage plan is desirable, the absence of such a plan does not appear to create any uncertainty regarding fish passage requirements for the Cataract Project. Agreement has been reached by the applicant and the State's fisheries agencies on the installation of fish passage facilities at all four Cataract Project dams. The conservation groups do not object to this agreement. Therefore, there appears to be no justification for postponing action on the pending Cataract application.

iv. OPERATING WATER LEVELS

During normal project operation, water levels in the Cataract impoundment are held at a constant full-pond elevation, while water levels in the Springs/Bradbury impoundment vary by up to two feet (see paragraph 1B, Project Operation). Under high flow conditions, water overtops the spillway flashboards at all four dams once the capacity of available gates and turbines is exceeded.

The applicant proposes to continue to operate the project with stable water levels in the Cataract impoundment and with water levels fluctuations of up to two feet in the Springs/Bradbury impoundment.

The project could result in significant adverse impact on fish and other aquatic life unless adequate water levels are maintained to protect aquatic habitat and resources. No significant impacts resulting from current water level management practices have been identified.

v. MINIMUM FLOWS

Historically, project operation resulted in only leakage flow (about 25 cfs) through the Cataract Project dams during off-peak hours, except when increased flows were requested by MERC.

Initially, the applicant proposed to operate the project to provide a minimum flow release of 851 cfs (Aquatic Base Flow) or inflow, whichever is less, during the fish migration season (April 1 to December 1, annually). The applicant also proposed to maintain

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instantaneous minimum flow releases of 100 cfs in the East Channel and 30-60 cfs in the West Channel during the fish migration season in order to assure proper attraction to and operation of the proposed fish passage facilities.

The applicant now proposes to provide minimum flow releases from the East and West Channel Dams in accordance with an October 25, 1991 Water Release Agreement signed by CMP, the City of Biddeford and the City of Saco. In this Agreement, CMP agrees to release 250 cfs on a continual basis from the East and West Channel Dams, except when CMP has maintenance requirements or when there are emergencies or seasonal variations beyond CMP's control.

The project could result in significant adverse impact on fish and other aquatic and estuarine life unless adequate minimum flows are provided to pass migrating anadromous fish through the project area and to maintain the freshwater and estuarine habitat downstream from the project. The applicant's proposals for minimum flow releases have been accepted by ASRSC, DIF&W, and DMR.

vi. MAINTENANCE DRAWDOWN

The Cataract impoundment has historically been drawn down by about 8 feet over a three to five day period annually in order to dewater the Cataract Powerhouse intake area and thus facilitate the removal of debris from this area. The debris removed averages about 120 cubic yards of silt, gravel, and wood (logs, trees, brush, and leaves). If not removed, this debris would restrict the turbine intake, resulting in decreased operating efficiency.

The maintenance drawdown results in the temporary dewatering of about 4 acres of the 14 acre Cataract impoundment. The drawdown would also cause any fish passage facilities at the Cataract and West Channel Dams to be temporarily non-functional.

The applicant has evaluated various alternatives to the traditional maintenance drawdown, including installation of a rack rake or log boom, and debris removal "in the wet" using a crane operating from the shore. The applicant reports that these alternatives would be very expensive and/or ineffective in comparison to the traditional method of debris removal. Therefore, the applicant proposes to continue to draw the Cataract impoundment down annually to facilitate debris removal. However, the applicant is willing to consult further with concerned agencies regarding the timing and duration of the drawdown.

ASRSC, DIF&W, and DMR all recommend that future debris removal occur "in the wet" without any impoundment drawdown.

The project could result in significant adverse impact on fish and other aquatic and estuarine life unless adequate measures are taken

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to minimize the effect of any maintenance drawdown on aquatic habitat and fish passage. The DEP Staff has concluded that it is feasible for the applicant to schedule the drawdown to avoid the fish migration period. This restriction on the timing of maintenance activities would continue until the applicant presents an acceptable alternative plan for debris removal.

C. DISSOLVED OXYGEN

The City of Biddeford and the City of Saco each have a municipal wastewater treatment plant discharging into the tidal estuary immediately downstream from the East Channel and West Channel Dams. The Saco plant has a design flow of 4.2 million gallons per day (MGD). The Biddeford plant has a design flow of 3.3 MGD. The Biddeford plant is currently operating near its design flow capacity, and is under consideration for an expansion to 6.0 MGD.

Without sufficient water being released from the East Channel and West Channel Dams, the effluent discharged from the Biddeford and Saco wastewater treatment plants may result in violations of Class SC dissolved oxygen standards in the Saco River estuary.

The applicant now proposes to provide minimum flow releases from the project in accordance with an October 25, 1991 Water Release Agreement signed by CMP and the Cities of Biddeford and Saco. In this Agreement, CMP agrees to release 250 cfs on a continual basis from the East and West Channel Dams, except when CMP has maintenance requirements or when there are emergencies or seasonal variations beyond CMP's control. CMP's obligation for releasing 250 cfs commenced upon the execution of the Agreement and is to continue so long as the Cities are discharging effluent from their wastewater treatment plants into the Saco River below the Cataract Project.

In accordance with the Water Release Agreement, the Cities of Biddeford and Saco are to conduct a waste load allocation study to evaluate the impact of existing discharges on water quality in the Saco River estuary. All three parties have agreed to renegotiate the minimum flow releases from the Cataract Project based on the results of the waste load allocation study, on future expansions to the Cities' wastewater treatment plants, or on permit requirements imposed by DEP or EPA.

Staff analysis indicates that minimum flow releases from the Cataract Project in accordance with the Water Release Agreement should be sufficient to meet DO standards in the Saco River estuary. However, with the exception of such flows as are necessary to provide adequate fish passage through the West Channel during the fish migration season, staff analysis indicates that all minimum flows should be released from the East Channel Dam so as to insure adequate mixing of MERC's thermal discharge.

BASED on the above Findings of Fact, the Board concludes that the relicensing and continued operation of the CATARACT HYDRO PROJECT will satisfy the

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requirements of U.S. Public Law 92-500, Section 401 (as amended), and Title 38 MRSA Section 464, for the issuance of Water Quality Certification provided that:

1. The provisions of the applicant's Recreational Facilities Plan relating to the Cataract Project are implemented in an adequate and timely manner;
2. Upstream fish passage facilities are installed, maintained, operated, and studied at all four project dams as proposed by the applicant;
3. Downstream fish passage facilities are installed, maintained, operated, and studied at the East Channel and West Channel Dams as proposed by the applicant;
4. Current water level management practices for the project impoundments are continued;
5. Minimum flows are provided in accordance with the Water Release Agreement signed by CMP and the Cities of Biddeford and Saco; and
6. Maintenance drawdowns of the Cataract impoundment are scheduled to avoid the fish migration period.

THEREFORE, the Board GRANTS certification that there is a reasonable assurance that the relicensing and continued operation of the CATARACT HYDRO PROJECT, as described above, will not violate applicable Water Quality Standards, subject to the following conditions:

1. RECREATIONAL FACILITIES

- A. Public recreational access facilities shall be provided in the project area as described in the applicant's February 1989 Recreational Facilities Plan.
- B. The applicant shall, within 6 months following the issuance of this certification, submit a schedule for implementing the provisions of the Recreational Facilities Plan as required by Part A of this condition. This schedule shall be reviewed by and must receive approval of the Department of Conservation and the Commissioner.

2. FISH PASSAGE FACILITIES

- A. Upstream fish passage facilities shall be installed and operational at all project dams within 2 years following the issuance of a new FERC license for the project. These facilities shall consist of: (1) a new fish lift at the Cataract (East Channel) Dam; (2) a new denil fishway at the West Channel Dam; (3) a new denil fishway at the Springs Dam; and (4) a new denil fishway at the Bradbury Dam.
- B. Downstream fish passage facilities shall be installed and operational at the Cataract (East Channel) Dam and the West Channel Dam within 2 years following the issuance of a new FERC license for the project.

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- C. The applicant shall, within 6 months following the issuance of this certification, submit functional design drawings, a construction schedule, and operating and maintenance plans for all fish passage facilities required by Parts A and B of this condition, prepared in consultation with state and federal fisheries agencies. These submittals shall be reviewed by and must receive approval of state and federal fisheries agencies, FERC, and the Commissioner prior to facilities construction.

3. FISH PASSAGE STUDIES

- A. The applicant shall, in consultation with state and federal fisheries agencies, conduct a study to monitor and evaluate the effectiveness of all fish passage facilities constructed pursuant to Condition 2 of this certification.
- B. The applicant shall, within 6 months following the issuance of this certification, submit a fish passage study plan and schedule, prepared in consultation with state and federal fisheries agencies. This plan and schedule shall be reviewed by and must receive approval of state and federal fisheries agencies, FERC, and the Commissioner.
- C. The applicant shall, in accordance with the approved schedule, submit the results of the fish passage study, along with any recommendations for structural or operational changes to existing fish passage facilities based on the study results, to the Commissioner and to all consulting agencies. The Board reserves the right, after notice and opportunity for hearing, to require reasonable structural and/or operational changes to existing fish passage facilities as may be deemed necessary to effectively pass anadromous fish through the project area. Any such changes must also be approved by FERC.

4. WATER LEVELS

Except as temporarily modified by approved maintenance activities or by inflows to the project area or by operating emergencies beyond the applicant's control, as defined below, water levels in the Cataract impoundment shall be maintained at a normal surface elevation of 44 feet USGS datum (flashboard crest elevation) and in the Springs/Bradbury impoundment shall be maintained between elevations 49.2 feet and 47.2 feet USGS datum (flashboard crest elevation to 2 feet below flashboard crest).

Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other temporary abnormal operating condition, flashboard failure or maintenance, generating unit operation or interruption under power supply emergencies, and orders from local, state, or federal law enforcement or public safety authorities.

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5. MINIMUM FLOWS

- A. Except as temporarily modified by operating emergencies beyond the applicant's control, as defined below, the following minimum flow releases shall be maintained:
- (1) During periods of generation at the Cataract Powerhouse, a total instantaneous minimum flow of 851 cubic feet per second or inflow, whichever is less, shall be maintained from the East Channel and West Channel Dams.
 - (2) During periods of non-generation at the Cataract Powerhouse, a minimum flow shall be provided from the East and West Channel Dams in accordance with the Water Release Agreement signed on October 25, 1991 by Central Maine Power Company, the City of Biddeford, and the City of Saco. Any minimum flow provided in accordance with this Agreement shall be released in its entirety from the East Channel Dam whenever flows are requested by the Maine Energy Recovery Company to comply with the terms of its Waste Discharge License, except for such flow releases as are necessary from the West Channel Dam to provide effective fish passage during the fish migration season.
- B. Operating emergencies beyond the applicant's control include, but may not be limited to, equipment failure or other temporary abnormal operating condition, flashboard failure or maintenance, generating unit operation or interruption under power supply emergencies, and orders from local, state, or federal law enforcement or public safety authorities.
- C. The applicant shall, within 6 months following the issuance of this certification, submit plans for providing and monitoring the minimum flow required by Part A of this condition. These plans shall be reviewed by and must receive the approval of the Commissioner.
- D. If the applicant operates the project in accordance with the terms of the October 25, 1991 Water Release Agreement and all terms and conditions of this certification, then water quality standards will be met in the tidal estuary of the Saco River insofar as this project is concerned.

6. MAINTENANCE DRAWDOWNS

Until such time as an alternative plan for the removal of debris from the Cataract intake area is proposed by the applicant and approved by the Board, annual maintenance drawdowns of the Cataract impoundment to facilitate debris removal shall be restricted to the period December 1 through March 31.

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

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documents are subject to the review and approval of the Board or Department prior to implementation.

8. COMPLIANCE WITH ALL APPLICABLE LAWS

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 and shall expire with the expiration of the new hydropower project license issued June 29, 1989 for the Cataract Project by the Federal Energy Regulatory Commission.

DONE AND DATED AT AUGUSTA, MAINE, THIS 12th DAY OF August, 1992.

BOARD OF ENVIRONMENTAL PROTECTION

BY: 
Owen R. Stevens, Chairman

NOTE ATTACHED SHEET FOR APPEAL PROCEDURES.

Date of receipt of initial application: 1/26/89

Date initial application accepted for processing: 2/03/89

Date of decision on application: 11/29/89

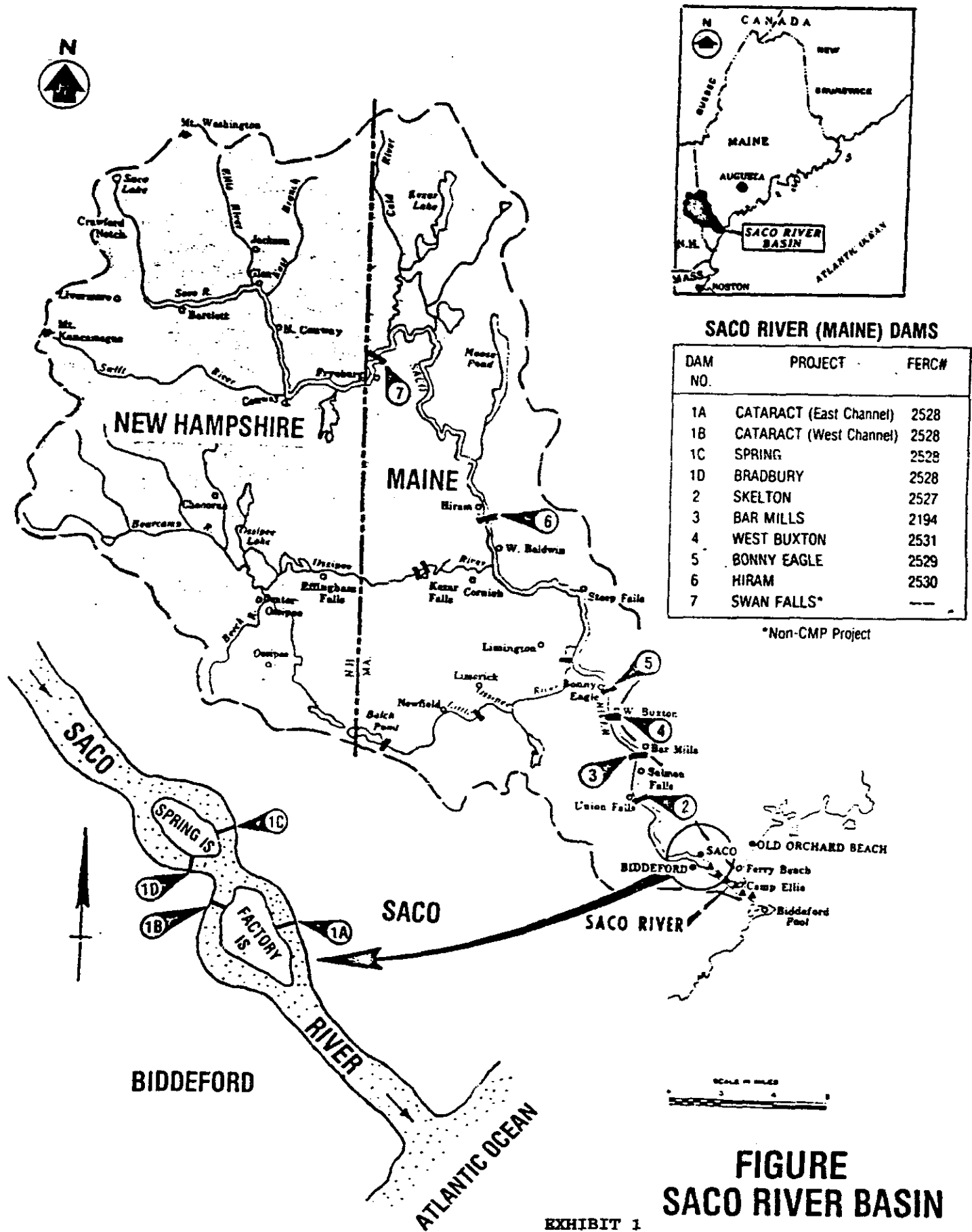
Date of filing of Petition for Reconsideration: 1/9/90

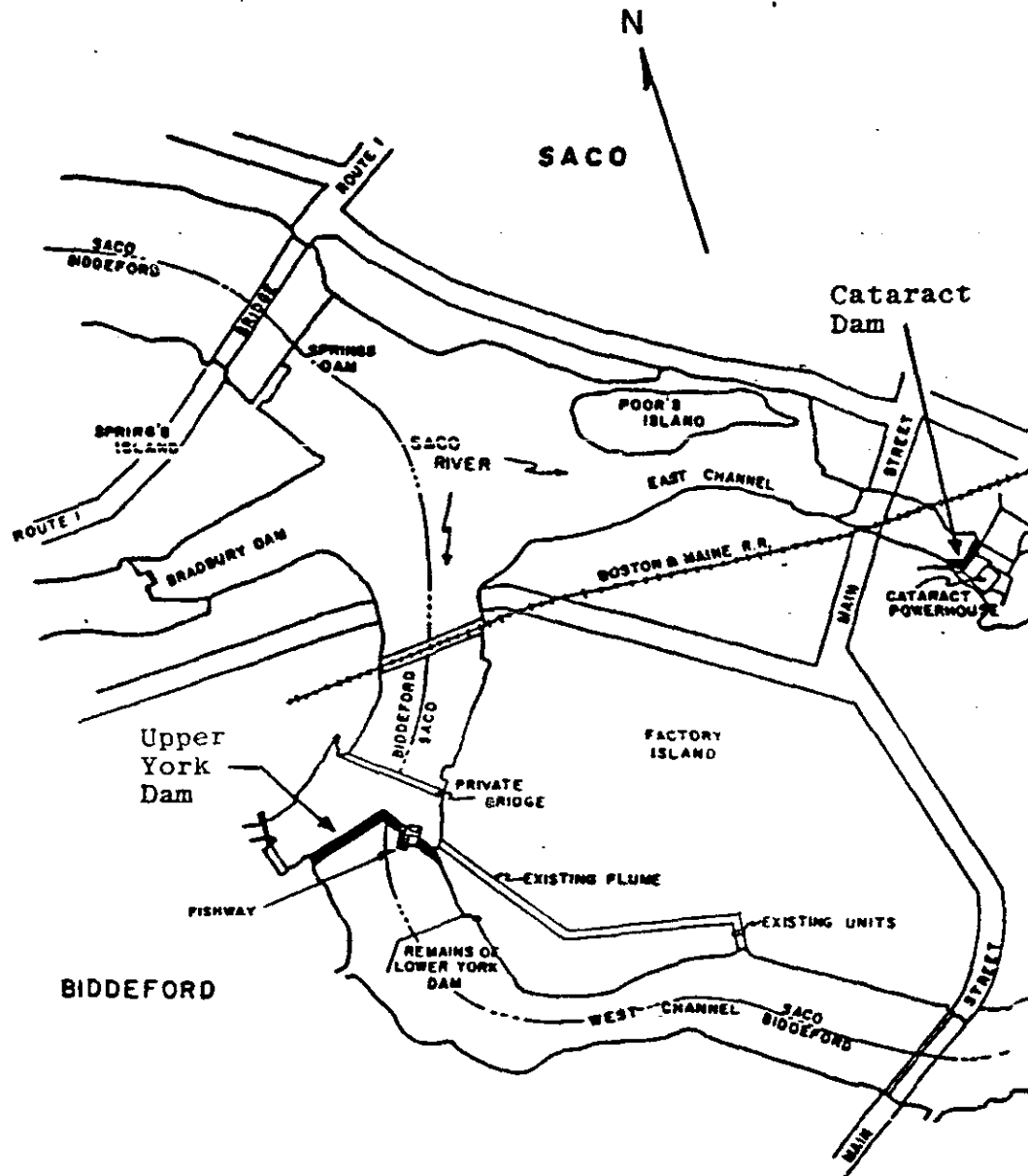
Date Petition for Reconsideration accepted for processing: 1/24/90

Dates of receipt of additional information: 4/18/90; 7/5/90; 12/19/90; 6/20/91;
5/28/92

Date filed with Board of Environmental Protection:

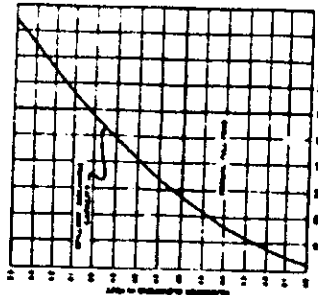
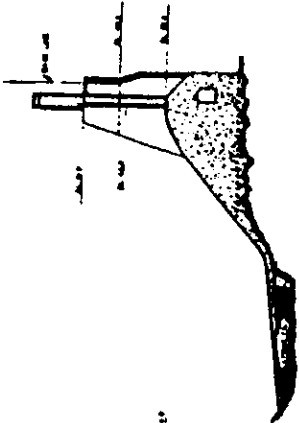
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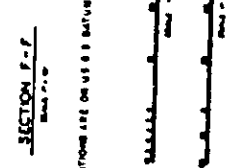
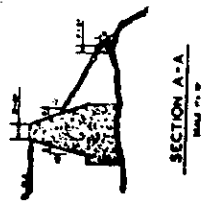
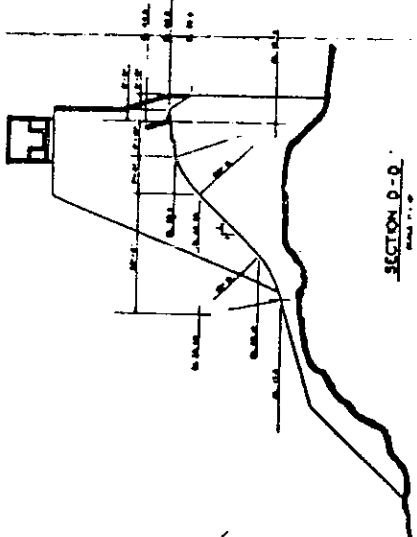
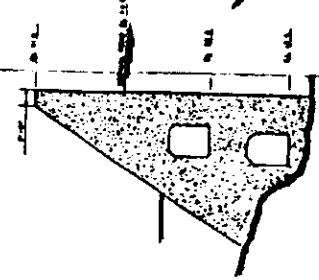
Figure Locations of Cataract and Upper York Dams in the Saco River in Saco and Biddeford, Maine (CMP undated).



THIS DRAWING IS PART OF THE APPLICATION FOR A LICENSE TO CONSTRUCT AND OPERATE MADE BY THE UNDERSIGNED THE 15th DAY OF March, 1936.
BY *[Signature]* ENGINEER, CIVIL ENGINE COMPANY
OF *[Signature]* CIVIL ENGINEER



EXHIBIT / SHEET 1
CATACT POWERHOUSE - EAST CHANNEL DAM
PLAN - ELEVATION - SECTIONS
CATACT PROJECT
STATE OF NEW YORK



NOTE
ELEVATIONS ARE ON U.S. DATUM

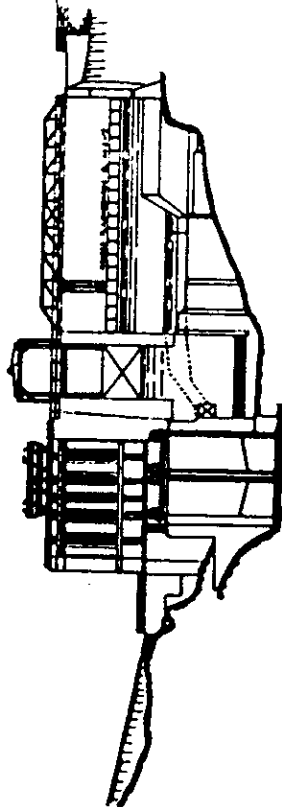
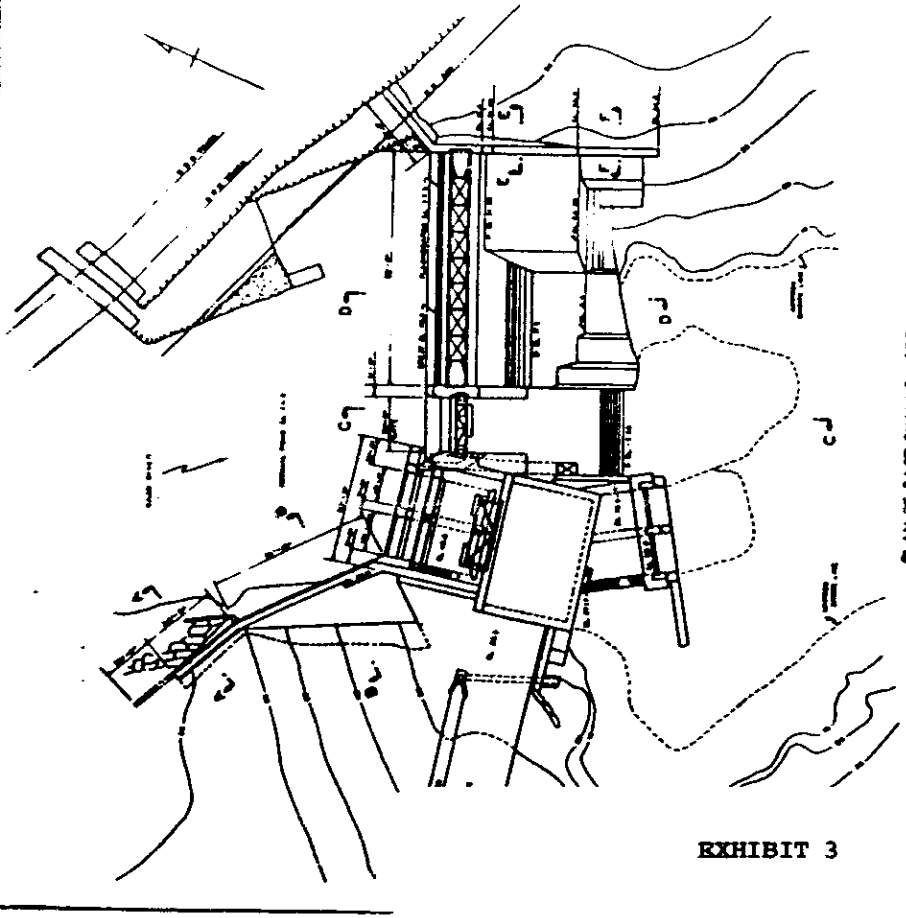


EXHIBIT 3

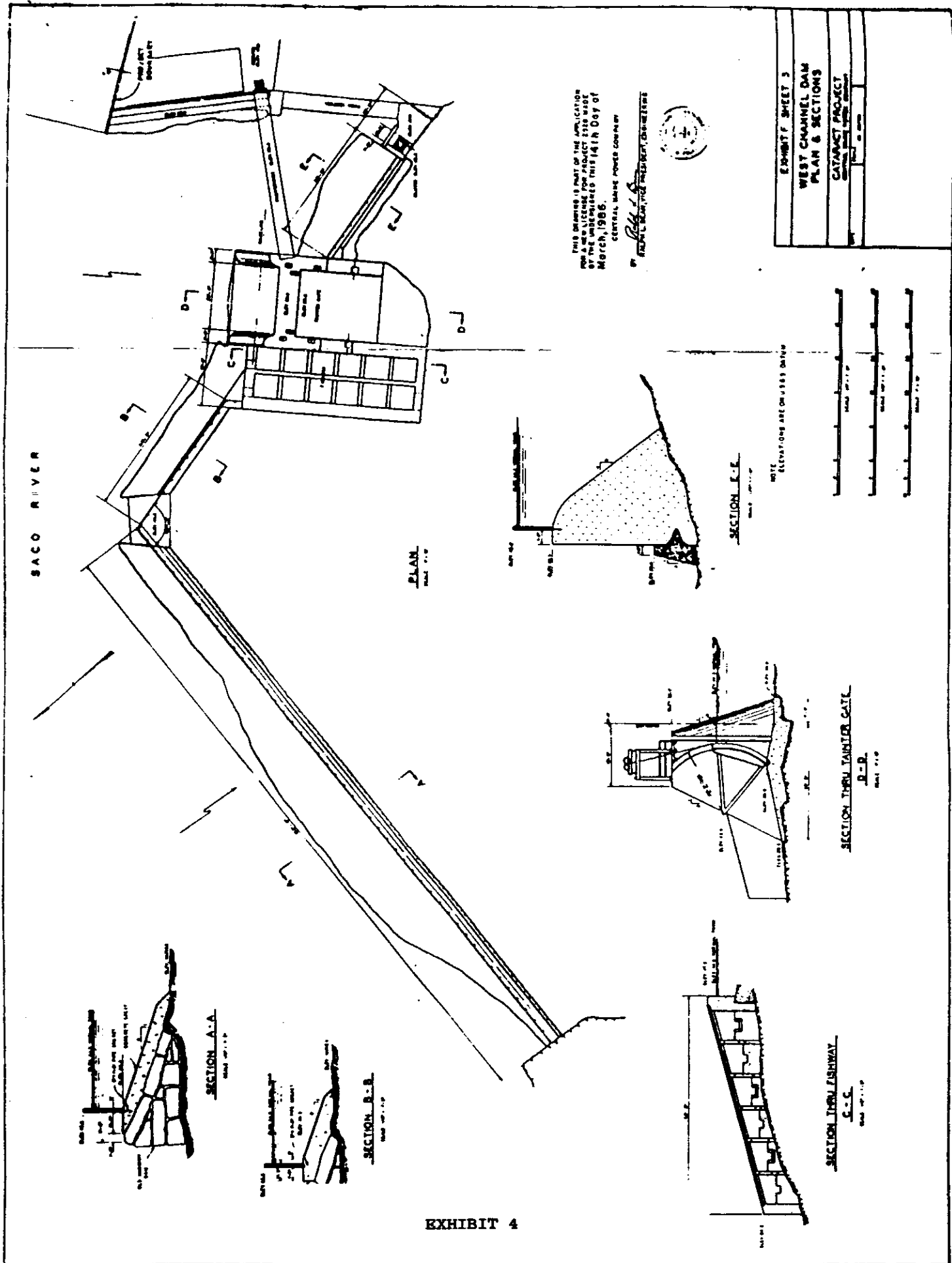


EXHIBIT 4

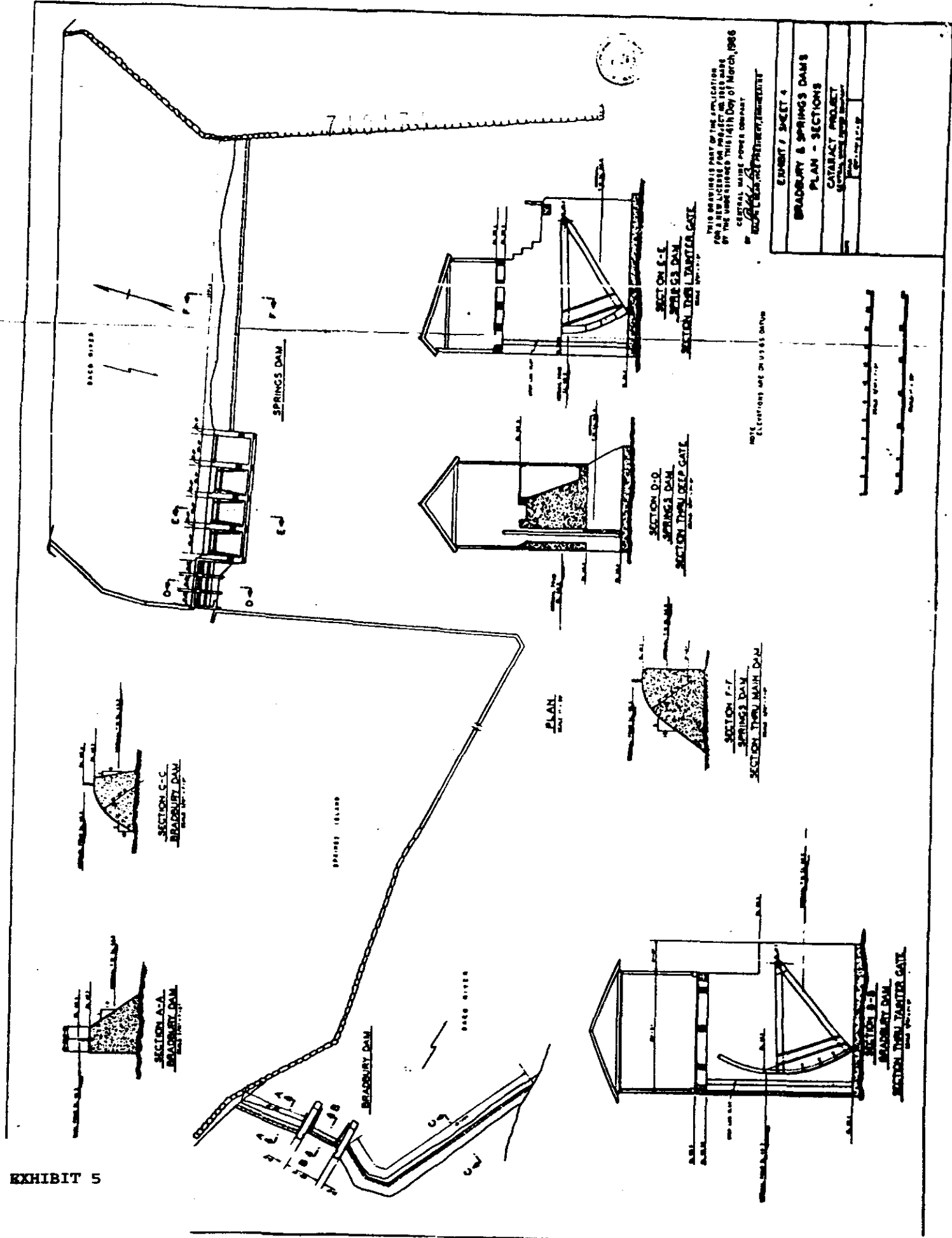


EXHIBIT 5

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