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MASTER

THE USE OF MEDIATION TO RESOLVE THE DISPUTE OVER LOW-HEAD HYDROELECTRIC DEVELOPMENT AT SWAN LAKE

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PREFACE

This report is about a negotiation process: who participated, why there was a need to negotiate, what issues were involved, and the outcome of the negotiation. As such, it describes a process we are all familiar with. We all negotiate, almost constantly, in order to get most of what we really want when we can not have all we would like.

It is also about a mediation process. In a mediation process, parties in dispute receive assistance in negotiating a resolution of their differences. A mediator organizes and directs the negotiations until they are concluded or the parties can continue without help. Parties enter into mediation voluntarily and agreements are made at their discretion. A mediator, unlike an arbitrator, has no authority to impose a settlement on the parties. The parties are free to reject proposals made by the mediator or the other parties or withdraw from the process at any time. Once they sign an agreement with one another, however, it acts with the same force as a contract and the parties can hold one another accountable for failure to perform under the terms.

In many instances, it seems that the involvement of a neutral mediator causes parties in dispute to consider a wider range of options in the course of their negotiations and may cause them to agree on a solution different from that proposed by any of them at the outset. For this reason, complex negotiations between parties confronted with environmental disputes can often be assisted by a neutral mediator. Careful examination of the mediation process that occurred in Swanville may provide a model for the resolution of other natural resource disputes. Therefore, the report concludes with a section on the implications of the case for those concerned with hydroelectric development and its environmental impacts -- public officials, developers and representatives of host communities.

The report was written by the mediator of the dispute and represents the views and behavior of the parties as the mediator understood them. It is intended to present the mediator's observations in a way which will inform and assist others who may someday face a difficult situation like the one the Town of Swanville and Maine Hydroelectric Development Corporation faced, and successfully resolved, in the spring and summer of 1979.

David O'Connor
Boston, 1980

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SUMMARY OF THE CASE

In 1978, the president of Maine Hydroelectric Development Corporation, Lawrence Gleeson, announced that the company planned to spend almost a half million dollars to renovate five dams on the Goose River near Belfast, Maine to generate electricity. The most important part of the plan involved the use of the first of the dams, the one which stands at the lower end of Swan Lake, not to generate power, but to regulate the flow of water to the downstream dams. In short, Swan Lake was to be used to retain water when the downstream dams were operating at capacity through normal runoff and to release water for them when rainfall and runoff were low. For Maine Hydro, management of the Swan Lake dam could make an otherwise marginal proposal lucrative.

However, Swan Lake and the dam which regulated its water level were vitally important to the town of Swanville, a community of about 400 persons wrapped around the shore of the lake. The residents use Swan Lake for swimming, fishing, boating, drinking water, and rely on it to maintain property values (and therefore property taxes) in the face of inflation, serious unemployment and a diminishing agricultural industry. The town was so concerned about the impact of this proposed hydroelectric project that in November, 1978 it petitioned the Federal Energy Regulatory Commission (FERC) to deny Maine Hydro's application on the grounds that it would damage the environment, reduce property values and eliminate recreational opportunities for its citizens.

In December, 1978, FERC accepted Swanville's petition and granted the Town status as an intervenor* in its review of Maine Hydro's license application. Meanwhile, community sentiment had long since turned against Maine Hydro and there were threats of reprisals if the company went ahead with its plans. Efforts to bring the developer and the community face to face for rational discussion of the project were unsuccessful.

In the spring of 1979, the Maine Office of Energy Resources requested the assistance of an environmental mediator to resolve the dispute. In May of 1979 the parties, represented by Gleeson on the one hand and the Selectmen from Swanville and their attorney on the other, voluntarily agreed to enter into negotiations with one another under the direction of a mediator in an effort to resolve their differences. Their decision to enter into mediation was unprecedented in Maine and very possibly in the history of hydropower development in the United States.

The Federal Energy Regulatory Commission supported their decision, anxious to learn if hydropower licensing disputes might be more efficiently and more satisfactorily resolved at the local level with the help of mediators. (See page 55 for a discussion of this question.) The Maine Office of Energy Resources hoped some settlement could be achieved that was acceptable to both sides and believed that negotiations between developers and host communities

*To qualify for intervenor status, one must show that participation is either "necessary or appropriate to the administration" of the Federal Power Act, or "may be in the public interest" (18 C.F.R. § 1.8, Conservation of Power and Water Resources). Once the Commission grants intervenor status it is required to hold a series of hearings to allow the applicant and intervenor each to present their case as well as to allow for comments by other concerned parties and for the preparation of studies that may be required to rule on the application. It is a lengthy and costly process for all.

might encourage the responsible development of hydropower capacity in the state.

The negotiations took place over five months and included five joint negotiating sessions, a public information meeting, two tours of the lake and numerous private discussions between the mediator and one or the other of the parties. The two most important and most difficult issues to resolve were the establishment of minimum and maximum lake levels and the plan for management of the area around the Swan Lake dam.

In the end, the parties reached agreement on a strategy for management of the Swan Lake dam by Maine Hydro so that the level of the lake will (1) not rise above a point 2.5 feet below the top of the dam at any time during the year, nor (2) fall below a point 5.0 feet below the top of the dam during the summer months, nor (3) fall below a point 7.5 feet below the top of the dam during the remainder of the year. At the same time, they agreed to take a number of actions to improve and clarify responsibilities for management of the area around the dam and to create a Swan Lake Committee comprised of representatives from Swanville and (ex officio) Maine Hydro, to "ensure future communication and cooperation" and to "develop and implement a plan for management and public use of the area around the (Swan Lake) dam."

The final agreement signed by the parties on August 2, 1979, covers fourteen different areas of concern, including water rights and recreational opportunities, upper and lower limits for fluctuation of the lake level, flood control procedures, dam maintenance and repair, and management of the area around the Swan Lake dam.

The parts of this agreement pertaining to water use and dam management have been incorporated by the Federal Energy Regulatory Commission in the license it has since issued to Maine Hydroelectric Development Corporation for operation of the Goose River Hydroelectric Project and the Town of Swanville has withdrawn its opposition to the project.

II. THE SITUATION PRIOR TO MEDIATION

Maine Hydro's Situation

In the spring of 1976, Lawrence Gleeson left his job as a systems planning administrator with Sun Oil Company and formed Pennsylvania Hydroelectric Development Corporation and began efforts to obtain rights to operate a number of hydroelectric projects in Pennsylvania. After some initial successes in Pennsylvania, he began to investigate the potential for hydroelectric development in Maine. In the course of his investigation he located a number of dams which had been abandoned or were not in use and which were, in his estimation, promising sites for hydroelectric development. This led him to form Maine Hydroelectric Development Corporation and to seek to acquire the rights to develop these sites. One of these sites was a series of five dams along the Goose River, north of Belfast, Maine.

The Goose River has its headwaters in Swan Lake about ten miles north of Belfast and drops from an elevation of 200 feet above sea level at the lake to a few feet above sea level when it empties into Belfast Bay. It is not a large river by any means, averaging forty to fifty feet wide most of the way and is rarely deeper than three feet. Gleeson estimated the mean flow to be 40 cubic feet per second (cfs). He calculated runoff from the surrounding hillsides to contribute approximately fifty percent of the total stream flow. The remaining fifty percent was provided by Swan Lake.[1]

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[1] Maine Hydroelectric Development Corporation, "Application to the Federal Energy Regulatory Commission for a Minor License to Construct and Operate a Hydroelectric Project on the Goose River"; September, 1978 (Mimeographed; See Appendix 1 for the complete text of the License Application) (Hereafter, Maine Hydro, "License Application")

Over a period of many years, all of the dams and the rights to make use of the water in Swan Lake and the Goose River had been acquired by a leatherboard manufacturer, The Sherman Company. Gleeson arranged to lease these rights from the company with an option to purchase them outright if he could successfully construct and license a hydroelectric project on the river.

On its route to the sea the river passes over, first the dam at Swan Lake, which has an 8 foot head, then Mason's Dam which has a 31 foot head. Next comes Kelley Dam, which has a 22 foot head, followed by the Mill Dam (near the site of the leatherboard manufacturing plant, originally constructed by the Sherman Company) which has a 21 foot head, and finally, a dam originally constructed by Central Maine Power Company which has a head of 79 feet. Maine Hydro in its license application, stated that "the degree of regulation of this stream, which drains approximately 21 square miles of coastal Maine, should permit operation of this project at an annual capacity factor of approximately 80%. In total, Gleeson estimated the power generating capacity of the system to be 430 kilowatts which could produce 2,700 megawatt hours of electricity annually.[2]

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[2] Maine Hydro, "License Application", page 1. The power generation capability of the Goose River project (2,700 megawatts) could provide electricity to serve the lighting requirements of 400 to 500 residences each year. However, it is important to note that the power produced by the project would flow into the power transmission system maintained by Central Maine Power Company and will not be distinguishable, to retail purchasers, from power produced by other sources within the Central Maine Power Company system. Thus, regardless of the efficiencies of the Goose River Project, residents of the Swanville area would find no appreciable difference in their electricity bills as a result of the project.

Of the five dams included in the proposed project only the Swan Lake dam would not be used to generate power. This dam, however, was crucial to the effectiveness and financial feasibility of the proposal for the lake holds some 7,500 acre feet of water storage capacity and the dam could provide a sufficient supply of water to the downstream generating stations to keep them operating at full capacity most of the year. In times when there was little or no natural runoff it controlled virtually all of their water supply. Most hydroelectric facilities cannot claim nearly this degree of control over river flow and therefore have a much lower "capacity factor" (the amount of time the facility can be reliably called upon to deliver full output).[3]

There was one more aspect of the Goose River project which made it desirable to a developer such as Gleeson. Maine Hydro's license application reported that "the process of consolidating essential water rights under a single owner was begun in the 1880's; the result is that, now, the excellent regulation potential of the basin has been developed and is available to this project." This meant that the rights to the dams and, therefore, under Maine state law, the "reasonable use" of the water that flowed over them, was no longer available to "riparian" (water front) land owners, and flowed over

[3]The flow of water along a river in an uncontrolled state varies significantly from season to season and even week to week. Turbines must be sized to capture as much of this flow as possible while not incurring excessive capital carrying costs. If a river flow is largely uncontrolled, the capital cost of the equipment must be amortized over a much smaller volume of productive hours in a given period of time, and one cannot predict when it will be available. Both characteristics make it less economical. Because of Swan Lake and the dam there, the Goose river project offered the rare prospect of being able to provide maximum output, consistently.

them, was no longer available to "riparian" (waterfront) landowners, and could be leased to Maine Hydroelectric by a single corporate entity.[4] Management authority could be transferred easily and completely to Gleeson.

Maine Hydroelectric expected its proposal would raise concerns on two fronts. The Maine Department of Inland Fisheries and Wildlife could be expected to be concerned about the effect of fluctuating lake levels on fish habitats and the people of Swanville could be expected to be concerned about the effect of these same fluctuations on recreational opportunities. Nonetheless, Gleeson felt Maine Hydro could respond to these concerns by demonstrating that regulated river flow for downstream power production would produce fluctuations in the lake which were substantially less than those that had occurred when the downstream dams had been used for mechanical power and production of manufactured goods. Gleeson expected lake level fluctuations to be moderate and therefore a net improvement over past fluctuations. He foresaw a desirable situation for both the natural environment and recreational use.

> "Development and operation of a co-dependent system of hydroelectric sites, sized approximately to the stream's flow, will quite reasonably produce a beneficial effect upon fish and wildlife resources as opposed to the effects of historic usage. The primary difference will lie in stream flow regulation. The stations are to be operated continuously, at essentially fixed power settings, as contrasted with the historic usage situations in which shift/workday/ production schedules dictated highly variable power settings and resultant variations in stream flow."[5]

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[4] See Olson, Robert A. et al., "A Case Study Analysis of Legal and Institutional Obstacles and Incentives to the Development of the Hydroelectric Potential at the Goose River, Maine", September, 1979; Energy Law Institute, Franklin Pierce Law Center, Concord, New Hampshire, pages 24-25.

[5] Maine Hydro, "License Application", page 2.

Maine Hydro went on to state in its license application that "regulation of flow is likely to enhance the warm water fisheries" that exist in the sluggish, lower portion of the river. The company recognized, and had "no objection" to, the continuation of historical patterns of recreational uses of the lake for fishing, swimming and boating.[6]

Swanville's Situation

The residents at Swanville had long been familiar with the capabilities of the Swan Lake dam. The 10 foot high, 250 foot wide dam, made of stones and cement, was constructed in the 1850's to regulate the flow of water to mills located downstream and to increase the capacity of the lake to retain flood waters. However, at the time, the area around the lake must have been sparsely settled, used mostly by hunters and fishermen from nearby Belfast. Therefore, the impact of higher or fluctuating lake levels on those who owned property around the lake would have been minimal.

Over the years, the population in the vicinity of the lake gradually increased but, until recently, remained small except for the summer months. Then, the population of Swanville would swell when the residents of Belfast and surrounding communities would fill the cottages around the lake. Over the last decade there has been a slow but steady increase in the number of cottages around the lake and conversion of older seasonal

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[6] Ibid.

cottages to year-round residency. By 1978, Swanville had reached a stage in its development when it would take great pains to protect its interest in continued access to the natural beauty, recreational opportunities and clean water of Swan Lake.

There had been anger and dissatisfaction in Swanville over the management of the level of Swan Lake long before Maine Hydroelectric announced its plans to put the downstream dams back in operation. Management of the dam to serve downstream manufacturing plants had caused unpredictable and extreme fluctuations, while few benefits, if any, were delivered to the residents of Swanville by these manufacturing operations.

Under common law doctrine, land owners along a river or other inland body of water have the right to a "reasonable use" of that water as it touches or flows past their land. However, through a process of deed consolidation, begun in the 1880's, the Sherman Company had purchased the rights to the water from lake front and river front land owners. Having sold their water rights, these land owners no longer had a right to "reasonable use" of the water.[7]

Under Maine law, the owner of the water rights could operate the dams and manage the flow of the river in whatever ways were necessary to take advantage of its potential for "beneficial" use.[8] Thus the Town of Swanville could do little, under Maine laws to gain control or influence over the regulation of lake levels as long as the Sherman Co. controlled the water rights and was using the power generated by the dams.

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[7] See Olsen, et al., page 25.

[8] Neglected Dams Act, Vol. 6, Maine Revised Statutes Annotated, Title 12, Chap. 6, § 304.

When the leatherboard plant burned down in December, 1976, the dams were no longer in "beneficial use," and authority to regulate their operation passed to the State's Soil and Water Conservation Commission under the State's Neglected Dams Act.[9] In May, 1977, following a series of public hearings, the Commission established an upper level of 2.5 feet below the top of the dam and a lower level of 6.5 feet below the top of the dam and directed the operators of Swan Lake dam to operate it in such a way as to comply with these limits. The Commission stated in its ruling that "high water has resulted in significant flooding of property, undermining of foundations, septic field failures and shore erosion" and that water quality had been reduced because of low water. The residents of Swanville were very pleased that the State of Maine, which had been unable to respond to their pleas for help in the past, had required positive, protective measures at last.[10]

However, only a month later, in June of 1977, Gleeson announced his plan, put the Mill Dam back in operation producing electricity instead of mechanical power, and applied to the Federal Energy Regulatory Commission for a license to operate a hydro project. Authority to regulate operation of the Swan Lake dam passed from the State Soil and Water Commission to the Federal Energy Regulatory Commission.[11]

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[9] Ibid. § 305. The Maine Soil and Water Conservation Commission has the authority to regulate dam operations in certain instances under Maine's Neglected Dams Act but not in cases where the dam is "operated for the beneficial use of the owner or operator." The law states that "such beneficial use shall include but not be limited to the generation of hydroelectric power."

[10] See Maine Soil and Water Conservation Commission, Findings of Fact and Order, May, 1977 (See Appendix 2 for the complete text of the Order)

[11] The Federal Energy Regulatory Commission is authorized to issue licenses for water power development by the Federal Power Act (16 U.S.C. 797 (e))

The residents were shocked and angry. They felt sure this meant the level of the lake would fluctuate, not according to their needs, nor in harmony with nature's patterns, but according to the needs of the downstream power generators. Later, Gleeson indicated he would abide by the limits set by the Soil and Water Conservation Commission until the Federal Commission ruled on his license application. But the townspeople were skeptical and unsatisfied. Not long thereafter, their worst suspicions were confirmed, not by human malfeasance, but by a series of events which are distinguished most by unfortunate timing, bad luck, and confusion.

The Goose River watershed received an unusually large amount of rain in the early spring of 1978. Water in the lake in March and April approached the upper limit set by the Conservation Commission of 2.5 feet below the top of the dam. This created serious concerns among residents. As the water approached the top of the dam it began to lap against the foundations of homes built in recent years around the lake with foundations below a level equal to the top of the dam. Homeowners could see that, if the water was allowed to rise to the top of the dam, their property and foundations would be inundated. This was not a situation they trusted Gleeson to protect them from. Moreover, they were aware that needs for water in the summer and fall suggested that future water supply would be best protected by retaining as much water as possible in the lake. Resentment of the company's initiatives and fear of its future plans led to violence when vandals tore rocks from the downstream side of the dam, near the gates, allowing water to spill through uncontrollably, and tossed them to the upstream side to further hamper effective operation of the gates.

The damage to the dam severely reduced its ability to hold water. Millions of gallons were lost long after it had dropped below the 2.5 foot mark. This was unfortunate because the latter part of the spring and the entire summer of 1978 were extremely dry. By July, leakage, evaporation and lack of rainfall had caused the water level to drop well below the 6.5 foot mark and in August, the water had reached 9.5 feet from the top of the dam. Gleeson claimed there was nothing he could have done to prevent this but the residents did not believe him. They grew more and more angry as water intake pipes were exposed, cutting off water supplies, shoreline areas dried up and concentrations of animal and agricultural wastes began to build up in the lake and give off unpleasant odors. Most residents observed this as the results they had predicted when the Soil and Water Conservation Commission lost authority to protect the lake levels. They were sure the water running through the gates every day was being put to profitable use by Gleeson downstream.

During the fall of 1978, Gleeson made efforts to respond by repairing the gates and inviting residents to meet with him on several occasions so that he might explain the details of the proposed project. But the residents felt resentful and distrustful and believed they had "seen enough of Gleeson's operation to know what to expect."

The Selectmen from Swanville wanted to stop the escalating atmosphere of hostility toward Gleeson but were also anxious to protect the Town's interest in responsible lake level management. Consultations with an attorney in Augusta who specialized in environmental law suggested that the most effective course of action would be to intervene in the license proceeding before the Federal Energy

Regulatory Commission and seek to have the license denied or heavily conditioned to protect the Town's interests. The Selectmen and their attorney were aware that an intervention process would be lengthy and might tax the resources of Maine Hydro beyond its limits and force Gleeson to withdraw his proposal.

The Selectmen discussed this with residents at the annual fall town meeting and again at a special open meeting. The residents authorized expenditures of a limited amount of Town funds to retain Goodall to represent them before the Commission.

On November 9, 1978, Goodall filed the Town's petition with the Federal Commission. In it the Town alleged that fluctuation of the level of Swan Lake could: affect the ground water table upon which local residents depend for potable water; impair property owners who take water directly from the lake for domestic purposes; and destroy the recreational values of the lake and the property values of littoral landowners; economically harm marinas located on the lake; and damage fishery and waterfowl habitats.

The Town also alleged that degradation of littoral property values would erode the Town's property tax base; that the Goose River watershed could not support the proposed project without interfering with the other private and public uses of the watershed; and that Maine Hydro had not adequately evaluated the impact of the project on recreation, fish and wildlife, riparian and littoral landowners, and navigation.[12]

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[12] Town of Swanville, Maine, "Petition to Intervene in Application for Minor License for Hydroelectric Project", November, 1978 (See Appendix 3 for the complete text of the Petition).

On January 9, 1979, after reviewing Gleeson's response to the Town's allegations, the Federal Energy Regulatory Commission granted the Town the right to intervene in the license proceeding, finding that "it may be in the public interest to grant Swanville's petition to intervene". However, it pointed out that "admission of the intervenors shall not be construed as recognition by the Commission that they might be aggrieved by any order entered in this proceeding."[13]

Despite this qualification the town felt it had won a major victory in its effort to stop or significantly alter Gleeson's project. The Selectmen hoped to obtain protection equal to, or better than, that provided by the Soil and Water Conservation Commission, since a federal agency was, in their eyes, more powerful than a state counterpart. The attorney for the Town began to assemble the technical analysis that would be necessary in the proceeding before the Commission.

However, in late January of 1979, a crude fire bomb exploded on the dam causing the gates to catch fire. The atmosphere in the community was tense and the methodical approach favored by the Selectmen came under severe pressure. Newspapers across the state were beginning to cover the dispute and gave the fire bombing incident more than ample coverage. Communication between the parties had come to a standstill and no one seemed sure what might happen next.

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[13] Federal Energy Regulatory Commission, "Notice Granting Intervention," January, 1979 (See Appendix 4 for the complete text of the Notice).

The Entry of the Mediator

John Joseph, director of the Maine Office of Energy Resources, knew that Maine Hydro had applied for a license to operate the Goose River Project and was aware of the escalating tensions in Swanville. During the fall of 1978 he had had occasion to meet with a person who described himself as an "environmental mediator" to discuss a dispute over construction of a large coal-fired power plant on an island off the coast of Maine. Mediation was not a process he was familiar with in energy and environmental disputes but the type of behavior and the nature of the problem in Swanville had no precedent in his experience. In his meeting with the mediator, Joseph had sensed that mediation might create an informal atmosphere in which the parties could communicate directly with one another about their needs and concerns. Joseph thought it might be the right way to solve the problem to everyone's satisfaction. If this were to occur, it could work to the advantage of both developers and host communities as the state's low head hydropower potential was developed in the future. Joseph invited the mediator to meet with him and discuss the case.

In fact, the idea of mediation had been suggested to the parties in an indirect way some time earlier in the dispute. The invitation to make use of a mediator occurred in the form of a letter to the editor of the Belfast Republican Journal in April, 1978, written by Frank Ricker, Executive Director of the Maine Soil and Water Conservation Commission. He stated: "In my conversations with the littoral

owners . . ., I offered to sit down with Mr. Gleeson and try to work out a solution beneficial to all parties and Mr. Gleeson's commercial operation" and ". . . I am willing to discuss the matter with him in an attempt to reach an agreeable solution."[14]

Ricker's offer to mediate was not acted upon. This may have been because he or his agency was not acceptable to the parties, or because the offer was indirect, or because he admitted he had "no legal authority to force Mr. Gleeson", or for that matter, the Town, to do anything. Whatever the case may be, no mediation or serious negotiations had occurred between the parties at the time Joseph considered inviting the parties to work with a professional environmental mediator.

After discussing the case with Joseph, the mediator met with representatives of the Federal Energy Regulatory Commission in Washington in February, 1979 to discuss their views on mediation, generally, and any concerns or objections they might have to an invitation to the parties to enter mediation in this particular case. Their response was uniformly positive and supportive of the concept.

There seem to have been a number of reasons for the Federal Energy Regulatory Commission representatives to support the use of mediation to resolve the Swan Lake dispute. First, they doubted FERC would be able to satisfy, entirely, the demands of both parties. Second, they assumed that resolution of the dispute through an intervention process, regardless of the merits of the positions taken by the parties, would be more time-consuming and costly to all parties

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[14] Ricker, Frank W., Letter to the Editor, Belfast Republican Journal, April, 1978.

than the benefits to be gained from such a process by any of those involved, including the Commission. Third, the representatives seemed to feel that the underlying issues in dispute concerned control of community resources which might best be resolved locally. The feeling among the representatives of the Commission was that if a solution could be worked out at the local level through direct negotiations among the parties, it would be more likely to serve the variety of local concerns, be achieved more quickly and less expensively than through the licensing process and be more likely to succeed in the long run than a resolution designed by the Commission.

With the support of the Commission and the Maine Office of Energy Resources, the mediator decided to introduce himself to the parties and discuss the idea of entering into a mediation process with them. In February, 1979, the mediator met first with the Selectmen, then with Gleeson, and raised the possibility of voluntarily entering into a negotiation process with one another under the direction of a mediator.

At their first meeting, the Selectmen were suspicious of the mediator and angry that he had discussed the case with FERC. They did not understand what mediation was, why it would be needed when the Commission's process seemed adequate, or why they should agree to negotiate with Gleeson. They felt there was "no room for negotiation" and that they would prove their case before the Commission. Finally, they did not believe that a mediator sponsored even in part by the State Office of Energy Resources could be neutral.

The mediator explained what mediation was and how it might be helpful. He then responded to their concerns by pointing out that since the case was being handled by the Federal Commission and mediation could not occur without its support, it was, in the mediator's judgement, essential that the Commission approve of the concept before discussing it with the parties. He suggested that the apparent lack of room for negotiation would be proven or disproven only after an attempt at negotiation had been made. Finally, he reported that the Office of Energy Resources had no authority over the mediator and understood the need for the mediator to remain neutral. The Selectmen remained suspicious but agreed to discuss the matter with their attorney and proceed on his advice.

The mediator then met with Gleeson and repeated his invitation. Gleeson responded by stating that "any negotiations were better than none," and that if the Federal Commission had supported the concept, he was willing. Gleeson's primary concern was that the mediation process would be used by the Town as a tactic to delay resolution of their dispute and drive up the cost of the project. The mediator assured Gleeson that he would not allow this to happen and that both sides would have to sign a "participation agreement" before the process got underway in which they would declare their intention to resolve their differences expeditiously by negotiating "in good faith."

In each meeting, the parties claimed that they had been reasonable and conciliatory, while the other had proven untrustworthy and

uncooperative; that their case would win the licensing debate. The Town alleged that Maine Hydro had operated the dam in arrogant disregard of the interests of the lakeside residents, while Maine Hydro contended that the Town had ignored previous offers to negotiate.

In each meeting with the parties the mediator discussed the issues that would have to be resolved for them to consider the mediation process successful. Swanville's Selectmen insisted that the quality of the water in the lake be preserved for purposes of drinking, swimming and fishing; that the value of lakefront property be preserved for the purposes of maintaining assessed tax valuations; and that fluctuation of the level of the lake minimized. Gleeson insisted that the results assure Maine Hydro's right to a volume and rate of flow of water from Swan Lake sufficient to operate the generating sites economically, that he be able to operate the Swan Lake dam to maintain this flow, and that some mechanism be established which would require the Town to join with him in his efforts to respond to complaints by local residents regarding the maintenance of lake levels and policing of the area around the dam.

When the mediator met with the Town's attorney the following morning, he received a tentative acceptance of his invitation. The Town would agree to participate in three meetings and then determine whether or not to continue. In addition, the Town would require that Gleeson make available to its hydrologist all hydrological information pertaining to the proposed project.,

The mediator agreed to see that these conditions were met if the Town, in turn, would sign an agreement promising to negotiate in good faith, and agree not to withdraw from the mediation process without explaining its reasons for doing so beforehand. The attorney obtained the approval of the Selectmen for these conditions.

The essential ingredients for initiating a formal mediation process were in place. The mediator recommended to the Office of Energy Resources and the Federal Energy Regulatory Commission that a mediation process begin as soon as the parties had reviewed and were prepared to sign the participation agreement.[15]

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[15] See Appendix 5 for the complete text of this document.

THE MEDIATION PROCESS

The First Session: A Tour of the Lake

On May 2, 1979, Lawrence and Catherine Gleeson of Maine Hydro, three Selectmen and a Planning Board member from the Town of Swanville, the Town's attorney and hydrologist, several representatives of the Federal Energy Regulatory Commission and the mediator toured the lake and the dams along the Goose River. The purpose was to examine the physical characteristics which the parties felt supported their arguments or caused their concerns. The Selectmen pointed out damage done to property from high water in the lake and described the scene the preceding summer when the lake had been low. Gleeson described how each of the dams would be outfitted with equipment to produce power and explained exactly how the dam at Swan Lake could be used to regulate the flow of water downstream. He also explained why maintaining a minimum flow was necessary to preserve the river bed downstream and provide water to the wells which supply water for the city of Belfast. He described the damage done by vandals to the dam and described his limited ability to police the area around the dam.

That evening the mediator met with the Town's attorney and Gleeson to complete arrangements for the next day's first formal mediation session. Most importantly, final adjustments were made to the participation agreement so that it could be signed by each

of the parties in the presence of the other. The order for presentations was agreed upon. After the mediator's opening remarks, the representatives of the Federal Energy Regulatory Commission would describe the Commission's view of the mediation process, then Gleeson would describe his proposal and the issues he wished to have addressed in the course of the mediation and then the Town would describe its concerns and the issues it wished to have addressed. It was agreed that the major work for the first meeting would be establishing a procedural framework within which each party would be able to address and negotiate issues of substance.

The Second Session: Establishing Groundrules and Opening Proposals

The following morning, May 3, the same group of persons that had toured the lake met in a restaurant near Swanville. The mediator began by describing his role and the purpose of the mediation process: to facilitate negotiation between the parties on the matters which had caused them to be in dispute and to assist them in developing an agreement which would protect their interests. All this would be done without passing judgement on the principles the parties held and would continue as long as they chose to make an effort to resolve their differences but not longer.

One of the representatives from FERC described the position of the Commission. The Commission believed it would be wise for the parties to attempt to resolve their differences through direct negotiation before resorting to its administrative procedures for resolving disputes over licensing; that it supported the involvement of a

mediator; and that if the parties could reach an agreement the Commission could incorporate some or all of the agreement, within the limits of its authority, in a conditional license approval. However, the agency was free, he pointed out, to reject any or all parts of such an agreement. Finally, he indicated that the Commission viewed the use of mediation in this case as an experiment in an effort to determine how the agency might responsibly expedite the licensing of low head hydroelectric projects.

Discussion then moved to a number of procedural issues. The parties discussed and signed the participation agreement and reached agreement on a number of other procedural matters: to review a summary of the discussion from each joint meeting prepared by the mediator; to prepare a written description of the terms of their agreement, if one was reached, or of the reasons for termination of the mediation process prior to the formal conclusion of the mediation process; to refrain from public comment on the substance of the negotiations until they were concluded; to make the summaries of discussion available to the public and press, upon request, once they had been approved by both parties.

Next, each party presented to the other their proposals for a summer operating schedule (to be effective June 15 through Labor Day). However, before any negotiation could take place the mediator pointed out that the priority of various issues, including the summer operating schedule, had to be discussed and some order for consideration of these issues needed to be established. In order to do so, each party needed to describe and explain its proposals. In short, the mediator asked

that each side understand the entire set of proposals the other was making before negotiations began. Further, where there were areas of disagreement concerning hydrologic and other scientific data, the parties needed to determine how and why their information differed.

As each side presented its proposal it became clear that the identifiable issues were held in reverse order of priority by each party. The Town felt there were only two issues: the lower and upper limits on the level of the lake. The lower limit of the water level of Swan Lake appeared to be its primary concern because too low a water level disrupted recreational use and enjoyment of the lake and created health concerns and environmental concerns. The upper limit appeared to be the Town's next most important concern because property damage was caused by too high a lake level caused this feeling.

Maine Hydro saw things differently. First and foremost, Gleeson claimed he needed to have sufficient flexibility in the operation of the dam to protect against flooding downstream and be assured of a sufficient volume of water to operate the downstream turbines economically. He also would have to be able to release sufficient water to maintain the downstream riverbed and to supply Belfast's wells; finally, Gleeson wanted the Town to assist Maine Hydro in policing the area around the dam at Swan Lake.

Each party then made specific proposals which would meet their needs. The Town proposed the lake never be raised above three feet below the top of the dam nor be allowed to drop below five feet below

the top of the dam throughout the year. Maine Hydro, on the other hand, proposed that it open the gates to release water whenever the water level rose above two feet from the top of the dam, and close the gates whenever the water level fell below five feet from the top of the dam during the summer months. The remainder of the year there would be no specified lower limit.

The meeting closed with a summary by the mediator of the agreements reached during the course of the meeting, assignment of tasks to be completed before the next meeting, and agreement to meet again on May 15th in Augusta.

The Mediation Strategy: Separate the Issues and Narrow the Disagreements

Between the May 3rd meeting in Belfast and the next meeting, held on May 15th in Augusta, the mediation team examined the parties' initial proposals and considered alternate strategies to accommodate their concerns. They characterized the basic problem in the following manner: How could the Town be assured of relatively stable and predictable lake levels while allowing Gleeson adequate flexibility in the use of his primary storage site, Swan Lake? Specific solutions were less important to the mediators at this point than getting parties to agree to a statement of the problem that would enable them to work together on solving it.

Nonetheless, like the parties, the mediators searched for a strategy to resolve the tension between the Town's need for predictable lake levels and Gleeson's need for flexibility in operating the

gates. The mediators noted that, in general, the lake levels preferred by each side rose and fell throughout the year in a similar fashion. Each seemed to want the dam used to hold water in the lake through the spring and summer and each wished to see the lake level reduced in the fall and winter to accommodate spring runoff. They thought a system of cyclical guidelines whereby gate management would be adjusted according to anticipated rainfall and runoff might be satisfactory. The operations of the gate could be targeted to keep the water level within a "green zone" representing a range of water levels within which Maine Hydro would be allowed to operate the dam with complete freedom. On either side of the green zone they envisioned a "yellow zone", ranges of high or low lake levels within which Maine Hydro would manage the flow of water from the lake in a specified manner, releasing more water as the lake rose and less water as the lake fell. Beyond the yellow zones would lie "red zones" where extremely high or low water levels would require that the Swan Lake dam be completely opened or closed. These zones could shift from month to month or season to season as preferred levels shifted. The mediators believed that outlining the green and red zones would be relatively easy, since these areas were likely to be similar for both sides, and would show them the similarities in their preferred levels. The difficulty would come in establishing the borders of the yellow zones and the gate management program within those zones.

The Early Caucuses: Problems of Mistrust and Poor Communication

Prior to the next joint meeting, the mediator caucused with the Selectmen to determine their view of the "optimum lake levels." The discussion led to an unexpected confrontation. The Selectmen suspected that the mediator's efforts were a ploy to get them to agree to lake levels different than those specified in their opening proposals. The Selectmen accused the mediator of being biased in favor of Gleeson and threatened to terminate the mediation process.

After a private discussion with the Town's attorney, the mediator took responsibility for the misunderstanding and repeated his purpose: to help each side reach an agreement which protected their most important interests. The Selectmen explained the reasons for their suspicions and mistrust. They felt they had been ignored or misled by every organization to whom they had turned for help in the past. They feared the mediation process would be no different.

The mediator assured them this would not be the case; that the process would allow them to deal with the mediator and Gleeson without fear of being taken advantage of. The caucus ended with the Selectmen and the mediator on better but still distant terms. The candid exchange between the mediator and the Selectmen seemed to encourage them to believe they would be listened to and respected. In any case, they had agreed to continue to participate.

The Third Session: Beginning a Dialogue on the Issues

That evening, May 15, the parties met in Augusta for the second time and began to delve more deeply into the substance of the dispute. The mediator invited each party to re-state its proposal and then to answer questions. Not surprisingly, as each of the parties offered this re-statement, they proved to have made minor adjustments to the proposals offered at the first meeting. The most important of these was a demand by Gleeson that the final agreement include a public meeting in Swanville at which the Selectmen would describe the benefits of the project for the Town and encourage cooperation with Maine Hydro by members of the community.

Needless to say, the Selectmen were surprised by this demand. The last thing the Selectmen had expected was to be asked to help Gleeson promote his project and assure his safety. They felt it was not necessary to include it as part of the agreement.

Gleeson responded by describing the refusal of the Town residents to listen to his past efforts to explain the project and how it would benefit Swanville. He said there had been vandalism of the dams and threats on his life and the safety of his family.

The Selectmen seemed to be moved by the sincerity of Gleeson's appeal for help and agreed to help run a public meeting at some future date to allow Gleeson to explain his project -- if agreement could be reached on lake levels. They did not agree to support or promote the project unless they felt it was one they were satisfied with.

The remainder of the evening was spent on efforts to work out an agreement on lake levels.

In their discussion with Gleeson, the mediator learned that he was willing to attempt to define some limits for lake level fluctuations. However, his conception of limits was not the same as the Town's. Gleeson was accustomed to analyzing water supplies with a mathematician's appreciation for the subtleties of statistical probabilities. He knew that the precipitation in a given year would be predictable only within a range of uncertainty and that the management of the gates at Swan Lake could moderate, but not control, lake levels. In his view, the forces of nature would be controlling and it was only because he had carefully charted and analyzed the broad predictabilities of rainfall that he could be confident his project would succeed. The storage capacity of Swan Lake was his best protection against the uncertainties of future precipitation, but in his view it was limited protection at best.

Thus, Gleeson's primary concern was to retain as much flexibility as possible in the use of that storage capacity. For him, limits on fluctuation would have to be understood as guidelines and his ability to meet those guidelines would vary in relation to changes in rainfall and the resulting changes in his need for water downstream.

The Selectmen were not the least bit familiar with the use of differential equations and statistical probabilities for predicting rainfall and future water supply nor were they interested in them. Whenever Gleeson began to discuss his project in these terms, they

would quickly lose interest and become suspicious of his motives. Moreover, the Selectmen were unfamiliar with the operational requirements of a hydroelectric project. They believed the operator had a substantial degree of control over the amount of water which backed up behind a dam since he could release or restrain water "as he pleased." They saw limits on lake level fluctuations in absolute terms as levels which would not be exceeded.

In short, they believed Gleeson had a great deal more control over the level of the lake than he believed he did. Nonetheless, they began to make agreements on limiting lake levels rather quickly.

The first level agreed upon was a lower limit of 5 feet from the top of the dam during the summer months. Gleeson's proposal had been identical to the Selectmen's on the lower limit for this period and no negotiation was required. The next subject discussed was the upper limit in the spring. The Selectmen had proposed an upper limit of two feet from the top of the dam. Gleeson was prepared to accept this limit if provisions were made to allow him to accommodate unexpectedly large spring runoff. This was the first time the parties faced the need to define more precisely what a "limit" was.

After lengthy discussion of problems related to managing heavy runoff and flooding, both at the dam and downstream, the parties reached agreement on a schedule for release of water as it rose above the two foot limit. The Selectmen seemed to be persuaded to accept this approach by Gleeson's description of the problems encountered by homeowners downstream if all flood water was released instantly.

Thus, in the case of high water levels, the "limit" was understood to be a point at which Gleeson would institute gate management strategies to moderate the level in consideration of the downstream flow.

The mediator agreed to draft a description of the flood control plan for review at the next meeting. The parties agreed to meet again on May 21 to continue negotiations.

The Fourth Session: Disagreement Over the Level of the Lake in the Fall

The major subject for discussion at the third session was the lower limit which would apply for the non-summer months. This proved far more difficult to reach agreement on than any of the participants had expected. By setting an upper limit on the level of the lake in the spring and a lower limit in the summer, Gleeson and the Selectmen created a situation in which more water would be wasted or stored at either time than might otherwise be preferable given the runoff anticipated thereafter. The pressures created by these restrictions were not evident until debate on the lower limit in the fall got underway.

Gleeson made it clear that because of the requirement to maintain a minimum level 5 feet below the top of the dam until Labor Day, he would curtail or stop operation of the downstream stations throughout most of the summer months. However, in the early fall he would need to draw down the lake for two reasons -- to supply the mean water flow to the generators throughout the fall (to make up for the curtailment in the summer) and to make available sufficient storage capacity to handle runoff the following spring.

Given the uncertain amount of precipitation each spring, Gleeson felt it would be impossible (and unwise) to establish a minimum fall lake level. He argued that a minimum might cause flooding or waste of water the following spring. Since the lake would be at or near 5 feet below the top of the dam on Labor Day he expected that in most years it would not be necessary to draw the lake down below 7 or 7.5 feet from the top of the dam. Pressed by the mediator to state a non-summer lower limit that he could accept, he offered 9.5 or 10 feet from the top of the dam.

The Selectmen had an entirely different perspective on the non-summer lower limit. They felt that the hostility created by the low levels of the lake in 1978 were a good indicator of the residents' feelings about unrestricted drawdown. Moreover, they felt that agreeing to a lower limit in excess of the 6.5 foot mark set by the Maine Soil and Water Conservation Commission would be tantamount to a surrender to Gleeson. They felt, also, that lack of a specified limit would make it impossible to hold Gleeson accountable for failing to live up to his commitments.

Gleeson, after a number of caucuses with the mediator, proposed a lower limit of 7 feet below the top of the dam. He would accept nothing higher.

As the third meeting on May 21 wore on, the 6-inch difference on the lower limit brought negotiations to a standstill. It became clear that the Selectmen would need the authorization of the residents before they would agree to anything below 6.5. Since Gleeson

had wanted a public meeting all along, he readily agreed. At first the mediator resisted this strategy, arguing that it would make future negotiation more difficult if the residents were invited to express their opinions on the remaining differences. The parties were convinced this was not the case and persuaded the mediator it would be useful and constructive. They agreed to allow the mediator to draft and circulate for review and revision a summary of the agreements reached to date and a description of the remaining differences.[16]

The Fifth Session: A Public Information Meeting

The Public Information Meeting took place on June 14, 1979 in the Swanville Town Hall and signaled a turning point in the negotiations for a number of reasons. As those in attendance read the Summary of Agreements and the parties, first Swanville, represented by its attorney, Clifford Goodall and then Maine Hydro, represented by Gleeson, made their cases in support of those agreements, there was a shared effort to gain approval and advice unprecedented in the previous relations between the Town representatives and Maine Hydro. Admittedly, each made an appeal for the non-summer lower limit they had proposed, but this difference seemed to grow increasingly insignificant as the evening wore on.

When public comment grew heated and antagonistic, the First Selectman rose several times to remind the townspeople of the need for reason and cooperation. The residents attending made it clear

[16] See Appendix 6 for the complete text of this document.

that the majority of them were most concerned with property damage which resulted from high water. Low water seemed to create only minor inconveniences by comparison. Several residents angrily claimed that the 2 foot upper limit was too high; that it would not prevent damage to their property. Consensus on what the limits should be, however, did not develop, for the effect of different lake levels varied at different locations on the lake. To resolve this issue, the Selectmen and Gleeson agreed to tour the lake by boat, once with the lake at the 2 foot level and once at the 2.5 foot level.

The presentation of the tentatively proposed agreement and the effort to ascertain public opinion on the maximum winter drawdown and obtain comments on the proposed agreement was an important part of the mediation process. It demonstrated that there was real potential for cooperation and agreement. It showed the community that the medation process was open and that their concerns and advice would be respected. It indicated the shape of the agreement to come and the cooperation thus far. It granted Gleeson the recognition and public their ability to present the costs and benefits of each proposal honestly, clearly, and without emotionalism. Finally, it helped to refocus the negotiations: the lower limit did not turn out to be as important to the townspeople as the Selectmen had thought it was. the townspeople as the Selectmen had thought it was.

The public meeting and the tours of the lake keyed the final agreement on lake levels. The potential for high water damage at 2 feet convinced both the Selectmen and Gleeson that a 2.5 foot upper limit was essential. With local concern on the lower limit less

critical and a 5 foot range of fluctuation necessary to run the Goose River project and to accommodate spring runoff, a 7.5 foot lower limit was agreed to for the non-summer lower limit.

The Sixth Session: Beyond the Issue of Lake Levels

The fifth session occurred on July 20th at the Grange Hall in Swanville. Two important considerations were addressed at that meeting: discussion of the effects of lake level fluctuation on the fish habitat and the management of the area around the dam.

Because the dams to be used by the hydro project were already in place, environmental disturbances caused by construction, renovation, or flooding would be insignificant. Once in operation, the project would provide a steady flow of water to the Goose River, creating an almost ideal environment for animals downstream. At Swan Lake, minimal drawdown in the spring and summer would protect waterfowl nesting and bass spawning. According to the Maine Department of Inland Fisheries and Game, the only environmental drawback presented by the project might be caused by sizable drawdown from October to May. During this period, lake trout (togue) might spawn in Swan Lake. Drawdown after spawning might expose and kill the eggs.

The parties were aware that the Maine Department of Inland Fisheries and Game was concerned about the impact the agreement might have on togue spawning. The parties agreed with the mediator that it would be wise to invite the Department to their next meeting to discuss the agreement to determine what impact, if any, there might be on the togue.

At the meeting, the Department's representatives described the State's togue spawning program. The togue in Swan Lake, stocked by

the Department since 1971, were as yet too young to spawn. They noted that stocked togue sometimes never spawn in the wild, and that, depending on the habits of the fish in Swan Lake, those that did spawn might do so in areas deep enough to remain underwater despite the 2 to 3 feet of drawdown possible after Labor Day under the proposed lake levels.

Gleeson wished to have the Department's position made explicit, pointing out that he might not be able to obtain financing for construction if there was the chance it might seek to alter his operating limits in the future. The Department's representatives recognized this risk but refused to foreclose the possibility that the Department might request FERC to disallow drawdown after October 15.[17]

The remainder of this meeting was focused on resolving the differences between the parties over the management of the area around the Swan Lake Dam. Just above the dam on the east shore of the lake is a sandy area used by many local citizens as a landing for placing their boats in the lake and removing them. It is also not uncommon to see young people or families sunbathing and swimming near the dam in the summer. In the winter it is the logical place to build a fire

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[17] In fact, prior to the issuance of the license but after the Memorandum of Agreement had been signed, the Department of Inland Fisheries and Wildlife requested that the Federal Energy Regulatory Commission restrict drawdown during the fall months to protect the spawning habitat of lake trout. (See Appendix 7 for the text of a letter from Glenn H. Manuel, Commissioner, Maine Department of Inland Fisheries and Game to William W. Lindsay, Director, Office of Electric Power Generation, Federal Energy Regulatory Commission, September 10, 1979). Subsequently, in its order issuing a license to Maine Hydro, FERC stipulated that it should determine "what measures can be reasonably taken to provide protection to lake trout during the spawning and post-spawning period (October 15 through May 1)" and that "within three years from commencement of operation of the project, the Licensee shall file for approval a report describing measures deemed appropriate for protecting the lake trout of Swan Lake and taking into consideration other beneficial uses."

to warm ice skaters or ice fishermen. Just below the dam, in the warm months is a grassy area (less than a half acre) which slopes from the road to the river. It has a picnic table and on weekends families picnic there and children play along the river's edge.

On warm summer evenings the area around the dam is a favorite gathering place for boisterous people in their late teens and twenties. The activities of this group bother many of the residents who live in nearby houses and they complained regularly that Gleeson (like his predecessors) did nothing to stop or discourage these activities. Gleeson claimed that he had attempted to do this for his own interests as well as theirs, fearing that the activities would eventually lead to damage of the gates or an accident for which he might be liable. Signs he posted were removed as fast as he put them up and he had been threatened with bodily harm when he had attempted to remove these people himself. It was impossible to expect the county police force to be able to patrol the area other than infrequently. Moreover, Gleeson felt that letting any of the residents, even the best behaved, have use of the area, was to risk law suits in the event someone was injured, either on land or in the water around the dam.

Gleeson was convinced that the only way to adequately manage the area, even though it was private property, was with the help of the Town and its elected officials. He felt that official recognition of a shared responsibility for policing and maintaining the area was the most reliable and lasting way to assure his acceptance by the Swanville community.

The Selectmen saw the matter differently. They acknowledged that policing the area was a problem for Gleeson but they felt there was little they could do to help and that it would be inappropriate for the Town to be involved in the management of privately owned property. They steadfastly refused to participate in any activities which might make the Town liable for injuries or damages that might occur in the area. His proposal seemed impractical, inappropriate and dangerous.

The mediator sensed a joint management plan could improve and strengthen future relations between the parties but it could also create and inflame disagreements as easily. The mediator had advised Gleeson to wait until an agreement on lake levels could be reached before formally insisting that a joint management plan be devised.

On July 20th, Gleeson proposed that the Town be responsible for "normal maintenance" of the area around the dam, provide two trash barrels, two picnic tables, and see that the grass was mowed. Furthermore, he proposed that the Town install a guardrail around the grassy area to encourage parking across the street and pay the annual premium on Maine Hydro's liability insurance. Maine Hydro would install gates to keep persons from walking on the dam and post signs notifying persons attempting to walk on the dam of the dangers and risks incurred by such actions.

The mediator caucused with the Selectmen before they responded. They were angered at the degree to which they were being asked to assume responsibility for the area. After considerable deliberations

and consultation by both sides with the mediator, the meeting was reconvened and the Selectmen offered a counter-proposal. They proposed the formation of a Swan Lake Committee, comprised of representatives of Swanville and two neighboring communities with property along the lake, be created to monitor and report on compliance with the various provisions of the agreement and that the committee in consultation with Maine Hydro develop and implement a plan for management and public use of the area around the dam. In addition the Town would ask the Maine Department of Transportation to install the guardrail requested by Gleeson.

After some discussion to clarify the responsibilities and authority of the Committee and the actions to be taken immediately, Gleeson accepted their proposal.

The mediator then presented a draft of a Memorandum of Agreement and the parties edited it to reflect the agreements reached that day. The parties scheduled a meeting for August 2 to sign the document.

The Seventh Session: Finalizing the Agreements

The final Memorandum of Agreement developed in several stages with the parties revising and refining its wording until the hours just before the signing. Some parts of it were first articulated in the "summaries" of discussion. Most first appeared in the "summary of agreements" prepared by the mediator for the public information meeting. The final agreement covered fourteen topics including: recognition of the parties' water rights and recreational opportunities, measurement of water levels, a plan for controlling flood

waters, gate operating procedures for maintaining summer and non-summer lake levels, procedures for the release of spring runoff, plans for routine maintenance and repair of the dam, procedures for responding to emergencies caused by weather conditions, authorization of a monitoring committee to maintain the area around the dam and other aspects of the agreement, delineation of the parties' legal rights and responsibilities, and commitment by aprties to cooperate in protecting the recreational value of Swan Lake and the eocnomic feasibility of the project.

Once signed, the agreement was designed to become binding upon the parties when the FERC granted a license to Maine Hydro which incorporated the parts of the agreement pertaining to lake level management. Most important in this regard were the provisions that the upper and lower limits would allow not more than five feet of fluctuation in lake level from Labor Day to June 21 and would assure Maine Hydro of adequate flexibility in storage and release of water to the downstream dams for economical operation of the project. From June 15 until Labor Day, Maine Hydro would close the gates to maintain the level of the lake at five feet from the dam's top through the summer but would release the minimum flow necessary to maintain the downstream environmental and water supply for Belfast. The area around the dam at Swan Lake would be managed and policed by the Swan Lake Monitoring Committee and Maine Hydro, in consultation with the State Police, Sheriff, and others.

In the section entitled "legal rights and responsibilities" the Town and Maine Hydro declared their intention to abide by all government laws and regulations. If at any time the parties find that provisions in the agreement conflict with their legal responsibilities, those provisions will no longer be binding. In the event of such conflict, the parties agreed to modify the agreement to eliminate the conflict. The agreement is binding upon the parties and their successors so long as the Swan Lake dam constitutes part of any hydroelectric project similar to the one describe in Gleeson's license application.

The day before the signing of the final agreement, Gleeson's attorney requested the addition of the section on "legal rights and responsibilities." when this section was presented to the Selectmen, they were concerned that it could be construed to make them responsible for operation of the dam under certain circumstances. They momentarily resisted signing. However, assured by their attorney that this was not so, both parties were prepared to sign the agreement.

The Memorandum of Agreement between the Town of Swanville and Maine Hydroelectric Development Corporation was signed by the three Selectmen and Lawrence Gleeson on August 2, 1979 and submitted to FERC soon thereafter.[18]

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[18] See Appendix 8 for the complete text of the Memorandum of Agreement.

Maine Hydro's license was granted on March 24, 1980. Article 26 of that license states

> "The Licensee shall, in the interest of protecting and enhancing the scenic, recreational and other environmental values of the project, cooperate with the Town of Swanville, Maine (Town) in implementing the terms of the agreement for operation of Swan Lake Dam, signed by the Licensee and the Town on August 2, 1979. The Commission reserves the right to order any changes in the project's operating procedures that may be needed to resolve any differences between the licensee and the Town concerning the terms of the agreement."

Articles 27, 28 and 29 require Maine Hydro to determine measures which will protect lake trout which spawn in Swan Lake consistent with other "beneficial" uses of the lake. However, the Commission did not establish a limit on drawdown in the non-summer months more restrictive than that set by the Memorandum of Agreement signed by Maine Hydro and the Town of Swanville.[19]

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[19] See Appendix 9 for the complete text of the license issued to Maine Hydro.

IMPLICATIONS OF THE CASE

At the time of this writing it has been more than a year since the signing of the Agreement between Maine Hydro and the Town of Swanville. The requirements set forth in the Agreement have been included in the conditions attached to the license, which was issued March 24, 1980. It may be useful to reflect on the implications of this case for government officials concerned with the licensing and regulation of hydroelectric development, developers of hydro projects, communities affected by the impact of these projects, and mediators.

It is important to keep in mind that generalizations from one case must be tentative at best. Therefore, this section does not attempt to provide a manual of what to do, but catalogue what was done and why it was important in this case.

Implications of the Case for Regulatory Officials

In the Swanville case, regulatory officials took a number of actions which made possible a successful mediation process.

1. Officials of the Federal Energy Regulatory Commission made their support of mediation evident to the parties. This encouraged the parties to consider the proposal seriously. The officials explained that an agreed upon proposal would have a greater chance of being licensed than a proposal which was in dispute. At the same time, they pointed out that the grounds for rejecting an application on environmental issues were narrow and might not be found in this case.

2. The officials of the Commission and the Maine Office of Energy Resources allowed the mediator to present the concept of mediation to the parties and invited them to participate. This allowed the parties more freedom to decline the invitation than they would have felt had either of these organizations extended the invitation. Moreover, it gave the parties a chance to assess the mediator's style and approach to the case and to have their questions answered by someone experienced in mediation.

3. The officials from the Commission were willing to try to incorporate the conditions of an agreement which resulted from mediation in a final license approval. This was the reward the parties needed to keep them involved. The developer wanted a license. The community wanted an enforceable agreement. Commission approval would provide both.

4. The officials carried out all of their regulatory responsibilities. If the parties failed to reach an agreement their case would revert to the standard process for intervention proceedings. The agency was able to fulfill its responsibilities and at the same time encourage the parties to attempt mediation.

5. The officials assured the parties that they could participate in a mediation process without prejedice to any rights or future proceedings before the Commission on the case. This reassured the Town, which was not confident the mediation would be successful. If the case had to return to the

intervention proceedings, the Town did not want its petition weakened by having participated in a mediation process. Knowing the process would be confidential until after the Commission rendered its final decision seemed to put these fears to rest.

6. Finally, when the agreement was delivered to the Commission, it acted favorably on the amended application within a few months. It incorporated the important conditions of the agreement in the license approval. Both parties saw their efforts result in a timely decision which responded to their concerns.

In conclusion, it is clear that the supportive and considered response by the Commission to the proposal to mediate was crucial to the eventual success of the process.

Implications of the Case for Communities Affected by Hydro Development

The Town of Swanville took a number of actions which made possible a resolution of the dispute in a way that protected its interests.

1. Concerned residents successfully organized themselves into a single, cohesive bargaining unit. Not surprisingly this occurred through the Town's political process and the persons appointed to represent the Town's interests were the Selectmen who retained legal counsel. Organization of concerned citizens and selection of spokespersons are vital steps toward being able to negotiate as equals.
2. The Town successfully petitioned the Commission for status as an "intervenor" in the project's licensing. This established the Town as an entity with concerns to be reckoned with. This encouraged the Town to believe in the legitimacy of its concerns and served to articulate the nature of those concerns. At the same time the petition gave evidence of the Town's determination to stop the project or obtain concessions in its design and operation if it were in the Town's power to do so. The Commission's acceptance was crucial if the Town were to have any grounds on which to justify its demands for change. When the Commission accepted the petition, the Town was encouraged to believe it might prevail.
3. The Town chose to enter into negotiations with the developer. Negotiation seemed to hold greater promise from the Town's perspective (and that of their attorney) than an intervention proceeding. The opportunities for clarification of issues,

face-to-face negotiation, and accommodation might not have arisen during the intervention proceedings. For example, the public information meeting (which revealed the concern of the residents for flooding), and the development of the flood management plan might never have occurred had there not been negotiation between the Town and developer. Likewise, formation of the Swan Lake Committee and development of a plan for management of the area around the dam might never have occurred.

4. The Town reserved its right to return to the licensing process and assured its ability to do so without prejudice to its standing before the Commission. With this, the Town could withdraw from the mediation process with no loss of appeal rights and a minimal loss of time and legal fees. And, until an agreement was signed, it protected the Town from any results of the mediation process which appeared harmful to the Town's interest.

5. The Selectmen returned to their constituents for discussion of the proposed agreements. This allowed them to test the reaction of the community to the agreements already reached and to gain guidance on the difficult question of the lower water level limit. As a result, the problem of the lower limit was eliminated and a strategy was devised to resolve the outstanding difference on the upper limit. Overall, the meeting served to reaffirm the confidence of the community in the Selectmen's ability to fairly represent their interests

in the negotiations and served to authorize them to conclude the process.

6. The Town insisted that its agreement with Maine Hydro become part of the project's license. This meant that the Town could rely on the Commission and its police powers to enforce the terms of the agreement if the Town's ability to assure compliance through discussion and future negotiation was ineffective.

7. The Town won acceptance of its proposal for the creation of a "committee" which would provide a forum for discussion and negotiation with the developer in the future. This signalled to the developer and the Commission the Town's intention to remain actively concerned with the project and implementation of the agreement. It also created the opportunity for the Town to continue to have a significant degree of influence over the project without incurring the legal fees and delays caused by the Commission's appeal process or the courts in the future.

Implications for Developers of Hydroelectric Power

Maine Hydroelectric Development Corporation took a number of actions which contributed to a successful resolution of its dispute with the Town of Swanville while preserving the economic feasibility of the proposed project.

1. The company was willing to negotiate with the Town to make the project acceptable. This was true even prior to the Town's successful petition to intervene and it offered the Town an opportunity to alter the project to protect its interests. Without a willingness on the part of the developer to negotiate with the host community, the mediation process could not have occurred and no agreement could have been reached.

2. Maine Hydro was willing to abide by the decisions and authority of the Commission. This clarified the lines of authority which circumscribed the project. Even though as a federal agency, the Commission may have been farther away and less accessible than a state or local authority, it was an agency of the government charged with balancing competing public interests. There was never any confusion regarding the location of final decision-making and enforcement powers. Recognition by the developer of a controlling authority with a public interest assured the Town that the company respected laws and regulations and would be willing to abide by them. This was particularly important when the

Commission agreed to incorporate an agreement in its license approval. The developer could then be expected to adhere to the restrictions and would be accountable to an acknowledged authority.

3. Maine Hydro reserved all of its legal rights even while it agreed to enter into mediation. Like the Town, the company recognized the possibility that mediation might not be successful and wanted to reserve the right to return to the intervention process with its arguments unaffected and its position uncompromised by the attempt at mediation. This was essential for the developer to make the choice to enter the mediation process freely and with confidence.

4. The representatives of the Company were willing to put forward specific proposals in writing in attempts to meet the Town's concerns. This gave the Town (and the mediator) a clear idea of what was being proposed and how it reflected the degree to which the developer understood what the Town was requesting. It also showed the developer was willing to commit himself to certain specific actions to meet the Town's concerns. Finally, it made it possible to pinpoint areas of outstanding disagreements and future problems in implementing the proposal.

5. Maine Hydro agreed to have the results of its negotiations with the Town put into writing and sign the document. This showed a willingness to specify actions to be taken and to be accountable to the Town and the Commission for future

performance. It also indicated the company's intention to hold the Town equally accountable in return for promises it had made.

6. Maine Hydro agreed to the creation of a local entity (the (Swan Lake Committee) which would "monitor" implementation of the Agreement. This Committee holds the prospect for continuing the negotiation process started in the mediation. For this reason it holds equally good prospects for resolving the many differences, whether large or small, between Maine Hydro and the Town which will arise during the implementation of the Agreement.

Implications of the Case for Environmental Mediators

This case confims many standard assumptions about how a mediator ought to operate to successfully resolve a dispute. A few of the most important are discussed below.

1. The approval and authorization of the Commission was crucial to successful entry to the case. The parties would not have accepted the mediator or mediation without it.
2. The parties were allowed to propose preconditions on the process before agreeing to participate and the mediator did the same. This allowed all to have a chance to negotiate with one another on procedural issues -- a less threatening and more instructive introduction to formal negotiation than beginning with emotion-laden substantive issues.
3. The mediator did not claim to have special technical or legal expertise but did claim to understand negotiation and to be neutral. This encouraged the parties to believe the process would not be so sophisticated that they might be tricked and at the same time suggested that it would be fair and would concentrate on matters of direct concern to them, avoiding irrelevant formalities and procedures and eliminating the incentive for complex scientific and economic analysis which might otherwise be used to obscure weak, confused or unjustifiable demands.

4. The mediator held most caucuses and joint sessions near the site of the project. This gave a sense of immediacy and relevance to any who might otherwise have denied the importance of the issues in dispute (from water levels to parking signs). It also created an experience of negotiation within the community which may have removed images of negotiation as an alien and pre-determined event. It proved to fit as well in Swanville as anywhere, and this may encourage more negotiation there in the future on public/private disputes of this kind.

5. The public information meeting enhanced the negotiations. Instead of encouraging re-trenchment and face-saving postures as the mediator had feared, it created new areas for negotiation (e.g. the lower and upper limit) and resulted in a sincere effort by both sides to explain themselves, to ask together for the support and advice and cooperation of the community. It indicated that both sides recognized the community's long term interest in a peaceful and well-managed physical environment and served as a clear example of how the Town and Maine Hydro could work together to achieve that goal.

THE USE OF MEDIATION TO RESOLVE FUTURE HYDROPOWER LICENSING DISPUTES

During the course of the mediation process questions were raised on a number of occasions about the potential to apply mediation to other disputes over hydro development. More specifically, the question was put -- How could the existing licensing process be modified to encourage mediation? The case of Swanville suggests there are no major procedural or legal impediments to mediation of these disputes.

In fact, as a result of the successful mediation of the dispute over hydroelectric development at Swan Lake, it is possible to offer a number of potential benefits regarding the use of mediation to resolve disputes which occur within the licensing process and intervention proceedings directed by the Federal Energy Regulatory Commission.

Potential Benefits of More Frequent Mediation

1. Mediation may allow the parties to examine a wider range of options than they do when battling one another in an intervention proceeding. Solutions to the disputes may tend to be more environmentally sound and/or more economically or energy efficient as a result.

2. The number of intervention proceedings settled without recourse to a formal resolution of the dispute by the Commission may increase as a result of mediation because the negotiations would be managed by an independent mediator who has (a) no substantive interest in the outcome; (b) professional skill in mediation; and (c) greater latitude than Commission staff to design a solution acceptable to the parties.

3. In some cases, parties may make use of the intervention process when their most serious concerns are not related to the energy or environmental impacts of the proposed project. The Commission is limited to protecting the interests of the Federal Power Act. It has difficulty

> requiring measures which address these peripheral concerns and justifying allocation of resources to these cases. Mediation might allow the Commission and its staff to concentrate more of its resources on the technical and legal analysis of the most significant cases.

It does not appear that the existing licensing process need be changed to allow mediation to occur. If anything, the formal nature and adversarial tone of the existing intervention process would seem to encourage parties to enter into a less formal and more flexible process to resolve their differences.

Institutional Barriers to Mediation

Nonetheless, there are a number of "institutional" impediments to mediation. First, officials are largely unaware that the services of professional mediators are available to them. Second, officials are reluctant to seek out such help because it may appear they are unable to do their job or are inviting parties to a dispute to sidestep existing procedures. The case of Swanville indicates neither accusation need be true, but the reluctance of regulators to take such risks is familiar and understandable.

Third, the existing intervention process tends to create the impression that the issues in dispute are not negotiable. Parties are anxious to present the strongest case they possibly can. A developer seeks to create the impression that any change in the proposed project will make it economically infeasible or technically unsound. Opponents seek to create the impression that the proposed project is unsafe, uneconomical, or environmentally destructive.

Even though there may be ample room for negotiation, there is no incentive or reward for being conciliatory when one is not in negotiation. It is very difficult for officials to determine if negotiation would result in substantive and constructive changes in a project. Therefore, they are unlikely to encourage such negotiation, whether it occurs under a mediator's direction or not.

Fourth, there is no standard procedure yet established for an agency or commission to introduce parties to a mediator or to authorize and account for the results of a mediation process. Given that the courts have found it feasible and useful to establish such procedures, it seems likely that regulatory agencies may someday do the same. For the time being, each instance of mediation is unique and precedent-setting and these agencies inevitably approach the prospect gingerly. As the Swanville case demonstrates, the approval and encouragement of the adjudicating authority is crucial to the success of any mediation effort.

Recommended Actions

There are a number of actions which FERC or other regulatory agencies might take to foster negotiation and mediation. The first step is to indicate in the agency's rules and regulations that direct negotiations between the parties is a preferred way to resolve intervention (or similar) proceedings. The second is to provide opportunities (such as workshops and seminars) to brief regulatory officials on the mediation process, how it can work within the existing regulatory framework and how they can obtain mediation

assistance. The third step would be to have these officials work with a team of mediators to design a procedure to be followed when parties wish to enter mediation. These procedures would describe the most advantageous time to invite the parties to meet with a mediator, the best way to present this invitation, steps for obtaining approval of the process by the agency, steps for reserving legal rights and participating without prejudice, and possibly provisions for payment by the parties and/or the agency for the services of a mediator.

Implementation of Recommended Actions

The most logical way to implement these recommendations might be to undertake a limited experiment in mediation designed to determine the usefulness of mediation to the Federal Energy Regulatory Commission. This experiment would most likely include observations of the existing intervention process by mediators, mediation of a number of cases selected by the mediators in consultation with the FERC legal and technical staff, and preparation of a written report which addresses the following questions:

CASE LOAD

1. What percentage of licensing disputes involved in intervention proceedings are suitable for mediation?

2. In what proportion of these disputes do the parties agree to enter into mediation?

3. What types of issues and parties distinguish these cases from the rest?

4. What criteria seem to emerge for successful mediation of hydropower licensing disputes?

5. What is the potential for mediation to reduce the number and severity of disputes over hydropower licensing and allow the Commission to allocate staff resources more effectively?

PROCEDURES

6. What changes in present procedures for handling intervention proceedings (or other aspects of a case) could be made to increase the number of settlements and/or the prospects for successful mediation?

7. What are the essential elements for presenting mediation to the parties?

8. What are the general steps taken to complete the mediation process?

SUBSTANCE

9. What effect does the involvement of a mediator have on the definition of the issues which are in dispute?

10. What effect does mediation have on the resolution of these issues compared to the likely results of direct negotiation between the parties or a resolution defined by the Federal Energy Regulatory Commission?

Conclusions

The use of mediation to resolve the dispute at Swan Lake suggests that mediation may be helpful in resolving a greater number of hydropower licensing disputes. It also suggests the general criteria for a successful mediation and a procedure for incorporating mediation into the licensing process when disputes occur. For these reasons, it seems quite clear that further investigation of the potential for mediation to be helpful in these cases is warranted. That investigation will require controlled experimentation, testing and analysis along the lines suggested above to determine the costs and

benefits of using mediation on a regular basis in the hydropower licensing process. The case suggests that the increased use of mediation to resolve hydropower licensing disputes may serve the interests of all those concerned with the responsible and efficient development of hydroelectric power.

APPENDIX I

APPLICATION TO OPERATE

THE GOOSE RIVER HYDROELECTRIC PROJECT

Maine Hydroelectric Development Corporation

June 1, 1978

BEFORE THE

FEDERAL ENERGY REGULATORY COMMISSION

APPLICATION FOR LICENSE FOR MINOR PROJECT

HAVING INSTALLED CAPACITY OF

2,000 HORSEPOWER OR LESS

1. Full name of applicant is Maine Hydro-Electric Development Corporation, a corporation whose post office address is:

Maine Hydro-Electric Development Corporation
P.O. Box 402
Belfast, Maine 04915

Incorporated in the State of Maine with principal office at 72 Winthrop Street, Augusta, Maine 04330, and principal place of business at Mill Lane, Belfast, Maine 04915, which corporation authorizes Lawrence Gleeson, P.O. Box 402, Belfast, Maine 04915 to act as its agent and consents to accept service upon such agent as equivalent to service upon applicant.

2. A concise general description of the project is as follows, and plans of the principal project works are shown on Exhibit L, which is submitted herewith and made a part of this application:

The project described is known as the Goose River Project, and has been designated the FERC Project No. 2804. The project would include developing 430 KW total capacity at five dams, which would produce,approximately, 2,700 MWH's annually. The project is described in sequence by dam, beginning with the uppermost and proceeding down stream.

The Swan Lake Dam will not have electric generation capabilities of itself. This dam is used to maintain water levels in Swan Lake and to regulate downstream flow to the other dams. The dam is of gravity type construction consisting of stone with cemented seams, faced with 12" of concrete. It is approximately 250' long including abutments; maximum height at the center is 10'. It has three 1/4 turn release gates, high, medium and low. A spillway is not used, the high level release gate is the maximum pool elevation giving a gross head of 8'. The gateworks sit on a granite sill with concrete is front. The storage capacity is approximately 7,500 acre-feet; general appearance and condition of the dam are good.

The next downstream dam is Mason's Dam. It is approximately 86' across and 15' high at the spillway. It is of gravity type construction consisting of rock dry masonry with a planked upstream face. The impounding capacity is 1,621 acre-feet with 12" flashboards. A 31' head would be developed with a 160' penstock, utilizing the existing tailrace and wheelpit. Flow through the dam is controlled by two butterfly gates in the center of the dam. The powerhouse would be located 160' downstream from the dam. Construction would include a masonry foundation, wooden frame, with log or metal siding, and asphalt shingle or metal roof. The powerhouse dimensions would be, approximately, 14' by 20' and 12' high. Planned capacity is 75 KW, at an overall 80% efficiency at the normal operating head of 28'.

The next downstream dam is the Kelley Dam. It is, approximately, 135' across with a height of 15' at the spillway; approximate capacity available is 200 acre-feet. Type construction is gravity, built of rock dry masonry on rock ledge with an upstream plank face. Flow is controlled by high, medium and low 1/4 turn butterfly gates. A 22' head would be developed by means of a 305' penstock. The powerhouse would be of same construction and materials as the one at Mason's Dam, with dimensions of, approximately, 15' by 20' and 15' high. Planned capacity is 55 KW, at an 80% efficiency factor at the normal operating head of 22'...

The next downstream dam is the Mill Dam. It is approximately 70' across including abutments, height at the spillway is 6'. It is of gravity type construction, dry masonry on rock ledge with a concrete spillway and upstream face. The spillway comprises 40' of the total length and has flashboard pinholes. It includes a 4' by 4' dog gate closed off with planking. There is an existing corrugated metal penstock, 4' in diameter and 108' long, providing a usable head of 21'. There is an 8' 10" wide and 6' 8" high steel trash rack at the penstock intake; there is provision for stop log placement in front of the trash rack. The powerhouse foundation is poured concrete; it is a wooden framed structure sheathed with construction board and wooden, asphalt shingled roof. Powerhouse dimensions are 16' by 25' with slant roof 12' at the rear and 8' high at the front wall. Access to the powerhouse is afforded by a 4' by 20' railed wooden walkway over the tailrace. The mill pond has a capacity of 7 acre-feet. The capacity, as constrained by the existing water turbine, is 100 KW. The water turbine, installed in 1887, is a Hunt-Francis 33" wheel in a pressure case capable of developing 146 H.P. at 176 R.P.M. under a 21' net head. The main generator is a 125 H.P. asynchronous unit which is driven from the same shaft as the 6.5 KW, self-exciting, station service generator.

The next downstream dam is the CMP Dam. It is approximately 231' across total length and 21' high at spillway level. It is a gravity/buttress type dam of concrete construction. The spillway is 42' long with pinholes for 8" flashboards. The headworks include two double reduction, rack and pinion hoists attached to the wooden release and head gates; these gates are both low level. The impounding capacity is 72 acre-feet. The planned capacity is 200 KW under a 79' normal operating head. This would require the restoration or replacement of 1,100' of the existing plate steel penstock. The powerhouse would be of masonry construction material with construction similar to Mason's and with dimensions of, approximately, 15' by 22' and 12' high.

The degree of regulation of this stream, which drains 21 square miles of coastal Maine, should permit operation of this project at an annual capacity factor of approximately 80%. With the exception of the existing turbine at the Mill Dam site, unit sizing is based upon the mean stream flow which is estimated to be 40 cubic feet per second.

3. The project is located in the State of Maine, County of Waldo, on the Goose River stream, near the towns of Belfast and Swanville, in no National Forest, as shown on the map submitted herewith as Exhibit K, which map is hereby made a part of this application.

4. The lands of the United States which will be affected are: None.

5. None of the project facilities are located in whole or in part on lands of the United States (dam, reservoir, etc.).

6. Permits obtained authorizing the construction, operation and maintenance of the proposed project are as follows:

Building permits from the City of Belfast, Maine, have been obtained for construction at the Mill and CMP dam sites. These are the first two sites in the project that we intend to develop.

The Maine State Historic Preservation Commission has authorized clearance of the project relative to their concerns. Attached is a copy of the letter from Mr. Shettleworth to Mr. Gleeson, 4/21/78, indicating that the project will have no effect upon any structure or site of historic significance.

The State of Maine Department of Environmental Protection has granted water quality certification to the project. They find the project exempt from permit requirements of the Stream Alteration Act and the Great Ponds Act. Water Quality Certification is attached.

7. The project will produce power for use in the diversified capacities served by the local public utility; of the available power output, it is anticipated that 100% will be sold to Central Maine Power Company for their distribution and 0% will be used by the applicant.

8. It is desired to begin construction of the project, starting at the CMP Dam, within one month. It is estimated that construction will be carried on over a two year period and that full operation will be started within one month of completion of project construction.

9. The applicant hereby designates Lawrence Gleeson, whose address is P.O. Box 402, Belfast, Maine, 04915, as its agent and agrees that service upon such agent shall constitute full service upon it for all purposes in connection with any license issued pursuant to this application.

In witness whereof, the applicant has signed this application on the 1st day of June, 1977.

Maine Hydro-Electric Development Corporation

By: _____

(Name of Applicant)

ORG JULY 1977

APPENDIX 2

FINDINGS OF FACT AND ORDER

Maine Soil and Water Conservation Commission

May 4, 1977

SOIL AND WATER CONSERVATION COMMISSION

PETITION)
IN THE MATTER OF)
SWAN LAKE DAM)
SWANVILLE, MAINE)

FINDINGS OF FACT AND ORDER

A Petition signed by 52 persons, a number constituting more than 10% of the littoral owners along the shores of Swan Lake, Swanville, Me., was submitted to the Commission pursuant to 12 M.R.S.A. 304 (1). The owner and petitioners were notified of a duly called hearing by Certified Mail, Return Receipt Requested. All parties acknowledged receipt of such notice. In addition, the hearing was advertised 5 times in the Republican Journal pursuant to 12 M.R.S.A. 304 (2).

After reviewing the testimony submitted at the public hearing, under the provisions of 12 M.R.S.A., C.6, the Commission finds the following facts:

1. The dam is owned by Sherman Manufacturing Company of Belfast, Maine.

2. There is no present beneficial use by the owner of the dam, within the meaning of 12 M.R.S.A. 304 (3).

3. The dam has been traditionally used to store water for the operation of a mill downstream from Swan Lake. Water levels have fluctuated in the past as a result of water management by the dam owner. High water has resulted in significant flooding of property, undermining of foundations, septic field failures and shore erosion.

4. The lake has good water quality providing a habitat for togue.

5. The Maine Bureau of Parks and Recreation plans to develop a park on the lake for public recreation, and there is evidence that the beach at such site is subject to damage by erosion caused by excessively high water.

6. The shore is extensively developed with summer residences.

7. There is a public boat launching facility which provides navigational access for pleasure boating and fishing.

8. There is a sand bar in the vicinity of the dam which is an obstruction to navigation when lake levels are low.

9. Local municipalities around Swan Lake are having difficulty in implementing flood insurance and shoreland zoning programs by reason of excessive fluctuations in water levels.

10. There was substantial evidence presented at the hearing that high water should be no more than 30-36 inches below the top of the present dam and that low water should be no more than 48 inches below high water levels.

THEREFORE, the Commission finds, on the basis of the evidence submitted at the public hearing, that the Commission does have jurisdiction and that there is sufficient justification for the establishment of water levels by the Commission, pursuant to the provision of 12 M.R.S.A. 304 (4) at Swan Lake Dam, Town of Swanville, Maine, and hereby ORDERS the Sherman Manufacturing Company, Belfast, Maine to:

1. Maintain the water level at Swan Lake, no higher than 2.5 feet below the top of the present dam;

2. Except for purposes of accomodating spring runoff, maintain the water level at Swan Lake, no lower than 6.5 feet below the top of the present dam;

3. Lower the lake level during the month of September to be completed by October 1 to facilitate lake trout spawning and to accomodate subsequent spring runoff;

4. The owner shall have 60 days from the date of this Order to bring the dam and impoundment into compliance herewith.

DONE AND DATED AT AUGUSTA, MAINE THIE 11th DAY OF May, 1977.

SOIL AND WATER CONSERVATION COMMISSION

BY: Wallace Boyd
Wallace Boyd, Chairman

Subscribed and Sworn to by Wallace Boyd, Chairman, Soil and Water Conservation Commission on the day and year above written.

Before me _____
Notary Public

APPENDIX 3

PETITION TO INTERVENE IN

THE GOOSE RIVER HYDROELECTRIC PROJECT LICENSE PROCEEDING

Town of Swanville, Maine

November 3, 1978

UNITED STATES OF AMERICA

FEDERAL ENERGY REGULATORY COMMISSION

Maine Hydroelectric
Development Corporation — Project No. 2804

Petition to Intervene
in
Application for Minor License
for Hydroelectric Project

By: Inhabitants of the Town of Swanville, Maine

The Inhabitants of the Town of Swanville, Maine, by and through their attorney, Clifford H. Goodall, Esq., of Lund Wilk Scott and Goodall of Two Central Plaza, Augusta, Maine 04330, upon whom service is to be made, hereby petition to intervene and to be granted the status of a party in these proceedings for the following reasons:

1. The petitioners constitute the municipality of Swanville, in Waldo County, State of Maine.

2. The application requests a license for the rehabilitation of five consecutive hydroelectric developments on the Goose River including developments in the Town of Swanville.

3. Swan Lake, the major reservoir for the five proposed hydroelectric projects is located with a majority of its surface area and volumn, in the Town of Swanville and the outlet damn is within the Town of Swanville as well as a portion of Goose River.

4. The perimeter of Swan Lake is intensly developed with primary residential dwellings and seasonal dwellings with the bulk of this development being within the Town of Swanville.

1-F

5. Swan Lake is used extensively by its inhabitants, residents, and property owners of the Town of Swanville including but not limited to, recreational boating, swimming, fishing, waterskiing, sailing, and general recreation during the spring, summer and fall months; fishing, skating and snowmobiling during the winter months.

6. Swan Lake is the only lake of any importance in the greater Belfast area.

7. Swan Lake, with its impounded waters supports a ground water table which is utilized by the inhabitants and property owners of the Town of Swanville as their primary source of potable water and in addition this ground water table within the Town of Swanville is also the source of water for the public water system serving the City of Belfast. If the proposed hydroelectric projects unreasonably draw down the water levels of Swan Lake, these sources of public and private water supplies will be destroyed.

8. The inhabitants of the Town of Swanville who live around the perimeter of Swan Lake also use the lake water for domestic purposes. If the water level of the lake is unreasonably drawn down, their water systems will be destroyed.

9. The drawing down of the water levels of Swan Lake during the periods of intensive recreational uses will destroy the public recreational values of Swan Lake and the property values of the residental property on its perimeter.

10. The Town of Swanville receives sixty percent of its property tax revenues from the residental developments around the perimeter of Swan Lake. If these properties are degraded in value by the draw down of the water levels of Swan Lake, the property tax basis of the Town of Swanville will be substantially reduced.

2-F

11. There are privately owned and operated marinas located on Swan Lake and their economic survival is threatened by the proposed hydroelectric projects and resulting water level changes.

12. The Swan Lake - Goose River water shed, located within the limits of the Town of Swanville, supports and maintains an active wildlife population including, but not limited to, fisheries and waterfowl. The lowering and raising of the levels of the water in Swan Lake - Goose River, and the wetlands abutting the lake and river threatens these fisheries and waterfowl habitats.

13. The Goose River watershed is not sufficient in size and volumn to support the proposed hydroelectric projects assuming the unlimited availability of all its water nor is it sufficient to support the proposed hydroelectric projects in a manner which will not unreasonally interfer with the other private and public uses and benefits of the watershed by the inhabitants of the Town of Swanville

14. The application is for "the rehabilitation" of five consecutive developments on the Goose River suggesting that there are former and still existing hydroelectric developments. In fact, the proposal is for the conversion of some developments which were hydropower projects used for mechanical power to operate small mills on a limited basis and this applicant is proposing to convert them to hydroelectric generating facilities and to utilize the watersheds' waters in a manner and volumn for which it has never been used and for which it does not have the capacity to be used.

15. The applicant has not provided a reasonable and objective comprehensive plan for optimum coordinated development of the entire waterway with existing and future uses as required by 16 USCA §797 and 803(a)..

16. The applicant has not provided an adequate evaluation of the impact of the proposed projects on the fish and wildlife of the area as required by 16 USCA §797.

17. The applicant has not and cannot demonstrate that the proposed hydroelectric power project will be in the public interest, including but not limited to, alternate sources of power, public interest in perserving recreational uses of fisheries and the protection of wildlife as required by 16 USCA §797.

18. The applicant does not and cannot provide for an adequate regulating of the flow in the streams below the projects damns for the reasonable and adequate protection of riparian property owners, fisheries and wildlife, and the inhabitants of the Town of Swanville as required by 16 USCA §797.

19. The Swan Lake - Goose River currently provides a unique recreational use which is greater in public benefit than the proposed use of the lake and river for water power development and hence this license should be denied pursuant to 16 USCA §797.

20. Goose River is a navigable river pursuant to the 16 USCA §791 et seq. and the applicant has not made adequate provision for the navigation of the river by the public and riparian owners.

WHEREFORE, the Inhibants of the Town of Swanville petition to be granted the status of a party in these proceedings and that a public hearing be held in order that the issues raised in this

petition can be fully heard in opposition to the granting of the application as applied for.

DATED: November 3, 1978
Augusta, Maine

LUND WILK SCOTT & GOODALL

Clifford H. Goodall,
Attorney for the
Inhabitants of the Town
of Swanville

CERTIFICATE OF SERVICE

I certify that I have this date served the foregoing document upon the Maine Hydroelectric Development Corporation, c/o Lawrence Gleeson, Mill Lane, P. O. Box 402, Belfast, Maine 04915 and the Federal Energy Regulatory Commission at its office located at 825 N. Capital Street, N.E., Washington, D.C. 20436 by depositing in the United States Mail, postage prepaid, certified mail, return receipt requested.

Dated at Augusta, Maine this third day of November, 1978.

LUND WILK SCOTT & GOODALL

Clifford H. Goodall

Of counsel for
Inhabitants of the Town of Swanville

APPENDIX 4

NOTICE GRANTING INTERVENTION

Federal Energy Regulatory Commission

January 8, 1979

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Maine Hydro-Electric Development Corporation	))	Project No. 2804

NOTICE GRANTING INTERVENTION

(January 8, 1979)

On July 19, 1977, Maine Hydro-Electric Development Corporation ("MHEDC") filed an application for a minor license for the Goose River Project (FERC Project No. 2804). Public notice of the application was issued on September 11, 1978, with November 13, 1978, given as the last day for filing protests or petitions to intervene.

On November 9, 1978, the inhabitants of the town of Swanville, Maine ("Swanville"), filed a petition to intervene respecting the Goose River Project. Most of Swan Lake, the major storage reservoir for the project's four downstream developments, is located in the town of Swanville. In its petition, Swanville makes numerous allegations, including:

(1) Fluctuation of the level of Swan Lake could affect the ground water table upon which local residents depend for potable water.

(2) Fluctuations of the level of Swan Lake could impair property owners who take water directly from the lake for domestic purposes.

(3) Fluctuation of the level of Swan Lake could destroy the recreational values of the lake and the property values of littoral landowners.

(4) Degradation of littoral property values would erode the town's property tax base.

(5) Fluctuation of the level of Swan Lake could economically harm marinas located on the lake.

(6) Fluctuations of the levels of Swan Lake and Goose River could damage fishery and waterfowl habitats.

(7) The Goose River watershed cannot support the proposed project without interfering with the other private and public uses of the watershed.

(8) The existing dams and facilities were designed to support hydro-mechanical power operations and are not capable of supporting hydro-electric power operations.

(9) MHEDC has not provided a comprehensive plan for the development of the entire waterway.

(10) MHEDC has not adequately evaluated the impact of the project on recreation, fish and wildlife, riparian and littoral landowners, and navigation.

Swanville requested that a public hearing be held concerning the issues raised in its petition.

On November 23, 1978, MHEDC filed an answer opposing Swanville's petition. In its answer, MHEDC stated:

(1) Recreation at Swan Lake has been compatible with power usage.

(2) An equitable proposal has been made to the Swanville selectmen which should safeguard recreational interests.

(3) The water requirements of the Goose River Project are compatible with successful, conservative past practice for similar operations.

(4) Swan Lake is but one of several freshwater recreational developments in the Belfast area; therefore, the lake's recreational benefit is not unique.

(5) MHEDC's operating policy has been to observe the levels set by the Maine Soil & Water Conservation Commission until issues concerning the proposed project have been resolved.

(6) Environmental impact statements are not required in applications for projects of less than 1,500 kW capacity.

(7) Intervention proceedings are likely to increase, unnecessarily, the cost of the improvements without offering any reasonable potential for compensating public benefit.

(8) The project conforms with all state laws.

(9) The project would not only increase domestic energy supplies but also improve the project's recreational usage as well.

It may be in the public interest to grant Swanville's petition to intervene. The issues raised by Swanville and MHEDC--and Swanville's request that a public hearing be held--will be addressed at a later date.

Pursuant to section 3.5(a)(5) of the Commission's Rules of Practice and Procedure ("Rules"), 18 C.F.R. § 3.5(a)(5) (as amended August 14, 1978), the inhabitants of the town of Swanville, Maine, are permitted to intervene in the Project No. 2804 proceeding, subject to the Commission's Rules. Participation of the intervenors shall be limited to matters affecting asserted rights and interests specifically set forth in their petition to intervene. The admission of the intervenors shall not be construed as recognition by the Commission that they might be aggrieved by any order entered in this proceeding.

Kenneth F. Plumb

Secretary

APPENDIX 5

AGREEMENT TO ENTER MEDIATION

Town of Swanville, Maine

Maine Hydroelectric Development Corporation

May 3, 1979

MEDIATION AGREEMENT

We the undersigned agree to participate in a series of discussions to attempt to resolve our differences over the licensing and operation of a low-head hydroelectric facility on the Goose River and its impact on Swan Lake. We understand that these discussions will be convened and chaired by an impartial mediator who will remain nuetral and take no position with regard to the substantive issues and will seek to help us attempt to reach an acceptable agreement on this matter.

The following organizations will be represented at these discussions in the manner described:

The Town of Swanville, Me.	-	not more than four persons, plus an attorney and one technical advisor;
Maine Hydroelectric Development Corp.	-	not more than four persons, an attorney and one technical advisor;
Federal Energy Regulatory Commission	-	
Mediator	-	not more than three persons.

We agree to participate in at least three meetings at which all of the above-named organizations are represented. We recognize that additional meetings may be required to finalize our agreement though it is our goal to resolve this matter to the satisfaction of both parties in the most expeditious way possible. We respect the right of each participant to present and fully explain his position on each issue. In the course of these discussions we will make available all information necessary to form a fair and workable agreement.

Mediation Agreement

We understand that this document and the discussions it describes do not constitute or imply a waiver of any of our legal rights or regulatory responsibilities. Furthermore, it is our understanding that these discussions and any proposals made as they proceed are entered into without prejudice with respect to any other proceedings related to the Goose River project.

Any agreements reached during the course of our discussions will need to be reviewed and approved of by a number of regulatory authorities before they become final and binding. These authorities include but are not necessarily limited to the Federal Energy Regulatory Commission and the State of Maine. We agree not to terminate our involvement in this mediation effort until such approvals have been obtained or until such time as we agree that the effort should be terminated. We understand that any agreements we reach may be embodied whole or in part by the Federal Energy Regulatory Commission in a license to operate any or all parts of the proposed Goose River Hydroelectric project.

With full knowledge and understanding of the above provisions, and as an indication of our desire to attempt to reach a mutually acceptable resolution of our differences, we affix our signatures to this mediation agreement, this day, _____, 1979.

Authorized Representative of the
Town of Swanville, Me.

Authorized Representative of
Maine Hydroelectric Development Corp.

Witnessed by

APPENDIX 6

SUMMARY OF (INTERIM) AGREEMENTS

Town of Swanville, Maine

Maine Hydroelectric Development Corporation

June 14, 1979

SUMMARY OF AGREEMENTS
BETWEEN MAINE HYDROELECTRIC DEVELOPMENT CORPORATION
AND THE TOWN OF SWANVILLE
ON OPERATION OF THE SWAN LAKE DAM

Maine Hydroelectric Development Corporation has applied to the Federal Energy Regulatory Commission (FERC) for a license to operate a hydroelectric project on the Goose River, relying on operation of the Swan Lake dam to control the river's flow. This action has caused the residents of Swanville to be concerned about the proposed project's effect on lake water levels, the value of properties around the lake, and recreational opportunities, fish and wildlife habitats, and water supply provided by the lake. FERC has granted the Town of Swanville the right to intervene in Maine Hydro's application for a federal power license. Normally, a lengthy legal process follows this action, with FERC deciding the conditions for operation of the Swan Lake dam. In the past two months, however, representatives of the Town of Swanville and Maine Hydro have worked together to try to reach an agreement on how the dam will be operated which would protect the town's interests while allowing Maine Hydro to run an economically viable project. With the assistance of an impartial mediator supplied by the Maine Office of Energy Resources, agreement has been reached on a number of important issues regarding operation of the dam. A few details have yet to be worked out and further negotiations are planned. The agreements reached thus far include:

1)Water Rights and Recreational Opportunities

Maine Hydro and the Town recognize that the water rights of those who own and operate dams on navigable waterways are protected by both State and Federal law. They also recognize the importance of preserving the recreational opportunities provided by Swan Lake. Historically, the dam at Swan Lake has allowed for the enjoyment of many recreational opportunities while regulating the flow of the Goose River for downstream power use. The purpose of these agreements is to enhance the recreational value of Swan Lake and at the same time preserve the ability to tap the energy potential of the Goose River.

2)Measurement of the Water Level in Swan Lake

The top of the concrete wall at the west corner of the Swan Lake dam sluice gate, marked "1964", will serve as a benchmark for measurements of the level of water in Swan Lake and hereafter will be referred to as the "top" of the dam.

3)Flood Control

Maine Hydro and the Town seek to reduce the potential for high water damage to properties around the lake. Maine Hydro will operate the gates at the Swan Lake dam so that the lake does not rise and remain above 2 feet from the dam's top. Should natural events such as unexpectedly great rainfall or an uncommonly severe spring runoff cause the lake to rise above the 2-foot mark, Maine Hydro will take specified steps to return the lake to the 2-foot level (see attached plan).

4)Summer Lake Level

From June 15 to Labor Day, Maine Hydro will operate the gates at the Swan Lake dam to maintain the lake at a level above 4 feet from the dam's top. Should natural events such as evaporation, drought, or groundwater seepage cause the lake to fall to a point 5 feet from the dam's top, Maine Hydro will close the gates and release only a very

small amount of water for minimum flow, which is necessary to maintain the downstream environment and the water supply for the Belfast district wells. This minimum flow shall be based on data of flow rates measured at a downstream dam after sufficient summer experience. As a result of this agreement, Maine Hydro expects to shut down its power generating facilities during most of the summer period.

5)Non-Summer Lake Level

Maine Hydro and the Town agree that there will be a specified lower level beyond which the lake will not be drawn down by operation of the gates for the period from Labor Day through June 15. The selectmen of the Town of Swanville recommend that Maine Hydro be allowed to draw the lake down to a maximum of 6½ feet from the dam's top; beyond this level the gates would be closed (except to maintain the necessary minimum flow described above). Maine Hydro recommends that it be allowed to draw the lake down to a point 7 feet from the top of the dam.

6)Maintenance and Repair

Once in every ten-year period Maine Hydro will be allowed to draw the lake down to the level necessary to make regular non-emergency repairs to the Swan Lake dam. Maine Hydro will attempt to coordinate its regular repair work with dry years, when the lake is naturally low, and regular repairs will not be planned during the summer. Maine Hydro will give at least one month's notice before initiating drawdown for regular repairs.

7)Area Around the Dam

Maine Hydro and the Town recognize that the area around the dam at Swan Lake is frequently used for recreational activities by persons from Swanville and surrounding communities. The Town and Maine Hydro also recognize there is significant danger of personal injury and property damage due to unsupervised or abusive activities which may take place in this area. They are aware that management of this area and policing of the activities which take place there cannot be accomplished without on-going cooperation. The Town and Maine Hydro, in consultation with the State Police and Sheriff, will therefore develop an acceptable plan for management of the area around the dam which will seek to eliminate dangerous or undesireable activities in this area. This plan will describe:

a) activities allowed and encouraged in the vicinity of the dam;

b) activities which will be discouraged with signs and/or protective barriers; and

c) activities not allowed.

These rules and regulations will be make public in a variety of ways. The police will be informed of the prohibited activities and will be requested to take appropriate enforcement action.

The plan may also include detailed arrangements for:

a) maintenance and improvement of the area around the dam;

b) recreational use of the property;

c) supervision of swimming and boating activities in the vicinity of the dam;

d) procedures for handling complaints;

e) procedures for enforcing rules and regulations; and

f) limitations of liability of Maine Hydro and the Town for accidents occurring in the area.

This plan will be completed prior to submission of the agreement to FERC.

8) Swan Lake Committee

In order to ensure future communication and cooperation between Maine Hydro and the Town, the Town will create a Swan Lake Committee. This committee will be comprised of representatives of the Town of Swanville and Maine Hydro. It will meet from time to time to review operation

of the Swan Lake dam and its effect on Swan Lake.

Should Maine Hydro at any time anticipate that unusual weather conditions necessitate a temporary revision of agreed upon gate management, it will seek the advice of the Swan Lake Committee before taking action. If the Committee feels that actions taken by Maine Hydro are unreasonable, it may advise FERC of its concerns and request that FERC review the matter.

9) Emergency Conditions

Emergencies may be caused by natural conditions, such as unusually great rainfall or drought, or mechanical occurances such as the need for immediate repair of the gates or the dam. Determination of an emergency operating schedule will be made in consultation with the Swan Lake Committee and will be implemented subject to review and approval by FERC.

In the event of sudden emergency, Maine Hydro may take whatever action is necessary to minimize the threat of personal harm or property damage. Immediately following such action, Maine Hydro will notify the other members of the Swan Lake Committee and seek their advice on appropriate next steps.

10) Spring Runoff

Spring runoff is a highly unpredictable factor in lake level management. It is necessary to maintain a low lake level in the late winter and early spring to ensure that there will be enough room in the lake to store water from melting snow and spring rains; otherwise, flooding may occur. Each year, during the period from January 1 through ice out, Maine Hydro may report to the Swan Lake Committee on unusual weather conditions such as anticipated heavy spring runoff because of heavy snow cover, and may request a revision of the lower level gate management goal to prevent flooding and excess waste of water. Maine Hydro's report will describe the weather conditions which may require such action and will propose a revised operating lower limit. If the Committee determines that the lower level gate management goal is too high to prevent flooding or excessive waste of water, it may revise the lower level management controls for that spring with a temporary special operating schedule.

11) Final Agreement

Maine Hydro and the Town recognize that further discussions will be required to clarify the above agreements. Maine Hydro and the Town will make every effort to reach agreement on these matters by June 30, 1979.

Maine Hydro and the Town will embody their agreements in a Memorandum of Understanding which will be signed by the Selectmen of the Town of Swanville and an official of Maine Hydroelectric Development Corporation at a public meeting. They will endeavor to complete these requirements so that the Memorandum of Understanding and any other documentation required for action on the license application are submitted to FERC by July 15, 1979. The Memorandum of Understanding will have as attachments any explanatory or technical comments desired by the parties. FERC has indicated that it will make every effort to incorporate the joint recommendations of the Town of Swanville and Maine Hydro in the license it would eventually issue for operation of the Goose River Hydroelectric Project.

Maine Hydro and the Town recognize that FERC has ultimate authority in determing guidelines for the operation of the Swan Lake dam which will preserve water rights and protect recreational and other uses. In the event the guidelines agreed upon by the Town and Maine Hydro must be modified, for example, due to major changes in physical circumstances or operating assumptions, the parties may, if they so desire, submit a new set of guidelines for consideration by FERC.

The Town of Swanville will notify FERC of its intention to withdraw its petition for intervention in the event FERC approves a license for Maine Hydro which substantially incorporates the agreements stipulated in the Memorandum of Understanding.

APPENDIX 7

LETTER TO WILLIAM W. LINDSAY

Maine Department of Inland Fisheries and Wildlife

September 10, 1979

DEPARTMENT OF
INLAND FISHERIES AND WILDLIFE
284 STATE STREET
AUGUSTA, MAINE 04333

GLENN H. MANUEL
Commissioner

J. WILLIAM PEPPARD
Deputy Commissioner

September 10, 1979

William W. Lindsay, Director
Office of Electric Power Generation
825 North Capitol St. N.E.
Washington, D.C. 20426

Re: FERC Project No. 2804

Dear Mr. Lindsay:

We have reviewed the Memorandum of Agreement between Maine Hydroelectric Development Corporation and the Town of Swanville concerning operation of the Swan Lake Dam, Swanville. This agreement does not mention our two major concerns (1) water level manipulation as it may affect the reproduction of the togue (lake trout) population and (2) stable water levels in the wetland areas and impoundments on the Goose River down stream of the Swan Lake dam. These matters were discussed at the mediation meeting we attended but the Town and Maine Hydro have apparently decided not to consider them in their final agreement.

The Goose River below Swan Lake Dam provides high quality waterfowl and furbearer habitat. Stable water levels in the impoundments are highly desirable for maximum productivity. We understand that approximately 40 cfs will be released from the Swan Lake Dam for generating purposes. This flow, together with close attention to water level management at the Goose River dams, should maximize the potential of this area.

Ideal management for waterfowl would be a stable water level between April 15, the start of the nesting season, and July 15 when the young are ready to leave the nests. A rise in water level during the nesting season can flood and destroy nests, eggs and young.

Winter water level should be established by November 1 for furbearers, principally muskrat and beaver. Fluctuations after this date can have serious affects on these animals.

The togue population has been recently introduced. Togue spawn on rocky, windswept shoals in October and the young do not move off these spawning areas until May 1. A falling water level between mid-October and May may well dewater and destroy togue eggs or young. Ideal water level management for togue involves drawing the lake down to its lowest desired level by October 15 and no further drawdown unitl May 1.

We hope that the togue population will become self-supporting, especially since our current financial situation makes curtailment of our hatchery production a real possibility. We had no evidence of natural reproduction when we attended the mediation meeting on July 20, 1979. On August 23, 1979, we captured young-of-the-year naturally spawned togue by trawling. We now know that Swan Lake has habitat suitable for togue reproduction. It remains to be seen whether there will be sufficient reproduction to adequately stock the lake.

As we understand the agreement, Swan Lake will be no lower than 5 feet from the top of the dam between June 15 and Labor Day and will not be drawn lower than 7.5 feet from the top of the dam between Labor Day and June 15, when it should be back to the 5 foot level. With these provisions, Maine Hydro can draw the lake down after the mid-October togue spawning season, though probably less than 2½ feet in most years. During an exceptionally wet summer and fall, the post-togue spawning drawdown could be as much as 5 feet.

We recommend that your license carry a condition that there be no drawdown below the October 15 level between October 15 and May 1. We realize this restriction may well have serious consequences as far as Maine Hydro's generating capacity is concerned, but feel that it is necessary to adequately protect the resource we are charged to "maintain and enhance".

We appreciate the opportunity to participate in the mediation process and to submit these comments and recommendations. We are available at any time should the Swan Lake Committee wish to consult us. We would appreciate access to Maine Hydro's water level records to aid us in our evaluation of the success of natural togue spawning.

Sincerely,

Glenn H. Manuel
Commissioner

GHM/CFR:cs

cc: Lyndon Bond, Chief Fisheries Division
Augusta Headquarters
Norman W. Dean, District Warden
John Crabtree, Warden Sergeant
Ronald Woods, First Selectman - Swanville
Lawrence Gleeson, President, Maine Hydroelectric Development Corp.
Clifford Goodall, Counsel - Swanville
David O'Connor, Mediator
John Joseph, Maine Energy Office

APPENDIX 8

MEMORANDUM OF AGREEMENT

Town of Swanville, Maine

Maine Hydroelectric Development Corporation

MEMORANDUM OF AGREEMENT

between

MAINE HYDROELECTRIC DEVELOPMENT CORPORATION

and

THE TOWN OF SWANVILLE, MAINE

Maine Hydroelectric Development Corporation

by _____
Lawrence Gleeson
President

The Town of Swanville, Maine

by _____
Ronald Woods
First Selectman

by _____
Robert Osborne
Selectman

by _____
Robert Faulkner
Selectman

August 2, 1979

Subject: Certain agreements arrived at concerning operation and management of the Swan Lake dam in Swanville, Maine, as pertaining to Federal Energy Regulatory Commission Project 2804.

On June 1, 1978, Maine Hydroelectric Development Corporation (hereafter "Maine Hydro") applied to the Federal Energy Regulatory Commission (hereafter "FERC") for a license to operate a hydroelectric project on the Goose River, relying on operation of the Swan Lake dam to control the river's flow. This action caused the residents of Swanville to be concerned about the proposed project's effect on lake water levels, the value of properties around the lake, and recreational opportunities, fish and wildlife habitats, and water supply provided by the lake. FERC granted the Town of Swanville (hereafter "the Town") the right to intervene in Maine Hydro's application for a federal power license. Normally, a lengthy legal process follows this action, with FERC deciding the conditions for operation of the Swan Lake dam. However, from May through July, 1979, representatives of the Town and Maine Hydroelectric (hereafter "we") have worked together to reach agreement on how the dam will be operated. This Memorandum constitutes that agreement. It is our considered judgement that it will protect the town's interests while allowing Maine Hydro to run an economically viable hydroelectric project on the Goose River.

1) Water Rights and Recreational Opportunities

Maine Hydro and the Town recognize that the water rights of those who own and operate dams on navigable waterways are protected by both State and Federal law. We also recognize the importance of preserving the recreational opportunities provided by Swan Lake. Historically, the dam at Swan Lake has allowed for the enjoyment of many recreational activities while regulating the flow of the Goose River for downstream power use. The purpose of these agreements is to enhance the recreational value of Swan Lake and at the same time preserve the ability to tap the energy potential of the Goose River.

2) Implementation of the Agreement

FERC has indicated it will make every effort to incorporate the joint recommendations of the Town and Maine Hydro in the license it may issue for operation of the Goose River Hydroelectric Project.

Maine Hydro and the Town agree that this agreement will become binding upon them when and if FERC grants a license to Maine Hydro which incorporates the substance of the agreement.

The Town will notify FERC of its intention to withdraw its petition for intervention within twenty days of receipt of a license which incorporates the substance of this agreement.

3) Swan Lake Committee

In order to ensure future communication and cooperation between Maine Hydro, the Town, and FERC, the Town will create a Swan Lake Committee, which will be responsible for monitoring and reporting on compliance with the various provisions of this agreement. This committee will be comprised of five representatives, at least three of whom will be from the Town of Swanville, and, if they so desire, one each from the Towns of Frankfort and Searsport. In addition, Maine Hydro will be an ex-officio member of the committee and will be invited to send at least one representative to all meetings.

The municipal representatives will be designated by their respective selectpersons in consultation with local residents and Maine Hydro.

The committee will meet at least twice a year, on or before February 15 and on or before August 15, to review operation of the Swan Lake dam and its effect on Swan Lake, and to advise Maine Hydro on operation of the dam during the coming months.

Should the committee and Maine Hydro at any time disagree on operation of the Swan Lake dam, the committee may advise the Selectpersons of its concerns. Should the Selectpersons and Maine Hydro be unable to determine a satisfactory solution to the dispute, we may seek the aide of FERC's staff or a neutral party to assist us in reaching agreement. If agreement remains unattainable, the Town may advise FERC of its concerns and request that FERC review the matter.

4) Measurement of the Water Level in Swan Lake

The top of the concrete wall at the west corner of the Swan Lake dam sluice gate, marked "1964", will serve as a benchmark for measurements of the level of water in Swan Lake and hereafter will be referred to as the "top" of the dam. Maine Hydro will install a gauge on the dam to measure water levels.

5) Flood Control

Maine Hydro and the Town seek to reduce the potential for high water damage to properties around the lake. Maine Hydro will operate the gates at the Swan Lake dam so that the lake does not rise and remain above 2.5 feet from the dam's top. Should natural events such as unexpectedly great rainfall or an uncommonly severe spring runoff cause the lake to rise above the 2.5-foot mark, Maine Hydro will take specified steps to return the lake to the 2.5-foot level.

In the event of unexpectedly great rainfall or runoff, Maine Hydro will open the dam's gates to release water as described in the following schedule:

Water Level (as measured from the top of the dam)	Time (as measured from the moment the water level surpasses 2.5 feet from the dam's top)	Action
Between 2.5' and 0.5'	0 - 24 hours	Store water to reduce flood damage downstream
Between 2.5' and 1.0'	After 24 hours	Release 50-100 cubic feet of water per second (i.e., one gate $1/3$ - $2/3$ open)
Between 1.0' and 0.5'	After 24 hours	Release 250 cubic feet of water per second (i.e., all three gates $1/3$ open)
Above 0.5'	All times	Full release, approximately 600 cubic feet of water per second (i.e., all three gates full open)

Maine Hydro will raise the east and west wings of the Swan Lake dam at least 12 inches above their present height. This will prevent potentially dangerous erosion which might otherwise occur under flood conditions.

Maine Hydro will construct a spillway which will allow water to be released automatically beginning at a point at least 6 inches below the top of the dam.

6) Summer Lake Level

From June 15 to Labor Day, should the lake level fall to a point 5 feet from the dam's top, Maine Hydro will close the dam's gates and release only a very small amount of water. This minimum flow is necessary to maintain the downstream environment and the water supply for the Belfast water district wells. The amount of minimum flow necessary will be determined by Maine Hydro, in consultation with the Swan Lake Committee, within two years of the implementation of this agreement. It will

be based on data of flow rates measured at a downstream dam.

7) Non-Summer Lake Level

Maine Hydro and the Town agree that the lower limit from Labor Day through June 15 will be 7.5 feet from the dam's top. When the water falls to this level the gates will be closed, except to maintain the necessary minimum flow described above.

After ice-out, Maine Hydro will take measures necessary to raise the level to at least 5 feet from the dam's top by June 15.

8) Spring Runoff

Spring runoff is a highly unpredictable factor in lake level management. It is necessary to maintain a lake level in the late winter and early spring that ensures that there will be enough room in the lake to store water from melting snow and spring rains; otherwise, flooding may occur.

Each year, during the period from January 1 through ice out, Maine Hydro may report to the Swan Lake Committee on unusual weather conditions such as anticipated heavy spring runoff because of heavy snow cover, and suggest a revision of the lower limit to prevent flooding and excessive waste of water. Maine Hydro's report will describe the weather conditions which may require such action and will propose a revised lower limit. If Maine Hydro determines that the lower limit is too high to prevent flooding or excessive waste of water, it may, in consultation with the committee, revise the limit to accomodate spring runoff.

9) Maintenance and Repair

Maine Hydro will be allowed to draw the lake down below 7.5 feet from the dam's top once in any seven-year period in order to make non-emergency repairs to the Swan Lake dam. The seven-year period will commence any year the lake is drawn below 7.5 feet

for maintenance or non-emergency repairs. Maine Hydro will attempt to coordinate its repair work with dry years, when the lake is naturally low; in the Swanville area, dry years tend to occur in a seven-year cycle. Draw down of water for non-emergency repairs will commence after Labor Day. Maine Hydro's decision to draw the lake down to make non-emergency repairs will be made in consultation with the Swan Lake Committe. Maine Hydro will give public notice of its intention to draw the lake down to make non-emergency repairs at least one month prior to initiating draw down.

10) The Area Around the Dam at Swan Lake

Maine Hydro and the Town recognize that the area around the Swan Lake dam is frequently used for recreational activities by persons from Swanville and surrounding communities. We are aware that management of this area and policing of the activities that take place there cannot be accomplished without on-going cooperation. Further, we agree that public use of the area around the dam is contingent on its being kept clean, safe and orderly by those who use it. The Swan Lake Committee and Maine Hydro, in consultation with the State Police, Sheriff, and others, will develop and implement a plan for management and public use of the area around the dam which will seek to eliminate undesirable activities in this area and keep it clean, safe and orderly.

Because vehicular activity on the property below the dam is dangerous, the Town will request the Maine Department of Transportation to extend the guardrail, now located by the north side of the public road below the dam, to the east wing of the dam. Persons using the area will be allowed to park in the existing parking area across the road from the area below the dam. An opening in the guardrail would permit pedestrian access to the area around the dam.

Maine Hydro will post appropriate signs and fence off the platform area of the dam itself, and will secure the gates against tampering and vandalism.

11) Emergency Conditions

Emergencies may be caused by natural conditions, such as an intense storm after several days of rain or a long drought, or by mechanical occurances such as the need for immediate repair of the gates or the dam. Whenever possible, determination of a revised operating schedule to accomodate these unusual conditions will be made by Maine Hydro in consultation with the Swan Lake Committee and will be implemented subject to review and approval by FERC.

Should Maine Hydro at any time anticipate that unusual weather conditions necessitate a temporary revision of the agreed upon schedule for gate management, it will seek the advice of the Swan Lake Committee before taking action.

In the event of sudden emergency, Maine Hydro may take whatever action is necessary to minimize the threat of personal harm or property damage. Immediately following such action, Maine Hydro will notify the Selectpersons and seek their advice on appropriate next steps.

12) The Federal Energy Regulatory Commission

Maine Hydro and the Town recognize that FERC, through its licensing power under the Federal Power Act, has ultimate authority in determining guidelines for operation of the Swan Lake dam. In the event the guidelines we have agreed to must be modified, for example, due to major changes in physical circumstances or operating assumptions, we may, if we so desire, submit a new set of guidelines for consideration by FERC.

13) Resolution of Future Disputes

Maine Hydro and the Town will continue to work cooperatively through the Swan Lake Committee to protect the recreational value of Swan Lake and preserve the economic feasibility of the Goose River Hydroelectric Project. Should Maine Hydro and the Town be unable to resolve an issue pertaining to these goals in a mutually acceptable manner, we will seek the aid of FERC or a neutral party to assist us in reaching agreement.

14) Legal Rights and Responsibilities

By making this agreement, Maine Hydroelectric Development Corporation and the Town of Swanville do not promise or admit that we are in any way liable or responsible for injury of any nature to any person or property, or that we have any knowledge of any existing or threatened danger to life, limb or property.

We necessarily reserve the right to abide by the requirements of all governmental laws and regulations in the event any provisions of this agreement may be contrary to those requirements. From the time either or both parties are cognizant of such a conflict, the provisions of this agreement which cause such conflict shall not be binding upon the parties, nor shall Maine Hydro be required to stop power generation on the Goose River because such a conflict is discovered to exist. In the event of such a conflict, we will seek to modify this agreement to eliminate such conflict.

This agreement does not preclude termination by Maine Hydro, at its discretion, of the Goose River Hydroelectric Project or its participation in that project. This agreement will not survive termination of the project. However, this agreement is binding upon the parties and their successors and assigns so long as the Swan Lake dam constitutes part of a hydroelectric project similar to that described in FERC license application for project 2804 and they are involved in the project.

APPENDIX 9

ORDER ISSUING LICENSE

Federal Energy Regulatory Commission

March 24, 1980

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Maine Hydroelectric)
Development Corporation) Project No. 2804

ORDER ISSUING LICENSE (Minor)
(Issued March 24, 1980)

On July 19, 1977, Maine Hydroelectric Development Corporation (Applicant) filed an application for a minor license under the Federal Power Act (Act) for the Goose River Project FERC No. 2804. 1/ The project is located on the Goose River, near the Towns of Belfast and Swanville, Waldo County, Maine.

Project Description

The Applicant will utilize five existing dams, four of which will include power developments to be operated run-of-the-river. The dams, proceeding downstream, are Swan Lake, Mason's, Kelly, Mill, and Central Maine Power (CMP). Total storage capacity is 8,200 acre-feet. Swan Lake Dam is used to maintain water levels in Swan Lake and to regulate downstream flows. Mill Dam is the only dam with existing power generating facilities. The facilities at Mill Dam include a 108-foot-long steel penstock and a powerhouse with a water turbine that drives a main generator and a small 6.5-kW station service generator, for a total installed capacity of 100 kW.

Applicant proposes to construct powerhouses at Mason's, Kelly, and CMP Dams, and to make necessary repairs to appurtenant structures. Total rated capacity of the four power developments would be 430 kW, producing approximately 2,700,000 kWh annually. 2/ Average stream flow at the project available for power generation is 40 cfs.

Power from the project will be sold to Central Maine Power Company for distribution to its customers.

1/ Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under §3.5(g) of the Commission's Regulations, 18 CFR 3.5(g) [as amended in Docket No. RM78-19 (August 14, 1978) and Docket No. RM79-59 (July 23, 1979)].

2/ Operation of the project would save the equivalent of 4,400 barrels of oil or 1,250 tons of coal annually.

Jurisdiction

Licensing of the project is based upon the fact that it will affect the interests of interstate commerce. 3/

Public Notice, Intervention and Agency Comments

Public notice of the filing of the application has been given. On November 9, 1978, the Town of Swanville (Town) filed a petition to intervene which was subsequently granted. The Town alleged that hydroelectric power development would destroy recreation and degrade property values, and degrade the fish and waterfowl habitat of the Goose River.

On August 2, 1979, the Applicant and the Town entered into written agreement for the operation of the Swan Lake Dam. The agreement provides that the normal elevation of Swan Lake would not be allowed to rise above 2.5 feet below the top of the dam. The agreement specifies limits on drawdown of the reservoir for the purpose of hydroelectric generation. Such drawdown is limited to a maximum of 5 feet from the top of the Swan Lake Dam during the period beginning June 15 and ending Labor Day and a maximum drawdown of 7.5 feet at all other times. The agreement allows for modification of the lake level, for maintenance and repair to Swan Lake Dam, emergency situations, and for unusually heavy spring runoff.

Minimum Flows

When the level of Swan Lake falls either 5 feet or 7.5 feet below the top of the dam (depending on the time of the year) the written agreement with the Town requires the Applicant to release a minimum flow from Swan Lake. A minimum flow is necessary to maintain the level of the Belfast Water District's water supply wells located at Mason's Pond and to maintain a perceptible flow over natural falls located immediately above Mason's Dam. The Applicant has indicated that a minimum flow of 5 cfs from Swan Lake would be required during periods when the power plants are shut down.

3/ FPC V. Union Electric Co., 381 U.S.C. 90(1965).

The Environmental Protection Agency in its letter of comment recommended a minimum flow equal to the seven day low flow with a recurrence interval of 1 in 10 years to maintain water quality at the project.

The Commission staff reports, and it is concluded that there is insufficient information available to recommend a specific permanent minimum flow release at this time. License Article 28, however, requires that Licensee release an interim minimum flow of 5 cfs from Swan Lake Dam. Article 27 requires the Licensee to conduct a study to determine whether the minimum flow set forth in Article 28 should be modified.

Recreation, Fish and Wildlife

The Bureau of Parks and Recreation of the Maine Department of Conservation has informed the Staff by telephone that the water levels set forth in the agreement would not adversely affect state-owned beach property. The Maine Department of Inland Fisheries and Wildlife (DFW) objected to the agreement on the grounds that water level manipulation in Swan Lake as it may affect the reproduction of lake trout, and in the wetland areas and impoundments downstream of Swan Lake, as it may affect waterfowl and furbearers, was not considered in the agreement. DFW recommended that any license issued contain a condition that the water level of Swan Lake on October 15 be maintained through May 1. Interior, in its letter of comment on the application indicated similar views. DFW further states that for ideal management of waterfowl, water levels downstream of Swan Lake Dam should be stabilized between April 15, the start of nesting season, and July 15, when the young are ready to leave the nests. For furbearers, winter water levels should be established by November 1 and stabilized through ice-out (spring thaw). The Town of Swanville believes DFW's position seriously jeopardizes the project and undermines the settlement agreement between the Applicant and the Town.

It is concluded that the yearly maximum lake level and the minimum lake level for the period June 15 to Labor Day, as outlined in the agreement, would adequately protect recreation interests and property values along the perimeter of Swan Lake. For optimum lake trout spawning and egg incubation, a minimum water level in Swan Lake should be reached by mid-October and held stable through April. At times, however, it may be necessary to lower the lake level in late winter-early spring to allow enough room in the lake to store water from snow melt and spring rains to prevent flooding. In such cases, further drawdown of Swan Lake would be necessary

and, thus, could result in less than optimal conditions for egg incubation. The four dams below Swan Lake are proposed to be operated run-of-the-river with little or no water level fluctuation throughout the year that would affect waterfowl or furbearers. License Article 29 included herein, requires the Licensee to determine appropriate measures necessary to protect the lake trout population as it may be affected by project operation, taking into account other beneficial uses of the lake which shall include but not be limited to recreation, power generation, water quality and flood control.

Environmental Impact

Proposed construction activities would affect water quality and impact fish and wildlife resources to varying degrees, but these effects would be minor and short-term in nature. 4/ Project operation, under the conditions contained in this license, should not adversely impact recreational values and fish and wildlife resources. For the above reasons, it is concluded that issuance of this license would not constitute a major Federal action significantly affecting the quality of the human environment.

License Term

The proposed redevelopment of this project using existing dams is similar to relicensing an existing licensed project at which a moderate amount of new development is proposed. 5/ A 40-year license term is reasonable in this instance.

Economic Feasibility and Comprehensive Development

The Commission's staff has reviewed the economic feasibility of the Goose River Project. A letter of intent from Central Maine Power Company to purchase the plants' output provides that the Applicant would receive 36 mills per kWh.

Applicant's economic feasibility analyses shows that the estimated annual costs ($70,500) would be exceeded by estimated annual benefits ($97,200). Applicant's analyses is considered reasonable.

4/ Applicant has accomplished the necessary consultation with the Maine SHPO as evidenced by letter dated April 21, 1977. Water quality certification for the project has been granted by the State Department of Environmental Protection (April 26, 1978)

5/ Cf. Mystic Lake Project No. 2301, Order Issuing New License (Major)(Issued October 5, 1976).

The proposed project would utilize 174 of the 189 feet of head available between the uppermost power development at Mason's Pond and Tidewater below the CMP Dam. The project dams would normally spill water only 10 percent of the time; thus making excellent utilization of all of the flow and fall of the Goose River that is practical to be used.

It is concluded that the project will be best adapted to a plan for comprehensive development of the Goose River upon compliance with the terms and conditions of this license.

Safety and Adequacy

The dam structures have been analyzed for stability and found safe against sliding and overturning under normal loading.

Swan Lake Dam may be stable under a probable maximum flood (PMF); however because of the dry masonry construction its safety cannot be guaranteed. If it failed during a PMF the resulting increase in streamflow would raise the water surface downstream of Kelly Dam by 2 feet. Because of the high streamflow prior to failure of Swan Lake Dam the residents living in the low lying areas below Swan Lake, Mason, and Kelly dams would have left their homes and the incremental flow contributed by failure of Swan Lake Dam would not cause a significant increase in the hazard to life and property.

Article 30 provides for the filing of an Emergency Action Plan that would provide an early warning to downstream residents of hazards from an actual, or potential, dam failure.

During the most recent inspection by the staff, it was found that the dams are in stable condition. It was noted that repairs would be needed to the gates and concrete at the project dams. Such repairs are prudent for efficient operation of the project. The staff will continue to monitor the progress of repairs and eventual construction at the project. The Commission's Regional Engineer is its authorized representative for this purpose under Article 4 of the license.

It is concluded that the project is safe and adequate for the intended use.

It is ordered that:

(A) This license is issued to Maine Hydroelectric Development Corporation (Licensee) 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 Goose River Project No. 2804, located on the Goose River. This license is subject

to the terms and conditions of the Federal Power Act (Act), which is incorporated by reference as a part of this license, except as expressly waived below, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The project consists of:

1) all lands to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary, the project boundary and area being shown and described by a certain exhibit which forms part of the application for license and which is designated and described as:

Exhibit	FERC No. 2804 -	Showing
K Sheet 1	1	General Map of the Project
K Sheet 2	2	General Map of the Project

2) Project works consisting of:

(a) The Swan Lake Development comprising: (i) the existing 10-foot-high, 250-foot-long Swan Lake Dam of concrete and stone construction; (ii) a gate structure with 3 regulating gates; and (iii) a reservoir with a usable storage capacity of 6,300 acre-feet;

(b) the Mason's Development comprising: (i) the 15-foot-high and 86-foot-long Mason's Dam of rock masonry construction; (ii) a 160-foot-long, 3-foot-diameter steel penstock; (iii) a powerhouse containing a 75-kW generator; (iv) a reservoir with a usable storage capacity of 1,621 acre-feet; and (v) the generator leads, and a 480/12,000 volt step-up transformer;

(c) the Kelly Development comprising (i) the 15-foot-high, 135-foot-long Kelly Dam of rock masonry construction; (ii) a 305-foot-long, 3-foot-diameter penstock; (iii) a powerhouse containing a 55-kW turbine/generator; (iv) a reservoir with a usable storage capacity of 200 acre-feet; and (v) the generator leads, and a 480/12,000 volt step-up transformer;

(d) the Mill Development comprising: (i) the 6-foot-high, 70-foot-long Mill Dam of masonry construction; (ii) a 108-foot-long, 4-foot-diameter penstock; (iii) a powerhouse containing a 94-kW turbine/generator and 6.5-kW station service generator, (iv) a reservoir with a usable storage capacity of 7 acre-feet; and (v) the generator leads, and a 480/12,000-volt step-up transformer;

(e) CMP Development comprising: (i) the 21-foot-high, 231-foot-long CMP Dam of concrete gravity/buttress construction; (ii) a 1,100-foot-long, 5-foot-diameter steel penstock; (iii) a powerhouse containing a 200-kW turbine/generator; (iv) a reservoir with a usable storage capacity of 72 acre-feet; (v) generator leads and a 480/4,000 or 12,000-volt step-up transformer; and (vi) appurtenant facilities.

The location, nature, and character of these project works are more specifically shown and described by the exhibit cited above and by the following exhibit which also forms part of the application for license and which is designated and described as:

Exhibit L

Sheet No.	FERC No. 2804 -	Showing
1	3	Swan Lake Dam - Plan, Elevation and Section
2	4	Mason's Dam and Powerhouse - Plan, Elevation and Sections
3	5	Kelly Dam and Powerhouse - Plan, Elevation and Sections
4	6	Mill Dam and Powerhouse - Plan, Elevation and Section
5	7	CMP Dam and No. 2 Powerhouse - Plan, Elevation and Section
6	8	CMP No. 2 Powerhouse - Plan and Section

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

(C) Exhibits K and L, designated and described in Ordering Paragraph (B) above, are approved and made a part of this license.

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

Section 4(b), except the second sentence relating to free access by the Commission or its agents to the project works and records; 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; 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; 18, except as it relates to fishways; 19; 20; 22; 23(a) in so far as it relates to fair value.

(E) This license is also subject to Articles 1 through 14 and 16 through 18 set forth in Form L-15 (October 1975), entitled "Terms and Conditions of License for Unconstructed Minor Project Affecting the Interests of Interstate or Foreign Commerce", and attached to this license. In addition, this license is subject to the following special conditions set forth as additional articles:

Article 19. If any previously unrecorded archeological or historic 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 State Historic Preservation Officer (SHPO) to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historic work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

Article 20. The Licensee shall, to the satisfaction of the Commission's authorized representative, install and operate any signs, lights, sirens, barriers, or other safety devices that may reasonably be needed to warn the public of fluctuations in flow from the project and to protect the public in its recreational use of project lands and waters.

Article 21. The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable annual charge, as determined by the Commission in accordance with the provisions of its regulations in effect from time to time. The authorized installed capacity for that purpose is 570 horsepower.

Article 22. The Licensee shall commence construction of the project works within 2 years from the effective date of this license

and in good faith and with due diligence shall prosecute and complete construction of the project works within four years from the effective date of this license.

Article 23. The Licensee shall clear and keep clear to an adequate width all lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material necessary for the purposes of the project which result from maintenance or operation of the project works. In addition, all trees along the periphery of the project reservoir which die during operation of the project shall be removed. All clearing of lands and disposal of unnecessary material shall be done with due diligence to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 24. The Licensee shall, in the interest of protecting the scenic, recreational, and other environmental values of the project, exercise control of project lands and waters. The Licensee may authorize the use and occupancy of project lands and waters for the construction, operation, and maintenance of access roads, utility lines, piers, landings, boat docks, or similar structures, and embankments, bulkheads, retaining walls , or other similar structures for the protection of the existing shoreline. The Licensee shall monitor all uses and occupancies of project lands and waters to ensure that they: (a) are consistent with the shoreline aesthetic values; (b) comply with applicable Federal, State, and local laws and regulations; and (c) are maintained in good state of repair, all of which shall be done to the satisfaction of the Commission's authorized representative. The Licensee's consent to authorize the use of project lands and waters shall not, without its express agreement, place upon the Licensee any obligation to construct or maintain any associated facilities.

Article 25. The Licensee shall continue to consult and cooperate with the U. S. Fish and Wildlife Service of the Department of the Interior, the Maine Department of Inland Fisheries and Wildlife, the Bureau of Parks and Recreation of the Maine Department of Conservation, and other appropriate Federal, State, and local agencies for the protection and development of the natural resources and recreational values of the project area.

Article 26. The Licensee shall, in the interest of protecting and enhancing the scenic, recreational and other environmental values of the project, cooperate with the Town of Swanville, Maine (Town) in implementing the terms of the agreement for operation of Swan Lake Dam, signed by the Licensee and the Town on August 2, 1979. The Commission reserves the right to order any changes in the project's operating procedures that may be needed to resolve any differences between the Licensee and the Town concerning the terms of the agreement.

Article 27. Licensee shall consult with the Town of Swanville, the City of Belfast Water District, the Maine Department of Inland Fisheries and Wildlife, and the U. S. Fish and Wildlife Service of the Department of the Interior in conducting a study to determine the minimum flow release needed at the project for the protection of fishery and wildlife resources. The Licensee shall, within three years from the commencement of operation of the project, file with the Commission, a report of the results of the study, and, for approval, recommendations for a minimum flow release from the Swan Lake Dam.

Article 28. The Licensee shall discharge an interim continuous minimum flow of 5 cfs from Swan Lake Dam. This flow may be modified temporarily: (1) during and to the extent required by operating emergencies beyond the control of the Licensee; (2) during and to the extent required for the study required by Article 27; and (3) for fishery management purposes upon mutual agreement between the Licensee, the Town of Swanville and the Maine Department of Inland Fisheries and Wildlife. The requirements of this article shall be in effect until the Commission subsequently establishs a minimum flow superseding the interim flow provided by this article.

Article 29. Licensee shall cooperate with the U. S. Fish and Wildlife Service of the Department of the Interior and the Maine Department of Inland Fisheries and Wildlife in determining what measures can be reasonably taken to provide protection to lake trout during the spawning and post-spawning period (October 15 through May 1). Within three years from commencement of operation of the project, the Licensee shall file for approval a report describing measures deemed appropriate for protecting the lake trout of Swan Lake and taking into consideration other beneficial project uses.

Article 30. Licensee shall file with the Commission, implement, and modify when appropriate, an emergency action plan designed to provide an early warning to upstream and/or downstream inhabitants and property owners if there should be an impending or actual sudden release of water caused by an accident to, or failure of, project structures. Such plan, to be submitted within one year of the date of issuance of the license, shall include, but not be limited to, instructions to be provided on a continuing basis to operators and attendants for actions they are to take in the event of an emergency; detailed and documented plans for notifying law enforcement agencies, appropriate Federal, State, and local agencies, operators of water-related facilities, and those residents and owners of properties that could be endangered; actions that would be taken to reduce the inflow to the reservoir, if such is possible, by limiting the outflow from upstream dams or control structures; and actions to reduce downstream flows by controlling the outflow from dams located on tributaries to the stream on which the project is located. Licensee shall also submit a summary of the study used as a basis

for determining the areas that may be affected by such emergency occurrence, including criteria and assumptions used. Licensee shall monitor any changes in upstream or downstream conditions which may influence possible flows or affect areas susceptible to damage, and shall promptly make and file with the Commission appropriate changes in such emergency action plan.

(E) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in §1.7(d) of the Commission's Regulations, 18 CFR 1.7(d) [as amended in Docket No. RM78-19 (August 14, 1978) and in Docket No. RM79-59 (July 23, 1979)]. The filing of a petition appealing this order to the Commission or an application for rehearing as provided in §313(a) of the Act does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. 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 license 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.

(S E A L)

Robert E. Cockroch

for William W. Lindsay
Director, Office of Electric
Power Regulation

Project No. 2804

IN TESTIMONY of its acknowledgment of acceptance of all of the terms and conditions of this Order, Maine Hydroelectric Development Corporation, this _____ day of _____, 19__, has caused its corporate name to be singed hereto by _____, its _____ President, and its corporate seal to be affixed hereto and attested by _____its _____ Secretary, pursuant to a resolution of its Board of Directors duly adopted on the _____ day of _____, 19__, a certified copy of the record of which is attached hereto.

By _____
President

Attest:

_____
Secretary

(Executed in quadruplicate)