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HYDROPOWER LICENSING

A CASE STUDY OF
MASSACHUSETTS' STREAMLINED PROCEDURE

MASTER

Prepared by:
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Introduction

Massachusetts first began to evaluate its own licensing procedures for hydropower projects in the spring of 1978. The effort was made in response to problems that arose in the licensing of a 15MW hydro project at the Great Stone Dam in Lawrence, Massachusetts, one of the first of such projects in the region involving the redevelopment of an existing dam by a private, non-utility company. Under a special directive issued by Governor Dukakis, the Lawrence project had been "shepherded" through the state regulatory review process by an individual within the Department of Environmental Quality Engineering, one of the most important licensing agencies. Even though the project received special treatment, however, there remained a vast number of permits, licenses and other forms of approval which had to be obtained from several different state agencies in addition to what was at that time a very cumbersome, exhaustive federal licensing review coordinated by the Federal Energy Regulatory Commission (FERC). The Lawrence project succeeded in obtaining all of its required approvals within a reasonable time period, but the experience demonstrated to state energy officials that the licensing burden could become a serious barrier to hydropower development. In any case, the situation seemed to merit further investigation.

Consequently, in the spring of 1978 the Executive Office of Energy Resources (then called the Massachusetts Energy Office) began a full scale assessment of the state regulatory process as it pertained to hydropower generating facilities. At approximately the same time, the State Legislature passed a resolution requiring the Energy Facilities Siting Council and the Energy Office to study the hydropower licensing

process and to report back with recommendations by the end of December, 1978. The Energy Office legal staff and interns conducted extensive research during the summer. They worked in conjunction with the Franklin Pierce Energy Law Institute of Concord, New Hampshire which was at that time just beginning a comprehensive study sponsored by the Department of Energy, entitled "Legal Obstacles and Incentives to the Development of Low-Head Hydroelectric Power in the Northeastern United States."

The results of their research indicated that upwards of eight different state agencies, departments and commissions were somehow involved in the review of hydropower projects. Each of those agencies required different types of application forms and followed separate review procedures. In many cases there was overlapping jurisdiction between state and federal agencies and duplication of information requirements for applications. There was no central place where hydro developers could go to find out how to proceed or even what approvals would be necessary for a given project. In addition, there was no way for developers to predict how long the state regulatory process might take since many agencies had no set time limits for review of applications. In short, the evidence clearly showed that improvements had to be made if the state was going to encourage development of any substantial portion of its hydropower resources.

In September, 1978, the Energy Office and the Siting Council together decided to form an Advisory Committee to help determine the best solution to the problem and to provide recommendations to the Legislature. The Committee consisted of representatives of all the state licensing

and permitting agencies, the association of local conservation commissions and the FERC plus two hydro developers, three utility company representatives and two state legislators. The Committee met three times during the fall to review and discuss various staff proposals for a streamlined licensing procedure. The lead agency concept was determined early on by the Committee and staff to be the best alternative. Eventually, legislation was drafted and submitted along with a report to the Legislature on December 27, 1978. Then began the long, slow process of getting the bill approved by the Legislature; a task which was not actually accomplished until November 16, 1979.

The Advisory Committee review process turned out to be very valuable for a number of reasons. The decision to use an Advisory Committee with broad representation as opposed to designing a new licensing structure entirely in-house, was key to the success of the streamlining effort. Not only did the Committee members provide valuable insight and constructive criticism in their review of staff proposals, but they also provided a constituency for the legislation once it was submitted. Resistance to the streamlining legislation from environmental interest groups and agencies would have been much stronger had representatives of those groups not been involved in its creation. In addition, working relationships were established among the various licensing agencies and with the Siting Council and the Energy Office during the process of drafting legislation. Those relationships formed the basis for cooperation among agencies once the new streamlined procedure was implemented. Some agencies remained opposed to the idea of a streamlined process, but at least they felt they had been consulted

and therefore could feel reasonably comfortable with the legislation once it was enacted. Without the backing and the expertise provided by the Advisory Committee, it is unlikely that any significant reform could have been achieved.

Massachusetts was one of the first states in the region to revise its licensing procedures for hydropower projects primarily because it faced a more serious problem; the Commonwealth had a more complicated and cumbersome existing regulatory process than most states in the region. Nevertheless, other states may face similar problems and may desire to reform their own licensing procedures to further facilitate the development of hydropower as an alternative energy source. This case study represents an attempt to draw upon the Massachusetts experience in a way which may be helpful to those states.

DESIGNING A STREAMLINED LICENSING PROCESS. PROBLEMS, ISSUES AND QUESTIONS

Although the concept of a so-called "streamlined" licensing procedure seems straightforward at first, many complex issues and questions arise as soon as one attempts to actually design such a process. There are several different approaches to consider in terms of the overall structure of the process. Issues and questions regarding scope, authority, eligibility, and a multitude of procedural details have to be resolved. Even though the existing situation in each state may be very different in terms of the number and level of authority of the agencies that license or approve hydro projects, the problems and issues involved in designing a streamlined licensing procedure will be similar. The following discussion will attempt to focus on the issues, encountered in Massachusetts, that are likely to confront other states in any similar effort to improve their own hydro licensing procedures.

SCOPE

There are a variety of issues and impacts associated with hydropower development, some or all of which may be reviewed in the state licensing process. The three major categories of issues to be considered in reviewing hydro projects are: 1) environmental impacts, 2) energy benefits and 3) financial and economic viability. Which or how many of these issues are addressed in the streamlined licensing process depends on the intent or purpose of the process. Decisions regarding the scope of the process will determine in part which agency or agencies should have the authority to review and approve hydro projects and who should be eligible for licensing under the streamlined system.

Environmental Impacts

Safety - The structural integrity of a dam is an engineering problem, but it has important environmental implications. If a dam is washed out or even partially breached because of defective construction, or neglect or extreme weather conditions, it can cause severe flooding downstream and reduce water levels upstream. The possibility of dam failure involves liability and public safety concerns as well as environmental damage. As a result, almost every state has some existing statutory authority to license the construction and maintenance of dams, whether or not they are used to generate power.

Water Quality - Although hydropower projects do not pollute the water in any direct way, their construction and/or operation may alter the normal stream flow configuration and thereby affect the water quality.

For a run-of-the-river plant, a minimum 7-day 10-year average flow in cubic feet per second is typically required by state and federal authorities to maintain water quality downstream. These flow requirements may in turn limit the amount of power that can be generated at the site. Projects involving the use of a storage reservoir may warrant closer scrutiny by environmental authorities because of possible stagnation or stratification of the water. In fact, the federal Environmental Protection Agency is now considering whether or not dams should be considered a point source of pollution. Fluctuating reservoir levels may cause social impacts as well depending on the current uses of the area such as recreation or residential shore-line property.

Fish & Wildlife - Existing dams constitute a barrier to the passage of anadromous and catadromous fish regardless of whether or not the sites are used to generate power. Typically, however, dam owners are not required to install fish passage facilities until they decide to apply for a license to develop the site for hydropower generation. Then the project plans are reviewed by federal and state authorities to determine the size, type and design of a fishway that is appropriate to the particular species of fish at the site. Plans for construction of transmission lines to or from a hydropower site may also be subject to review for possible impacts on wildlife in the area.

Historical Resources - Many dam sites are connected to old mill complexes that may be eligible for inclusion in the National Register of Historic Places. As a result, any plans for developing such sites must be reviewed by federal and state officials to ensure protection of the historical or cultural resources. Restrictions may be imposed on the design and operation of these hydro projects as a result of such review.

Wetlands - The construction and/or operation of a hydropower generating facility is very likely to affect wetland areas upstream. The magnitude of such effects will depend on the location of the site and whether or not the project involves major construction or reconstruction of a dam. For example, a wetland area may have been recreated by the breaching of an old dam which, if reconstructed for the purpose of hydropower generation, would re-flood the area. Even the addition of flashboards to an existing dam that is intact may raise the upstream water level to a point which is unacceptable from an environmental or social standpoint.

Water Supply - Any project that involves the use of water is bound to conflict to some degree with other uses of the same watercourse. Water supply is probably the most common use of rivers, streams and lakes. Whether the source is used for industrial, commercial or municipal water supply, some agreement will probably have to be negotiated to determine how much water these entities are entitled to and how much flow the hydro developer can depend on for power generation. However, in many states no formal process exists to deal with these types of conflicts even though they can have a tremendous impact on the viability of a hydro project.

Construction Impacts - In addition to the more permanent effects caused by the construction and operation of hydropower projects, there are a variety of environmental impacts that can be incurred during the actual process of constructing or retrofitting a dam site. For instance, dredging is an activity that has a significant, although temporary, impact on the environment (particularly water quality) and generally requires the approval

of federal and state agencies. In addition, the use of explosives and/or heavy construction equipment may require local or state permits. In the construction of a hydro project, as with any construction effort, the developer must abide by local health and safety codes.

All of the above-mentioned environmental impacts will obviously be more serious for hydro projects that involve construction of a new dam or total reconstruction of a breached site as opposed to merely retrofitting an existing dam and powerhouse. Similarly, the impacts are likely to be more significant for larger projects. Nevertheless, these issues and impacts are associated with all hydropower developments to some degree and therefore are likely to be subject to some review at the state level.

In addition to the environmental impacts, the following concerns of energy supply, project financing and marketing are associated with hydropower projects.

Energy Supply/Benefits - If hydro projects are to be considered as part of the overall energy supply mix, it may be desirable to evaluate them in terms of their potential contribution to the energy needs of a given area. Comparison of the relative capital and/or environmental costs of hydropower as opposed to alternate sources could be an important factor in determining whether or not a plant should be developed. The extent to which a project's energy benefits and costs are evaluated by state authorities may depend on who the developing entity is - i.e. whether it is an established utility, a private concern or a municipality - and how large the project is in terms of capacity and annual energy output. For example, some states require that projects over a certain size file a certificate of public convenience and necessity - in Maine the

minimum size is 1 MW, in New Hampshire 5 MW and in Massachusetts, 100 MW.

Marketing - The projected market for the power produced may also determine the type and extent of regulatory review that is appropriate for different hydropower projects. Under the Public Utilities Regulatory Policies Act of 1978 (PL 95-617), hydropower producers are guaranteed the right to sell their electricity to a utility company at rates which may be negotiated privately or officially set by the state public utility commission. Hydro producers will not be regulated as electric companies unless they elect to sell retail. The question of whether or not the producer intends to sell power directly to the interstate grid (e.g. New England Power Pool) will also affect FERC jurisdiction over the project.

Project Financing - Questions regarding the financial or economic viability of hydropower projects may also be subject to review by one or more levels of government. Information on such matters is required by the FERC as part of their license application. State governments may want to exert authority over this area either in addition to the FERC or only in cases where the FERC does not have jurisdiction (e.g. for sites on non-navigable waterways).

Miscellaneous Legal Issues - Matters such as water rights, zoning ordinances, ownership or leasing arrangements will undoubtedly be of concern to most hydropower developers and will affect the viability of their projects, although such issues are not typically subject to state level review.

The basic question respecting the above-mentioned issues is one of policy: how comprehensive or "streamlined" is the licensing process intended to be? Are hydro projects to be subjected to the same degree

of scrutiny that is applied to conventional electric generating plants or is the streamlined process designed to eliminate all but the most essential regulatory review? If state agencies are already mandated under existing law to review certain of these impacts and approve or disapprove hydro projects on that basis, should this authority be left intact or altered for these projects? Which of the issues/impacts discussed here are best dealt with at the state level and which may be better left to the review of federal or local government agencies?

The Massachusetts' streamlined process incorporates only the environmental impacts of hydropower development that were previously required by state and federal law to be reviewed. Thus, it includes primarily the issues of safety, water quality, protection of wetlands, fisheries and historical resources. Any other environmental or social impacts associated with particular projects will be dealt with in the state environmental review procedure (MEPA) whose timing is keyed to the streamlined licensing process (see discussion under "Eligibility" and "Procedure"). The issue of a hydropower project's contribution to the energy supply is brought into the process only at the appellate level. At that point, if any of the environmental review agencies have denied permits or licenses or have imposed unduly burdensome conditions on the development of a project, then the appeals agency may review the entire project in terms of both its environmental impacts and energy benefits to the state or local community, and then issue a decision approving or denying the project.

Other energy-related issues such as the project cost or market for the power are left out of the Massachusetts streamlined process entirely. The process was designed only to address those issues and concerns which

required review before a project could be approved for construction. Thus, although the state Department of Public Utilities might get involved in establishing rates for the sale of power from a hydro plant to nearby retail customers or to a utility under the mandate of PURPA, those procedures and concerns are left out of the streamlined process because they can be dealt with later, after a project has received initial approval for construction. Financial arrangements are likewise omitted. To include review of such matters would be premature in most cases since a developer can hardly negotiate terms for financing a project or selling the power it produced until (s)he knows for certain that it can be built.

Finally, some issues were specifically excluded from the process because they did not seem appropriate for review by the State. Health and safety problems associated with the construction phase of a project were determined to be matters for local authorities to decide. Similarly, issues regarding interstate commerce and navigability were left up to the federal government which is already mandated through the Federal Power Act to take jurisdiction over such matters. Issues concerning the protection of fisheries and historical resources, on the other hand, were included because although they are protected under a federal mandate, state authorities also exercise jurisdiction both on their own and as counterparts of the federal government. Legal questions such as water rights were omitted, primarily because no state agency currently has authority to determine them. However, in the future, the need may arise for the state to resolve disputes concerning water rights, ownership or development rights, and related issues and, if so, the necessary authority could easily be added within the structure of the streamlined process. In general, however, the

guiding policy in designing the Massachusetts streamlined process was that it should cover only those issues currently required by law to be reviewed by state agencies. The intent was not to be more comprehensive, but rather to consolidate the existing licensing process and to limit the number of issues involved; to lessen rather than increase the regulatory burden on hydro developers.

AUTHORITY

Possibly the most significant issue involved in designing a streamlined licensing procedure is how authority is to be distributed among the various agencies included in the process. Which agency or agencies should have authority over the licensing of hydropower projects, how much authority should they have and at what stage of the review process should it be exercised? Or, to phrase the question another way, how streamlined should the licensing procedure be? Answering this question involves first determining what are the basic problems with the existing regulatory system and how they can be best corrected. The capabilities and existing authority structure of individual agencies should also be considered. Three basic approaches to streamlining suggest themselves: a single agency acting as an information clearinghouse, a single agency coordinating procedures between all involved agencies and the developer, and a single agency reviewing and deciding on all hydro projects.

Clearinghouse - Under the first option potential developers go to one agency for guidance and information about the existing process, but have to deal with several different agencies to obtain the actual permits for their projects. If the existing state licensing process involves only one or two agencies, then this may be the most appropriate solution. It may be that all that is necessary to facilitate development is to fully explain to developers the information requirements and the review and approval procedures. The chief advantage to this solution is that it can be implemented quickly and easily, with no need for legislative or regulatory changes primarily because no authority would have to be added to or taken away from any agency.

The only real question is, which agency should serve as the information clearinghouse? It could be either an agency that already has the chief permitting authority over dams, such as the Water Resources Board in New Hampshire or the Department of Environmental Quality Engineering in Massachusetts, or it could be the state agency with the responsibility for promoting hydropower development such as the energy office which is likely to be already geared up to provide information and to assist hydro developers in other ways. If the one or two licensing agencies do their job well, are responsive and willing to cooperate with the clearinghouse agency and with the developer, then this arrangement can be ideal. The one drawback, however, is that if the existing process fails because of lack of cooperation, political conflicts or delays then no one agency has the authority to break the deadlock or to expedite the process. The clearinghouse agency, even if it is a development agency would be without any substantive power to resolve the situation.

One Stop Licensing - The solution at the other extreme is to design a true "one-stop" licensing process with one agency to review all the issues involved and issue one decision on each hydro project. This system would be the simplest and most streamlined from a developers' point of view since (s)he would have to deal with only one agency for everything related to state review and approval of a hydro project. On the other hand, a one-stop licensing procedure would certainly raise serious questions of authority and jurisdiction among the state agencies currently involved in reviewing hydro projects. Thus, there would probably be severe political problems associated with trying to implement such a dramatic solution, unless there was virtually no existing review of hydro projects required at the state level.

The decision regarding which agency should have the authority in the one-stop process depends somewhat on the scope of issues to be reviewed. It would be a difficult task for any one agency at the state level to acquire the expertise to adequately review all the concerns of safety and energy supply plus the environmental impacts of hydropower projects on fisheries, historical resources, recreation, wetlands, water supply and water quality. One solution might be to establish a board similar to a siting council or water resources commission which would include experts in all of the above-mentioned areas. Such a board or commission could then review all proposals for the construction or retrofitting of hydro projects and issue one decision based on a majority vote. Alternatively, one could establish a process similar to that of the Federal Energy Regulatory Commission whereby one agency would receive all applications for hydro projects and then refer them to other water resource, environmental and/or energy agencies for review and comment. Thus, the one-stop agency would have the authority to make the final decision on all hydro projects, but would not necessarily need to have in-house expertise in energy as well as in all environmental areas. In this case, it would probably be appropriate for the one-stop authority to be given to an energy agency with some expertise in the hydropower field since the presumed intent of the process is to facilitate and promote hydropower development.

Lead Agency - A third approach to the licensing problem is to create a lead agency structure whereby one state office would coordinate the review and approval process but existing agencies with jurisdiction over hydro projects would be allowed to make the actual decisions on permits and licenses. This method represents a kind of middle ground between the

two extremes discussed above. It is the approach which Massachusetts has adopted for several reasons.

The lead agency structure possesses most of the chief advantages of the one-stop licensing process without requiring as many legislative changes or potential political conflicts. By designing the process around a lead agency, it is possible to coordinate and expedite the licensing procedures without seriously impinging upon the authority of agencies with jurisdiction over hydropower generating facilities. Furthermore, such a system allows developers to deal with only one agency at the state level. The lead agency structure also provides the federal regulatory agencies (the FERC in particular) with one contact at the state level and may therefore facilitate coordination of the state and federal licensing procedures. This system allows the expertise of existing environmental and natural resource agencies to be fully utilized in the review of hydro project proposals. At the same time, it establishes a lead agency with the development perspective and authority necessary to expedite approval of these energy projects.

Massachusetts has designed a procedure that gives the lead agency three main functions: 1) to consolidate all agency information requirements into one standard application form, 2) to enforce a uniform time frame on all state regulatory agencies for review and decision-making on license and permit applications and 3) to act as a last-resort appeals body in the event regulatory agencies delay decisions, deny permits or licenses or impose burdensome or conflicting conditions on the developer. The lead agency in Massachusetts' proposed process has the authority to assist in resolving disputes between other licensing and permitting agencies and the developer, but not to issue actual decisions on project proposals

until the appellate level is reached. Thus, it is assumed that the lead agency will exert decision-making authority only in the event that existing regulatory agencies fail to act in a prompt and reasonable manner.

Massachusetts chose to designate an energy office as the lead agency for several reasons. First of all, since hydropower projects are being given priority in Massachusetts because they represent a partial solution to the state's currently difficult energy situation, it seemed appropriate for an energy office to take the lead. Furthermore, in order to be able to review decisions of licensing agencies at the appellate level, the lead agency had to be above the level of those agencies administratively and not directly responsible for them under normal circumstances. For example, the Executive Office of Environmental Affairs (EOEA) was considered but rejected as a lead agency because almost all of the licensing and permitting agencies are currently under its jurisdiction and it would be difficult for that office to review licensing decisions objectively. In addition, EOEA does not encompass all the agencies, such as the Historical Commission, which have jurisdiction over hydro projects. Finally, the appeals process was designed to review and balance both the energy benefits and environmental impacts associated with hydro projects and therefore needed to be handled by an agency with a broad perspective. The Energy Facilities Siting Council was chosen in the end because it meets all of the above criteria. The Council includes representatives of both the energy and environmental agencies, is chaired by the state's chief energy official, and, in fact, already performs a similar appeals function for larger (over 100 MW) generating plants.

ELIGIBILITY

A decision must be made at some point regarding which projects should be eligible for licensing under the streamlined process. The basic questions to be resolved are: For whom is the streamlined process designed? What eligibility requirements, if any, should be placed upon the projects and/or developers to be licensed under this process? Should any projects or developers be exempt from the process, or from any regulation at all? There are various ways in which eligibility can be restricted, depending on the purpose of the streamlined process and review procedures deemed appropriate for different types of projects.

The first and most obvious option is to essentially avoid the issue of eligibility criteria by including everyone in the streamlined process regardless of the type, size or location of the project or the developer's status. This approach has the advantage of being simple and straightforward. It leaves no question as to who can be licensed through the streamlined process. On the other hand, a potential disadvantage is that all projects may be treated in the same fashion even though their characteristics of ownership, use of power, and environmental impact differ considerably.

An alternative to including everyone in the streamlined process is to differentiate between projects on the basis of the magnitude or degree of their environmental impact. A ceiling or maximum size limit could be established based on the head, impoundment or capacity of a project. For example, the streamlined process could be designed to license only those projects which met the federal criteria of a 66 foot head and 15 MW maximum capacity for "small-scale" or "low-head" hydropower. This would certainly exclude large pumped storage facilities and perhaps some run-of-the-river projects on major rivers, but it could still encompass projects with a wide

range of environmental impacts. Another alternative would be to restrict eligibility for the process to hydroelectric developments at existing dams. The problem then becomes one of defining "existing" dam - e.g. are breached sites included?

The chief difficulty with any of these sets of eligibility criteria is that they may be too restrictive in some cases. While there may be important political or environmental reasons for restricting the streamlined process to sites at existing dams or with less than 15 MW of installed capacity, such a decision could conceivably exclude some economically and technically viable projects with relatively minimal impacts. For instance, the differences between a 15 and 16 MW power station at any particular site may be insignificant in terms of environmental impact, but the variation in cost and power output might determine whether or not the site is feasible to develop.

Determining what eligibility criteria are appropriate depends to a large extent upon the scope of the licensing process. If the so-called streamlined process is broad enough in scope to include review of the entire range of issues and impacts associated with hydropower development, then perhaps all projects should be eligible. Alternatively, it might be sensible to include all projects initially with a provision that those demonstrating a minimal degree of environmental impact and/or relatively small capacity would be exempted from the full review process. The smaller, less complicated projects would receive more scrutiny through a more in-depth, perhaps longer review procedure.

The third approach is to determine eligibility on the basis of ownership and/or use of power. In terms of ownership, the question is should

major investor-owner utilities be allowed to utilize the streamlined system or should eligibility be limited to private companies, municipalities and other developers who are not primarily engaged in the business of producing and selling electricity? If the established policy is to encourage all hydro development then no restrictions should be placed on ownership. On the other hand, since the major utility companies are subject to comprehensive regulation for all their other electric generating facilities, it may be inappropriate to allow a simpler review procedure just for their hydro projects. Once again eligibility really depends on the scope of the streamlined process and, in particular, whether it is designed to include consideration of rates and energy supply or just environmental issues.

Finally, if power market concerns are part of the streamlined process, a different type of review may be appropriate for applicants depending on whether they propose to generate power for on-site use, for sale to one or more retail customers or for transmission to the grid, since issues of energy supply, value and reliability are different in each case. For instance, small projects intended only for on-site use could be exempted from the full state licensing process and be reviewed only for environmental impacts at the local level. On the other hand, a large generating facility developed for sale of power to the grid may need to be scrutinized more closely in regard to reliability and financial viability.

Regardless of what restrictions, if any, are placed on projects in terms of size, impact, ownership or use, it might be worthwhile to establish certain threshold requirements for developers to become eligible for licensing under the streamlined process. Developers could be required to submit a preliminary application form including basic information regarding the proposed project and the applicant's status. These submissions could

be reviewed in order to "weed out" marginal projects and developers who were unqualified or ill-prepared so that agencies would expend their limited time and effort only on "serious" applicants and legitimate, viable projects. An important concern in light of our initial energy situation may be that prospective developers not be allowed to "sit on" potential projects for too long thereby preventing development by someone else and depriving society of the benefits of an indigenous energy source. Perhaps applicants should somehow have to prove their commitment to expedited development of a project in order to be eligible for treatment under a streamlined licensing process.

In Massachusetts, the issue of eligibility for the streamlined licensing process was resolved by combining elements of the three basic approaches discussed above. Under the Massachusetts' system, all projects are eligible at the start but certain screening mechanisms are built into the process to provide some variation in the review required for different types of projects. The idea of imposing size limitations or environmental impact criteria was rejected for two main reasons. First of all, since the streamlined process incorporates all aspects of environmental review currently required by law, there seemed to be no need to limit eligibility to projects with minimal impact--e.g. less than 15MW capacity or existing dam sites. Secondly, an environmental screening mechanism is already built into the streamlined procedure through the Massachusetts Environmental Protection Act (MEPA). Under this law, most developers are required to file an Environmental Notification Form (ENF) indicating the nature of their project's environmental impacts. These forms are reviewed to determine whether or not the developer must file an Environmental Impact Report (EIR) which must then be accepted before the project can be licensed. Thus, all major or complicated projects automatically receive more scrutiny, whereas minor projects are cleared

within approximately 30 days of filing an ENF.

Furthermore, since a policy decision had been made to encourage the development of all hydropower in the state, no restrictions were placed on ownership. Utility companies, municipalities, and private entities will all receive equal treatment. In addition, distinctions between applications based on the use of power were avoided because the streamlined process is mainly concerned with environmental impacts and not energy production. Issues regarding energy supply and/or rates for the sale of hydroelectricity are outside of the existing licensing process. Therefore any eligibility criteria regarding use of power would be irrelevant.

Finally, a means of "weeding out" unacceptable or unqualified applicants is provided for in the preliminary application stage of the streamlined process. At the joint meeting which occurs 30 days after a preliminary notification form (including the ENF required for MEPA review) is filed, the developer's project plans and status will be reviewed and discussed. Agencies will outline their requirements for licensing and then the developer may take as long as necessary to prepare the applications. The burden of taking the initiative is therefore on the developer after this initial meeting. If (s)he is ill prepared or unqualified, review of the project through the streamlined process effectively stops at this point.

PROCEDURE

Once the larger issues of scope, authority and eligibility have been resolved, a whole range of questions arise regarding procedural details, i.e. how is the "streamlined" process actually going to operate in a step-by-step fashion? The mechanics may seem minor at first glance, but they can have a significant effect on how smoothly the process functions and how successfully it actually will be in facilitating hydropower development. Matters of information processing, timing and coordination between the various actors involved can be critical to the successful design of a streamlined licensing process.

Information Requirements - A key element in the licensing and review process is the format and type of information required for applications. Frequently, duplication exists between the application requirements of different agencies. For instance, the same or similar information may be required by two or more environmental review agencies but in a different form. Agency specification for maps and drawing may vary slightly, just enough to require redrawing as opposed to photocopying them. This kind of duplication can be a burden to developers who have limited resources, cannot afford the time and cost of preparing all the applications and in general, have relatively little experience in dealing with government regulation.

If the purpose of designing a streamlined licensing process is to facilitate hydro development, then this kind of duplication should be eliminated. One solution to the problem may be to modify various agencies' information and application forms so that they all utilize one standard set of specifications for maps and drawings, and require a basic project description that can be duplicated for all agencies' purposes. Another option

would be to consolidate all the various forms into one which developers could then fill out and send to all agencies with jurisdiction over their hydro projects.

In both instances, the state could greatly improve the licensing process from the point of view of both the developer and federal regulatory agencies, by integrating federal and state requirements and consolidating them wherever possible. Overall, the key is to strike a balance between the developer's need for somewhat simplified and consolidated application forms and agencies' needs for adequate information on which to base their decisions regarding hydro projects.

Scheduling/Time Frame - Another key question regarding procedure is what is a reasonable time frame for filing of applications, decision-making and/or appeals? Deadlines can be a very important means of expediting the licensing process, but they may also be too restrictive and so defeat their objective by causing more cases to wind up in appeals proceedings. Once again, the challenge is to try to achieve a balance between the needs of the developer and the needs of the agencies.

Time limits are important to the developer primarily because they make the licensing process predictable. In order to obtain financing and to begin negotiations for sale of the power, a developer needs to know with a reasonable degree of certainty that (s)he will have all the necessary licenses, permits and other forms of government approval for the project by a certain time. Obviously the shorter that time period is, the better from a developer's point of view, but regardless of the length, some definite time limit is far better than none.

Regulatory agencies, on the other hand, may resist the imposition of any time limits because they would prefer to have maximum flexibility and control over the process. If the licensing and permitting agencies are not

given enough time to review applications to their satisfaction, they may choose to deny approval of a project on that basis. On the other hand, if the agencies agree to a time frame that is too long - i.e. to allow them the maximum time for review - then projects may encounter financing difficulties because costs have increased in the interim.

An alternative to imposing one strict time limit for review of all hydro projects would be to establish some type of sliding scale for the time frame. Based upon review of a preliminary application or agency notification form, a time limit could be set that was appropriate for each project. Thus major projects that involved complicated issues and possibly required coordinated, inter-agency review could automatically be assigned a longer period of perhaps one year for review of their license applications. A smaller hydro project that was fairly simple and straightforward (such as one that involves only refurbishing equipment that once used to generate power at an existing dam) might be guaranteed a decision on their application by all agencies within two or three months. Obviously the appropriate procedure for handling this matter depends on who is eligible for licensing under the streamlined process and whether or not outright exemptions are allowed for these minor projects.

Another approach is to establish one set deadline for agency decisions on all applications with provision for a limited extension under certain carefully defined circumstances. This procedure would accomplish essentially the same purpose as the sliding scale time frame discussed above. It might, however, be more cumbersome depending on how the extensions were to be granted. For instance, standards would have to be established to define the appropriate circumstances to warrant an extension. In addition, agencies would have to be provided with a format and procedure for requesting such an extension.

The important task is to determine how many standards, definitions and limits are necessary to expedite the licensing process and, where it is essential, to build in mechanisms for flexibility in dealing with a variety of projects. One solution may be to include only the basic standards and limitations in the legislation and leave the more specific issues to be addressed in the regulations.

Structure for Interaction - Interaction between state officials and the developer as well as among the various regulatory agencies is key to the whole design of a streamlined licensing process. How such interaction occurs will in part depend on how consolidated or streamlined the licensing process is designed to be. Basically, a choice has to be made between a formal structure with requirements for hearings, appeals proceedings, and so forth, and a more informal process with fewer restrictions on the way in which information is conveyed and reviewed. Once again this decision relates to the question of authority discussed previously.

The chief advantage to a formal structure is that it can be clearly defined in statutes and regulations. It is also less dependent upon good relations between the various agencies and their professional staff. It is more rigid, however, and therefore runs the risk of being inappropriate for review of certain projects and perhaps unduly burdensome to some developers. On the other hand, if a state chooses to adopt the true "one-stop" licensing procedure, then the formal structure may be the most appropriate framework. Under these circumstances, the licensing agency or authority would have one standard application form which would be reviewed within a certain time frame. Hearings could be held to discuss project applications and perhaps to gather input from other agencies, experts or interested parties. The licensing agency could then make a decision on a given project. An appeals procedure might follow in which case standards for the appeal would have to be established.

A less formal procedure has the advantage of greater flexibility. It can allow for different types of interaction and coordination to occur at various stages of the review process. For instance, at the beginning of the licensing process, informal meetings between the developer and state agencies may be helpful as a forum to discuss information requirements and the unique aspects of particular projects. It has been the experience in Massachusetts generally that if government officials are informed of a hydro project early on, before any formal application and review process begins, they will be in a much better position to cooperate and be helpful to the developer. Conversely, if they are presented with a formal, written application for a license or permit with no prior notification they may react somewhat defensively and perhaps without adequate information. Thus, if a spirit of cooperation between the state and the developer can be engendered at the start through informal meetings, then the licensing process is likely to proceed more efficiently and expeditiously. Later on in the process, after agency decisions are made, it may be appropriate to establish an appeals process to resolve disputes between the agencies and the developer. This process would probably include adjudicatory hearings and would, in any case because of its quasi judicial nature, be more formal.

State/Federal Coordination - Another key aspect of the licensing procedure is the coordination between agencies at different levels of government, particularly state and federal. The more closely the state and federal licensing procedures can be tied together, the easier it will be for the developer. Coordination between the state and federal processes can be achieved in terms of information requirements and scheduling. For instance, if a developer can submit the same information to both federal and state agencies for review of a project, then the burden of applying will be greatly relieved. Similarly,

the time frames can be keyed more closely to aid developers. It is not always clear to developers whether they should go through the state or federal process first. Perhaps it would be more efficient and productive if they went through both procedures simultaneously.

Under current regulations, the FERC requires that an application for a short-form or minor project license (under 1.5 MW capacity) include all state permits, licenses or other required forms of approval for the project. In the case of major projects (over 1.5 MW) at existing dams, the FERC asks the applicant to show evidence of consultation with state officials and general compliance with state laws but no copies of actual permits. In both cases these stipulations are designed to expedite the federal review process by enabling the FERC to rely, at least in part, on the judgment of state agencies regarding the viability or acceptability of hydro projects. If, however, FERC officials could be involved more directly in the state review process so that they were familiar with specific projects before the license applications came in, their review and approval process might be further expedited. An appropriate time for such involvement to begin could be at a joint informal meeting between state agencies and the developer, particularly if the state's process involves a lead agency type of authority structure. If the state streamlined procedure is one-stop and involves a single agency, then close coordination will be even easier to accomplish.

The Massachusetts streamlined licensing procedure incorporates many of the notions discussed above. The legislation to implement the streamlined process gives the lead agency the authority to establish standard preliminary notification and application forms and stipulates that these forms shall include all information required by permitting and licensing agencies to make decisions on hydro projects. In addition, the lead agency is instructed to minimize duplication of information required by state agencies and for

federal licensing. The details regarding the specific content of these application forms will be outlined in regulations to be promulgated by the lead agency. At the very least the basic project description and the specifications for maps and drawings will be standardized so that the developer need only produce the information once and then merely copy it for other agencies. It is very likely that many state agencies will have additional information needs depending on the characteristics of individual projects and the agencies' statutory authority. In such cases, agency requirements are to be specified after the preliminary meeting, as an addendum to the basic standard form.

Several important time limits are incorporated in the Massachusetts streamlined licensing legislation. The first specifies that within 30 days from the time a developer files a preliminary notification form with all the agencies, and notice of that filing is published, a joint meeting shall take place between the developer and all state agencies with jurisdiction over the particular hydro site. In addition to the state licensing and permitting agencies, representatives from the FERC are to be invited plus one local agency, the Conservation Commission, which has authority to issue wetlands orders. The primary purpose of this meeting is to provide the means for an informal exchange of information. The developer will present his/her project plans and, in turn, the agencies will outline what their concerns are and what types of information they will need beyond that provided in the standard forms in order to make decisions on the project.

The timing of this meeting is coordinated with the MEPA review process already outlined in state law (see Appendix A). It is designed so that after the meeting a developer will know not only which permits and licenses (s)he needs to obtain but also whether or not an Environmental Impact Report will be required. The overall intent of this first part of the review procedure

is to create a climate of cooperation between the regulatory agencies and the developer. The meeting may also serve as a means of screening out ineligible applicants and/or determining whether exemptions from all or part of the licensing process are warranted for certain projects.

The second time limit is imposed on the agencies after applications for permits and licenses have been filed. The legislation allows all regulatory agencies 90 days to review applications and make decisions on projects. This time frame was determined in consultation with both developers and representatives of the various licensing and permitting agencies and seemed reasonable to both parties. Two exceptions to the 90-day time frame are allowed in the legislation. One applies if the developer has been required to file an Environmental Impact Report (EIR). In this case the deadline for agency decisions on permits is set for 30 days after the EIR is deemed adequate by the Secretary of Environmental Affairs. This was desirable since the EIR process involves review of at least one draft and then a final report - a lengthy process from the developer's viewpoint and one likely by itself to give the involved agencies considerable time to review the project's impacts. The second exception is for local conservation commissions issuing wetlands orders. Since these agencies were already operating under strict and reasonable time frames that fell within the streamlined process' overall time frame, it was decided that their review schedules should be left intact.

Finally, there are two cases where the 90-day limit is intended to be imposed but probably cannot be enforced. In one case the Massachusetts Historical Commission acts under a federal mandate in reviewing hydro projects (under the National Historic Preservation Act of 1966, 16 USC 470-470 t) and therefore has no obligation to abide by decision making time limits set by

the state. In addition, the state Departments of Fisheries and Wildlife and Marine Fisheries can exert pressure on their federal counterparts to intervene at the FERC level if they oppose a project. This provides them with a means of asserting a position long after the 90 day period is over. To correct this discrepancy, the lead agency will attempt to negotiate a Memorandum of Understanding with both these agencies which will commit them to making decisions within the same time frame as other state agencies.

Up until the point at which agencies issue their decisions on a given project, the Massachusetts streamlined process is relatively informal and relies on the good faith and cooperation of all parties involved. The lead agency is empowered to assist in resolving disputes between agencies and the developer that may arise during this period, but its role is essentially that of a facilitator or, at most, an arbitrator. If all goes well and the hydro project is approved, then the process is complete at this point. If, however, an agency delays beyond the 90-day limit, denies a permit or license, or imposes unduly burdensome conditions on a developer (s) he may appeal to the lead agency.

At this point, the process becomes more formal. The appeal must be filed within 10 days of the final agency action or failure to act. This limit was imposed in order to prevent a developer from bringing an appeal action months or years after decisions had been made on the project, when the conditions and circumstances surrounding development might have changed considerably. The lead agency is given the authority, but is not required to hold a hearing and to consider jointly all pending appeals. Again, this stipulation is intended to allow for flexibility so that a consolidated appeal may occur where appropriate. The lead agency's decision must be issued within 90 days of the appeal.

In designing the Massachusetts' streamlined process, an attempt was made to impose only those time limits which were deemed essential first, to make the process predictable for the developer and secondly, to ensure that it could be completed in a timely fashion. Thus, most of the time limits were placed on the regulatory agencies. With the exception of the 10 days for filing an appeal, the developer's time is not restricted. Control over the timing of the licensing process is basically in his/her hands.

Coordination between state and federal agencies will begin at the first joint meeting. After that it is hoped that the FERC and the Energy Facilities Siting Council, as the two lead agencies for both levels of government, will keep in close contact. There will be variations between different hydro projects as to how they should be handled in the state and federal review processes. Thus, the two lead agencies must be allowed some flexibility to coordinate their review procedures as appropriate for the given project. The Massachusetts legislation, already recognized by the FERC, establishes the structure within which this type of positive interaction can occur.

IMPLEMENTATION

Regardless of which mechanism or framework is selected for the purpose of streamlining the hydro licensing process, it is likely that new legislation will have to be proposed and, once approved, implemented. The amount of work to be done and the number of questions left to be resolved in the implementation phase obviously will vary according to which approach is chosen. If the appropriate solution is merely to establish a clearinghouse function within an existing agency to provide information and guidance to developers, then the task of implementation will probably be simple and straightforward. The agency or department which is selected to be the clearinghouse will merely have to acquire or assemble the necessary information and capability to assist prospective hydropower developers. Legislation will be necessary only if the agency selected does not already have a broad enough mandate to include functions related to promoting and facilitating hydropower development. In addition, funds may have to be appropriated to cover staff and printing costs associated with the new tasks of the particular agency. It is unlikely, however, that regulations will be necessary. If, on the other hand, an entirely new one-stop licensing process is created, then comprehensive legislation and supplementary regulations will have to be adopted. Legislation will have to be proposed outlining the new powers of the lead agency and the scope of the new process. Later, regulations setting forth the eligibility criteria, application requirements and other procedural details will have to be promulgated. How complicated and difficult the implementation of such a process is will depend in part on the extent to which totally new procedures are required. The choice of a streamlined licensing mechanism may be determined in part by the number and complexity of the problems associated with implementation. The way in which the process is implemented can have as much of an effect

on its success as will the type of authority structure and procedures selected.

In Massachusetts' case, the task of implementing the new streamlined hydro licensing procedure has been long and involved, but with no major complications. Even through the lead agency, the Energy Facilities Siting Council, is an existing rather than entirely new entity, legislation was necessary in order to grant the agency specific powers relating to hydro licensing. The legislation (see text in Appendix D) outlined the entire streamlined process in fairly explicit terms, although some details regarding procedures were deliberately left to be determined in regulations. The language in the legislation clearly states that all hydropower generating facilities are to be included in the streamlined process regardless of whether they involve new or existing dams or produce electrical or mechanical energy, as are all agencies whose approval is necessary prior to or for construction of a hydropower facility. The lead agency's authority to coordinate the process, establish new application forms and handle all appeals from permitting and licensing agency decisions is explicitly stated. The basic schedule for the process is also set forth, including the 30-day period from submission of the notification form to the joint agency meeting, the 90-day decision time frame for all agencies and the 10-day and 90-day response times for the appeals process. Only general standards for appeals are outlined. The legislation was redrafted several times and subjected to last minute changes three months after the filing deadline in response to objections raised by some of the environmental permitting agencies. Even after it was written in final form and approved by the legislature nine months later, many details and questions remained to be resolved through regulations. In fact, one of the

biggest tasks of all was yet to be accomplished: the adoption of standard application forms for permits and licenses.

In Massachusetts, it is unlikely that there will ever be a single all-encompassing application form, for the same reason that there is now a lead agency instead of a one-stop licensing procedure. The licensing process for hydropower projects in the Commonwealth is so broad in scope that there are real and reasonable limits to how much can be consolidated. Certain basic information about the project including a description of the proposed facility, a checklist of associated environmental impacts and preliminary design drawings and plans will be required on a standard preliminary notification form. This information will enable all affected agencies to determine first whether or not they will have jurisdiction over the project and, secondly, what additional information they will need from the developer in order to make a determination on the project. Depending on the circumstances of the particular project, the developer may then have to file separate forms addressing specific issues such as dredging, fishway design or preservation of historic structures. There remains enough flexibility in the process so that it can be modified depending on the degree of complexity or the number of critical issues and impacts associated with each project. For instance, the developer of a relatively small project using an existing dam and powerhouse might only have to file the preliminary notification form. Then, if none of the agencies raised concerns about the project's environmental or other impacts, the developer would receive a clear signal to go ahead after the joint meeting 30 days later. On the other hand, a more complicated and controversial project would probably be required to submit an environ-

mental impact report as well as specific license applications beyond the initial standard notification form.

In addition to creating the application forms, the Siting Council has to outline all the procedural details in regulations. The regulations will specify the amount of time that agencies are allowed after the joint meeting to outline their additional information requests, as well as what standards and procedures are to be followed at the appellate level. Certain questions, such as how the state process will be coordinated with the FERC review remain to be resolved and may, in fact, be dealt with outside of regulations. A vehicle such as a Memorandum of Understanding (MOU) will have to be used in the case of the state and federal historic and fisheries agencies to ensure that their decisions on projects are made within the time frames set in the legislation. Other questions such as whether or not certain projects should be exempted outright from the streamlined process -- e.g. projects at conduit facilities or residential sized micro-hydro sites -- will probably be left unresolved now in the hopes that appropriate solutions will become clear as the lead agency gains experience with the new process.

The process of drafting regulations and new application forms may seem cumbersome and time consuming, but if done right, it should not have to be repeated. In Massachusetts, the implementation of the new process was conducted in the same way in which the process was designed; that is in close cooperation and through consultation with all the local, state and federal agencies involved in hydropower licensing. The presumption was that no streamlined process could work unless all parties including the developers, the regulators and the lead agency

worked closely together. The lead agency process, unlike a true one-stop licensing process, relies to a large extent on good will and cooperative relationships among all the licensing and permitting agencies. Since it also relies on the expertise of those agencies, it is critical that the standard application forms include adequate information about a project and that all other mechanisms by which the parties interact are acceptable to everyone. The implementation phase can help to establish the groundwork for such coordination throughout the licensing of all hydro projects.

Needless to say, the success of the Massachusetts streamlined process has yet to be proven. The premise upon which the lead agency structure was based may prove to have been too optimistic. If that is the case, however, then the authority of the Siting Council may be strengthened to correct the deficiencies; a one-stop process may be created if necessary.

APPENDIX A

CURRENT LICENSING PROCEDURES FOR
HYDROPOWER PROJECTS IN MASSACHUSETTS

INTRODUCTION:

Present licensing procedures appear to be a major barrier to the development of hydropower in Massachusetts. The time and costs involved in getting licenses and approval to produce and sell hydroelectricity often prohibit the development of the many suitable dam sites in the Commonwealth. The process currently involves up to 8 different state agencies, departments or commissions whose authority in regard to hydro projects is sometimes unclear. Only with difficulty can the developer who is without extensive experience in dealing with the government understand which agencies and procedures he must contend with or gauge how long the entire process will take.

The following outline and accompanying flow chart represent an attempt to sort out and explain the current licensing procedures. This report was prepared by MEO personnel over the past few months and analyzes the statutes and regulations of pertinent agencies. The report will serve as the basis for developing a streamlined or simplified licensing procedure.

A. PERMITS & LICENSES REQUIRED FOR ALL HYDROELECTRIC PROJECTS:

1) Wetlands Permit -- A developer who proposes to remove, dredge, fill or alter any bank, wetland area, river, stream or pond must file a written Notice of Intent to do so with the local Conservation Commission and the Department of Environmental Quality Engineering (DEQE).¹ The notice must provide detailed plans of the project including maps, engineering drawings of the site and proposed structures, and an Environmental Data form describing such things as sewage disposal, ground and surface water, water supply and the impact of proposed actions

and alternatives.² Twenty-one days after receipt of the Notice of Intent, a public hearing is held. The Commission then has 21 days to determine whether the area on which the proposed work is to be done is "significant to public or private water supply, the ground water supply, to flood control, to storm damage prevention, to prevention of pollution, to protection of land containing shellfish, or to the protection of fisheries."³ If so, then the Commission will impose an order of conditions regarding how these interests are to be protected.

An appeal process through DEQE may be initiated by the applicant, aggrieved parties, an abuttor, ten town or city residents or the Commissioner of DEQE.⁴ The Commissioner of DEQE then has 70 days to issue a superceding order.⁵ The Notice of Intent is also reviewed by DEQE to determine whether additional waterways licenses are necessary. Such determination is made within 6 weeks at the longest and the average time is two weeks from the time of receipt of the Notice of Intent.⁶

2) Massachusetts Environmental Protection Act (MEPA) Review --

Any developer who applies or intends to apply to a state agency for a license, permit or financial assistance must file an Environmental Notification Form (ENF) no later than 10 days after the first such application, unless the project involves only minor repairs or maintenance and is excluded under Appendix C of the MEPA regulations.⁷ If doubt exists as to whether a project is excluded, a developer or an agency may request an opinion of the Secretary of Environmental Affairs. Such requests will be responded to within 10 days.⁸

In preparing an ENF, the developer must provide a description of the project and a statement of the proposed scope or range of environmental issues which may be involved, including impacts on historic resources, open space and recreation, fish and wildlife, vegetation, coastal or inland wetlands, flood hazard areas, geologically unstable areas, agricultural and forest lands, mineral resources, water quality, and aesthetics. This document is reviewed by the MEPA unit of the Executive Office of Environmental Affairs, the headquarters and appropriate regional office of DEQE, the Massachusetts Historical Commission, and the Local Conservation Commission. Other agencies may be included depending on what permits are required and what functions the project will provide.⁹ The public and other participating agencies may submit comments on the ENF up to the twentieth day following publication.¹⁰ The Secretary has 30 days from the date of publication within which to consult with developer and participating agencies and issue a certificate stating whether or not an Environmental Impact Report (EIR) is required and if so, what its scope must be.¹¹

The EIR is intended to address only those aspects of the project which are likely to cause damage to the environment, based on the information provided in the ENF. The Report must include a description of the major benefits, costs, environmental impacts and alternatives to the project and an outline of the measures being utilized to minimize environmental damage, along with a copy of the ENF and written comments submitted by agencies and the public with responses by the proponent.¹² The EIR must be submitted to the Secretary of Environmental Affairs, the State Clearinghouse in the Office of State Planning, the appropriate regional planning commission, any participating agency and such other agencies as designated in Appendix B of the regulations.¹³ Both a

draft and a final EIR must be submitted and reviewed according to a procedure that includes publication of notice of availability in the Environmental Monitor, a 30-day comment period, and 6 or 7 days for the Secretary to issue a judgment of adequacy.¹⁴ Finally, agencies are required to act on permit applications within 90 days of publication of notice of availability of a final EIR, 90 days of publication of notice of the determination that an EIR is not required, or 90 days from the permit application, whichever is latest.¹⁵ An agency or person may appeal on the basis of an improper determination of whether a project requires the preparation of an EIR, or failure of a final EIR to comply with the requirements of MEPA.¹⁶

3) Waterways License (Chapter 91) -- A developer must apply to the DEQE Division of Waterways for a license under Chapter 91 of the Massachusetts General Laws if the proposed project involves construction or extension of a dam or other structure located: 1) upon certain parts of the Westfield, Connecticut or Merrimack Rivers,¹⁷ 2) below the high water mark of any river or stream with respect to which expenditures from federal, state or municipal funds have been made for stream clearance, channel improvement, or any form of flood control or prevention work¹⁸, 3) over or upon the waters of any great pond¹⁹, or 4) in or over tide waters below the high water mark but not beyond any established harbor line or line of riparian ownership.²⁰ An application for this license must include plans for the proposed structure, extent and method of construction and, if applicable, the amount of solid filling to be placed in tidewater. The Waterways review is concerned with dredging, obstacles to navigation and proper land use.

The Division of Waterways circulates the completed application to 5 or 6 agencies, including the Water Resources Division, Water Supply Bureau and the Army Corps of Engineers, for their review and comment. Neither the statutes nor regulations specify a time limit for submittal of comments or issuance of a license. Generally, the DEQE Waterways Division will issue a license, possibly with conditions, if no adverse comments are received within a "reasonable" period of time and if it is assured that the applicant has obtained an environmental authorization from MEPA and an order of conditions from the local Conservation Commission or the Commissioner of DEQE. Given completion of these two prior review processes, the average approval time by Waterways is two weeks or at most 4 to 6 weeks.²¹ If an applicant subsequently violates the conditions of this license, DEQE may appeal to the Supreme Judicial Court.²² A copy of the Chapter 91 license and final drawings for the project must be filed with the Registry of Deeds prior to the commencement of construction.

4) Waterways License (Chapter 253) -- This license applies to reservoir dams or mill dams which either exceed 10 feet in height, impound more than one million gallons of water, have a drainage area larger than one square mile or would involve risk to downstream life or property in the event of a failure.²³ The developer of a hydroelectric project must first provide the DEQE Division of Waterways with information concerning the location of the dam, its height, drainage area, the volume of water impounded, and a statement of downstream conditions of life and property so that the Commissioner may determine whether the project comes under the purview of Chapter 253 requirements. If

jurisdiction is found, then the developer must submit a description of the project including a hazard evaluation, hydrologic data, design criteria, construction drawings and specifications and a certification of inspection.²⁴ The application is reviewed primarily to determine the safety and structural integrity of the dam, possibilities of downstream flooding, draw down, etcetera. The review process is rather informal and, like the Chapter 91 procedure, has no specified time restrictions.

DEQE is also authorized to approve the location and plans of all dams constructed and maintained by towns, according to the permitting procedures of Chapter 253.²⁵ In addition, DEQE has authority to monitor and inspect dams for safety and may order the owner or operator to submit engineering plans and make certain specified repairs.²⁶

B. AGENCIES WITH AUTHORITY TO REVIEW, COMMENT OR ISSUE CONDITIONS RE. HYDRO PROJECTS:

1) Department of Fisheries, Wildlife & Recreational Vehicles --

a) Division of Fisheries and Wildlife -- The Director of Fisheries and Wildlife has the responsibility and the power to protect and ensure the passage of anadromous fish in inland waterways. The Director may examine all dams and other obstructions to the passage of anadromous fish in brooks, streams and rivers where in his judgment fishways are needed. He may "determine whether existing fishways, if any, are suitable and sufficient for the passage of such fish...or whether a new fishway is needed...and prescribe by written order what changes or repairs, if any, shall be made therein and where, how and when a new

fishway shall be built and at what times kept open."³³

No specific criteria are outlined and no published requirements or permitting procedures exist. The Division of Fisheries and Wildlife usually receives notice of a project through DEQE, MEPA and/or the Army Corps of Engineers, and it generally relies on information about a project supplied in the Wetlands or Corps permit applications or in the ENF.³⁴ The Division may informally request additional information, however. Although the Division has no permitting powers, a developer is, in effect, forced to comply with Fish and Wildlife requirements before he can go forward with a hydro project. This is because the state Division has the power to enforce its conditions either by requesting the Division of Water Pollution Control to set certain minimum flow requirements, by invoking its relationship with the federal Fish and Wildlife Service to induce the latter to withhold approval of a FERC permit, or by raising serious objections through the MEPA review process, thereby blocking a project.³⁵

b) Division of Marine Fisheries -- The Director of Marine Fisheries has the overall power to maintain, preserve and protect all marine fisheries resources.³⁶ To provide passage for salt water fish coming into fresh water to spawn, the Director has powers similar to those of the director of Fish and Wildlife, as previously described. He may seize and remove all obstructions, examine dams and obstructions where fishways are needed, determine the adequacy of existing fishways and prescribe changes or repairs where needed.³⁷ Fines may be imposed if a developer or owner of a dam or fishway refuses to comply with the Director's orders. The Director also has the authority to close portions of streams flowing into coastal waters during the spawning season of smelt for a

period of up to 60 days per year.³⁸

The Division of Marine Fisheries generally does not require specific information about projects, but instead, reacts to information circulated to it under the MEPA, Corps of Engineers, and Wetlands permit review processes. Although the Division has the authority to "adopt, amend or repeal all rules and regulations" necessary for the protection of marine resources, in fact it rarely does.³⁹ Instead, the Division invokes the broad powers given its director under the U.S. Fish and Wildlife Coordination Act.⁴⁰ Alternatively, the Division tends to invoke its relationship with the U.S. Fish and Wildlife Service in the same manner described for the state Division of Fisheries and Wildlife.⁴¹

2) Department of Environmental Management -- DEM has the overall power to exercise general care and oversight of the environmental management of the Commonwealth and its adjacent waters.⁴² DEM has authority to review all wetlands in the state and to impose restrictions on the use of those areas where deemed necessary. Specifically, the Commissioner of Environmental Management may "adapt, amend, modify or repeal orders regulating, restricting, or prohibiting dredging, filling, removing or otherwise altering or polluting" coastal or inland wetlands, for the purpose of preserving and promoting the public safety, health and welfare and to protect public and private property, wildlife, fisheries, water resources, flood plain areas and agriculture.⁴³ These orders of restriction, if imposed are then included on all deeds for property in the given area.

No rules and regulations exist under these statutes, nor do

any formal, written criteria, though both are in preparation. Some of the factors considered in evaluating wetlands include the value of the wetland for flood control purposes, its effect on groundwater level and quality, whether or not actual and potential well sites are involved, the ability of the wetland to control pollution, and the value of the wetland for fish and wildlife.⁴⁴

Before DEM can issue an order detailing the permitted uses of land within either coastal or inland wetlands, it must notify all landowners that their land is under consideration for restrictions. DEM then makes itself available to the landowners for an informal conference to discuss pending actions and relevant facts and an on-site review of an owner's premises. Notice of a public hearing is sent to the State Reclamation Board, DEQE, DPW, local officials and all assessed owners 21 days prior thereto. After an order is issued and filed with the Registry of Deeds, appeals can be brought to the Superior Court. It is the opinion of DEM that both the Coastal and Inland Wetland Restriction Acts give the Commissioner the power to regulate hydroelectric dams if such activities involve any dredging, filling or alteration of a restricted wetland.⁴⁵

DEM has similar authority to issue orders regarding the scenic and recreational rivers and streams of the Commonwealth and contiguous lands.⁴⁶ No rules or regulations currently exist nor do any formal written criteria, though both will be in preparation by late 1978. No rivers or streams have yet been designated as scenic, so this authority would not affect hydro developers at the present time.⁴⁷

3) Water Resources Commission -- The Commission, chaired by the commissioners of DEQE and DEM is authorized to meet and consult on

matters concerning watersheds, water systems, storage basins and underground and surface water supplies. Its purpose is to study the needs, supplies and resources of the Commonwealth with respect to water conservation and flood prevention and to determine those sites and adjacent lands which it deems necessary to meet the future water resource needs of the Commonwealth for flood control, low flow augmentation and municipal water supply.⁴⁸ The Commission has no regulations and no specific criteria exist as to when or to what extent it will discuss a project. The Commission is well informed of water resource activity through close contacts with DEM, DEQE, Department of Fisheries, Wildlife and Recreational Vehicles, Department of Commerce & Development and the Metropolitan District Commission. The Commission generally uses its broad powers to meet and discuss policy issues rather than review specific projects or permit applications. The Commission might become involved in review of a large water power project that had to do with flood control structures or the diversion of water, but it would probably do so only at the specific request of another agency.⁴⁹

4) Executive Office of Environmental Affairs -- As the umbrella agency for all of the major environmental commissions and departments, including DEQE, DEM, MEPA, Fisheries and Wildlife, Agriculture, the MDC and Coastal Zone Management, the EOEa has broad authority over all environmental matters and, ultimately, over all projects that have a significant impact on the environment.⁵⁰ EOEa has promulgated no rules or regulations under its broad enabling statute, and most of its duties and functions are articulated in the statutes which cover each of its divisions. Ultimately, however, this office oversees all of the environmental review processes that affect hydroelectric projects.

5) Massachusetts Environmental Trust Amendment -- This Article broadly states the people's right to clean air and water and the natural, scenic, historic, and aesthetic qualities of their environment, and gives the General Court the power to enact legislation to protect those rights.⁵¹ It is possible, though not certain, that citizens of the Commonwealth could bring suit under this amendment in order to stop a hydroelectric project which was allegedly causing damage to the environment.⁵²

C. AGENCIES WITH AUTHORITY OVER HYDRO PROJECTS IN CERTAIN LOCATIONS:

1) The Massachusetts Historical Commission has the overall authority to preserve and protect all historical, cultural and archeological resources of the Commonwealth. It is responsible for the assessment and certification of historic landmarks and may establish standards for the care and management of such landmarks. If a developer proposes to alter a historic landmark on his site in such a manner as would seriously impair its historic values, permission must be obtained from the Commission which is automatically notified of all projects through MEPA, the Wetlands permit process and/or the FERC license review. A public hearing must be held first, after which the Commission may withhold permission for up to one year in order to consult with civic groups, public agencies, and interested citizens to ascertain the appropriate action to be taken. Appeals may be made to the Superior Court.⁵³ It should be noted, however, that the Commission's authority over landmarks in the state would probably not affect hydro projects since there are so few landmarks in the state.

The Commission is further empowered by federal law to review the

effect of an "undertaking" or proposed project on any property included in or eligible for inclusion in the National Register of Historic Places.⁵⁴ Under this broad mandate the commission must first apply the criteria of effect to determine if the project will indeed cause any change in the quality of the historical, architectural, archeological or cultural character. In the next stage, the criteria of adverse effect is applied. If a finding of Adverse Effect is established then there is a rather lengthy consultation process involving on-site inspection, a public information meeting, consideration of alternatives, avoidance or mitigation of adverse effect and a memorandum of agreement followed by a 30-day review period. The review process is complete when the memorandum of agreement is signed by the Chairman of the Commission.⁵⁵

If there is a finding of No Adverse Effect, then the developer may proceed with the project. Thus a project or "undertaking" may proceed only if it fails to come under the criteria of effect or adverse effect, or if it conforms to the standards and requirements for protection of historical resources established by the Commission.

2) The Underwater Archeological Resources Board within DEQE has the duty and responsibility to protect and preserve historical, scientific and archeological information about underwater archeological resources located within the inland and coastal waters of the Commonwealth.⁵⁶ The Board would have to issue a permit to a developer only in cases where the hydroelectric project was located within the area designated for archeological excavation and research. It would be notified of any projects under its jurisdiction through the MEPA review process and/or by the Massachusetts Historical Commission. It is unlikely, however, that any hydro projects in the state would be restricted by

this agency.

3) Massachusetts Historic Districts -- No building or structure located within a designated historic district may be altered or constructed in any way that would affect its exterior features unless approved by the local Historic District Commission.⁵⁷ Thus a developer whose hydroelectric project is located within such a district must file an application for a certificate of appropriateness, non-applicability or hardship, providing plans, elevation, specifications, material and other information deemed necessary by the local Commission or specified in local ordinances.⁵⁸ Within 14 days, if the Commission determines that the project is subject to its approval, a public hearing is held. Then, within 60 days the Commission must make a final determination on the application. Cities and towns are authorized to establish a review or appeal procedure.⁵⁹

4) The State Reclamation Board has authority to designate and control all reclamation districts. According to the statutes, no water power may be developed in a reclamation district except by vote of the District and approval of the Board.⁶⁰ In fact, this clause has not been enforced for many years, but the Board represents another checkpoint for a developer whose project lies in a reclamation district.

5) Projects located in intertidal areas, coastal wetlands and beaches, tidal rivers and adjacent uplands or anadromous fish runs in coastal areas come under the purview of the Coastal Zone Management Program within the Executive Office of Environmental Affairs.⁶¹ Regulations under this program outline policies for the protection of ecologically significant resource areas such as salt marshes, shellfish beds, dunes, beaches, barrier beaches and salt ponds. They also specify

a procedure for consideration of coastally dependent energy facilities.

The actual implementation of the CZM program and the enforcement of these regulations is generally the responsibility of appropriate EOEAs agencies and departments which handle the permitting procedures.⁶²

The Secretary of Environmental Affairs must mediate any conflicts between EOEAs agencies regarding projects in a coastal zone.⁶³

CONCLUSION:

The procedures and statutory authorities outlined above are those of primary concern to a developer because they are the ones with which he must contend before he can begin to construct or retrofit a dam site. This report does not touch on federal laws or requirements which could come into play, except to the extent that state agency authority or criteria flow from such federal law. Nor does it discuss Massachusetts laws regarding health and safety codes, use of explosives, zoning, interstate compacts or public utilities and rate structures, all of which would have a significant impact on a hydro project during the construction, financing and marketing phases. These statutes are important to a developer, be it a municipality or individual, in the later stages of a project, but the main focus here is on procedures which may inhibit or prevent a hydroelectric project from ever getting underway.

FOOTNOTES:

- 1 G.L. c.131, §40
- 2 Mass Register #45, Reg. 3.1, 4.1, 4.2, 5.3
- 3 G.L. c. 131 §40
- 4 Reg. 6.2
- 5 Reg. 6.3
- 6 Ed McDonald, DEQE, Division of Waterways
- 7 G.L. c. 30 §62A, Suppl 1978, Reg. 4.3
- 8 Reg. 3.1
- 9 Appendix B of MEPA Regs.
- 10 Reg. 4.9
- 11 G.L. c. 30 §62A, Suppl. 1978
- 12 108 Mass Register 16, Reg. 5.7
- 13 Reg. 6.1, Appendix B
- 14 Reg. 14, 6.3, 6.5, 7.1, 7.2, 7.4
- 15 G.L. c. 30, §62D, Suppl. 1978
- 16 Reg. 15.1, 15.2
- 17 G.L. c. 91, §12
- 18 G.L. c. 91, §12A
- 19 G.L. c. 91, §19A
- 20 G.L. c. 91, §14
- 21 Ed McDonald, DEQE, Division of Waterways
- 22 G.L. c. 91, §57
- 23 G.L. c. 253, §44
- 24 Waterways Division Internal Rules and Regulations, revised 11/25/75,
p. 1, et. seq.
- 25 G.L. c. 40, §39C
- 26 G.L. c 253, §§45, 46
- 27 G.L. c. 21, §27-28
- 28 P.L. 92-500, §401 (a), (1)
- 29 Mr. Slagle, Division of Water Pollution Control
- 30 & 31 Mr. Slagle
- 32 P.L. 92-500, §201 (a), (1)
- 33 G.L. c. 131, §4 (14)
- 34 Matt Connolly, Director of Fisheries & Wildlife
- 35 G.L. c. 21, §§26-53, Matt Connolly
- 36 G.L. c. 130, §17 (10)
- 37 G.L. c. 130, §19
- 38 G.L. c. 130, §36
- 39 G.L. c. 130, §17 (10), Lee Bridges, Asst. Director of Marine Fisheries
- 40 16 U.S.C. §§661-668
- 41 Lee Bridges
- 42 G.L. c. 21, §1
- 43 G.L. c. 130, §105 coastal wetlands
G.L. c. 131, §40A inland wetlands
- 44 Meriel Hardin, Director DEM Wetlands division
- 45 G.L. c. 130, §105, Meriel Hardin c. 131 §40A
- 46 G.L. c. 21, §17B
- 47 Meriel Hardin
- 48 G.L. c. 21, §§9, 9A
- 49 Fletcher Pyle, DEM
- 50 G.L. c. 21A, §1, et. seq.

FOOTNOTES (cont.)

- 51 Article 49, Mass. Constitution
- 52 G.L. c. 214, §7A
- 53 G.L. c. 9, §27
- 54 16 U. S. C. §§470-470t, National Historic Preservation Act, 1966
- 55 36 Code of Federal Regs. 800
- 56 G.L. c. 6, §180
- 57 G.L. c. 40C, §6
- 58 G.L. c. 40C, §§10, 6
- 59 G.L. c. 40C, §§11, 12
- 60 G.L. A. c. 252, §14B (1949)
- 61 95 Mass Register 1 (2/24/78), Reg. 3.0
- 62 Reg. 6.10
- 63 Reg. 6.24

APPENDIX B

A STREAMLINED STATE LICENSING PROCEDURE
FOR MASSACHUSETTS

THE COMMONWEALTH OF MASSACHUSETTS

In the Year One Thousand Nine Hundred and Seventy-nine

AN ACT FACILITATING THE DEVELOPMENT OF HYDROPOWER GENERATION.

Be it enacted by the Senate and House of Representatives in General Court assembled, and by the authority of the same, as follows:

Chapter 164 of the General Laws is hereby amended by inserting after section 69H the following section:-

Section 69H¹. For the purpose of this section, the following words shall have the following meanings, unless the context otherwise requires:

"Hydropower generating facility", any electric or mechanical power generating unit whose power source is water flow and which is not a facility as defined in section sixty-nine G.

"Permitting and licensing agencies", all agencies, authorities, and departments of the commonwealth, and local conservation commissions whose approval, order, order of conditions, permit, license, certificate, or permission in any form is required prior to or for construction of a hydropower generating facility, except the secretary of environmental affairs acting under the provisions of section sixty-two to sixty-two H, inclusive, of chapter thirty and shall include, but not be limited to, the department of environmental quality engineering including the division of water pollution control, the department of environmental management, the department of fisheries, wildlife and recreational vehicles, the conservation commission with jurisdiction over the proposed site, the Massachusetts Historical Commission, the department of public utilities, and any other agency, authority, or department of the commonwealth, county, city or town government, as may be from time to time so designated by the energy facilities siting council.

Said council shall coordinate the permitting and licensing of hydropower generating facilities by simplifying requirements for permits and licenses, and shall promulgate rules and regulations to carry out the requirements of this section.

Said council, ^{shall} after consultation with the permitting and licensing agencies, establish a preliminary notification form and other forms to be employed by such agencies for permitting and licensing review of proposed hydropower generating facilities. These forms shall include all information

required by the permitting and licensing agencies to make decisions on hydropower projects while minimizing duplication of information required for such agencies and for federal licensing. No other forms shall be required by these agencies for permitting and licensing review of hydropower generating facilities.

Prior to the submission of any application to any of the permitting and licensing agencies, the developer of a proposed hydropower generating facility shall file a preliminary notification form with all the permitting and licensing agencies and said council. Such preliminary notification form shall be deemed the first agency application for the purposes of notification under section sixty-two A of chapter thirty. Within thirty days after publication of the notification forms prescribed by the secretary of environmental affairs under said section sixty-two A, said council and the secretary of environmental affairs shall convene a meeting of all the permitting and licensing agencies, all agencies which may provide financial assistance, other interested persons or parties, including federal regulatory agencies, and the developer. At such meeting, the permitting and licensing agencies shall consult with the developer and shall determine the information, data, and studies required in addition to the forms specified for compliance with the provisions of the permitting and licensing agencies. Said council shall assist the developer and the permitting and licensing agencies in resolving disputes between the developer and the permitting and licensing agencies concerning the form, content, level of detail and schedules of such requirements.

Unless an earlier date is otherwise specified by law or by the said council, no later than ninety days after receipt of the appropriate completed forms and any other additional requirements of this section, each of the permitting and licensing agencies shall determine whether or not to issue, approve, or grant any application, permit, license, certificate, or other evidence of approval; provided, however, that if the developer has been required to file an environmental impact report pursuant to section sixty-two B of chapter thirty, the decision shall be made no later than ninety days after receipt of such forms or thirty days after issuance of the statement of adequacy of the final environmental impact report, as required by section sixty-two C of chapter thirty, whichever is later. Notwithstanding other provisions of this section, the department of environmental quality engineering shall act on a request for a final order of the department within the time

limitations specified in section forty of chapter one hundred and thirty-one.

Any party aggrieved by the action, or failure to act, of the permitting and licensing agencies pursuant to this section may, after exhausting all other administrative remedies, appeal to said council within ten days of final agency action or failure to act. Failure to exercise such right of appeal shall not be deemed a waiver of the right to judicial appeal of an action or failure to act of the permitting and licensing agencies. Said council shall hold a hearing and may consider jointly all pending appeals and shall issue a written decision and order on such appeals considered within ninety days of the appeal. Such decision shall be based upon energy needs, cost, and environmental impact, and shall for all purposes, including judicial appeal, be deemed equivalent to final licensing or permitting agency action on the approval, permit, license, certificate or permission which is the subject of the appeal. Any party who is aggrieved by the decision of said council may seek judicial review in the manner provided by chapter thirty A.

Approved November 16, 1979.

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This Appendix is an in-depth description of the streamlined licensing process established by Chapter 804 of the Acts and Resolves of 1979 (Mass. General Laws, Chapter 164 §69 H $\frac{1}{2}$). It represents the views of the staffs of the Energy Office and Siting Council regarding how the details and timing of the process might work. It is anticipated that these procedural details will be developed more fully in regulations to be promulgated by the lead agency.

NOTIFICATION

In order to initiate the licensing and review procedure at the state level, a developer will submit a preliminary notification form to the following agencies: the Energy Facilities Siting Council, the MEPA Unit of the Executive Office of Environmental Affairs, the headquarters and appropriate regional office of DEQE, the DEQE Divisions of Waterways, Wetlands and Water Pollution Control, the local Conservation Commission, the Department of Fisheries, Wildlife and Recreational Vehicles, the Department of Environmental Management, the Massachusetts Historical Commission, the Department of Public Utilities, the Executive Office of Energy Resources and any other agencies or departments specifically designated by the Siting Council acting as lead agency. There are two different forms which may be used for notification purposes. If the project in question is subject to review under the Mass. Environmental Policy Act (MEPA), then the developer must file an Environmental Notification Form (ENF) with a Hydropower Development Supplement (HDS) attached. If the project is categorically excluded from MEPA review (a matter which may be determined upon petition to the Secretary of

Environmental Affairs) then the developer files a so-called Hydropower Development Notification Form (HDNF). In both cases the form will include a brief description of the project, its location, size, proposed mode of operation and a checklist indicating the anticipated short and long term environmental impacts. Either of these forms (e.g. the HDN or ENF-HDS) will serve as the notice of intent for the local Conservation Commission and will satisfy the notification requirements of all other agencies. The forms may or may not satisfy all the information requirements of other licensing and permitting agencies. In any case, enough information should be provided on the forms so that the various agencies are able to determine first whether or not they have jurisdiction over the project and secondly, what if any issues need to be addressed before they can approve the project.

Joint Meeting: Within 40 days after receipt of the preliminary notification form, or within 30 days after publication of the ENF in the Environmental Monitor, whichever is later, the Siting Council shall convene a meeting with the project developers and all relevant licensing and permitting agencies. If MEPA review is required, then the meeting shall be chaired jointly by the Chairman of the Siting Council and the Secretary of Environmental Affairs, or their designees. All agencies on the notification list shall be invited to the joint meeting along with representatives from the Federal Energy Regulatory Commission (FERC) and the U.S. Army Corps of Engineers.

The purpose of the joint meeting is to provide a forum in which the developer and interested agencies may discuss the project and the requirements for licensing approvals. At the meeting the developer will be expected to present his/her project proposal including plans for the physical arrangement of the site, a description of the construction work

to be done, estimates of the power output and proposed use of the power produced, and an outline of the potential environmental impacts. The developer will also have the opportunity to learn directly from agency representatives what additional information s/he must provide and if it is likely that project plans will have to be modified in order to satisfy agency concerns. The meeting will also give the various agencies (both state and federal) an opportunity to learn about each others concerns and areas of expertise so that duplication of effort can be avoided. Finally, the meeting will serve as a consultation/scoping session for the Secretary of Environmental Affairs to help determine whether or not an Environmental Impact Report is required and, if so, what its scope should be.

Although the agencies will be expected to come to the joint meeting ready to outline their information needs and concerns (based upon review of the preliminary notification form), they will be given an additional 10 days after the meeting in which to submit those requirements in writing. The extra time will allow agencies to respond to the project as discussed at the meeting and to set their own requirements or needs in the context of the entire review process. At the end of the 10-day period, each agency shall submit to the developer and to the Siting Council, simultaneously, a written statement to include the following:

- 1) the extent of its jurisdiction and specific interests in the proposed project,
- 2) the additional data or studies necessary for the agency to make a decision, and
- 3) the requirements for submittal of any other specific forms such as dredging or dam safety permit applications.

If an agency plans to waive jurisdiction on the basis of review of the preliminary notification form, then a statement to that effect shall be submitted to EFSC and the developer. If an agency does not respond

within the 10-day period, then EFSC and the developer will assume that the agency is satisfied with the information submitted and is able to begin the review process. During this phase of the streamlined process, the Siting Council shall assist the developer and the agencies in resolving any disputes with regard to the form, content or level of detail of any information or application forms required.

Application Process: After the joint meeting, the developer will have as much time as necessary to prepare and submit the information required for all permits, licenses or other forms of approval as specified by the agencies involved. Depending on the particular case, this may involve preparing dam safety and dredging permit applications, or submitting additional information such as flow data in order to obtain approvals from the Division of Water Pollution Control and the local Conservation Commission. In addition, the developer may have to compile information to satisfy the needs and concerns expressed at the meeting by other non-permitting agencies. For example, the developer may have to prepare and submit an Environmental Impact Report to the Secretary of Environmental Affairs as well as other planning or "participating" agencies (specified in Appendix B of the MEPA Regulations). If the site is located in a historic district or is eligible for inclusion in the National Register of Historic Places, the developer will have to outline how the project plans will be arranged to comply with the Historic Commission's restrictions. Similarly, the developer may be required by the Division of Fish and Wildlife or Marine Fisheries to develop plans for the construction of a fish ladder or elevator in order to provide passage for anadromous or catadromous fish. The developer should submit copies of all application

forms and specific project plans to the Energy Facilities Siting Council as well as to the agency requesting the material. In that way, the EFSC will be able to compile a complete record of all the regulatory proceedings for each project.

Decisions: All state agencies will make decisions on permits and licenses separately, but within a uniform, specified time frame of no more than 90 days after the final application has been submitted or, in the case of projects requiring an EIR, within 30 days after the final EIR is complete. (The local Conservation Commission will decide earlier; it is already required by law to issue orders of conditions within 42 days of receipt of the notification forms.) The 90 day or less review period shall begin as soon as the agency submits a statement indicating that the information received from the developer is complete and adequate for its needs. If the developer's plans for the project have been altered substantially since the time of the joint meeting, then the reviewing agencies must be notified and, upon notification, shall have a chance to modify their information requests or jurisdictional determinations accordingly. Thus it is only after the agencies have received complete and final information concerning the project that they are required to begin the 90 day review process. It should be noted, however, that depending on the degree of complexity of a particular project and the amount of time already spent in informal review prior to submission of the final project plans, the Siting Council may establish a time frame for review that is shorter than 90 days. Any agency that objects to the deadline set for decisions may petition the Siting Council for an extension of time. Extensions will be granted

as appropriate; i.e. if the agency in question has an important reason for needing more time, and the extra time will cause no undue hardship to the developer of the project.

Appeals: If an agency fails to issue or to decide on a permit or license application within the 90 day period or if an agency denies a permit or license, imposes unduly burdensome conditions on a project, or issues an unlawful permit, then the developer may appeal to the Energy Facilities Siting Council provided, however, that s/he has first exhausted all other available administrative remedies. Orders issued by the local Conservation Commission may be appealed to the Commissioner of DEQE under the provisions set forth in M.G.L. Chapter 131 § 40. In such cases, the superceding order issued by the Commissioner of DEQE shall be considered to be the final agency action which may in turn be appealed to the Siting Council.

All appeals to the Siting Council must be filed within 10 days of the subject agency's final action or failure to act on the project. The Council has the discretion to delay a decision on appeal until all licensing and permitting agencies have acted on an application for a proposed project and to consolidate all appeals in one hearing. A written decision and order on the appeal must be issued within 90 days of the date of filing of the appeal. Under the provisions of the statute, such a decision "shall be based upon a balanced consideration of energy needs, cost and environmental impact and shall. . . . be deemed equivalent to final licensing or permitting agency action" on the permit, license or other form of approval which is the subject of the appeal.

The intent of the appeals section in the new streamlined licensing statute is to provide the developer with an expeditious avenue for review of agency decisions which might resolve the problem before court proceedings become necessary. The appeals process occurs only after other internal administrative remedies (such as the DEQE appeal process under the Wetlands Act) have been exercised, and it will in no way affect the developer's right to further judicial appeal. If the streamlined process works effectively, it is hoped that this appellate process need never be utilized. The mechanism for appeal is available only if all other means of arbitration and negotiation fail.

State/Federal Coordination: An important feature of the streamlined process is coordination with agencies at the federal level and, in particular, with the Federal Energy Regulatory Commission (FERC). In the case of both the short form license and the license for major projects at existing dams, the FERC regulations specify that the project proponent should attach to the application all state permits and/or written reports of consultation sessions with the various state permitting authorities. These requirements may be different for major projects at new dams, and they may also change as a result of the new exemption provisions under the recently approved Section 408 of the Energy Security Act of 1980 for projects under 5 MW. In most cases, however, coordination of the state and federal level review procedures can be arranged very easily.

The first step for a developer once the feasibility study and preliminary engineering and construction drawings have been completed is to file the preliminary notification form(s) with all the state agencies plus the local Conservation Commission. Then, within roughly

30 to 40 days (i.e. after the joint meeting and the additional 10-day response period) s/he will know exactly which state or local agencies will be involved in review of the project and what their principal concerns are. Appropriate documentation provided by either the separate agencies or the Siting Council could then be forwarded to the FERC along with the federal license application. Beyond that point, the state and federal review procedures would proceed simultaneously under the close coordination of the Siting Council and the FERC. As soon as the state procedures are complete (which will probably be before the federal review has ended), copies of the permits, licenses or other forms of approval could be forwarded to the FERC. If required, plans for construction of fish passage facilities or for protection of historical resources must be forwarded to the FERC since those items are required prior to issuance of a federal license. With this documentation in its possession, the FERC would be better able to complete its review process expeditiously, and issue the final license.

The standard procedures outlined here provide a mechanism for coordination at all levels of licensing or regulatory review of hydro projects. In addition, however, because of the lead agency structure that now exists with EFSC and FERC, the system can be tailored easily to accommodate the needs and circumstances of each particular project. The Siting Council staff will provide advice and assistance to individual developers in determining the best approach for licensing their hydro-power projects.

STREAMLINED HYDRO LICENSING PROCEDURE