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# ACCOMMODATING, BALANCING, AND BARGAINING IN HYDROPOWER LICENSING

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## INTRODUCTION

The Federal Energy Regulatory Commission (Commission) is responsible for licensing nonfederal hydroelectric power projects. Before the end of the century, 201 projects are scheduled for relicensing and 148 applications are expected for original licenses. The applicant for a license is required to consult with fish and wildlife agencies, Indian tribes, and the general public in planning and conducting studies of the project's effects on a number of non-power benefits, including fish and wildlife habitat, recreation, aesthetics, and archeological sites. Based on these studies, along with analyses of developmental benefits (power, flood control, irrigation, safety), a license application is forwarded to the Commission. The Commission reviews all of the documentation and determines whether or not to grant the license, which may include conditions to protect non-power benefits such as fish and wildlife habitat.

The consultation process is a unique opportunity for interested parties to help shape the licensing decision because the Commission is mandated to balance developmental benefits against ecological, aesthetic, recreational, and cultural harm (B. Collins, "The Public Gets a Chance to Revamp Dams Built 50 Years Ago," High Country

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News, vol. 23, at p. 2 (1991).

Many projects will be steeped in controversy during both the consultation process and the Commission's review of the application. Instream flow is one of the most common issues in licensing consultations. These consultations are multilevel negotiations in which a number of local, state, federal, tribal, utility, and private entities haggle over how the license should be conditioned.

What are some of the lessons that can be learned from past experience with these negotiations? The answer requires reviewing the treatment of instream flow issues because streamflow is such a vital element in the consultations. Guidelines for bargaining about instream flow in the context of the consultation process include suggestions about negotiating in writing, negotiating at a public meeting, face-to-face negotiations, negotiating with the Commission, and why negotiations fail.

## INSTREAM FLOW ISSUES IN HYDRO LICENSING

Maintenance of instream flow below a project is a vital environmental condition placed in hydropower licenses (C.M. Kerwin, "Transforming Regulation: A Case Study of Hydropower Licensing," Public Administration Review, vol. 50, p. 1, at p. 95 (1990). From January 1980 to March 1983 instream flow was the subject of special articles in 59% of licenses. Special license articles addressed instream flow in 80% of licenses granted in 1985 (C.M. Kerwin, College of Public Affairs, American University, and J.M. Robinson, Office of Hydropower Licensing, Federal Energy Regulatory Commission, unpublished report 1984; and Kerwin, supra, at 95). These special articles were in one

of three categories:

(1) fixed minimum flow;

(2) further study leading to a later flow requirement; or

(3) an interim flow requirement while a study was conducted to guide establishment of a permanent flow regime.

The Commission no longer establishes interim flows as a part of a license, although monitoring flow release requirements is an important aspect of licenses.

Relicensing existing projects will be the largest part of the hydroelectric licensing workload before the Commission in the next few years. Formal rules for both licensing and relicensing compel applicants to conduct studies in consultation with state and federal fish and game agencies (18 CFR ch. 1, 16.8 (April 1, 1990), implementing section 4(e) of the Federal Power Act as amended by the Electric Consumers Protection Act of 1986, 16 U.S.C 791a-825s at 797(e)). The Federal Power Act requires that the Commission give equal consideration to environmental issues. However, equal consideration does not mean "equal treatment" (Brazos River Authority, 48 FERC 62190 (1989)). The Electric Consumers Protection Act also requires a project to be best adapted to a comprehensive plan for a waterway (16 USC 803(a); 53 Fed. Reg. 15,804 (May 4, 1988)); and requires license conditions to "equitably protect, mitigate damages to, and enhance, fish and wildlife, including related spawning grounds and habitat" (16 USC 803(j)).

The rules that guide this procedure are fairly simple. The Electric Consumers Protection Act amended the Federal Power Act to establish a presumption that

conditions recommended by resource agencies will be included in a license. This Act places on the Commission the burden of demonstrating why any recommended conditions should not be included. The Commission has discretion to decide when it has sufficient environmental information on which to base a licensing decision.

The Electric Consumers Protection Act "does not give fish and wildlife agencies a veto or mandatory conditioning authority" (U.S. Department of the Interior et al. v. Federal Energy Regulatory Commission (No. 90-1405, D.C. Cir., Jan. 10, 1992); A.D. Mitchnick, "Negotiating with State and Federal Fish and Wildlife Agencies," Waterpower '89. Proceedings of the Sixth Int'l. Conf. on Hydropower (Niagara Falls, NY: Vol. 2, at 728)). The Congressional Conference Committee explained the intent of Congress as requiring the Commission

> ...in deciding whether to issue an original license...or to issue a new license for an existing project...give 'equal consideration' to the purposes of energy conservation and environmental values, including fish and wildlife and recreation, in deciding whether to issue the license for power and developmental purposes.

The Conference Committee also noted that:

> Consequently, equal consideration must be viewed as a standard, both procedural and substantive, that cannot be satisfied by mere consultation or by deferring consideration and imposition of environmental conditions until after licensing. Protection, mitigation, and enhancement of fish and wildlife, energy conservation, and the protection of recreational opportunities are a potential cost of doing business for hydropower projects (Joint Explanatory Statement of the Committee of Conference, S.B. 426, 99th Congress 1986, at 21-22).

Sharing information, conducting studies, and filing the application are the three stages of licensing consultation required under the Electric Consumers Protection Act

(18 CFR 16.8(b)-16.8(d) April 1, 1990. See also Mitchnick, supra). The applicant is required to share information with all interested parties in the first stage of consultation. The applicant must provide each of the appropriate resource agencies, Indian tribes, and the Commission with detailed maps, general engineering design, operating plans, information documenting environmental effects and mitigation or enhancement plans, streamflow and hydrology data, and detailed descriptions of proposed studies (18 CFR 16.8 (b)(i)-(vii) April 1, 1990). The applicant must then hold a joint meeting with all the interested agencies, Indian tribes, and general public. The purpose of this meeting is to provide formal, open, and on-the-record consultations among the applicant and resource agencies (18 CFR 16.8 (b)(3)). After the joint meeting, resource agencies have 60 days to provide written comments to the applicant identifying information needs and recommending specific studies. Agencies must explain the appropriate resource goals that are the basis for any studies and state why the studies recommended by the resource agency are more appropriate than those planned by the applicant (18 CFR ch.1, 16.8 (b)(4)). This seems to work one of two ways. Agencies and applicants either discuss resource goals in an effort to reach a mutual understanding or the resource agencies merely state the goals they prefer. Disputes that cannot be resolved by the parties may be referred to the Director of Hydropower Licensing at the Commission (18 CFR ch. 1, 16.8 (b)(5)).

The second stage of consultation involves environmental studies. The applicant must "complete all reasonable and necessary studies and obtain all reasonable and necessary information requested by resource agencies and Indian tribes..." (18 CFR ch 1.

16.8(c)). After the studies are completed the applicant must inform the resource agencies of the results. If the resource agencies substantially disagree with the applicant's conclusion about effects on the resource or proposed protection, mitigation, or enhancement measures the applicant must hold at least one additional joint meeting, prepare a formal record, and further consult with the resource agencies. All meetings and comments are part of the application that is submitted to the Commission and part of the Commission's record for decision (18 CFR ch. 1, 16.8 (c)(6)-(10)).

The third stage of consultation is license application. The applicant files an application with the Commission documenting all the steps that have been taken including "consultation and any disagreements with resource agencies or Indian tribes" (18 CFR ch. 1 16.8(f)) and the resource agencies have an opportunity to comment. The applicant must explain how the project is consistent with any comprehensive plans developed by others for the river system (18 CFR 2.19) and describe any finding by a resource agency about the consistency of the project with the plans (18 CFR ch. 1 16.8(f)(6)). This part of the consultation is often complicated by misunderstandings about the requirements of these comprehensive plans.

Based on a variety of factors, the Director of the Office of Hydropower Licensing has been delegated authority to issue orders granting or denying licenses in cases where no intervenor opposes the project. Section 10(j) of the Federal Power Act provides that a further negotiation is possible between Commission staff and resource agencies if recommendations by the agencies for the protection of fish and wildlife are not included in the license conditions. Resource agencies have a right to appeal the decision of the

Director of the Office of Hydropower Licensing when a license is issued with terms that reject or materially modify the agency's recommendations. In order to appeal, agencies must have been granted intervenor status. The Commission itself must formally act on the application if any intervenor opposes the project, but most licenses are granted by the Office of Hydropower Licensing (only 10% of licenses are issued by the Commission itself (Kerwin, supra at 95)).

The section 10(j) negotiations are becoming more frequent, even when the applicant and resource agencies have worked out agreements before the application is filed. Although the Commission often agrees with the appropriateness of the measures suggested by the parties, it commonly asks for additional evidence supporting the agreements. Also, some agency conditions are mandatory, such as Section 401 water quality certification under the Clean Water Act. Although section 10(j) negotiations are increasing, almost all licenses contain articles protecting instream values.

## MUTUAL ACCOMMODATION

There are many opportunities for constructive negotiations during the licensing or relicensing of a project, but the opportunities change as statutes, regulations, and administrative practice change. The Commission has transformed its approach three times.

First, after court rulings (J.A. Bearzi and W.R. Wilkerson, "Accommodating Fish and Wildlife Interests Under the Federal Power Act," Natural Resources & Environment, vol. 4, at p. 4. (1990)), the Commission changed from a policy of issuing

licenses that left environmental conditions to future studies to licensing by policy decree. This change resulted in a large backlog of licenses awaiting the appropriate policy ruling.

Second, after 1985, the Commission established guidance that insisted "on a serious effort by applicants to cooperate with agencies during the development of applications . . . ." (Kerwin, supra, at 97). By encouraging the parties to work out differences in advance -- and by significantly adding to its staff -- the Commission could accommodate a rapidly increasing work load.

Third, in the very recent past, the Commission has moved to exercise more affirmative control over the delineation of license conditions by more frequently requesting supporting documentation and conducting its own analyses (Comments of T.N. Russo, Chief of Project Review, East Branch, Federal Energy Regulatory Commission (22 July 1991); Balancing of Hydropower and Non-Hydropower Resource Values Conference, Denver, Colorado). At present, the practice of encouraging parties to work out suggested license conditions to be included in the application is blended with a strong independent review from the Commission. This approach means that applicants and resource agencies face a stringent challenge to develop instream flow studies that will successfully lead to special license articles.

The Commission began to encourage mutual accommodation as early as 1984 (Kerwin, supra, at 95; and C.G. Stalon, "The Challenge of Equal Consideration," paper presented at Water Works: Promoting Hydropower and Its Values, National Hydropower Association, Washington, D.C. (1990)). Data from 1984 to 1986 show a dramatic increase in licenses based at least in part on agreements worked out by the parties.

During those years an average of 78% of all licenses reflected such agreements, whereas the previous highest rate was 53% in 1983 (Kerwin, supra, at 97, Table 4). Negotiations regarding flow regimes are so commonplace that a kind of behavioral routine has developed that guides decision-making. The basic outline of the consultation process includes written comments on study design, followed by personal contacts to work out details of study elements.

Negotiations over streamflow during consultation usually result in either no agreement, agreements with little substance, or effective agreements. In the case of no agreement, one of the parties commonly favors the option of leaving the decision entirely up to the Commission. The party that decides to do this will have concluded either that its position is strongly supported by the Commission, the opposition has a weak argument, it can force a favorable regulatory action, or it is better to give the Commission all the facts so that the decision can be objectively arbitrated. When this approach is selected, the formal steps are followed, but the application and comments on it are forwarded to the Commission without an agreement among the parties. The Commission decides each disputed issue after staff members have considered all the arguments and conducted an independent investigation.

In the case of agreements with little substance, streamflow recommendations that are not well grounded in technical analysis are forwarded to the Commission. One example is agreement on methodology, data needs, and procedures but disagreement on interpretations. Another example is a negotiated solution that does not match the objectives the parties first set forward. A third example of an ineffective agreement is

one not supported by any substantive evidentiary justification, including a weak economic analysis. These circumstances call for an especially detailed technical review by the Commission staff.

Most applications incorporate effective agreements among the parties regarding streamflow. The Commission has historically approved the recommended conditions for these applications. The Commission now performs fairly extensive analyses of the of all applications, including those with environmental conditions agreed to by all parties. Under all three of the scenarios the Commission frequently requests further study. This may include refinements to existing studies, additional analysis, or entirely new studies. Requiring further study often serves the purpose of encouraging agreements among the parties because more studies encourages collaboration. The Commission reviews all of the resulting documentation, sometimes leading to special articles in the license that vary from the agreements reached among the parties (Russo, 1991).

## GUIDELINES FOR THE NEGOTIATIONS

All phases of the licensing process involve negotiation. The negotiations are conducted through written correspondence, a public meeting, face-to-face bargaining, and bargaining between Commission staff and fish and wildlife agencies under section 10(j). These four forums are required either by statute or the Commission's rules.

Negotiating in Writing

Since 1986, the Commission's rules have placed an emphasis on written correspondence and public meetings. Although comments and agreements were always recorded in writing, written correspondence is now an integral part of the consultation process. The Commission's reliance on written records to guide its balancing activities has increased the use of correspondence as a negotiation vehicle. Other factors contributing to reliance on correspondence are the large number of applications, limited agency funding, and the need to be explicit.

This vehicle is effective in documenting positions and conclusions but is not efficient as a means to resolve problems. Negotiation through letters and memoranda reinforces the positions of the parties, lends an atmosphere of finality to every proposition, and can actually increase conflict.

Negotiating at a Public Meeting

A public meeting can have much the same result as negotiation through letters and memoranda (D. Matthews, "Thinking About the Citizen and Government," National Forum, vol. 61, at p. 2 (1981)). Such meetings are usually managed as hearings where everyone can speak. Sometimes, effective negotiations begin at this type of meeting (M.G. Cavendish and M.I. Duncan, "Use of the Instream Flow Incremental Methodology: A Tool for Negotiation," Environmental Impact Assessment Review, vol. 6, at p. 3 (1986)), but often harsh pronouncements polarize the parties. Special techniques are required to create effective public involvement (J.D. Wellman and P.A. Fahny,

"Resolving Resource Conflict: The Role of Survey Research in Public Involvement Programs," Environmental Impact Assessment Review, vol. 5, at p. 4 (1985)). Very few applicants or resource agencies have developed the skills necessary to use these meetings effectively.

Negotiating Face-to-Face

In spite of the role of written correspondence and public meetings, face-to-face bargaining continues to be an important part of the licensing process. Bargaining on instream flow studies includes negotiations over the objectives, geographic scope and level of effort (e.g., methodology), and identification of who will carry out specific tasks. After the nature and scope of the studies are decided the applicant and natural resource agencies haggle over implementing the study plan. Consequently, the parties may negotiate the specific application of analytical techniques while standing on the stream bank.

Negotiating how to interpret the resulting data is an inevitable part of the licensing process. It is made more difficult if agreement on how to conduct the studies was not explicit and comprehensive. For example, instream flow studies very often include use of the Instream Flow Incremental Methodology (IFIM) (C.A. Armour and J.G. Taylor, "Evaluation of the Instream Flow Incremental Methodology by U.S. Fish and Wildlife Service Field Users" Fisheries, vol. 16, at p. 5 (1991)). This is a complicated technology that allows for many analytical pathways and produces a variety of results.

Parties commonly agree to conduct an IFIM study without specifying objectives, appropriate species to be studied, or format for presentation of results. Such imprecise direction at the beginning means complicated negotiations later during the interpretation phase. After the data are collected it is very difficult to analyze options for which no information is available. One way to overcome this sort of impasse is to thoroughly investigate the expectations of each party before the studies begin.

It is difficult to agree on interpretations, even when each side has an understanding of what others hope to gain from the studies. This becomes easier when answers to a few basic questions are agreed to before the studies begin. For example, in what form should the data be reported? Who will analyze the data? How will recommendations be developed? A common point on which negotiations stumble is setting the objective of the study. Studies that lead to the most confusion are those based on objectives that are poorly thought out or expressed in general terms. On the one hand, resource agencies have a strong tendency to request broad studies, perhaps to answer the question, "How will the ecosystem fare under all possible operating regimes?" On the other hand, applicants have a strong tendency to hold the line on costs and to assume that less extensive studies meet the requirements of the Commission. Neither of these positions is effective in preparing a successful application. All parties will be more satisfied during the data interpretation stage if they can agree from the outset on precise study objectives and a mechanism for building recommendations.

Parties to a licensing consultation often find it easy to agree on only a few of the important questions. For example, some agreements address only the easy questions --

such as recreational access and flow gaging -- but ignore the core issues. Core questions include run-of-river versus peaking operations, quantity and timing of releases to bypass reaches, and fish protecting measures (such as preventing turbine mortality). These issues lie at the heart of the negotiation and they are often the most intractable. Because these questions will be settled by Commission staff, it is important for intractable problems to be carefully documented.

Negotiating with the Commission

During the last few years, the Commission has manifested an increased willingness to scrutinize the evaluations of the effects of projects on the environment. This scrutiny has applied to projects where the parties cannot reach agreement on environmental protection measures, as well as those for which the parties have agreed. By performing independent analyses, the Commission staff emphasizes the need for applicants to submit well prepared studies that accurately portray the resource issues of concern and enable the Commission to give equal consideration to such values during the licensing process.

The intent of Commission staff to undertake extensive review of even agreed-to provisions of license applications has been made clear in recent presentations by employees of the Commission. (See for example, presentation of D. Schumway, Chief of Hydropower Licensing, FERC, at Mini-Symposium on Environmental Considerations in Reservoir Construction and Management, at the 11th International Symposium of the North American Lake Management Society, Denver, Colorado (12 November 1991); and J.M. Fargo, "Evaluating relicense Proposals at the Federal Energy Regulatory

Commission," Office of Hydropower Licensing (Paper No. DPR-2, FERC 1991)). Although the Commission continues to encourage applicants and natural resource agencies to reach agreement on license provisions, these agreements must meet the test of a review once the application, along with its underlying environmental evaluations, is submitted to the Commission.

Why Negotiations Fail

Negotiations seem to fail for one of three reasons: ideological differences, poor coordination of the consultation process, or unsatisfactory agreements.

First, ideological differences are a natural part of the licensing process because proponents serve rate payers and believe in building efficient projects while resource agencies serve diverse missions including preservation of the natural environment. To this ideological mix may be added Native American groups pursuing both cultural and economic goals and interest groups and individuals representing economic or environmental values. It is not possible to avoid opposing views but it is possible to seek overlapping areas of agreement. A few common interests may be sufficient to overcome some effects of ideological differences.

Second, poor coordination of the consultation process is a function of (1) the sheer number of elements that must be considered, (2) lack of financial, personnel, or knowledge resources, and (3) a limited view of the licensing arena. In the face of very complex problems, critical elements of a solution may be ignored. Examples of elements that are sometimes not addressed by project planners include public involvement, water

rights, water quality certification and identification of all interested parties. Failure to confront these issues in project planning may increase conflict and will become evident when the application is reviewed by the Commission staff.

Third, unsatisfactory agreements are a common cause of failed negotiation. An unsatisfactory agreement is a decision that is never implemented or that, when implemented, does not work. Conducting studies when the expectations for those studies are not fully explored often leads to an ineffective agreement. This is evident when the applicant and resource agencies agree that studies will be conducted without a mutual understanding of how the studies will be accomplished or how the results will be used. A frequent reason for this shortcoming is limited staff time. Based on the deficient agreement, the applicant conducts studies and presents the resource agencies with final results and recommendations. The parties then often argue over the interpretation of the data or over how a study was conducted. The result is information that decision-makers may have difficulty using.

## SUMMARY

The Commission and natural resource agencies have a large workload in consulting on and evaluating applications for new and renewed hydroelectric licenses. The licenses that are granted typically include provisions aimed at protecting instream values. These values are expressed in terms of fish and wildlife habitat, recreation, aesthetics, and water quality. The Commission has established an expectation that applicants and agencies will attempt to reach agreement through negotiation over how

these instream values are to be protected. The Commission relies on the studies conducted by the applicant, in consultation with the natural resource agencies, to provide information allowing equal consideration of the developmental and non-power benefits of each project. The statute requires that the recommendations of the resource agencies receive very serious consideration in this process.

Applicants must consult with natural resource agencies and other interested groups. Sometimes this consultation is perfunctory, but most often the parties enter into extensive negotiations that are opportunities for interested parties to reach agreements on resource protection. Negotiation tends to occur by correspondence or other formal means because the parties are building an administrative record that will support the licensing decision. However, almost every license application process involves face-to-face bargaining. These are very intense sessions during which hidden, unrecognized, and complicated expectations should be determined and expressed. Differences in expectations often manifest themselves in planning for technical studies. Studies of the instream flow resource are one means of designing a license application that can pass the Commission's independent review of economic soundness, and environmental protection.

Negotiations over hydropower license applications seem to fail because of ideological differences, poor coordination of the consultation process, and unsatisfactory agreement.

First, most negotiations are among parties with value differences. Sometimes, these differences are so great that one or more parties simply cannot agree. When this happens the parties leave the decision entirely up to the Commission. Most often the

ideologies of the parties can be put aside to allow negotiation over studies to continue.

Second, a poorly coordinated consultation process means that important parties or issues are not fully considered. Such a shortcoming is likely to be highlighted in the Commission staff's review of the application.

Third, even where the parties can work out an accommodation a number of factors may combine to produce an agreement that is unacceptable to the Commission or does not work in practice. Consultations result in varying degrees of mutual accommodation, depending on the issues. Although parties usually agree on relatively simple issues during consultation on a typical project they disagree over a few core issues. Because these core issues most affect the economic feasibility of a project they can be reflected in incomplete or unsatisfactory agreements.