# **CRS** Report for Congress

# Relicensing of Nonfederal Hydroelectric Projects: Background and Procedural Reform Issues

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# Relicensing of Nonfederal Hydroelectric Projects: Background and Procedural Reform Issues

#### Summary

Hydroelectric facilities produce approximately 7% of all electricity generated in the United States and are an important and flexible source of power. About half of the hydroelectric power generated in the United States comes from privately owned facilities that operate under licenses issued by the Federal Energy Regulatory Commission (FERC). Federal hydropower dams do not require FERC licenses and are not covered by this report. New licenses for private facilities establish allowed generation capacity, operating parameters, and environmental protection requirements for the next 30 to 50 years. Given the multi-purpose nature of hydropower facilities and changes in river-management priorities since the 1950s and 1960s, it now can take more than six years and millions of dollars to relicense a hydroelectric project.

Since the mid-1980s, FERC has been working to improve the relicensing process. In 1985, FERC established a deadline-driven process known as the Traditional Licensing Process (TLP). In 1997, FERC developed a second, more flexible process called the Alternative Licensing Process (ALP). The focus of recent FERC efforts, and of this report, is on the development of regulations, finalized in FERC's July 30, 2003, Rule (Docket No. RM02-16-000, Order No. 2002), to further modify the licensing process by establishing a third process. This process, called the Integrated Licensing Process (ILP), incorporates elements of the TLP (e.g., deadlines for multiple steps) and the ALP (e.g., focus on early stakeholder involvement). In addition, the ILP includes a new process for resolving study disputes and requires FERC to participate earlier in the licensing process. FERC indicates that these changes are intended to make the process shorter and more efficient without altering agencies' authorities under the Federal Power Act (16 U.S.C. §791 et al.) or the Clean Water Act (33 U.S.C. §1341) to develop license conditions that protect fish, federal reservations (e.g., national forests, Indian reservations), or rivers' statedesignated uses. Effective July 23, 2005, the ILP is the default process, but applicants may petition to use either the ALP or the TLP based on anticipated costs, level of complexity and controversy related to the relicensing, and other factors. Approval to use a process other than the ILP is not automatic.

After FERC completed its rule establishing the ILP, the 109<sup>th</sup> Congress passed legislation that affects the rule. P.L. 109-58, signed in August 2005, includes provisions for applicants to propose alternatives to license conditions and requires agencies to accept those alternatives as long as they meet certain environmental and economic requirements. Some have expressed concern that this legislation could reduce the effectiveness of the ILP by eroding federal resource agencies' conditioning authority.

This report summarizes the current processes, describes FERC's recent development of a third licensing process, and explains changes to relicensing enacted by P.L. 109-58. This report will be updated as events warrant.

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# Relicensing of Nonfederal Hydroelectric Projects: Background and Procedural Reform Issues

#### Introduction<sup>1</sup>

Hydroelectric facilities generate nearly 7% of all electricity produced in the United States and between 15% and 44% of the electricity in seven states.<sup>2</sup> Hydropower is generated by releasing water through a set of turbines; thus the process does not produce air pollutants and can be turned on or off in a matter of minutes. This flexibility makes hydroelectric facilities an important source of peaking power.<sup>3</sup> However, the construction and management of these facilities are often contentious because they affect many other resources, activities, and values. For example, decisions about when and how to release water from a hydro facility, and how much water to release, can affect fisheries, flood control, irrigation, municipal water supplies, recreation, stream ecology, and transportation.<sup>4</sup>

To protect navigable waters and encourage multiple-use hydro projects, Congress created the Federal Power Commission<sup>5</sup> in 1920 and gave it exclusive authority to license nonfederal hydropower facilities. With this authority, the Federal Power Commission, renamed the Federal Energy Regulatory Commission (FERC) in 1977, licensed facilities in 45 states.<sup>6</sup> These licenses, which are valid for 30 to 50 years, establish operating parameters for nonfederal facilities.

<sup>&</sup>lt;sup>1</sup> This report was originally written by former CRS analyst Kyna Powers.

<sup>&</sup>lt;sup>2</sup> The following states get more than 15% of their electricity from hydropower: Washington (44%), Oregon (43%), Vermont (37%), Montana (34%), South Dakota (30%), Idaho (27%), and Maine (15%). U.S. Dept. of Energy, *State Energy Data Report 1999*, Report DOE/EIA-0214, Table 3: Energy Consumption Estimates by Source, at [http://www.eia.doe.gov/emeu/sedr/contents.html].

<sup>&</sup>lt;sup>3</sup> Peaking power is electricity generated during periods of high demand, called on-peak periods or heavy load hours.

<sup>&</sup>lt;sup>4</sup> For an overview of the interaction between hydropower and other resource uses, see CRS Report RL31536, *Licensing of Non-Federal Hydroelectric Projects: Background and Current Issues*, by Nicole Carter and Amy Abel.

<sup>&</sup>lt;sup>5</sup> The Federal Power Commission was established under the 1920 Federal Power Act (16 U.S.C. §797, et seq.).

<sup>&</sup>lt;sup>6</sup> FERC has licensed hydropower facilities in all states except Delaware, Mississippi, North Dakota, South Dakota, and Hawaii. FERC-licensed facilities account for about half of all U.S. hydropower production.

Congress also created a major role in the licensing process for federal resource agencies, state agencies, and agencies representing Indian tribes.<sup>7</sup> Specifically, Congress gave certain agencies mandatory conditioning authority (i.e., Congress requires FERC to include in its license certain agency-established operating conditions). Section 18 of the 1920 Federal Power Act (FPA), for example, stipulates that the Secretary of the Interior or the Secretary of Commerce may require an applicant to facilitate the passage of fish safely around barriers created by the facility. When a project is located on a federal reservation (e.g., Indian reservations and national forests), §4(e)<sup>9</sup> also grants the authority to establish such license conditions to the Secretary of the department under whose supervision such reservation falls. Specifically, the Secretary may stipulate license provisions to maintain the reservation for the purposes for which it was designated. Congress extended this conditioning authority to state resource agencies under the 1972 Clean Water Act (CWA). Under the CWA, a FERC-issued license must include any conditions that the state deems necessary to maintain state-developed water quality standards. 10 Given their mandatory conditioning authority, these federal and state agencies, called conditioning agencies, are actively involved in the relicensing process.

Pending hydropower relicensing activities will involve a significant percentage of federally regulated hydropower. During the next decade (2007-2016), 115 projects, which account for about 30% of all nonfederal U.S. hydroelectric capacity, will face relicensing. Given the multi-purpose nature of hydropower facilities, changes in river-management priorities, and changes in environmental knowledge and policies since the 1950s and 1960s, this relicensing process can be fairly lengthy. Since the 1980s, Congress and FERC have worked to reduce the time and cost of relicensing. Specifically, Congress has pushed FERC to continue evaluating its relicensing process. Since 1985, FERC has developed three hydropower licensing processes: the Traditional Licensing Process (TLP) in 1985; the Alternative Licensing Process (ALP) in 1997; and the Integrated Licensing Process (ILP) in July 2003. The ILP integrates components of the TLP (e.g., deadlines for process phases) and the ALP (e.g., focus on early stakeholder involvement). Effective July 23, 2005, the ILP is the default process, but applicants may petition to use either the ALP or TLP based on anticipated costs, level of complexity and controversy related to the relicensing,

<sup>&</sup>lt;sup>7</sup> Federal agencies that may be involved include the Dept. of the Interior's Fish and Wildlife Service, Bureau of Land Management, National Park Service, Bureau of Indian Affairs, and Bureau of Reclamation; the Dept. of Commerce's National Oceanographic and Atmospheric Administration and National Marine Fisheries Service; the Dept. of Agriculture's Forest Service; the Dept. of Defense's Army Corps of Engineers; and the Environmental Protection Agency.

<sup>8 16</sup> U.S.C. §811.

<sup>&</sup>lt;sup>9</sup> 16 U.S.C. §797.

<sup>&</sup>lt;sup>10</sup> States set these conditions as part of their Water Quality Certification under §401 of the CWA (33 U.S.C. §401, et seq.)

<sup>&</sup>lt;sup>11</sup> The 115 projects represent about 16.9 gigawatts (GW) of all nonfederal capacity (55.2 GW) and about 11% of all 1,034 nonfederal projects. (Data from FERC at [http://www.ferc.gov/industries/hydropower/gen-info/licensing/licenses.xls].

and other factors. Approval to use a process other than the ILP is not automatic.<sup>12</sup> After FERC completed its rule establishing the ILP, the 109<sup>th</sup> Congress passed legislation that could affect that rule. P.L. 109-58, signed in August 2005, includes provisions for applicants to propose alternatives to license conditions and requires agencies to accept those alternatives as long as they meet certain environmental and economic requirements. Some have expressed concern that this legislation will reduce the effectiveness of the ILP by eroding federal resource agencies' conditioning authority.

## **Historic Licensing Processes**

Since the passage of the 1920 Federal Power Act, the Federal Power Commission, now FERC, has been the dominant hydropower licensing authority. As such, FERC developed the procedures through which relicensing may occur. Until recently, FERC supported two relicensing processes: the Traditional Licensing Process (TLP) and the Alternative Licensing Process (ALP). This section describes these licensing processes to provide context for discussing the new Integrated Licensing Process (ILP) and related legislative issues and concerns.

#### The Traditional Process

In 1985, FERC established what is now referred to as the Traditional Licensing Process. 14 The TLP consists of two phases: a pre-application consultation phase 15 led by the applicant, and a post-application analysis phase led by FERC. During the pre-application phase, the applicant notifies FERC of its intent to seek a new license. The applicant also provides state and federal resource agencies, and agencies representing tribal governments, information describing the proposed project. These agencies help to identify studies the applicant must undertake to determine the project's effects on fish and wildlife, cultural resources, recreation, water, and other resources. After completing these studies, the applicant prepares a draft application, and obtains comments from resource agencies. The applicant may then attempt to resolve any disagreements with the agencies through an informal dispute resolution process. 16

After the formal application is filed, the post-application process begins. During the post-application process, participating stakeholders may request additional studies and provide other comments and recommendations. Federal resource agencies may also submit their mandatory license conditions, and state environmental agencies

<sup>&</sup>lt;sup>12</sup> At [http://www.ferc.gov/industries/hydropower/gen-info/licensing/licen-pro.asp].

<sup>&</sup>lt;sup>13</sup> Federal Power Act, 16 U.S.C. §790 et seq.

<sup>&</sup>lt;sup>14</sup> Order No. 413 (1985), 50 *Fed. Reg.* 23947 (June 7, 1985), FERC Stats. & Regs. Preambles 1982-1985 paragraph 30,632; Order No. 413-A (1991), 56 *Fed. Reg.* 31327 (July 10, 1991), FERC Stats. & Regs. Preambles 1991-1996 paragraph 30, 92.2.

<sup>&</sup>lt;sup>15</sup> This process begins about 5 to 5.5 years before the FERC license expires.

<sup>&</sup>lt;sup>16</sup> This includes disagreements on further studies and on the steps the licensee must take to minimize project damages.

must submit their water quality certification requirements.<sup>17</sup> At this point, FERC begins its environmental analysis, under the National Environmental Policy Act (NEPA),<sup>18</sup> by scoping the issue and identifying project alternatives. Then FERC prepares an environmental document that incorporates the study results and agencies' license conditions.<sup>19</sup> After examining the environmental and other project analyses, FERC staff recommends the project, along with a set of conditions, to FERC's commissioners, and the commissioners decide either to grant or to deny the license. The median time and expense of this process, as calculated by FERC, is 79 months and \$246 per kW.<sup>20</sup>

#### **The Alternative Licensing Process**

In October 1997, FERC responded to concerns that the TLP was too lengthy and costly by establishing a second process called the Alternative Licensing Process (ALP).<sup>21</sup> The ALP was designed to shorten the licensing process by encouraging early collaboration among stakeholders. Since the ALP requires collaboration, applicants must gain stakeholder support to use this process. Once the stakeholders agree to use the ALP, the stakeholders work together during the pre-application phase to develop the application and a preliminary draft NEPA document. FERC oversees the ALP and encourages participants to use the voluntary Dispute Resolution Service (DRS) when there are disagreements. The DRS is a mediation service offered by FERC that facilitates negotiations but does not offer recommendations. Instead, the DRS can bring in FERC experts to help clarify issues. Through this process, the preapplication phase can result in a settlement agreement between the applicant and participating stakeholders. This settlement agreement describes how the project will be managed and often includes the conditions required by state and federal resource agencies to protect and enhance the environment.

<sup>&</sup>lt;sup>17</sup> When a project is located in a federal reservation (i.e., national park, monument, forest, etc.), the federal agency with jurisdiction may place requirements in a FERC license (16 U.S.C. §811). Applicants must also have their project certified by the applicable state under §401 of the CWA. Through the certification process, states can place requirements on the licensees. These requirements are incorporated into the FERC license. For more applicable laws, see CRS Report RL31536.

<sup>&</sup>lt;sup>18</sup> 42 U.S.C. 4321-4347.

<sup>&</sup>lt;sup>19</sup> Under NEPA, FERC must conduct an environmental assessment (EA), which determines whether a more extensive formal environmental impact statement (EIS) will be required to evaluate the project's environmental effects.

<sup>&</sup>lt;sup>20</sup> Federal Energy Regulatory Commission, *Report to Congress on Hydroelectric Licensing Policies*, *Procedures*, *and Regulations* — *Comprehensive Review and Recommendations Pursuant to Section 603 of the Energy Act of 2000*, available at [http://www.ferc.gov/legal/maj-ord-reg/land-docs/ortc\_final.pdf]. (Hereafter referred to as the FERC *Section 603 Report*.) This report was criticized by the General Accounting Office (GAO, now Government Accountability Office) in a May 2, 2001, report entitled *Licensing Hydropower Projects: Better Time and Cost Data Needed to Reach Informed Decisions About Process Reforms* (GAO-01-499), available at [http://www.gao.gov].

<sup>&</sup>lt;sup>21</sup> The ALP was codified in October 1997 at 18 C.F.R. §4.34(i).

After this intensive collaborative process is complete, the applicant files a formal relicensing application. The formal application includes the draft NEPA document and reflects any agreements reached by participating stakeholders. After receiving the application, FERC completes its NEPA documentation and rules on the application. The median time and expense of this process, as calculated by FERC, is 56 months and \$58 per kW.<sup>22</sup>

#### Major Differences Between the TLP and the ALP

Multiple differences distinguish the ALP from the TLP. First, activities conducted pursuant to NEPA begin early under the ALP. Under the TLP, preparation of NEPA documents does not begin until after the application has been accepted by FERC and all studies have been completed. When the project being evaluated is controversial, beginning the NEPA process may help to clarify the issues. Second, an application prepared under the ALP contains a preliminary draft NEPA document that is largely the product of stakeholder collaboration, rather than a document containing the results of environmental studies prepared solely by the applicant. This collaborative development of the draft NEPA document under the ALP may increase the amount of information stakeholders have available when seeking a settlement agreement. Third, FERC staff are involved in advising the collaborative team throughout the ALP's pre-application activities. In contrast, FERC staff are rarely involved in pre-application consultation under the TLP. Earlier FERC participation, under the ALP, can familiarize FERC staff with the project and its issues before the post-application process begins.

#### Time and Cost of Relicensing

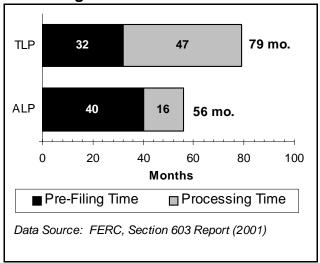
According to FERC's *Section 603 Report*, another major difference between the TLP and the ALP is time.<sup>23</sup> Specifically, FERC estimated that the median licensing time, from the time the applicant submits its Initial Consultation Document to the time FERC issues the license, was 79 months under the TLP and 56 months under the ALP (see **Figure 1**).<sup>24</sup>

<sup>&</sup>lt;sup>22</sup> FERC, Section 603 Report. In its report (GAO-01-499), GAO criticize these data.

<sup>&</sup>lt;sup>23</sup> FERC, Section 603 Report. For more information, see CRS Report RL31536.

<sup>&</sup>lt;sup>24</sup> FERC, *Section 603 Report*. A GAO report (GAO-01-499) criticizes the FERC *Section 603 Report* because the time data are limited almost entirely to the post-application phase and the report does not include time data for the administrative and judicial reviews of its license decisions.

Figure 1. License Duration



According to FERC's *Section 603 Report*, the ALP is also less costly than the TLP. Not including the resources expended by FERC, federal and state agencies, Indian tribes, and non-governmental organizations, FERC determined that the median cost of preparing the relicensing application was \$109 per kW under the TLP, and \$39 per kW under ALP.<sup>25</sup> Once the process is complete, it can also be expensive to comply with the provisions contained in the new license. FERC determined that the median cost of the license's protection, mitigation, and enhancement measures was \$246 per kW under the TLP and \$58 per kW under the ALP. However, the cost differences between the TLP and ALP could increase or decrease depending on the type of project being relicensed.

However, these figures may not clearly illustrate changes in relicensing time because they can vary significantly depending on the project size and the water resources affected. The ALP figures are based on projects for which the ALP was the selected process. The figures for the TLP include projects relicensed before the ALP was developed in 1997. Depending on a project's characteristics, the TLP or the ALP could be more expedient.

## **Administrative Licensing Reform**

While FERC's Section 603 Report indicated that the ALP could reduce the time and cost of relicensing for some projects, FERC continued to examine its licensing processes. In 1998, FERC joined with other agencies involved in the licensing process to form the Interagency Task Force to Improve Hydroelectric Licensing

<sup>&</sup>lt;sup>25</sup> Preparing the application, including study preparation, costs around \$2.2 million per project under the TLP and around \$3.6 million per project under the ALP (*Section 603 Report*, page 47). GAO has also criticized the cost data FERC used in its *Section 603 Report*. Specifically, cost data were based on information from 80 non-random projects. (See CRS Report RL31536.)

Processes (ITF). When the task force concluded its work in 2000, ITF published seven guidance documents to help agencies and other stakeholders through the TLP and ALP.<sup>26</sup> FERC also held regional workshops with states on how to integrate their Clean Water Act responsibilities with the licensing processes.

In addition to clarifying the current license processes, FERC also began developing a new licensing process. In July 2001, senior staff from FERC and other federal agencies formed the Interagency Hydropower Committee (IHC). This committee built on the comments developed by the ITF, and developed additional procedural modifications to further reduce the time and cost of licensing. Concurrently, the National Review Group (NRG), an industry and nongovernmental stakeholder forum, worked to develop a proposal for an Integrated Licensing Process. In September 2002, FERC used the IHC and NRG proposals as the basis for further discussions. Specifically, FERC published a notice requesting comments on the two proposals. This notice also established public forums and a schedule for providing comments and recommendations regarding the adoption of a new hydropower licensing process.

#### **The Integrated Licensing Process**

After receiving oral and written comments in December 2002, FERC began developing an additional licensing process through meetings and drafting sessions. On February 20, 2003, FERC issued its Notice of Proposed Rulemaking (NOPR).<sup>29</sup> The NOPR set out FERC's proposal for a new default licensing process called the Integrated Licensing Process (ILP). In July 2003, FERC issued its final rule establishing the ILP.<sup>30</sup> The ILP, which will not replace either existing process, incorporates components of the TLP and the ALP and will be both structured and collaborative. Effective July 23, 2005, the ILP is the default process, but applicants may petition to use either the ALP or TLP based on anticipated costs, level of complexity and controversy related to the relicensing, and other factors. Approval to use a process other than the ILP is not automatic.<sup>31</sup>

<sup>&</sup>lt;sup>26</sup> The ITF documents are available at [http://www.ferc.gov/industries/hydropower/indusact/itf/itf-reports.asp].

<sup>&</sup>lt;sup>27</sup> FERC document RM02-16-000 (September 12, 2002), "Hydroelectric License Regulations under the Federal Power Act: Notice Requesting Comments and Establishing Public Forums and Procedures and Schedule."

<sup>&</sup>lt;sup>28</sup> Federal Energy Regulatory Commission, "Notice Requesting Comments and Establishing Public Forums and Procedures and Schedule Pursuant to 18 C.F.R. Parts 4 and 16," Docket No. RM02-16-000.

<sup>&</sup>lt;sup>29</sup> 68 Fed. Reg. 13898 (March 21, 2003).

FERC document RM02-16-000, Order No. 2002 (July 23, 2003), Federal Energy Regulatory Commission, *Hydroelectric Licensing under the Federal Power Act. Final Rule*. Available online at [http://www.ferc.gov/whats-new/comm-meet/072303/H-1.pdf]. 68 *Fed. Reg.* 51070, August 25, 2003. (Hereafter referred to as FERC *Final Rule*.)

<sup>&</sup>lt;sup>31</sup> At [http://www.ferc.gov/industries/hydropower/gen-info/licensing/licen-pro.asp].

Early stages of licensing under the ILP will begin much as they have under the ALP. The applicant will consult with agencies, tribes, and the public to decide which studies the applicant needs to complete. In addition, the ILP adopted a recommendation, proposed by the hydropower industry and resource agencies, that FERC conduct NEPA scoping during the pre-application phase.<sup>32</sup> FERC anticipates that moving NEPA scoping from the post-application phase, where it occurs in the ALP, to the pre-application phase could reduce the number of studies FERC requests late in the application process.

After pre-application consultations and NEPA scoping are complete, the applicant files a draft study plan that includes a schedule for all major relicensing steps. Such a schedule could help keep stakeholders on task by providing check points prior to the deadline for submitting the formal license application. However, strict deadlines could prove to be unworkable in certain situations (e.g., weather disruptions or particularly complex studies). Once the applicant files the draft study plan, the stakeholders meet to discuss the draft and to try and resolve any remaining study disagreements. FERC would then approve the study plan with any needed modifications. At this stage, the ILP establishes a new dispute resolution process to help resolve study disagreements between the applicant and conditioning agencies. This process is described in more detail below.

**Initiating the Study Dispute Resolution Process.** A major goal of the ILP is to encourage stakeholders to identify study needs early in the licensing process and to give applicants some certainty regarding study requirements. However, in developing the ILP, FERC recognized that conditioning agencies may require applicants to provide information sufficient to establish their license conditions. Since the applicant may need a study to obtain this information, the ILP establishes a special study dispute resolution process for conditioning agencies. Under the ILP, FERC only grants additional study requests under exceptional circumstances.

The ILP's formal dispute resolution process differs from the TLP and the ALP. Under the TLP, there is no formal mechanism for resolving study disputes before the applicant files the license application. Under the ALP, conditioning agencies and the applicant try to resolve their disagreements using the voluntary Dispute Resolution Service. As will be described below, a major difference between the DRS and the dispute resolution panel created under the ILP is that the panel is required to complete its work in a set time period and provide recommendations.

Since the formal dispute resolution process may only be initiated by agencies with mandatory conditioning authority, other stakeholders have to petition their study requests to FERC's Director of Energy Products and face tougher study-approval standards. Entities without conditioning authority argue that they, too, should be able to initiate the dispute resolution panel. For example, state agencies with relicensing responsibilities but without licensing conditioning authority under the Federal Power Act and Clean Water Act argue that the dispute resolution panel, as described below, helps them to obtain information that is critical to their analyses. However, FERC

<sup>&</sup>lt;sup>32</sup> See list of entities recommending early FERC scoping on page 25 of FERC's February 20, 2003, NOPR (Docket Number RM02-16-000).

decided that most study disputes should be resolved during the pre-application consultation phase through voluntary mechanisms, and that the study dispute resolution panel is only to be used in situations when a conditioning agency is dissatisfied with the study development plan. Furthermore, FERC notes that conditioning agencies must require substantial evidence for their conditions to withstand judicial review.

**Study Advisory Panel.** When a conditioning agency files a notice of dispute, FERC convenes a three-member advisory panel. The panel consists of a person nominated by FERC staff, a person nominated by the agency referring the dispute, and a subject-area expert selected by the other two panel members. The applicant is not a panel member, but may provide the panel with information.

Various stakeholders have voiced concerns regarding the composition of the study dispute resolution panel. The hydropower industry, for example, argues that applicants should have a greater role in this process. Members of the hydropower industry are also concerned that the person selected by the agency would face pressure to rule in favor of the study request. However, FERC and conditioning agencies point out that the person appointed by the agency will not be working on the project in question and would not necessarily be an agency employee. Industry and non-industry stakeholders are also concerned that it may be difficult to find a third, uncompensated panel member who is not involved with the project but who has the necessary expertise. However, FERC contends that the panel will be used infrequently and that it has successfully used similar procedures in the past.

**Study Criteria.** To make its recommendation, the panel would review study requests that contain the following information:<sup>33</sup>

- (1) a description of the goals and objectives of the study and the information to be obtained;
- (2) an explanation of the relevant resource management goals of the agencies or tribes with jurisdiction over the resource to be studied;
- (3) an explanation of any relevant public interest consideration in the proposed study (if the requester is not a resource agency);
- (4) a description of existing information concerning the subject of the study proposal, and the need for additional information;
- (5) an explanation of the nexus between project operations and effects on the resources to be studied, and how the study results would inform the development of the license requirements;
- (6) an explanation of how a proposed study methodology is consistent with generally accepted practice in the scientific community, or, as appropriate, considers relevant tribal values and knowledge; and

<sup>&</sup>lt;sup>33</sup> FERC *Final Rule*, p. 34.

(7) a description of the level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

After considering all of the information submitted by the applicant, agencies, and other stakeholders, the panel would make a recommendation to FERC's Director of Energy Products on whether to grant the study request. The Director will either agree with or overrule the panel, and the decision will constitute an amendment to the approved study plan. After all initial disputes are resolved, the Director will issue an order directing the applicant to carry out the study plan as amended. Once this final study plan is complete, any additional requests to alter the plan will be submitted to the Director, rather than to the panel, and will only be granted under exceptional circumstances.

**Carrying Out the Study Development Plan.** Under the new rule, after FERC approves the study-development plan, the applicant begins the studies. In contrast, under the TLP or the ALP, an applicant begins studies without a FERC-approved plan. During the ILP's study phase, the applicant submits status reports and discusses the study development plan with other stakeholders. The applicant uses its updated status report, completed after the second phase of studies,<sup>34</sup> to file a draft application. To the extent possible, this draft application will include the same information as the final application, including information sufficient for tribes and agencies to file their mandatory terms and conditions, fishway requirements, or State Water Quality Certification. However, the ILP does not establish a procedural mechanism forcing applicants to include all such information in its draft application.

Some resource agencies are concerned that the ILP does not include a mechanism for ensuring that the draft or final license application includes sufficient information for agencies to exercise their conditioning authority or make other recommendations to FERC. Some agencies claim that lack of information is often the primary reason that their conditions or recommendations are delayed. FERC argues that early resolution of study disputes will reduce the likelihood of incomplete applications and that conditioning agencies' authority to amend or prevent the license is a sufficient incentive for applicants to submit all necessary information. Conditioning agencies respond that these incentives exist under the TLP and ALP, and that in some cases they are insufficient.

**Final Application and Licensing.** Following a comment period, the applicant files the final application. Then, agencies submit their recommendations and conditions, and FERC considers the recommendations and incorporates the requirements into its final NEPA document. FERC then rules to grant or deny the license.<sup>35</sup> FERC rarely denies applications that are based on an uncontested settlement agreement.

<sup>&</sup>lt;sup>34</sup> The phase depends on the type of studies. For example, the first phase could be a year or a season.

<sup>&</sup>lt;sup>35</sup> The license will include state and federal license conditions and any other conditions FERC deems necessary to balance multiple water uses, as is the case now under existing procedures.

**Major Differences and Other Issues.** As described above, the ILP differs from the TLP and the ALP. In general, the ILP is more collaborative than the TLP and more structured than the ALP. The ILP also moves FERC's NEPA scoping process from the post-application phase to the pre-application phase in an effort to resolve study disputes early in the licensing process. Under the ILP, which includes a FERC-approved study plan, FERC is likely to approve new studies as the licensing process progresses. This could encourage stakeholders to request studies early in the process and could provide applicants with some degree of certainty regarding the study plan. The ILP also develops a new study dispute resolution panel to help resolve disputes between conditioning agencies and the license applicant.

Although resource agencies, environmental organizations, Indian tribes, and applicants are optimistic that the rulemaking will improve the licensing process, they disagree regarding FERC's decision to make the ILP the default process, but to allow applicants to petition to use the TLP or the ALP. Specifically, resource agencies, Indian tribes, and volunteer organizations argue that the ILP should replace the other two processes after a trial period. They state that retaining multiple processes could confuse the public, nonprofit organizations, and agencies involved in multiple relicensing processes. However, the hydropower industry opposes a single process and argues that there are certain projects for which the TLP or the ALP may be more appropriate than the ILP. Conversely, proponents of a single process argue that the ILP should be flexible enough to accommodate all types of projects. These issues, and other stakeholder concerns, were discussed at regional workshops and at a stakeholder drafting session before FERC issued its final rule in July 2003.

### **Legislative Licensing Proposals**

The issue before Congress was whether legislation was needed to make the licensing process shorter and less costly, minimize environmental impacts,<sup>36</sup> and maximize electricity generation, or whether FERC's actions sufficiently addressed concerns about relicensing. Congress held hearings and took other action to assess the necessity of legislative relicensing reform or other action. In 2000, Congress directed FERC to conduct a comprehensive review of the policies, procedures, and regulations guiding the licensing process.<sup>37</sup> FERC responded, in May 2001, with recommendations on how to reduce the length and expense of obtaining a new license.<sup>38</sup> In addition to administrative reforms, some of which are in FERC's 2003 *Final Rule*, FERC recommended that Congress make FERC the "one-stop shop" for hydropower licenses by giving it the authority to reject or modify resource agency conditions and by eliminating other federal authorizations.<sup>39</sup> The hydropower industry generally supported this type of legislative reform. However, these suggestions for legislative changes were not supported by officials within some resource agencies or

<sup>&</sup>lt;sup>36</sup> For more information, see CRS Report RL31536.

<sup>&</sup>lt;sup>37</sup> Section 603 of the Energy Act of 2000 (P.L. 106-469).

<sup>&</sup>lt;sup>38</sup> FERC, Section 603 Report.

<sup>&</sup>lt;sup>39</sup> For example, special use authorizations for projects on Forest Service lands and similar existing authorizations would be eliminated.

environmental organizations, which generally opposed reducing agencies' mandatory conditioning authority. In their view, resource agencies' mandatory conditioning authority is necessary to protect non-hydropower resources. Officials within some resource agencies and environmental organizations also argued that administrative reforms, like the ILP, are adequate to improve the relicensing process.<sup>40</sup>

Following the issuance of FERC's Section 603 Report, legislation was proposed to change components of the licensing process. For example, the comprehensive energy bill (H.R. 4, 107<sup>th</sup> Congress), would have allowed applicants to propose alternatives to agencies' mandatory conditions under the Federal Power Act, required conditioning agencies to consider alternatives to their license conditions, and required them to select the alternative if it met certain environmental and cost criteria. No resolution came out of the 107<sup>th</sup> Congress. There was further debate over these issues in the 108<sup>th</sup> Congress, but no legislation was enacted until the 109<sup>th</sup> Congress with the passage of the Energy Policy Act of 2005 (P.L. 109-58).

#### Recent Relicensing Changes: P.L. 109-58

Provisions allowing applicants to propose alternatives to agencies' mandatory conditions became law in the Energy Policy Act of 2005 (P.L. 109-58, §241). An applicant for a FERC license, or any other party to the proceedings, has the opportunity to formally dispute issues that arise in the relicensing process. Specifically, applicants or other parties involved have the right to request a hearing to resolve disputes regarding fishways and issues of material fact relating to adequate resource protection on federal lands. These hearings are conducted by the agency responsible for the resource in question.

Additionally, whenever the relevant management agencies indicate specific conditions that are required for resource protection, license applicants or other parties involved may propose alternatives that cost less to implement or improve hydropower production. So long as proposed alternatives provide adequate resource protection, the management agencies must accept them. These same provisions for alternative proposals — and the same criteria of adequate resource protection — also apply to fishways that may be prescribed as a license condition.

This procedure was tested in 2006 with the first hearing prompted by §241 of P.L. 109-58. The Departments of Commerce and the Interior both filed mandatory terms and conditions related to the relicensing of PacifiCorp's Klamath River Project (FERC license number 2082). An administrative law judge ruled that the government's preliminary prescriptions would benefit species in the basin.<sup>41</sup> The Departments of Commerce and the Interior have since issued final mandatory conditions requiring fishways at the Klamath dams.<sup>42</sup>

<sup>&</sup>lt;sup>40</sup> For a list of FERC recommendations and more discussion, see CRS Report RL31536.

<sup>&</sup>lt;sup>41</sup> Decision of administrative law judge in the matter of Klamath Hydroelectric Project, Docket Number 2006-NMFS-0001 (September 27, 2006). See [http://www.fws.gov/yreka/P2082/20060927/2Klamath\_DNO\_Final.pdf].

<sup>&</sup>lt;sup>42</sup> FWS and NMFS, Section C: Modified Fishway Prescriptions of the Fish and Wildlife (continued...)

#### Conclusion

Re-evaluating a project's historic operating conditions to develop a license that balances a project's electricity interests alongside habitat, recreation, water supply, irrigation, and flood control objectives is necessarily a lengthy process. The length, however, can be exacerbated by a number of factors. For example, beginning new studies late in the pre-application phase can lengthen the licensing process. In formulating the ILP, FERC and other stakeholders attempted to reduce the likelihood that the applicant will need to produce more information late in the study phase. Specifically, the ILP requires FERC to identify NEPA issues during the pre-application process and creates a study dispute mechanism for conditioning agencies. By identifying the information needs of FERC and conditioning agencies early in the process, the ILP could reduce the need for additional studies near the end of the licensing process. Furthermore, stakeholders with limited personnel resources hope that the timelines developed under the ILP will help them to schedule their resources more efficiently.

In the end, it is not the process but the results (i.e., the contents of and conditions on the license) that matter most. When results are unsatisfactory from the perspective of any stakeholder, relicensing may be accompanied by long and costly legal battles. Bringing all the stakeholders to the table and negotiating a relicensing agreement, as is done in the ALP, is one method that may reduce post-licensing litigation. Like the ALP, the ILP could encourage stakeholder collaboration. Unlike the ALP, however, the ILP establishes strict deadlines for each phase of the licensing process. Under the ALP, negotiations sometimes drag on until parties are faced with the deadline for submitting the application. Therefore, the deadlines established under the ILP could prompt parties to reach agreement sooner. On the other hand, some stakeholders are concerned that the ILP's deadlines may not provide sufficient time to negotiate a settlement. The success of the ILP in achieving settlement agreements may depend on the quality of the information gathered through the study process, and on the focused and cooperative efforts of conditioning agencies, license applicants, FERC, and other stakeholders.

The question of whether legislative efforts could improve relicensing is difficult, because the ILP has not yet been tested. On one hand, individuals within some resource agencies and environmental organizations are concerned that reducing the leverage of conditioning agencies, through legislation such as P.L. 109-58, removes an important incentive for applicants to work toward a settlement agreement. On the other hand, FERC and the hydroelectric industry argue that this legislation complements administrative reforms by encouraging license conditions that are equally effective and less costly.

<sup>42 (...</sup>continued)

Service and National Marine Fisheries Service pursuant to Section 18 of the Federal Power Act, (January 26, 2007). See [http://www.fws.gov/yreka/P2082/20070126/070126DOIMOD \_Sectionc.pdf].