

Citizen Toolkit for Effective Participation in Hydropower Licensing

June 2005

DEFINITIONS AND ACRONYMS

Acre-Foot: a volume of water adequate to cover an acre to a depth of one foot, or 325,851 gallons.

Action Alternative: an alternative to the licensing action proposed by the licensee.

AIR: Additional Information Request.

Anadromous: fish that hatch in freshwater, migrate to the sea, and return to freshwater to spawn (e.g. salmon or steelhead trout).

APEA: Applicant Prepared Environmental Assessment.

BA: Biological Assessment.

Baseline (or Environmental Baseline): the environmental conditions that are the starting point for analyzing the impacts of a proposed licensing action (such as approval of a license application) and any alternative. Under FPA Part I, as discussed in Section 2, the baseline consists of the existing conditions of the waters and lands in the project area at the time of the licensing proceeding. Under the ESA, baseline is defined differently as: past and present impacts of all Federal, State or private actions and other human activities in the action area, the anticipated impacts of all proposed Federal projects in the action area that have already undergone Section 7 Consultation, and the impact of State or private actions which are contemporaneous with the consultation process (50 C.F.R. § 402.02).

Biological Assessment: a document prepared by the licensee, under the supervision of the FWS or NMFS, as the basis for a Biological Opinion. This document evaluates the potential impacts of a licensing decision on a fish, wildlife, or plant species listed or proposed for listing under the ESA or on proposed or designated critical habitat for such species.

Biological Opinion: a document, prepared by the FWS or NMFS, which includes: (1) the opinion of the administering agency whether a licensing action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat; (2) a summary of the information on which the opinion is based; and (3) a detailed discussion of the impacts of the action on listed species or its critical habitat.

BO: Biological Opinion.

BOD: Biological Oxygen Demand.

Bulkhead: a water-retaining structure, like a dike.

Bypass Reach: the reach of a river between a dam (or other diversion structure) and powerhouse.

CIA: Cumulative Impacts (or Effects) Analysis.

CFR: Code of Federal Regulations.

CFS: Cubic feet per second.

Competing Development Application: any license or exemption application for a proposed project that would use the same water resources as another proposed project for which an application for preliminary permit or license has already been filed with FERC.

Comprehensive Plan: a plan for the development of generation or other beneficial uses of a river recognized under FPA Act section 10(a)(2)(a).

Conduit: any tunnel, canal, pipeline, or similar structure for water conveyance.

Consultation: under Federal Power Act Part I, a cooperative effort of the licensee and other participants to prepare and implement a study plan, then prepare a license application, to minimize unresolved disputes of fact and law. Consultation under ESA (**Section 7 Consultation**) is a cooperative effort of FERC, licensee, and FWS or NMFS, to analyze the impacts of a licensing action on listed species or critical habitats. Such consultation may be formal or informal, as discussed in Section 4.2.2.

Critical Habitat: land or water areas which FWS or NMFS has designated to have the physical or biological features essential to the conservation of a species listed under the ESA, as provided in ESA § 3(5)(A).

Critical Energy Infrastructure Information (CEII): information concerning proposed or existing critical infrastructure (physical or virtual) which: (1) relates to the production, generation, transmission or distribution of energy; (2) could be useful to a person planning an attack on critical infrastructure; and (3) gives strategic information beyond the location of the critical infrastructure.

Cubic Feet per Second (cfs): a water flow of one cubic foot passing a measurement point in a second.

Cumulative Impact: under NEPA, the environmental impact that results from the incremental impact of the action in addition to other past, present, and reasonably foreseeable future actions, as provided in 40 C.F.R. § 1508.7. Under ESA, a **Cumulative Effect** is the impact of future State or private activities, not involving Federal activities, that are reasonably certain to occur within the action area of the Federal action subject to Section 7 Consultation, as provided in 50 C.F.R. § 402.02.

CWA: Clean Water Act, 33 U.S.C. §§ 1251-1387.

Dam: any structure for impounding or diverting water.

DEA: Draft Environmental Assessment.

Deficient License Application: an application which FERC determines does not comply with the minimum requirements for form or substance.

DEIS: Draft Environmental Impact Statement.

Designated uses: the beneficial uses of water designated as water quality standards under Clean Water Act section 303(a).

Development Application: any application for either a license or exemption for a proposed hydropower project.

Discharge: the release of flow from a dam, powerhouse, or other control structure.

Dismissal: rejection of license application on the basis of FERC's determination that the applicant failed to provide required information for an informed decision.

Docket: a formal record of a proceeding on a given application for permit, license, or exemption.

Drawdown: the lowering of a reservoir as the result of water withdrawal.

DO: Dissolved Oxygen.

Endangered Species: any species of fish, wildlife, or plant listed under the Endangered Species Act as in danger of extinction throughout all or a significant portion of its range.

Endangered Species Act (ESA): the federal law, 16 U.S.C. §§ 1531-1544, that provides for protection and recovery of endangered or threatened species of fish, wildlife, or plant.

Enhancement: improvement of the baseline condition of a natural resource.

Entrainment (or Impingement): incidental capture of fish or other aquatic organisms in a trash rack or generator turbine.

Environmental Assessment (EA): a document prepared by FERC and any cooperating agency, pursuant to NEPA, to determine whether a licensing action may significantly affect environmental quality.

Environmental Conditions: the numbered articles which, as conditions of a license, require that the licensee undertake measures for protection, mitigation, and enhancement of environmental quality affected by a project.

Environmental Document: a document in several forms under NEPA, including an environmental assessment, environmental impact statement, or categorical exemption, and in similar forms under counterpart state laws.

Environmental Impact Statement (EIS): a document prepared by FERC under NEPA to analyze a licensing action that, even after mitigation measures, may have significant adverse impacts on environmental quality.

EPA: U.S. Environmental Protection Agency.

ESA: Endangered Species Act.

Federal Lands: lands which the U.S. holds in fee title.
FERC: Federal Energy Regulatory Commission.
FLMA: Federal Land Management Agency.
FPA: Federal Power Act, 16 U.S.C. §§ 791-823 (Part I) and 16 U.S.C. §§ 824-824n (Part II).
FWCA: Fish and Wildlife Coordination Act, 16 U.S.C. §§ 661 - 666c.
FWPA: Federal Water Power Act.
FWS: U.S. Fish and Wildlife Service, an agency within the U.S. Department of Interior.
Filing: any document filed in a licensing proceeding.
Fish and Wildlife Agencies: FWS, NMFS, and any state agency with jurisdiction over fish and wildlife resources in the state where a hydropower project is located.
Fishway: a structure or device used to permit the passage of fish through, over, or around a hydropower project, such as a fish ladder or a trap-and-truck operation.
Flume: a lined structure used to convey water.
Forebay: a reservoir upstream from a powerhouse, used to regulate the flow of water into the powerhouse. **Geomorphology:** the science used to analyze how water flow and land interact, such as the capacity of a given flow to carry sediment.
HRC: Hydropower Reform Coalition.
Head: vertical distance between the surface of a reservoir or other intake location and the powerhouse.
Headwater: the source of a river, above a hydropower project.
Hydrograph: a chart or table that depicts the water volume as a function of time.

ILP: Integrated Licensing Process.
Impoundment: a reservoir.
Initial Consultation Document (ICD): document prepared by licensee in first stage of development of a license application, for the purpose of consultation with state and federal agencies, FERC, and participants regarding the application.
Initial Development Application (IDA): an application for development of a site for which no prior application has been filed.
Installed Capacity: the instantaneous capacity of the project to generate electricity, expressed in kilowatts or megawatts.
Instream Flow: water flowing in the channel of a river or stream.
Interagency Task Force (ITF): a work group (1999-2001) which prepared the Interagency Task Force Report stating recommendations for agency coordination in hydropower regulation.
ITS: Incidental Take Statement.
Jeopardy: a risk of extinction for a species listed under the Endangered Species Act.
Levee: any earthen structure that channels water.
License Articles: individual articles which state the licensee's duties for construction, operation, and maintenance of a hydropower project.
Licensee: entity which holds a license and thus is legally responsible for construction, operation, and maintenance of a project. For simplicity of reference, this Toolkit uses the term "licensee" to describe a license applicant, including an applicant for original license.
Load: the amount of electrical power or gas delivered or required at any point on a system.
Major Project: hydropower project with generating capacity of more than 1.5 MW, as defined in 18 C.F.R. § 4.30(b)(14)-(16).
Mandatory Conditioning Authority: the authority of a federal agency to prescribe conditions which FERC must incorporate in a license.
Minor Project: a hydropower project with an installed generation capacity of 1.5 MW or less, as defined in 18 C.F.R. §4.30(b)(17).
Mitigation: avoidance or reduction in the potential impact of a license or exemption.
MOA: Memorandum of Agreement.
MW: Megawatt.
MWh: Megawatt-hours.

NEPA: National Environmental Policy Act, 42 U.S.C. §§ 4321 - 4347.

NGO: Non-Governmental Organization.

NHI: Natural Heritage Institute.

NHPA: National Historic Preservation Act, 16 U.S.C. §§ 470-470x-6.

NMFS (formerly NOAA Fisheries): National Marine Fisheries Service, fisheries branch of the U.S. Department of Commerce.

No-Action Alternative: the alternative whereby a federal agency takes no action. In an original licensing proceeding, this is the denial of the license application. In a relicensing proceeding, this is typically considered to be the renewal of the existing license without modification.

Notice of Intent (NOI): document that the licensee files at least five years before expiration of a license, to state its intent whether it will seek a new license.

Nonfederal Lands: lands not owned by the U.S.

Nonpower License: a temporary license for an existing project during a transition from power generation to an alternative use not subject to FERC's jurisdiction.

NPS: National Park Service, an agency within the U.S. Department of Interior.

OEP: Office of Energy Projects, the FERC office responsible for licensing non-federal hydropower projects.

Original License: the first license issued for a hydropower project.

PAD: Pre-Application Document.

Patently Deficient: a determination by FERC that an application substantially fails to comply with requirements for the form or substance of an application.

Peaking: operation of a hydropower projects to meet peak electrical demands.

Penstock: an inclined pipe to convey water to the powerhouse.

PM& E: Protection, Mitigation, and Enhancement measures.

Powerhouse: a structure that contains the turbine and generator of a hydropower project.

Project: the dam, powerhouse, reservoir, and any other structures, rights, lands, and waters regulated by a license or exemption.

Project Boundary: the boundary designated by FERC to identify the lands and structures included in a license or exemption.

Proposed Action: the activity planned by a federal agency that generates the need to prepare as EIS. In the context of a licensing proceeding, the proposed action describes FERC's issuance of a license to the license applicant

Pumped storage: a project which pumps water uphill to a reservoir for subsequent use.

PURPA: Public Utility Regulatory Policies Act, 15 U.S.C. §§ 717x - 717z, 3201 - 3211; 16 U.S.C.

§§ 823a, 824a-1 - 824a-4, 824i - 824k, 825q-1, 2601 - 2603, 2611 - 2613, 2621 - 2627, 2631 - 2634, 2641 - 2645, 2701 - 2708; 42 U.S.C. § 6808; 43 U.S.C. §§ 2001 - 2012.

PURPA Benefits: benefits under PURPA section 210(a), 16 U.S.C. § 824a-3, which requires electric utilities to purchase electricity from, and to sell electricity to, qualifying facilities such as small hydropower projects

Ramping: the act of changing discharge from a dam or powerhouse.

Ramping Rate: the rate at which discharge from a powerhouse or dam changes.

Ready for Environmental Analysis (REA): the determination by FERC that an application is adequate for the purpose of preparing the environmental document under NEPA.

Real Property Interest: fee title, right-of-way, easement, or leasehold.

Reasonable and Prudent Alternatives (RPAs): recommended alternatives to a licensing action, as identified during formal Section 7 Consultation, that can be implemented in a manner consistent with the intended purpose of the action and with the scope of FERC's legal authority and jurisdiction, that are economically and technologically feasible, and that FWS or NMFS believes would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of designated critical habitat" (50 C.F.R. §402.02).

Reasonable and Prudent Measures (RPM): actions the FWS or NMFS believes are necessary or appropriate to minimize the impacts of a licensing action on listed species (50 C.F.R. § 402.02).

RPM, which are identified in Incidental Take Statements, and cannot alter the basic design, location, scope, duration, or timing of the licensing action and may involve only minor changes. **Reservation of authority:** a provision whereby an agency reserves its authority to take further or different action in the future.

Reservoir: a pond or lake stored by a dam.

Reservoir Storage Capacity: the maximum amount of water which may be stored in a reservoir, typically expressed in acre-feet.

Resource Agency: a federal, state, or interstate agency which has jurisdiction over flood control, navigation, irrigation, recreation, fish and wildlife, water supply, or cultural resources of the state in which a project is located.

RPMs: Reasonable and Prudent Measures.

Run-of-the-river: a hydropower project that generates at the rate of inflow without change as a result of storage in a reservoir.

SCORP: State Comprehensive Outdoor Recreation Plan.

SD: Scoping Document.

SD-1: Scoping Document 1.

SD-2: Scoping Document 2, as revised following public comment.

Sediment Load: the amount of sediment carried by flow.

SHPO: State Historic Preservation Officer.

SMP: Shoreline Management Plan.

Spillway: a structure over or through which excess or flood flow may be discharged from a reservoir.

Tailrace: a structure through which a powerhouse discharges flow into the river or other receiving water.

Take: to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect an endangered species, or to attempt to engage in any such conduct, as defined in 16 U.S.C. § 1532(19). **Harm** is further defined by the U.S. Fish and Wildlife Service (FWS) and NMFS to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering. **Harass** is defined by FWS as actions that create the likelihood of injury to listed species to such an extent as to significantly disrupt normal behavior patterns which include, but are not limited to, breeding, feeding or sheltering (50 C.F.R. §17.3).

Threatened Species: any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range, as listed under the Endangered Species Act, 16 U.S.C. § 1532(20).

WQC: Water Quality Certification.

Water Quality Certification (Section 401 Certification or Certification): the document issued by the State where a project discharges, pursuant to Clean Water Act (CWA) section 401(a), 33 U.S.C. § 1341, to assure that a license complies with applicable water quality standards.

Water Quality Standards: designated beneficial uses, narrative or numeric criteria, and an anti-degradation policy adopted by the State under CWA section 303, 33 U.S.C. § 1313, for protection of the quality of water affected by human activities, including hydropower projects.

1 Introduction

The Hydropower Reform Coalition (HRC) publishes this Toolkit to encourage effective citizen participation in the licensing of non-federal hydropower projects.

The Federal Energy Regulatory Commission (FERC) decides, through licenses, how such projects will be constructed, operated and maintained. Licenses determine how to allocate river flows between energy generation and other beneficial uses recognized by the Federal Power Act (FPA) and other applicable laws. Effective citizen participation helps assure that licenses protect and restore fish and wildlife resources, recreation, and water quality of the rivers affected by these projects, which are located in 47 states.

Between 1993 and 2005, FERC issued nearly 350 licenses. Most activity in hydropower regulation relates to the relicensing of existing projects. A total of 1,011 licenses are in effect. A license for a given project has a term of 30 to 50 years, subject to renewal. Five years before the current license expires, the licensee must start a relicensing proceeding. It formally notifies FERC of its intent to seek a new license, then develops and implements a plan of study of project impacts on the resources of the affected river. Using study results, it files an application for a new license.

Meanwhile, active participants have meaningful opportunities to influence the study plan and application. They may assist the licensee to pick the study methods, cooperate in fieldwork, interpret study results, and even draft the new license application. Most importantly, they may negotiate a settlement with the licensee that, if approved by FERC, will be the basis of the new license. Such a settlement is river democracy in action.

. This is intended to help you understand the fundamental structure of a licensing proceeding, We have attempted to describe these requirements in a neutral manner and, for that reason, have solicited the peer review

We also state our recommended strategies for effective participation in a licensing proceeding, which spans five years or more. Effectiveness means that you add value to the evidentiary record that the licensee will compile regarding project impacts, and that you persuade FERC and other regulatory agencies to adopt license conditions which further the public interest as you understand it. Since the evidentiary record in each licensing proceeding is two to twenty linear feet of filing space, and since the licensee and other participants represent many different interests, you participate to assure a fair hearing for that balance which you believe best serves the public interest.

Our recommendations are highlighted in italicized text in text boxes.

Fundamentally, what is necessary for effective participation is curiosity about the project and its impacts, along with the patience or at least the stamina to keep current on the evidentiary record, attend relevant meetings - many dozens in the course of a proceeding involving collaboration between the licensee and participants - and otherwise represent your interest in that crowd. In exchange for your efforts, you have an extraordinary opportunity to use the leverage provided by the FPA and other applicable laws to protect and restore a river controlled by a hydropower project. The law provides that all participants with an interest in the decision have equal standing to participate. With few exceptions, the groups and individuals who make this commitment view it as one of the better decisions they have made to improve the future of our rivers.

The Licensing Handbook describes the mechanics of the licensing processes. . It reflects new directions in hydropower regulation, including the Integrated Licensing Process (ILP) (July 2003) as well as FERC's increasing reliance on settlement as the basis of a license.

1.1 Who is the Hydropower Reform Coalition?

The Hydropower Reform Coalition (HRC) is an association of over 130 national, regional, and local membership groups dedicated to enhance the quality of rivers controlled by hydropower projects, ensure public access to these lands and waters, and reform the licensing process to ensure public participation and to improve the quality of the resulting decisions. These groups represent more than 1.5 million people across the country.

The HRC was formed in April 1992. Our member groups have subsequently intervened in over 75% of licensing proceedings. These groups are signatories to more than 200 comprehensive settlement agreements which, as the basis for new licenses, have restored water quality, fisheries, and recreational access to thousands of miles of rivers and streams.

1.2 Toolkit Organization

The Toolkit consists of five parts - the main text and four appendices.

The main text is a comprehensive description of the procedures and other requirements for any licensing proceeding. *Section 1* is this introduction. *Section 2* is an overview of hydropower

regulation. It explains how FERC and other agencies relate in a licensing proceeding, describes the basic structure and content of a license, and explains how a license is enforced or amended. **Section 3** describes the fundamental elements of the licensing process, as required by FPA section 15. Since a project uses public resources, FERC makes a licensing decision only after notice, public comment, and other opportunities for affected persons to influence that decision. Among other things, the licensee conducts field studies of baseline (or current) conditions, prepares its license application to describe proposed operation and impacts, and consults with agencies and other participants in these efforts. You, in turn, may submit further information to the record, negotiate with the licensee and other participants, intervene as a formal party in the proceeding, and seek rehearing or judicial review of a licensing decision that you believe does not comply with applicable laws. FERC uses three licensing processes - the Traditional, Alternative, and Integrated Licensing Processes. They include fundamental elements discussed in Section 3 but differ in timing, sequencing, and even the substance of the steps. **Section 4** discusses the Integrated Licensing Process (ILP), which will be the required process as of July 2005 unless a licensee obtains FERC's permission to use another; **Section 5**, Traditional Licensing Process (TLP); and **Section 6**, the Alternative Licensing Process (ALP). Finally, **Section 7** discusses how a licensee and other participants may negotiate a settlement which, if approved by FERC, will serve as the basis for the license. Settlement negotiation is permitted and indeed encouraged in each of the licensing processes.

1.3 Legal Research Relevant to Hydropower Regulation

You may obtain all documents filed in any licensing proceeding through FERC's eLibrary, discussed in Section 3.2.2(G). You may obtain court cases through a fee service like Westlaw or LEXIS, for free at <http://www.findlaw.com/>, or in your public library. You may access statutes and rules in the same manner, or through <http://www.loc.gov/>, which is the Library of Congress' website.

2 Overview of Hydropower Regulation

With very few exceptions, FERC regulates all operating *non-federal* dams that generate electrical energy anywhere in the U.S. Its jurisdiction extends to each dam that meets at least one of the following tests: (1) occupancy of federal public land, (2) regulation of a navigable stream, (3) use of surplus water or water power from a federal dam, or (4) if constructed after August 26, 1935, any effect on interstate commerce, including linkage of the project to the grid. This jurisdiction includes any dam that, in addition to electrical generation, also serves other functions, such as water supply or flood control.

2.1 Who is FERC?

In 1935 Congress enacted the Federal Power Act (FPA) Part I to regulate non-federal hydropower projects in order to contribute to the comprehensive development of our rivers for energy generation and other beneficial uses. As a result of agency reorganization, in 1977 the FPC was renamed Federal Energy Regulatory Commission (FERC), which is now an independent agency within the Department of Energy. FERC consists of five Commissioners (including a Chair) who, having been nominated by the President and approved by the Senate, are appointed for a term of five years. The Commissioners vote on each licensing decision, unless uncontested. FERC's Office of Energy Projects (OEP) is the staff office responsible for the management of each licensing proceeding until the Commissioners' vote, and for the supervision of each licensed project thereafter to assure compliance with the license.

Under FPA section 10(a), the fundamental purpose of each license is to assure that a project is "best adapted to a comprehensive plan of development" of the affected river basin for the

beneficial uses of energy generation, water supply, flood control, recreation, and fish and wildlife. Under FPA section 4(e), which resulted from the 1986 amendments to the FPA, FERC must now give “equal consideration to energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.” In sum, when making a licensing decision, FERC must assure that the project achieves a balance of beneficial uses of the affected waters and lands, as required by the FPA.

2.2 Several Kings of the Hydropower Mountain

Only FERC may issue a license to construct, operate, and maintain a non-federal hydropower project. It is ultimately responsible for deciding whether to license a given project, and if so, under what conditions. As Congress intended in adopting the FPA in 1935, this exclusive jurisdiction helps to ensure that such projects are regulated in a consistent manner in and across our river basins.

However, State and other federal agencies have significant authorities to prescribe or recommend environmental conditions, not preempted by the FPA. In practice, FERC's exclusive authority to issue a license is subject to checks and balances administered by other agencies. The community of agencies involved in licensing proceedings includes the following federal as well as state agencies.

As discussed below in Section 2.3.4, each license includes duties for project operation, such as release of a minimum flow, for the protection, mitigation, and enhancement of the affected river. We use the shorthand “environmental condition” or “environmental measure” to describe any such duty in a license.

2.2.1 National Marine Fisheries Service

The National Marine Fisheries Service (NMFS), an agency within National Oceanic and Atmospheric Administration of the U.S. Department of Commerce, manages, conserves, and protects living marine resources that spend at least part of their life cycle within the U.S. Exclusive Economic Zone. NMFS administers several statutes that bear on licensing decisions. Under the Endangered Species Act (ESA), NMFS may establish Reasonable and Prudent Alternatives or Measures to prevent project take of marine animals or diadromous fish listed under the ESA. Under the Magnuson-Stevens Fishery Conservation and Management Act, NMFS consults with FERC on any licensing action that may adversely affect essential fish habitat (EFH) for diadromous fish. Under FPA section 18, NMFS may prescribe a fishway as a mandatory license condition to protect diadromous fish. Under the Fish and Wildlife Coordination Act (FWCA) and FPA section 10(j), NMFS recommends conditions to protect, mitigate damages to, and enhance fish and wildlife, including related spawning grounds and habitat. Under FPA section 10(a), NMFS recommends other conditions to ensure that a project is best adapted to comprehensive plans for developmental and non-developmental resources.

2.2.2 U.S. Department of Interior

The Department of Interior protects and provides access to the nation's natural and cultural resources and honors our trust responsibilities to the Indian Tribes. It includes several agencies that routinely participate in licensing proceedings.

Fish and Wildlife Service (FWS) conserves, protects, and enhances fish, wildlife, and plant resources which do not use marine habitat or otherwise are not under NMFS' jurisdiction. FWS may submit a mandatory fishway prescription for riverine fish under FPA section 18; adopt Reasonable and Prudent Alternatives or Measures for non-marine species listed under ESA; and

may recommend other conditions under FPA sections 10(j) and 10(a) and the Fish and Wildlife Coordination Act.

National Park Service (NPS) is responsible for preserving unimpaired natural and cultural resources and values of the National Park System and implementing technical assistance provisions of the Wild and Scenic Rivers Act of 1968 and the Outdoor Recreation Act of 1963. The NPS is actively involved in hydropower regulation on both Park and non-park lands. In most proceedings where the NPS participates, hydropower operations do not directly affect a National Park. In this circumstance, the NPS' primary function is to advise FERC under FPA Section 10(a) and represent public interests in recreational and river conservation opportunities. In proceedings where hydropower operations directly affect a National Park, the NPS also advocates for protection and enhancement of park resources. Although the FPA specifically excludes the use of Section 4(e) authority if the affected reservation is a National Park or Monument, NPS has such authority for other reservations, such as National Recreation Areas.

Bureau of Land Management (BLM) administers federal lands not included in National Parks, National Fish and Wildlife Refuges, or National Forests. Under FPA section 4(e), it may prescribe mandatory conditions for any such lands set aside as a federal reservation. Under FPA section 10(a), BLM may also recommend conditions for a project's use of other lands and associated waters.

Bureau of Indian Affairs (BIA) seeks to enhance the quality of life, promote economic opportunity, and carry out the responsibility to protect and improve the trust assets of Indian Tribes.

Under FPA section 4(e), the BIA may prescribe mandatory conditions for the protection and use of Tribal reservations occupied by a project. BIA may recommend other conditions under FPA section 10(a) to protect Indian reservations and trust assets from any adverse effects of other projects.

Bureau of Reclamation (BOR) constructs and operates federal dams (and related facilities) for water supply, hydropower generation, and other beneficial uses under the Reclamation Act. It participates in a licensing proceeding if a powerplant that a non-federal licensee proposes or owns is located at a federal dam, or if a licensed project may otherwise affect the operation of such a dam.

United States Geological Survey (USGS) collects and publishes scientific data on our natural biological and physical resources, including rivers. USGS operates flow gages and undertakes other research and monitoring programs that collect scientific data regarding the resources affected by licensed projects. A licensee or other agency may contract with the USGS for the collection of scientific data or for the design of a hydrologic or biologic monitoring program or fish passage facility.

2.2.3 Forest Service

The Forest Service, an agency within the U.S. Department of Agriculture, administers National Forests and Grasslands. Under FPA section 4(e), the Forest Service may require that a license for a project occupying lands or waters of a National Forest include those conditions necessary to assure the protection and use of the affected resources. Such conditions assure the high productivity of renewable resources as provided by the Multiple Use-Sustained Yield Act and National Forest Management Act. The Forest Service requires a Special Use Permit for any new project not licensed as of the enactment of ECPA. Under FPA section 10(a), it may recommend environmental conditions for a project that affects a National Forest without occupying it.

2.2.4 U.S. Environmental Protection Agency

The Environmental Protection Agency (EPA) administers various permitting programs to protect life and property against the adverse impacts of various forms of pollution. It administers the

Clean Water Act (CWA), under which it approves the water quality standards that a State then applies in a water quality certification for an individual project. Under the Clean Air Act, it has general authority to review all environmental documents issued by federal agencies, including those issued by FERC.

2.2.5 U.S. Army Corps of Engineers

The Army Corps of Engineers (Corps) has built and operates 75 dams and other facilities that, in addition to their primary purposes of flood control and navigation, generate 25% of the nation's hydroelectricity incident to flood control and navigation. These dams are not regulated by FERC, whose jurisdiction is limited to non-federal facilities. However, a license may require that a project coordinate operations with any Corps' dam located in the same watershed. Finally, the Corps may establish protocols for the flood control operations of any licensed project and may require any measure necessary for commercial navigation.

2.2.6 State Agencies

Under CWA section 401(a), states must issue a certification that a license will comply with all applicable water quality standards. FERC may not issue a license if the State denies such certification. The State also administers property rights both in land and waters occupied by a project. Through its public utilities commission, the State regulates the rates for any retail service of electricity generated by a project. Through its department of fish and game, the State may recommend conditions, under FPA sections 10(a) or (j) (see Sections 2.3.4(B) and (C)), for the protection, mitigation, and enhancement of fish and wildlife resources and recreation. The State also must assure protection of coastal waters affected by a project, in compliance with the Coastal Zone Management Act (see Section 2.3.4(G)).

Agencies are significant allies to citizen groups and other participants in licensing proceedings. They have unique technical expertise in addition to their regulatory authorities. While you have standing to intervene and otherwise participate in any licensing proceeding, you should never view yourself as an island. You should try to persuade the agencies to use their respective authorities to further the public interest in a manner that includes your interest in the affected lands and waters. FERC must provide deference to their recommendations, and it must adopt their mandatory conditions, while it has more leeway with citizen groups.

To that end, you should establish a working relationship with the assigned agency staff. You should offer to help them as appropriate, by providing needed information, supporting their additional study requests to the licensee, and even co-drafting documents. By the time settlement negotiations start, or, when the agencies are drafting their final conditions for submittal in a disputed proceeding, the agencies hopefully will consider you as their ally or at least as a trusted source of information, and they will give weight to your recommendations. Bear in mind that, by law, any agency is required to give the same opportunities to other participants whose interests may be conflicting. Your power of persuasion turns on your trustworthiness.

2.3 What is a FERC License?

A license is a regulatory document that permits the dam owner to use public waters for energy generation. It specifies the conditions for construction, operation, and maintenance of the project. When final, a license is enforceable by FERC or the U.S. District Court through fines or injunction. FERC may revoke a license in the event of systematic non-compliance.

2.3.1 Types of Licenses and Related Approvals

Depending on the generating capacity and other relevant features of a project, FERC may issue a license or an exemption for a given project. It may also issue a preliminary permit for the purpose of site study preparatory to a license application.

A. License

This Toolkit focuses on licenses, which cover 99% of the generation capacity under FERC's jurisdiction. There are different forms of license for a constructed or an unconstructed project, and for major or minor generation capacity. A list of current licenses, sortable by state, river, utility, and project name, is available at <http://www.ferc.gov/industries/hydropower/gen-info/licenses.xls>.

B. Exemption

An exemption applies only in the limited circumstances where a project is located on an existing water supply conduit (such as an irrigation canal) on non-federal lands and where the project has a generation capacity of 15 MW or less or, if operated by a state or local government solely for municipal water supply, 40 MW or less; or uses a natural stream feature (such as a waterfall) without a dam or other storage capacity and has a generation capacity of 5 MW or less. exemption is perpetual, unlike a license, which has a term of years as discussed below in Section 2.3.5. It includes whatever environmental conditions are submitted by fish and wildlife agencies, not subject to the normal limitations on scope, in order to prevent loss or damage to fish and wildlife resources. FERC may include any additional conditions necessary to insure the facility continues to comply with these conditions. A list of exempted projects is available at www.ferc.gov/industries/hydropower/gen-info/exempt.xls.

FERC has only granted 66 exemptions in the past 10 years. As a result, this form of license is a not a focus of the Toolkit. For further information about the exemption process, and for standard conditions of exemptions, see www.ferc.gov/industries/hydropower/gen-info/l-forms.asp.

C. Preliminary Permit

A developer interested in a potential site for a new hydropower project may first apply for a preliminary permit. A permit is an exclusive right to study that site and to file a license application during the permit term, which is three years subject to renewal and periodic reporting. FERC will grant a permit application unless a legal barrier precludes it from licensing any subsequent project.

FERC may also decline to issue a permit where it has rejected a license application for the same site and development. If competing permit applications are filed for the same site, FERC grants the permit to the applicant which: is a state or municipal utility, will “best serve the public interest,” or was filed first in time. A list of current preliminary permits is available at www.ferc.gov/industries/hydropower/gen-info/pre-permits.xls.

A preliminary permit is like staking a claim. It gives the permittee the exclusive right to apply for a license for a period of 36 months and conduct studies to determine whether to proceed with a license application. A preliminary permit, which authorizes such field studies, does not authorize any construction or guarantee the issuance of a project license in the event the permittee files a license application.

A preliminary permit is subject to conditions. The standard conditions are stated in FERC Form P-1, available at www.ferc.gov/hydropower/gen-info/l-forms.asp. FERC will also impose additional conditions on the permittee if circumstances warrant. Your comments may influence FERC to include conditions to protect sensitive resources against the adverse impacts of any studies. FERC will not deny a preliminary permit application on the basis of your objections to a future license application. FERC will only deny an application if (1) a legal barrier exists that would absolutely prohibit the licensing of the proposed project, or (2) the application is truly speculative. We recommend intervention in a permit proceeding, in part because you will

receive the required 6-month progress reports from the permittee and also notices of proposed amendments to, extension of, or cancellation of the permit

See *Symbiotics, LLC*, 99 F.E.R.C. ¶ 61,099 (2002). Thus, FERC will deny a permit application for a site if it had previously denied a license application on the ground that unmitigable adverse impacts would outweigh energy and other developmental benefits, and circumstances have not changed since. *Id.*

2.3.2 What is Included in the "Project"?

FERC licenses a “complete unit of development.”¹ This consists of all dams, reservoirs, other engineered structures, as well as property rights in lands and waters as necessary for construction, operation, and maintenance of a project. Consequently, a licensee must acquire and retain title in fee to, or the right to use in perpetuity, of such lands and waters. The license establishes a project boundary which includes all such structures, lands, and waters. Under FPA section 9, a license incorporates the approved “maps, plans, and specifications” which establish that boundary.

The project boundary is an essential element of the project definition. At a minimum, the boundary includes any dam, powerplant, or other structure used for generation of electricity. However, the selection of which lands and waters to include is somewhat discretionary, as a function of FERC's determination of which are necessary for mitigation of project impacts. FERC's policy is that its jurisdiction and thus enforcement capability extend only over those lands and waters within the project boundary. This policy means that the selection of lands and waters determines the scope of the licensee's mitigation duty. Thus, it effectively means that a license does not include off-site mitigation measures even if the project's adverse impacts may not be fully mitigated within the project boundary.

As a matter of policy, the HRC believes that the project boundary should include: (i) any bypass river reach between a dam and powerhouse; (ii) reservoir shoreline up to the high water mark; (iii) all other lands needed for protection, mitigation and enhancement of resources adversely affected by the project.

In some proceedings, FERC has allowed a bypass river reach to be removed from a project boundary, on the ground that the dry channel is not a project work. The HRC disagrees with this position, since the bypass reach is plainly integral to a plan of development which separates the dam and powerhouse. We have defeated other such amendment applications attempted late in the license term, on the ground that the project boundary is a relicensing issue.

In other instances, FERC has approved applications to remove transmission lines from a project boundary when the character of the line changes from primary to secondary - even though that classification may affect jurisdiction over the project as a whole (e.g., where the only basis for jurisdiction is the occupancy of federal lands by the transmission line). The HRC has opposed such reclassification where apparently motivated to eliminate jurisdiction over the project as a whole.

In sum, project boundary is not a legal nicety - instead, it is an essential element of the license which directly affects non-power benefits. Consider specifying the project boundary in any settlement agreement.

Under FPA section 3(11), 16 U.S.C. § 796(11), a project is a “complete unit of improvement or development” consisting of, among other things, “a power house, all dams and appurtenant works and structures (including navigation structures) ... and all storage, diverting or forebay reservoirs ... all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit” 16 U.S.C. §§ 796(11)-(12), 797(e).

1.

Standard Article 5 requires a licensee to acquire and retain title in fee to, or the right to use in perpetuity, project properties sufficient to accomplish all project purposes. Under the article, the licensee has five years from the issuance of the license to obtain these properties. *See* Standard Article 5, Forms L-1 through L-21, 54 FPC 1799-1923 (October 1975), *supra*. Such rights inland and water must be adequate for the performance of all duties under the license. From a legal perspective, the rights must enable FERC, through the licensee, to protect the public interest affected by a project. Any non-licensee who owns or controls rights necessary for project operation must become a co-licensee or must transfer such rights to the licensee.

2.3.3 Who is the Licensee?

A license identifies the agency, corporation, or individual that is legally responsible for compliance with license articles. The licensee thus is responsible for the adequacy of construction, operation, and maintenance of the project as so required. There may be co-licensees.

2.3.4 What are the Basic Legal Responsibilities of Licensee?

The license establishes the legal responsibilities of a licensee for construction, operation, and maintenance of the project. Generally, for any unconstructed project, the license specifies the plan (including schedule) for design and construction. Once constructed, license articles relate to operation typically specifying a range of reservoir levels, a schedule (varying by year-type or season) for flow release from the dam or powerhouse, and a ramping rate that may limit the rate of change in the powerhouse discharge or other release. For example, the licensee has discretion how to operate the project after compliance with these license articles. Thus, if a license requires a minimum flow release of X cubic feet per second (cfs), the licensee may release more than X cfs at any given time. A licensee may not modify project operations or works prescribed by the license without FERC's prior approval.

A typical license also requires recreational facilities on any reservoir or river reach within the project boundary, such as boat launches. It specifies measures for fish passage and meeting water quality standards as well as monitoring methods and schedules for measures such as the minimum flow schedule to assure compliance and (in some recent licenses) to evaluate whether the measures have the intended results. Finally, it requires periodic reports of the monitoring results and also standard reports of recreational use and safety as specified in FERC's general rules.

The format of a license is spelled out in numbered articles establishing duties for construction, operation, and maintenance of the project. A license consists of Standard Articles (*see* Section 2.3.4(A) below) that are generally applicable. In addition to the Standard Articles, FERC adopts numbered articles that establish conditions for construction, operation, and maintenance of the specific project. These are specific to the project circumstances and specify how, when, and where a given measure (such as release of a minimum flow, or a recreational facility) will be implemented. At its own discretion, FERC may establish mandatory conditions for protection of environmental quality under FPA sections 10(a) and 10(j), discussed sequentially in Sections 2.3.4(B) and (C) below. A license incorporates those articles or conditions submitted by agencies other than FERC prescribed under various authorities, including FPA section 4(e) or 18, ESA section 7, CWA section 401(a), and CZMA. When timely submitted in the course of a licensing proceeding, FERC incorporates these conditions verbatim into the license, even if it might have established a different condition if left to its own discretion. In other words, a community of regulatory agencies shares the licensing decision (*see* Section 2.2 above).

In recent years, some industry representatives have complained that FERC has been reduced into a word processor, compiling other agencies' submittals of mandatory conditions into a

license. While overstated, that beef is not bad news for the conservation community. Before these agencies began to systematically use these authorities in the 1990's, FERC tended to give short shrift to non-power uses of lands and waters. Now, it has substantial incentives to cooperate with these agencies as they develop their mandatory conditions. This is not criticism of FERC - it just acknowledges the fundamental value and effect of checks and balances.

While you should encourage each such agency to use its authority deliberately (e.g., a measure may be overturned on appeal if outside of the scope of the agency's authority or not supported in the record), you should also support the result of affirmative protection or restoration as promised in the environmental statutes. In the face of political pressure from FERC (whose primary mission is energy) or the licensee (which reasonably seeks to minimize new capital costs), your support helps give agency staffs the necessary basis for such conditions.

A. Standard Articles

All licenses issued since 1953 and many issued previously, include Standard Articles, which are incorporated by reference. While these vary slightly between license categories (for example, existing versus unconstructed status, or minor versus major generation capacity), they establish general duties for the protection of the public interest, including coordination of water regulation in a river basin.

One of these Standard Articles reserves FERC's authority to require additional or different environmental conditions in advance of relicensing, either on the motion of a regulatory agency or other person or its own initiative. This article balances the licensee's need for investment security over the license term, with the countervailing need to adjust project design or operation if circumstances relevant to the public interest change significantly after license issuance. Thus, Standard Article 15 for a major project (over 5 MW) provides: "The licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of the State in which the project or a part thereof is located, after notice and opportunity for hearing."

Other Standard Articles permit reopening a license (a reopener) for modification of recreational facilities, coordination of energy operations in a watershed, and other purposes. Mandatory conditions submitted under FPA section 4(e) or 18 or CWA section 401(a) may include reopener at the initiative of the prescribing agency.

FERC rarely reopens a license under the reservation of authority contained in a Standard Article or the numbered articles that require specific measures for protection, mitigation, and enhancement of environmental quality. It probably denies 90% or more of the motions for reopener filed by agencies or other participants. Its view is that a license must provide financial and legal security to the licensee in order to assure recovery of the costs of construction, operation, and maintenance; and that the environmental measures required by numbered articles should not be changed unless the law or circumstances that existed when the license issued have materially changed.

The HRC differs as to what constitutes a material change in circumstances. You have greater leverage to reopen the license if it contains specific benchmarks regarding the circumstances that are the basis for the environmental measures. We recommend that you seek specific findings in a license to describe the expected impacts of such measures. "E.g., if this flow schedule is adopted, then the project discharge will also have a dissolved oxygen context of X ppm or more." That way, if the expected impacts are not achieved, FERC will have a rational basis for reopening the license.

The ESA is a primary driver for reopening a license mid-term. FERC may be compelled to reopen a license by initiating formal consultation with FWS/NMFS, if one of those agencies finds

that continued operation may adversely affect a species listed after license issuance and petitions for such

reopener. See In re American Rivers and Idaho Rivers United, 372 F.3d 413 (D.C. Cir. 2004). Another primary driver for reopener is a change to water quality standards or new monitoring data that demonstrate that the project does not comply with existing standards. If the certification includes a reopener provision, the administering State agency may reopen the certification (and thus, by necessary effect, the license) to achieve such compliance.

). These Standard Articles, collected in forms by type of license, are available at www.ferc.gov/industries/hydropower/gen-info/l-forms.asp.

B. FPA Section 10(a) Conditions for Protection, Mitigation, and Enhancement of Environmental Quality

Under FPA section 10(a)(1), a project must serve the public interest in a river basin, not just the licensee's interest in power generation. A license must ensure that the project adopted “shall be such as in the judgment of the Commission will be best adapted to a *comprehensive plan* for improving or developing a waterway or waterways for the use or benefit of interstate or foreign commerce, for the improvement and utilization of water-power development, for the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat), and for other beneficial public uses, including irrigation, flood control, water supply, and recreational and other purposes....”

The record compiled in the proceeding is a comprehensive plan. In addition, FERC will give consideration to a plan which a federal or state agency has adopted under its own authority, if the plan (1) is a comprehensive study of one or more of the beneficial uses of the river; (2) specifies the standards, the data, and the methodology used; and (3) is filed with FERC's Secretary before Section 10(a) conditions are established for a given project.³ An agency or other participant may submit a plan for acceptance as comprehensive in the course of a proceeding, or even outside of any proceeding. The Secretary maintains a list of comprehensive plans approved by FERC.

Under FPA section 10(a)(2), FERC must consider whether a license or license condition is *consistent* with applicable comprehensive plans. For example, FERC must determine whether a flow objective, as established in a State's recognized “comprehensive plan” for river management, is consistent with the conditions in a proposed license. FERC has occasionally denied and frequently conditioned license applications in order to ensure consistency with the general tendency of such plans. Inconsistency with a management objective in any one comprehensive plan, however, is not controlling.

Project revenues are a relevant factor under Section 10(a)(2). FERC evaluates the fiscal impact of each alternative, assuming existing conditions in the electricity market served by the licensee. It does not attempt to forecast changes in market conditions, nor will FERC grant or deny a license based on a prediction of economic viability. Rather, the licensee makes a choice whether to accept a license, and if it does, it is obliged to comply, regardless of whether project revenues are different than predicted.

Early in the proceeding, you should determine which comprehensive plans accepted by FERC apply to the proposed project. State and federal agencies may have adopted other management plans which appear to meet the requirements for a comprehensive plan, but which have not been submitted to FERC for acceptance under FPA Section 10(a)(2). If so, you should encourage the agencies to submit the plans, or do so yourself. Even if FERC determines that a plan does not meet the required definition, you should notify FERC and the licensee and request that the plan be included in the Pre-Application Document(PAD) (see Section 3.2.2(A)).

As the proceeding goes forward, your comments should address any conflicts between the project and the management objectives of relevant plans. For example: “The license application

does not propose sufficient minimum flow to support the fishery below the dam, an identified goal of the following comprehensive plan” You should request that the licensing decision address the specific objectives of these plans. FERC has a tendency to make a conclusory finding (expressed in a single paragraph) that a decision is consistent with all applicable plans, and not address specific objectives. Thus, a license may not be consistent with a specific objective in a given comprehensive plan.

16 U.S.C. § 803(a)(1); *see also* Udall v. Federal Power Commission, 387 U.S. 428 (1967) (emphasis added).

C. FPA Section 10(j) Conditions for the Protection, Mitigation, and Enhancement of Fish and Wildlife Resources

Unlike FPA section 10(a), which balances energy generation and all other beneficial uses of the affected river, FPA section 10(j) requires that a license “adequately and equitably protect, mitigate damages to, and enhance, fish and wildlife (including related spawning grounds and habitat) affected by the development, operation, and management of the project....” NMFS, FWS, or a state fish and wildlife department may recommend such conditions. If timely submitted, all such conditions must be included in the license, unless FERC makes written findings that: (1) a given condition is inconsistent with the purposes of the FPA Part I; and (2) the alternative condition adopted by FERC provides the protection, mitigation, and enhancement required by FPA section 10(j)(1).

Because Section 10(j) submittals are recommendations, FERC may reject many on the basis of the above findings. To increase the chances of acceptance, you should encourage each resource agency to analyze the consistency of its Section 10(j) conditions with the purposes of the FPA, specifically electricity generation. Its submittal should state why it believes the conditions are consistent. Typically, when FERC finds that a condition is inconsistent, it relies on the adverse impacts on generation, capacity, or revenues. This is often simplified by stating that the “project is inconsistent with a comprehensive plan for development.” For that reason, as discussed in Section 3.2.2(B), you should assure that the agencies have access to a model which predicts such impacts, and demonstrate that in relative terms, the costs are not as great. For instance, while the costs of a mitigation measure may appear high, they may be modest as a fraction of the net project revenues or when distributed among ratepayers. You may prepare such a model if you have the means. The HRC has developed such models and may be willing to share them and assist participants in finding consultants who can help. Establish alliances with organizations that would benefit from acceptance of Section 10(j) recommendations. Work with hunting and fishing clubs and similar interests to build support for fish and wildlife measures, on the ground of local financial benefits. Use the media to share your vision for the restoration of natural resource values.

D. FPA Section 4(e) Conditions for Protection of a Federal Reservation

If a project is located within a federal reservation such as a National Forest or tribal land FPA Section 4(e) applies. FPA Section 4(e) establishes two substantive requirements. First, FERC must find the license will not interfere or be inconsistent with the original purposes of such reservation.”

Second, the federal agency managing the reservation may require whatever conditions it finds are necessary for the reservation's protection and use, although such conditions may not expressly veto the license. FERC must incorporate these conditions into the license. FERC may

reject or condition a license if it believes a condition exceeds the scope of FPA section 4(e). In this event, FERC may issue the license under protest after which it may join in judicial review of that condition. FERC, however, may not amend or delete the condition on its own authority.

An agency with Section 4(e) authority for a given project may prescribe any conditions necessary to protect the lands and waters of the reservation. These conditions range from flow schedule to recreational improvements such as improved river access. To understand the “original purposes of the reservation,” as defined by Section 4(e), you should review the original legislation that created the reservation as well as the plans and policies adopted by the federal agency for management of the reservation. Meet with the agency to understand how its staff views their obligations in the licensing process.

Early in the proceeding, you should identify the specific management requirements in the plans applicable to the project. Analyze whether and how the license application and alternatives appear to be consistent with those requirements. Some management requirements may be vague or general so work to convince the agency to make interpretations of those requirements early in the process.

File a written request that the agency include you in its mailing list for the Section 4(e) conditions. This should be done early in the proceeding, and not later than when FERC publishes notice that a license application is complete. You should insist on the ability to participate in any negotiations the agency undertakes with the licensee.

Like FERC in its treatment of comprehensive plans, agencies with Section 4(e) authorities sometimes do not articulate the nexus between the conditions they adopt and the specific management requirements in applicable plans for the reservation. In your comments on the preliminary or final Section 4(e) conditions, focus on those specific management requirements. Articulate a clear and rational nexus between the conditions and requirements if the agency does not otherwise provide it. Acknowledge any ambiguities and conflicts between the requirements, and explain how best to resolve such conflicts.

You should address your correspondence on Section 4(e) issues directly to the agency. You should also file any such correspondence, including your written comments on the Section 4(e) conditions, with FERC. Your standing to appeal such conditions, through rehearing or judicial review, depends on your timeliness and specificity in such comments. It may be helpful to reach out to other constituencies who concentrate their work on public lands and have experience working with specific land managers. Request that members of Congress, State legislators, or County supervisors file letters urging protection and restoration of natural resource values.

E. FPA Section 18 Fishway Prescription

Under FPA section 18, FWS or NMFS may prescribe a facility for fish passage (such as a fish ladder or a trapping site), operation and maintenance of the facility, and any other conditions necessary to ensure effective passage. A Section 18 prescription applies to upstream or downstream passage, and diadromous or riverine fish and aquatic species such as eels and mussels. The agency may also reserve its authority to adopt or amend a prescription after license issuance. This authority may not directly address the impact of fish entrainment unrelated to passage facility, since that impact is instead within the scope of FPA section 10(j) or (a). A Section 18 prescription may address entrainment indirectly, by trying to maximize the efficiency and safety of a downstream fishway. Further, the agency may not use this authority to veto the license in the event that passage is infeasible.

As with FPA section 4(e), FERC must incorporate a Section 18 prescription timely submitted by FWS or NMFS. If it finds that the condition exceeds the permissible scope (e.g., by addressing fish entrainment directly), it may refuse to issue the license, or it may issue the license “under protest” with the objectionable condition subject to judicial review.

Work closely with FWS/NMFS in the development of their Section 18 prescriptions. FERC's ex parte rule (see Section 3.2.2(F)) does not apply to such discussions. Early in the proceeding, make a written request that FWS/NMFS add you to its mailing lists. Ask to be included in any negotiations it undertakes with the licensee. Review any management plan relevant to the prescription, whether adopted by FWS/NMFS or the State fish and game department and confirm that the plan is filed with FERC. If it is not, ask the agency to do so. Identify each fish species subject to the plan and any specific management requirement that may apply to the Section 18 prescription. File written comments on the draft prescription with the prescribing agency and FERC. Although FWS/NMFS may establish a deadline for such comment independent of FERC's schedule, the draft prescription is usually released within 60 days of the Notice of Readiness for Environmental Analysis. Ask that FWS/NMFS include in their prescription a specific nexus between the prescription and any relevant management plan, and more specifically, anticipated benefits of the proposed fish passage. Work with other constituencies such as angling groups, tribes, or commercial fishermen. Undertake historical research to describe the condition of the river and its fishery. This information can be helpful in identifying goals for fish restoration or simply proving the geographic range of a given species. Invite reporters or political decision-makers out to the river during fish migration or spawning season to help them understand your proposed restoration goals. Have a stock of current or historic photos to use in media or lobbying.

F. Protection of Endangered or Threatened Species and Their Habitat

Where a project adversely affects a species of fish, wildlife, or plant listed as threatened or endangered under the Endangered Species Act, the FWS or NMFS may establish reasonable and prudent alternatives (RPA) or measures (RPM). While FERC is not required to include such measures in the license, FERC and the licensee may be liable for damages if the license results in death, injury, or other harm to the listed species. As a practical matter, FERC treats RPA or RPM as mandatory conditions.

Under ESA section 7(a)(1), FERC, like any other federal agency, must protect *and* contribute to the recovery of all threatened and endangered species affected by their actions. Under ESA Section 3(3), FERC must “use ... *all methods* and procedures which are necessary” for this purpose. Under ESA section 7(a)(2), FERC must, in consultation with FWS/NMFS, ensure that any action it authorizes, funds, or implements is not likely to jeopardize the continued existence of listed species or result in the destruction or adverse modification of designated critical habitat. In fulfilling this requirement, each agency must use the best scientific and commercial data available.

The ESA specifies special procedures for compliance with these mandates. Early in the licensing proceeding, FERC must determine whether its licensing action may affect listed species or critical habitat. Typically, the licensee will be designated as the non-federal representative for consultation and will prepare a Biological Assessment (BA) under FERC's supervision. If, on receipt of the BA, FERC finds that the licensing action will not affect such species or habitat in the project area, and if NMFS/FWS concurs (in what is called a “concurrence letter”), then informal consultation ends.

Otherwise, FERC must initiate formal consultation - with NMFS with respect to marine wildlife or diadromous fish such as salmon, or the FWS regarding freshwater and terrestrial species such as bass or frogs. FWS/NMFS will review the information provided by FERC (including the BA), evaluate the status of the affected species, evaluate the possible direct, indirect, and cumulative impacts of the licensing action; and then prepare a Biological Opinion (BO) and Incidental Take Statement (ITS).

The opinion must include: (1) supporting documentation, (2) discussion of the impacts of the action on listed species or critical habitat; and (3) FWS/NMFS' opinion as to whether the action is likely to jeopardize the continued existence of a listed species.

If the FWS or NMFS, as appropriate, finds that the project may cause jeopardy to the listed species or adversely affect critical habitat, then the BO includes Reasonable and Prudent Alternatives (RPAs). These are alternatives that avoid jeopardy or adverse modification of critical habitat in a manner consistent with the intended purpose of the project, within the scope of FERC's legal authority, and are economically and technologically feasible. If the agency finds that the project will not cause jeopardy or adverse modification to critical habitat, then the BO includes RPMs which minimize the impact of incidental take but do not modify the basic design, location, scope, duration, or timing of the Proposed Action. Finally, regardless of the type of BO, the ITS specifies the permissible level of take of the listed species.

Early in the proceeding, contact FWS/NMFS to learn whether federally listed species or critical habitat may exist in the project area. If a species is threatened as a matter of fact but not yet listed for protection under the ESA, you should consider a corollary strategy of filing a petition to list the species. Such a petition should be filed in advance of the relicensing proceeding. See 16 U.S.C. § 1533(b); 50 C.F.R. § 424.14.

If the project may affect an already listed species, make a written request that FWS/NMFS include you in any discussions with the licensee regarding the conditions of the Biological Assessment or Opinion. File comments on the Biological Assessment/Opinion both with that agency and FERC. As discussed above, you should ask the agency to include in the BO specific findings regarding the incidental take of listed species and impacts on critical habitat, to establish accountability in the RPAs or RPMs. Thus, the agency may request that FERC reopen the license, by reinitiating consultation, if these measures do not achieve the required level of protection. The ESA uses a different baseline for analysis of alternatives to protect and recover a listed species.

The baseline is historic condition.

G. Wild and Scenic Rivers Act

The Wild and Scenic Rivers Act (WSRA) provides for the protection and preservation of certain rivers and their riparian lands. A river may be included in this system by Congress or, if protected by an act of the State legislature, the Secretary of the Interior. Sections 7, 5, and 11 have special relevance for hydropower licensing.

Under Section 7, the agency administering the WSRA on a river (BLM, NPS, USFWS, or USFS) reviews any license application for a project on or affecting that river. Section 7 prohibits an original license for any project that is proposed to be located within the boundaries of a designated river or a Congressionally authorized study area. Section 7 strictly prohibits FERC from issuing a new license for any project works that lie within a designated river reach. FERC has established a policy of dismissing license or preliminary permit applications where the proposed development is barred by the WSRA.

For any project (including all works) located wholly outside designated boundaries, the administering agency determines whether the project would invade the designated area (e.g. through the backwater effect of an impoundment) or unreasonably diminish the scenic, recreational, and fish and wildlife values present at the date of designation, also called "outstandingly remarkable values" (ORVs). The standard for a Congressionally authorized study river is similar.

WSRA section 5(d) states: "In all planning for the use and development of water and related land resources, consideration shall be given by all Federal agencies involved to potential national wild, scenic, and recreational river areas." It further requires that "the Secretary of the Interior shall make specific studies and investigations to determine which additional wild, scenic and recreational river areas ... shall be evaluated in planning reports by all Federal agencies as potential alternative uses of water and related land resources involved." In partial fulfillment of

the Section 5(d) requirements, the National Park Service has compiled and maintains a Nationwide Rivers Inventory (NRI), a register of river segments that potentially qualify as national wild, scenic or recreational river areas. The NRI is a comprehensive plan under Section 10(a)(2)(A) of the Federal Power Act. Under WSRA Section 11(b), NPS is authorized to assist, advise, and cooperate with governments, landowners, or individuals to plan, protect, and manage river resources.

H. Water Quality Certification Under CWA section 401(a)

Under Clean Water Act (CWA) Section 401, FERC may license a hydropower project only if the State where the project discharges certifies that the project will comply with applicable water quality standards. FERC must include in the license any conditions the state requires in order to certify the project. The state where the project is located must assure compliance with the Clean Water Act water quality standards before issuing a water quality certification. Each state's water quality standards are made up of beneficial uses, narrative and numeric criteria, and the anti-degradation policy. If the state finds that a project would violate water quality standards and cannot be reasonably expected to meet water quality standards through remedial actions, the state must deny certification, and FERC must also deny the license. A state, however, can include limitations on discharge of pollutants (such as construction debris or erosion) and "any other appropriate requirement of State law" to assure compliance with water quality standards. Depending on water quality standards in individual states, the water quality certification can establish a variety of different types of conditions. For example, a certification may establish a minimum flow schedule or flow storage, require fish passage or creation of a recreational facility for enhanced access. A certification may also reserve the State's authority to reopen the certification, if the State determines any such condition to be necessary for such compliance. A certification can also be issued with an adaptive management plan to meet water quality targets in the future. As with Section 4(e) or 18 conditions, FERC may not amend or delete a certification condition. A licensee (or other participant) may challenge an objectionable certification only in State court.

Water quality certification may provide the greatest leverage for environmental restoration at a typical hydropower project. Early in the licensing proceeding, familiarize yourself with your State's water quality standards and its own administrative procedures for issuing water quality certification. To learn more about Section 401 of the Clean Water Act and water quality standards, go to EPA's website at www.epa.gov/waterscience/standards, <http://www.instreamflowcouncil.org/> and <http://www.rivernetwork.org/>.

Make a written request that the State agency put you on its mailing list for the certification proceeding and include you in any negotiations the agency undertakes with the applicant. Send a copy of your request to FERC for inclusion in the record.

Encourage the State to adopt written findings as the basis for its certification, to describe the expected impacts on water quality. (Many states do not.) Such findings serve as the basis for accountability that the certification actually complies with such standards over the term of the license.

Encourage the State, in its certification decision, to address project operation and all other project impacts on water quality, not just the discharge of waste. It may be useful to coordinate with organizations that have experience dealing with the state about administration of water quality standards. For larger, more controversial projects, it may be helpful to involve the governor's office or members of the state legislature. Any administrative rehearing of the certification occurs before the State, not FERC. Any judicial appeal lies to State court, not the U.S. Court of Appeals that has jurisdiction to hear an appeal of the license itself. You should be

prepared to use these procedures if a certification, in your judgment, fails to attain water quality standards as required by CWA and the counterpart state law.

I. Consistency Determination Under the Coastal Zone Management Act

Under Coastal Zone Management Act (CZMA) section 307, a license must include a valid certification approved by the State to assure that project construction and operation will be consistent with the State's coastal zone management program. FERC may not issue a license if the State, subject to approval by NOAA, determines that the project is inconsistent with that program.

Strategies for effective participation in a CZMA proceeding are the same as for a water quality certification.

2.3.5 What is the Term of the License?

Under FPA section 6, each license must have a stated term of years. Starting on license issuance, the term runs between 30 and 50 years. At the end of the stated term, the licensee must undertake the relicensing process described in Section 3.2.

As a rule of thumb, FERC generally grants a term of 30 years in a new license which includes few operational or capital improvements, 40 years for some operational but no capital improvements, and 50 years for operational and capital improvements.

License term is an important issue in settlement negotiations. Because of the value of a longer license term, a licensee may be willing to negotiate more costly environmental conditions in exchange for a longer license term.

2.4 License Amendments

A licensee must construct, operate, and maintain the project in conformity with the license. Any proposed amendment to that plan must be approved by FERC before implementation. The licensee must submit an application for license amendment to change any facility (such as the height of the dam or the capacity of the powerhouse), operation (such as the minimum flow release), or schedule for construction or operation, as prescribed in the license. Temporary deviation is permitted without formal amendment, if necessary for protection of life and property or if caused by an event beyond the licensee's control.

The application for license amendment varies by category of amendment. As a general rule, an application must contain: a description of the proposed change in facility, operation, or schedule, and supporting exhibits which document the environmental and other impacts of the amendment to the extent they differ from the impacts of the underlying license. FERC will publish public notice and take comment if the application proposes a material change in the plan of development. In that circumstance, the federal agencies with mandatory authorities may also change their prescriptions as appropriate to address the expected impacts of the amendment, and other persons may intervene and comment. Further, an amendment that involves a new or materially changed flow discharge is subject to new or amended certification.

In the Standard Articles discussed in Section 2.3.4(A), FERC reserves its authority to reopen the license on its own initiative, or on the motion of a regulatory agency or other interested person. This reserved authority permits FERC to compel the licensee to amend the license even if the licensee does not desire to do so. FERC sparingly uses this authority, which it considers to unsettle the licensee's expectation that the license will remain fixed for its term. However, FERC may amend an environmental condition if the project impact is substantially worse than predicted when the license issued, or if the required level of protection for an affected resource

has substantially changed. For example, FWS or NMFS may request that FERC initiate formal consultation and thus an amendment proceeding if: (A) a fish or wildlife species in the project vicinity is listed as threatened or endangered under the federal Endangered Species Act post-licensing, and (B) there is a risk that the project will take (kill or harm) members of that species in the absence of an amendment.

Amendments, while often necessary to address changed circumstances may also be used to reopen a resolved issue without the public scrutiny which occurs in relicensing. A licensee may, after relicensing, seek to amend the project boundary to remove project works or lands. Or, before relicensing, it may seek such an amendment of the original license in order to narrow the jurisdiction of regulatory agencies.

You may track the submittal of any amendment application through eSubscription, which is described in Section 3.2.2 (G) below. You may intervene in the proceeding if it materially affects the plan of development. You may argue against approval of such an application late in the term of an original license, on the ground that the amendment is more properly an element of a new license application.

2.5 Compliance and Enforcement of Licenses

A licensee must comply with the duties for construction, operation, and maintenance established by the license articles. Under FERC's general rules, it must submit periodic reports on recreational use and safety. It must also comply with monitoring and reporting requirements as established by the non-standard license articles. For example, it must use a gage or other reliable device to measure the release of any minimum flow. It must report non-compliance with any license article, including a temporary deviation caused by an event outside of its control. With some exceptions related to public safety, such reports are public documents, as defined in Section 3.2.2. FERC periodically inspects each project to assure the adequacy of compliance. It is impossible to operate a project in perfect compliance with a license over a term of 30 to 50 years, given the physical realities of weather, flood, land movement, and even human error. The licensee usually corrects (and reports) such non-compliance on its own initiative. If the licensee and FERC disagree whether non-compliance occurred or what the remedy should be, FERC may conduct a hearing before issuing a compliance order, which will specify the licensee's going-forward duties to return to compliance. If it finds that non-compliance is deliberate or systematic, FERC may assess an administrative penalty (up to \$10,000) or even revoke the license or exemption, although the latter remedy has only been used a few times in the history of the FPA. It may also request that the U.S. Department of Justice file a complaint against the licensee in U.S. District Court, which has jurisdiction to issue an injunction or restraining order to enjoin such non-compliance, or to issue writs of mandamus commanding any person to comply with the provisions of the FPA or any rule or order of FERC.

Any person may file a complaint alleging non-compliance with a license. A complaint must comply with the form and proof requirements established in 18 C.F.R. section 385.206.

Essentially, the complainant must describe and, to the extent feasible, document the nature and frequency of the non-compliance. As long as the complaint meets these minimum requirements, the licensee will be required to answer the complaint and any additional questions asked by FERC staff. Unless persuaded on the basis of these initial pleadings, FERC may then undertake an independent investigation - such as a field inspection. It may issue a compliance order or dismiss the complaint.

In a complaint about non-compliance with a license article, you should request specific procedures going-forward, once the licensee answers as required by 18 C.F.R. § 385.206(f). At a minimum, you should request that FERC include you in any investigation or negotiation it undertakes with the licensee. FERC takes the view that the complainant is not a formal party in the complaint proceeding and thus may negotiate without notice to you. You should also bear in

mind that a court will probably not overturn FERC's decision on the complaint, given the doctrine that an agency has generally unreviewable discretion to determine an enforcement remedy.

The HRC believes that a citizen may file a complaint in federal court to enforce the Clean Water Act water quality certification incorporated into a license, or the Incidental Take Statement adopted under the ESA. FERC and the hydropower industry generally believe that FERC has exclusive venue to enforce the license, including incorporated conditions; and as a result, may be expected to vigorously defend against any effort to enforce such conditions in another venue. Before pursuing such a strategy, you should carefully consult with your own counsel. You may wish to negotiate directly with the licensee. Unless it completely disagrees with the merits of your complaint, it may well be interested in avoiding the cost and risk of litigation, or in demonstrating its responsiveness to legitimate concerns.

3 Relicensing Process

Administrative process bores most people, notably excepting licensees and attorneys. While millions of people are passionate about their local rivers, few are willing to undertake the time to engage in the formal license proceeding. Still, citizen participation is rewarding, given the prospect of contributing to restoration of flows, installation of fish passage, protection of riparian lands, and new recreation access. Whether you achieve your objective in a final licensing decision turns largely on how well you use, indeed direct, each process step (such as an opportunity to submit evidence) to advance that objective. As a current license approaches its sunset, the licensee must decide whether to seek to renew the license. With few exceptions, the licensee does so and, two years before expiration of the existing license, files a new license application for FERC's approval. Since a new license is a recommitment of the public waters, FERC approves or rejects that application only after an adjudicatory proceeding where it provides public notice and hears and considers comments (including evidence and argument) from the licensee, as well as agencies, conservation groups, property owners, and all other participants. Thus, not less than five years before expiration, an existing licensee for a project must notify FERC of its intent whether to seek a new license.

3.1 Purpose of Relicensing Proceeding

Not less than five years before expiration, an existing licensee for a project must notify FERC of its intent whether to seek a new license. FERC has four options for its final decision in the resulting proceeding: a new license, non-power license, decommissioning, or federal takeover. FERC attempts to make a final decision in a relicensing proceeding before expiration of the current license. Its new policy, in plain English, is that “the train will run on time.” If FERC does not timely make such a decision, an annual license issues from year to year. An annual license is a non-discretionary stopgap in that circumstance. The annual license incorporates the conditions of the now-expired license and for that reason is not subject to water quality certification under CWA section 401(a)(1), although FERC has the discretion to adopt interim measures in the circumstance where the original conditions are plainly inadequate.

3.1.1 New License

FERC may issue a new license to the existing licensee or a competing applicant whose application is demonstrably superior. In the relicensing proceeding, FERC does not assume that a new license will issue. Rather, FERC must determine anew whether the project is best adapted to a comprehensive plan of development of the affected river. If issued, a new license must comply with applicable laws at this time. In other words, a licensee cannot expect its current license to be reissued without modification. FERC may also reject a license application, in which event the project will be decommissioned.

3.1.2 Nonpower License

A non-power license is a temporary license for a project that is in transition from power generation to other uses outside of FERC's jurisdiction. It is temporary, continuing only until the area occupied by the project has been restored or until another governmental agency has agreed to assume jurisdiction over the project works for nonpower uses. FERC may issue a nonpower license to restore environmental quality, or even operate for a nonpower purpose such as recreation or water supply, if it finds that the continued generation is not "in conformity with a comprehensive plan for improving or developing a waterway or waterways for beneficial public uses...." While any person or entity may submit an application for such a nonpower license, it will be issued only on the above finding and the further finding that the applicant has the capacity to perform the resulting duties. FERC has issued such licenses twice. We understand a nonpower license to be a conditional form of license surrender.

3.1.3 Decommissioning as a Result of License Surrender

Under a 1994 policy, FERC may issue an order denying a new license and requiring the licensee to decommission the project, in whole or part. Decommissioning may take many forms. These include: removing the project, or abandoning it in place in a non-functional form (e.g., filling the flowline with sand). Pursuant to that policy, FERC has approved the decommissioning of approximately 15 projects on the basis of voluntary applications, including Edwards Dam in Maine. Its authority to require decommissioning in a contested proceeding is disputed by the hydropower industry and has not been tested in any appellate case.

You should generally ask FERC to include a "No Project Alternative" as an action alternative in its NEPA analysis. Since the status quo, including the original license for a project, is the environmental baseline for such analysis, this action alternative permits FERC and the parties to evaluate future conditions without the project. This assists to segregate the project from other facilities and activities which affect natural resource values in the watershed. Where you have no actual interest in pursuing decommissioning as the licensing decision, you should clearly state that your request for the action alternative is solely intended to assure that FERC understands the project's contribution to existing conditions, so that mitigation is proportional to that contribution. Clarity about your intent is very important, since FERC and the licensee otherwise will view this request as a camel's nose in the tent (namely, as your effort to compel them to develop the record for decommissioning as the actual relicensing decision).

You may decide to advocate some form of decommissioning as the relicensing decision, in circumstances where you believe the resulting restoration of natural resource values is the best or only method to comply with Section 10(a) and other applicable law, bearing in mind that it will also result in loss of generation capacity. This is a fight that you should not start unless you have a very substantial basis in evidence and law - for example, because the project has marginal economic value for the licensee, or where the project cannot comply with water quality standards no matter what the mitigation. Bear in mind that a request for decommissioning as the relicensing decision will start a fight not just with an unwilling licensee, but also with the owners of any residential or commercial facilities around the reservoir.

3.1.4 Federal Takeover

A project may be transferred to federal ownership if the U.S. provides notice two years before license expiration and if the licensee is paid fair market value and any damages. Upon such takeover, the project exits FERC's jurisdiction, which is limited to non-federal licensees, even if the project continues to be operated for generation. Such takeover has occurred once.

3.2 Fundamental Elements of Licensing Process

FERC's final decision will determine the licensee's duties for construction, operation, and maintenance of the project. It will also dedicate the lands and waters occupied by the project to a particular use. The licensing proceeding that precedes that decision is adjudicatory. It determines private and public rights in the affected lands and waters. A license is issued (or is denied) only after a public hearing on the application, as required by the FPA Part I as well as the Administrative Procedures Act. In sum, the decision must be based on (A) proof that the licensee is ready, willing, and able to comply with a new license, if granted; (B) a record of evidence regarding project impacts on the public interest, including the licensee's field studies and an independent environmental document, and (C) consideration of comments and pleadings filed by agencies and other participants regarding the application.

This Section 3.2 addresses these fundamental elements. Sections 4-6 then describe the specific steps in the three processes - Integrated Licensing Process (ILP), Alternative Licensing Process (ALP), and Traditional Licensing Process (TLP) - that FERC uses for this purpose. While the specific steps for the ILP, TLP, and ALP differ somewhat in substance, time, and sequence, all incorporate the following fundamental elements.

3.2.1 Notice of Intent

A licensee must file a Notice of Intent (NOI) to seek a new license not less than five years before expiration of the original license. In an ILP proceeding, a license applicant can issue an NOI anytime between 5.5 and 5 years prior to license expiration. The NOI is the public notice whether the licensee intends to relicense or decommission the project. It triggers all of the steps that follow in the licensing proceeding.

Ensure you are notified of the Notice of Intent for any project in which you have an interest. In an ILP process, the licensee files the NOI at any time in the 6-month period between 5.5 and 5 years prior to license expiration. In the TLP or ALP, the licensee typically files the NOI just over 5 years prior to license expiration. In advance, file a letter with FERC, copied to the licensee, asking to be put on the mailing list for the NOI and subsequent notices. (Bear in mind that the formal service list for a proceeding is compiled only after the proceeding starts). You should also subscribe to notices for that project via eSubscription

3.2.2 Licensing Record

A license must be supported by “substantial evidence” in the record of the licensing proceeding. The evidence describes the impacts of the project (and any alternatives for facility design or operation) on the electricity system, environmental quality, recreation, and other beneficial uses of the lands and waters. The record must support a decision whether the project is best adapted to a comprehensive plan of development of the basin over the license term, which is 30 to 50 years. Evidence must be written and subject to rebuttal (or support) by any participating party.

Scientific evidence (e.g., how will project operation affect the availability of habitat for a fish species?) must be based on a generally accepted analytical method that is properly applied.

The record in a licensing proceeding consists of several parts, addressed in subsections below. These are: (A) Pre-Application Document, (B) Study Plan, (C) Application, and (D) Evidence Developed by other Participants, and (E) Environmental Document prepared under NEPA.

Further, as discussed in subsection (F) below, any communication with OEP staff on the merits, after the license application is filed must be on the record.

A. Pre-Application Document

The Pre-Application Document (PAD), which is filed with the NOI, compiles existing information about project facilities, operation, and known or potential impacts on environmental quality, including protection, mitigation, and enhancement measures.¹ The PAD must include available information such as studies, raw data, maps, and other information that is either in the licensee's possession or obtainable from third parties including agencies and the public. The license must use “due diligence” to collect the information.

The PAD will form the basis of the study plan, license application, and the environmental document that follows. Among other information, the PAD must include five fundamental elements.

Process Plan states the proposed schedule of all activities prior to the filing of the license application.

Project Location, Facilities, and Operation describes the project as constructed and operated under the existing license.

Existing Environment and Project Impacts addresses the following resources areas: Geology and Soils; Water Resources; Fish and Aquatic Resources; Wildlife and Botanical Resources; Wetlands, Riparian, and Littoral Habitat; Rare, Threatened, and Endangered Species; Recreation and Land Use; Aesthetic Resources; Cultural Resources; Socio-Economic Resources; and Tribal Resources.

Preliminary list of issues describes the issues likely to be disputed, and an outline of applicable studies.

List of contacts is self-explanatory.

The licensee must make the PAD and the studies it refers to available to any requesting participant, preferably in electronic form.

The PAD compiles existing information and thus serves as a starting point for the resulting study plan, which gathers new information. Before the NOI is due, you should contact the licensee to discuss its plan for compiling existing information. Submit information that you believe should be included. Encourage the licensee to work collaboratively with you and other likely participants to conceptualize the PAD - for example, identify resource issues you intend to raise, and state your preferences for the process plan.

Review the PAD carefully once published. Ask, “Does it contain all reasonably available information about the current environmental conditions (baseline)? How does the licensee interpret that information? What are the licensee's assumptions in interpreting the information? Do you agree with the preliminary study plan?” For more information on how to reevaluate and submit comments on the PAD, see Section 4.2.5(A).

B. Study Plan

Since a license is a privilege to use public lands and waters, the licensee has the burden of proof under the Administrative Procedures Act (APA) to support its application for that privilege. Before preparing the application, the licensee must compile existing information, such as its own records of electricity generation under the existing license, or flow gauging records upstream and downstream of the dam, in the PAD. After publication of the PAD, it must also conduct field and other studies to supplement that existing information. In effect, the study plan provides for the licensee to supplement the existing information in anticipation of the exhibits required in the license application itself.

An application must be filed three years after the NOI. A licensee will conduct studies within that period, except in unusual circumstances. Such studies are undertaken according to a written document called a study plan. The licensee drafts, amends, finalizes, and implements the study plan in consultation with agencies and other participants. FERC must approve the plan in the ILP. The study plan must: (1) identify each study to be completed by the licensee to characterize existing conditions of resources affected by the project; (2) identify corresponding management goals and objectives; and (3) and propose analytical methods (generally, field studies) to determine the nature and scope of the project's existing impacts under the original license and

alternatives to mitigate such impacts. Following any dispute resolution, the licensee will implement the study plan and conduct field and other studies and report the results. There is no specific requirement as to the number and types of studies in a study plan. A study plan, however, supplements existing information to complete the exhibits required in a license application and environmental document. We address below those study plan elements that tend to be most significant to the final decision in a relicensing proceeding.

The study plan is one of the most important steps in the licensing process. The new information which will be gathered is essential to: (A) fill any gaps in existing information about the existing impacts of the project, (B) evaluate the possible alternatives for project operation and their impacts, and (C) evaluate possible mitigation measures for any significant impacts. You may request additional study if the licensee's draft study plan is inadequate. See Section 4.2.8 for the procedures, including criteria, for such a request.

Water Resources. A project converts the kinetic energy or force of river flow into electricity. The most important evidence in a license application is the pattern (the amount and variability) of flow at any given unit of time, available either continuously from the river or via reservoir storage to the powerhouse. A licensee must collect all flow data from gages in the project vicinity over the period of record, such as the term of the existing license; analyze that data for reliability (e.g., did the gage malfunction or otherwise produce inaccurate data?); and synthesize data to correct for any gaging errors. It will then use a water balance model to predict how alternatives for project operation would affect the level of any reservoir, energy generation, and flow release downstream of the dam or powerhouse. The model is both predictive across the proposed term of the new license and comparative, by permitting analysis of the incremental impacts of existing operations and alternatives. Thus, the water balance model answers questions such as: “if the minimum flow schedule for protection of a fishery is increased from the current X cfs to Y cfs, then how will reservoir level, generation, and dependable capacity change?”

A new license is intended to protect and enhance beneficial uses of the waters controlled by the project for the license term, which is 30 to 50 years. FERC and other regulatory agencies almost always rely on a computer model to predict how each action alternative will affect the reservoir level and downstream flow, since the alternative (hand calculation, as used in dam planning before computers) cannot address short time-steps, such as a week or day. FPA and implementing rules require disclosure of the modeling results but not the model itself. A typical licensee or its consultant will treat the water balance model as proprietary and will not disclose it willingly to other participants. The model may have been developed for non-public use and thus is intellectual property. More often, the licensee is simply afraid that other participants would use the model to evaluate alternatives unacceptable to the licensee, or may develop a precise understanding of the project profitability and then use that as the basis for negotiation. HRC opposes this black box approach to water balance modeling.

You should encourage the licensee to allow use of its water balance model or develop your own for use and disclosure in the proceeding. In effect, a water balance model is a complex spreadsheet that applies variables (an operational protocol such as a minimum or maximum reservoir level, or a minimum flow schedule) to the hydrologic record, in order to predict future conditions, such as the actual reservoir level, flow, or electricity generation across any time step (hour, day, week, month, or year). In several proceedings when licensees have refused to disclose their proprietary models, HRC members have developed their own, disclosed them to the licensee and other participants for correction of errors in data or assumptions and for use in evaluating alternatives. See NHI's Santee-Cooper Watershed Model, available at www.n-h-i.org/srm.html. A hydrologic model can include an analysis of foregone generation revenue, or the water quality or other secondary impact, of a given flow schedule.

Fish and Aquatic Resources. The most fundamental decision in any licensing decision is flow regulation. What is the most beneficial schedule for storage of in-flow and release, and how will release be allocated between the powerhouse and any bypass reach between the dam and the powerhouse? Answering that question typically turns on two variables: the resulting energy capacity and generation on the one hand, and impacts on aquatic resources on the other. Plainly, the populations and habitats of downstream fisheries and amphibians, and even of wildlife species dependent on riparian vegetation (e.g., song birds), are directly affected by the flow schedule. A licensee typically uses the Instream Flow Incremental Methodology (IFIM) or a similar method to predict how alternative flow release schedules will affect the habitat availability of target fisheries. After representative transects of the affected channel have been measured, IFIM predicts the wetted depth and width of the channel, and more specifically, the availability of suitable habitat for a given fishery, at each alternative flow release schedule.

IFIM or similar method includes two fundamental assumptions: (A) the amount of habitat directly affects the fishery population rendering habitat the primary limiting factor; and (B) the target fishery is representative of other resources not modeled. These assumptions are often arbitrary or even wrong. There is a growing consensus in the scientific community that IFIM merely makes a physical prediction (what physical habitat will be available under a given flow schedule?) and is not reliable for any biological prediction (what will the future population of a fishery be?). IFIM does not analyze how a flow schedule or other project impact relates to other facilities and activities that may also limit the population, distribution, or health of the species in that watershed.

The classic form of a limiting factor analysis, which varies one variable at a time to isolate the incremental impact of a given facility or activity, is not feasible on the relicensing clock. A licensee typically tests alternative flow release schedules for a limited period (say, a week or a month). FPA requires that a new license application will be filed within 3 years of the NOI, and thus a controlled experiment for a longer period coincident with the life cycle of a target resource (up to five years for an anadromous species, or even decades for a tree species) would require FERC's special approval. HRC increasingly uses post-licensing adaptive management to address causal impacts that cannot be fully understood on the relicensing clock. In some recent proceedings, the licensees and other participants have used other methods that focus on how the project affects hydrologic variability, namely, the natural variability in flow across any unit of time (day, week, season, year, or decade). For example, Indices of Hydrologic Alteration (IHA) may be used to evaluate how much each alternative flow release schedule changes the natural hydrologic pattern, including minimum or maximum flows and variability across time. See www.freshwaters.org/tools. IHA and similar methods assume that a flow release schedule that mimics the variability of the natural pattern may reasonably substitute for a limiting factors analysis, which would provide an even more reliable understanding of the probable project impact on each fishery or other resource.

Further, the study plan must address the impacts of the project on passage of riverine or diadromous fish. Typically, NMFS and FWS will determine the scope and method used for this purpose, to assure the adequacy of the record for the Section 18 prescription.

You should coordinate with NMFS and FWS as they develop a study plan request related to fish passage. The licensee will focus only on their requests, given their authority to prescribe. You should focus on helping the agency articulate a management objective for the passage study (e.g., what is the appropriate level of passage, either upstream or downstream, for any migrating fish?).

Wetlands, Riparian, and Littoral Habitat. A study plan addresses how a new license will affect lands both within the project boundary and adjacent. It analyzes whether existing uses of the

lands owned or managed by the licensee contribute to any adverse impacts on channel form, such as erosion; and whether alternatives (such as a ramping rate) will mitigate such impacts.

The state agency which will issue water quality certification has lead responsibility to assure the adequacy of the study plan related to water quality, including turbidity, temperature, dissolved oxygen, and other standards. Again, the primary function of a participant is to encourage the agency staff to devote the time necessary for careful review of the licensee's study plan (in the face of many conflicting priorities), and, in any study plan dispute, to insist that the final study plan provide the information necessary to evaluate project impacts on each applicable water quality standard.

Rare, Threatened, and Endangered Species. A study plan will specifically address each federally listed or proposed species of fish, wildlife, or plant, while it may otherwise rely on a “canary in the coal mine” to evaluate project impacts on non-listed species. Again, your function here is to assist the FWS or NMFS in its preparation or advocacy of a study request related to a listed species, given that the agency with ESA jurisdiction over that species will control the eventual Biological Opinion and thus effectively controls the development of the record which will be the basis for the BO. Bear in mind that the BO will establish conditions to achieve two functions: prevention of take of the listed species, and contribution to species recovery. As a result, you should review the study plan and any responsive study request to assure that it will provide the information needed for both functions.

Recreation and Land Use. A study plan addresses how a new license will affect public recreation on any reservoir and the river downstream. Its scope includes facilities (such as the locations and usage of facilities such as boat ramps or picnic areas) and operation (such as the impacts of alternative minimum flow schedules on reservoir levels and downstream navigability). A typical study plan relies on FERC Form 80, which reports on recreational use under the existing license in 6-year intervals; and surveys of existing users to determine demand (or potential use) of additional facilities or services.

HRC members routinely participate in the conduct of boating studies, which evaluate the safety and enjoyability of river recreation. In a typical boating study, the licensee arranges for volunteer boaters to run a given reach at different flows and to evaluate safety and enjoyability at each flow.

Licensees and participants often disagree about the method or scope of study of economic impacts of river recreation. This dispute is a surrogate for the ultimate issue: how much flow should be dedicated to riverine uses, and how much to generation? Since any prediction of future recreation is somewhat speculative, you should compare the project reach to any comparable rivers in the region, as reference. How much recreation, including boating, angling, and hiking, occur on a reference river? Has the County or other reliable source estimated the economic value of that recreation? How is the project reach alike, or different - can the use and economic benefits of the reference river apply here

Aesthetic Resources. FERC regulations require a description of the visual characteristics of the lands and waters affected by the project. This includes a description of the dam, natural water features, and other scenic attractions of the project and surrounding vicinity. If the project affects a waterfall, a gorge, or a similar place attractive for its beauty, the licensee may conduct a study to evaluate aesthetic quality at different flows that can lead to license requirements to provide aesthetic flows. Methods rely on user surveys or professional judgment and include on-site or photographic user surveys where recreationists respond to different flows.

Do not assume that aesthetic impacts are a trivial issue in a licensing proceeding. The beauty of our landscape is a fundamental American value, as recognized in the song, “America the Beautiful.” Further, aesthetic quality is a significant factor in tourism in a watershed.

Cultural Resources. The study plan addresses how a new license will affect tribal and other historical sites within the project boundary. The licensee identifies known sites, surveys for unknown sites, and analyzes alternative forms of protection of such sites. Pursuant to the

National Historic Preservation Act (NHPA), the State Historic Preservation Office (SHPO) will review the study plan for adequacy.

You should generally defer to the Tribes in their study requests related to tribal sites. As to other historical sites, focus on whether the study plan adequately evaluates the potential for public education. Often, there is potential for a trail to link a historical site (such as abandoned mining equipment) to a recreational facility.

C. License Application

After the licensee implements the study plan, collects the study results, and reports the results to the participants for comment, it will publish a draft license application. The license application will be filed approximately 2.5 years before the expiration of the existing license for review of participants. The application will synthesize relevant information (including study results) into lettered exhibits, which display and analyze the information to describe project design, operation (including capacity, generation, and revenues), and environmental impacts of the proposed new license. There are eight such exhibits, as shown in Table 1.

TABLE 1

LICENSE APPLICATION EXHIBITS

Exhibit Description Citation

-- General Information 18 C.F.R. § 4.32(a)

-- Initial Statement 18 C.F.R. § 4.32(a)

Exhibit A Project description

Exhibit B Project operation and resource utilization

Exhibit C Schedule for any new construction

Exhibit D Project costs and finance

Exhibit E Environmental setting and impacts

Exhibit F Design drawings of the project facilities described in Exhibit A

Exhibit G Project map

D. Evidence Submitted by Participants

Any participant may submit written evidence into the record. In the event that evidence conflicts with the licensee's, FERC will give weight to the evidence that is most reliable. Thus, a subjective opinion about project impact on a given resource is given less weight than data based on actual observations or measurements. Participants may submit evidence at any time after the NOI. More typically, evidence is submitted in response to the study plan, license application, or environmental document.

HRC members and allies have undertaken a wide variety of studies on ecological, recreational, economic, and other impacts of licenses. We take this initiative in circumstances where the law does not clearly require, or the licensee does to agree to conduct, a particular scope or method of study that we nonetheless believe will contribute value added to the record. Deciding whether to undertake such a study is a balance between cost and value-added. Thus, where a license declines to disclose its hydrologic model, an HRC member may incur the cost of developing its own if it has reason to believe that the independent modeling results are necessary for analysis of alternative flow schedules.

For more information on these independent studies, see <http://www.hydroreform.org/>.

E. Environmental Document under NEPA

Under the National Environmental Policy Act (NEPA), FERC must publish an environment document to analyze the environmental impacts of any licensing decision that *may* have a significant impact on environmental quality. As a practical matter, FERC publishes such a document in every proceeding for a new or amended license, because there is always dispute or

uncertainty about such impacts. The document is intended to assist FERC and other regulatory agencies to make rational decisions in the face of such dispute or uncertainty. NEPA does not change the balance between development and other beneficial uses of the affected lands and waters as required by FPA Part I. NEPA does not change the level of protection, mitigation or enhancement of natural resources required by other laws, such as the Clean Water Act. Instead, the environmental document is an essential part of the record that forms the basis of the licensing decision.

Form. An environmental document must be “concise, clear, and to the point,” and supported by “evidence that the agency has made the necessary environmental analyses.”

The environmental document in a licensing proceeding may be in two forms: an Environmental Assessment (EA) where the new license (including any mitigation or restoration measures) would probably not have a significant impact on environmental quality,^(FONSI) or an Environmental Impact Statement (EIS), which applies to a decision which probably will have such significant impacts.

Although the EA tends to be shorter than an EIS both forms cover the same topics: project description, a reasonable range of alternatives for relicensing, a comparison of the impacts of such alternatives, and a recommended decision.⁷

Early in the licensing process, you should ask FERC to prepare an EIS if you believe that the licensing decision (even including mitigation) may have a significant adverse impact. As stated above, an EIS tends to be more detailed in its articulation of action alternatives and analysis of impacts.

In 90% or more of licensing proceedings, FERC decides to publish an EA. If it does, put aside the fight about form until later in the proceeding. If the final EA finds a significant impact, FERC must prepare a follow-on EIS. Instead, until publication of the final EA, focus on substance - the specific action alternatives that you believe should be included and the method of analysis.

FERC claims to have discretion to: publish a draft EA followed by a final EA, or proceed directly to a final EA. The latter form is cheaper. HRC believes that tends to result in less careful response to comments. If a draft EA is published, FERC responds twice - once, in the final EA, and again, in the licensing order; whereas, if a final EA is published as the totality of NEPA review, it responds only once. The iterative comment-and-response tends to be helpful to FERC and participants alike in narrowing or resolving disputed issues of law and fact. Before FERC decides on the form of the EA, you should state a preference for a draft EA and explain why two rounds of public comment may help resolve issues in this manner.

FERC's Process. After the NOI, FERC's Office of Energy Projects (OEP) issues a Scoping Document for public comment. The scoping document broadly outlines issues to be evaluated in the environmental document. Next, OEP issues a Notice of Readiness for Environmental Analysis (REA) after the application has been filed, once it determines all necessary studies are complete. In the ALP, the REA Notice is titled “Notice Requesting Terms and Conditions,” but it has the same function. The REA Notice triggers a 60-day period for submittal of recommended and mandatory conditions, after which OEP proceeds to draft the environmental document.

OEP staff or a consultant under their supervision drafts the environmental document, relying heavily on the study results and license application. OEP may also ask another public agency with jurisdiction over the licensing decision, including those with authority to prescribe or recommend conditions, to cooperate in the drafting of the environmental document.

Unfortunately, FERC and other regulatory agencies rarely cooperate in the preparation of the environmental document in a licensing proceeding. This is the result of FERC's interpretation of its *ex parte* rule (discussed in Section 3.2.2(F) below) to mean that another agency may formally cooperate only if it foregoes its right to participate as a party in the proceeding and appeal any adverse decision. As a result, agencies generally decline cooperating agency status, limit themselves to comments on the draft document prepared by FERC, and do not prepare their own document due to budgetary constraints. FERC must ask for public comment on its environmental document, including an Environmental Assessment that may be published in final form without a prior draft. The environmental document must comply with the content

requirements and facilitate meaningful comment. FERC may prepare and circulate a second document for a further round of public comment, if circumstances (including applicable laws) change substantially after the close of the public comment period.

FERC must respond to comments in the final environmental document. If the EA was published as a final (without a draft) it will respond to comments in the licensing order. See Section 4.5.2 below. FERC may respond by modifying alternatives, including the proposed alternative; adding new alternatives; supplementing or modifying analyses; or explaining why the comments do not warrant further response.

Mandatory Conditions Review Process (MCRP). The Departments of Commerce and Interior have adopted a review process for their respective mandatory conditions, exclusive of any FPA section 10(a) or (j) recommendations. The policy - proposed to be adopted as a rule - provides that they will file such conditions in preliminary form in response to the REA Notice. The filing requests public comments. Each agency will consider comments submitted during any comment period on the NEPA document. Each will submit to FERC modified conditions, taking into account such comments, within 60 days after the NEPA comment period.

Content of Environmental Document. Each environmental document in a licensing proceeding consists of topical sections organized as follows:

Statement of Project Purpose states the purpose or need for the new license. In virtually every case, the stated need will be for the generation of electricity for the local or regional service area to which the project is connected.

Proposed Action and Alternatives describes the *No-Action Alternative*, which is the renewal of any existing license without any modification; the **Proposed Action**, outlined in the license application; and other **Action Alternatives**. These Action Alternatives are the “heart” of the environmental document. FERC must “rigorously explore and objectively evaluate all reasonable alternatives...” and identify possible environmental measures before approving the license application. The range of Action Alternatives may include project decommissioning in some form that may be necessary for compliance with the Clean Water Act, Endangered Species Act, or other law.

Your comments before and in response to FERC's Scoping Document should identify specific Action Alternatives and explain why they should be included to assure the adequacy of analysis of the Proposed Action. It is not enough to simply restate the duty that FERC consider all reasonable alternatives. Bearing in mind that life (or money) is short, why should FERC consider the specific alternatives that you recommend? For example, assuming that the original license has a 50 cfs minimum flow schedule for protection of a bypass reach, the new license application proposes 100 cfs, and the natural flow in that reach is 800 cfs, you should ask for step analysis between 100 and 800 cfs, and you should explain the specific beneficial uses that may benefit from restoration of a more natural hydrograph.

Environmental Setting describes the existing environmental conditions that are the starting point for comparison of No-Action and Action Alternatives. They consist of: (A) the existing conditions of affected resources in the project vicinity considering the existence of the dam and (B) the likely future conditions assuming a continuation of project operations, or the No-Action Alternative. Current FERC policy is to define “baseline” to be conditions that exist today.

In the 1990's, the HRC and other participants sought to define the environmental baseline in a relicensing proceeding as the conditions that would exist absent the existing license. This definition was rejected in American Rivers II, which holds that existing conditions in the project area are the baseline for FERC's NEPA review. The HRC has moved on to a simpler strategy to achieve our restoration objective. FERC has a plain duty to consider past, present, and future cumulative impacts of the proposed action, and the licensee has a duty to undertake feasible measures to “enhance” existing conditions. Thus, if a project has blocked fish passage for 50 years, the baseline for the NEPA document is the separation of upstream and downstream fisheries - but the new license may require construction and operation of a feasible fish ladder if

the separation undercuts the future sustainability of the fisheries. Thus, a new license is a “new decision” whether to continue or end this or other continuing impacts caused by the existing license.

You should gather historical evidence of the condition of the natural resources in the project reach before the original license. This evidence, while irrelevant to the baseline for NEPA review, is relevant to the analysis of the restoration potential of the reach. Try to find contemporaneous photographs or eyewitness accounts. Historical libraries and agency repositories are good places to start.

Environmental Impacts analyzes how each Action Alternative will change the baseline for affected resources. It includes: **direct impacts** (e.g., the discharge of waste from any new construction); **indirect impacts** (e.g., the public use of any new recreational facility); and **cumulative impacts**, which are defined “the impacts on the environment which result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of who undertakes the other actions. This section identifies any **irreversible and irretrievable commitments of resources** under the Proposed Action or Action Alternative. In a licensing proceeding, this section is typically organized by topics that correspond to the form of the

Pre-Application Document or application itself.

Try to parse the baseline to isolate the impacts of the project, as distinct from other facilities and activities. Acknowledge the principle of proportionate responsibility. This is essential to your credibility as well as success. Put in the negative, the licensee and OEP alike will not agree to hold the project responsible for the adverse impacts caused by other facilities and activities.

In **Recommended Action**, OEP tallies the benefits and costs, to the licensee as well as the public for the Proposed Action and each alternative action. OEP then recommends an alternative for the Commissioners' approval. The recommended alternative is usually a mix of features of the Action Alternatives, including any mandatory conditions submitted by other agencies. A final EA typically does not make specific findings of fact and law as the basis for its recommendation of a Preferred Alternative. Rather, it includes a section entitled, “Developmental Analysis,” which describes the many factors that contribute to the recommendation. If you believe that the basis is unclear, ask specific questions in follow-up comments on the EA.

List of Preparers and Agencies or other Persons Consulted is self-explanatory.

F. Prohibition Against Private Communications: The Ex Parte Rule

Once the licensing proceeding starts, FERC staff may only communicate with the licensee or any other participant in a public manner (e.g., at a public meeting or a written document served to the service list (as discussed in Section 3.2.2(F) and 3.2.4(C)). This *ex parte* rule means that FERC may only communicate with the licensee or other participants “on the record.” It cannot have a non-public meeting or conference calls or consider a non-public written submittal by a participant, on the merits of the proceeding. In short, a participant may not privately seek to persuade FERC to favor its evidence or opinion on a disputed factual issue. This rule assures fairness and transparency in the development of the record that FERC will use for its decision. The *ex parte* rule does not apply when the NOI is filed. That is because FERC does not formally deem the relicensing proceeding to begin as a result of the NOI. Instead, it applies when the license application is filed, because that step means that FERC is compelled to make a decision. Up until that step, it is theoretically possible that the licensee would not perfect a license application. Sections 4-6 flag when the rule applies in the three forms of process. There are several important exceptions to the *ex parte* rule's requirement that any communication with assigned FERC staff must be on the record. The rule does not prohibit off-the-record communications: (A) related solely to the procedure; (B) to or from FERC staff who have

formally been recused from participating in the Commission's decision; (C) to or from a cooperating agency that has regulatory responsibilities, i.e., cooperating agencies; (D) related to any emergency concerning a facility regulated by FERC, or (E) made pursuant to a written agreement among all parties which has been approved by FERC.

G. Accessing the Record in Electronic Databases

FERC maintains a public record of all filed documents that relate to each project. FERC has established an eLibrary and related services that make all documents filed since 1989 available over the internet. FERC also operates a Public Reference Room, including public computers, for walk-in visitors.⁶ Traditionally, the record of a licensing proceeding (other than final order) has been available only in paper form to such walk-in visitors or by mail through a copy service.

Written Request. If you do not have access to a computer, or if the specific record you need is not on the eLibrary, you may mail a written Request for Record to:

Public Reference Room
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426.

The request must identify the document by date, docket and any sub-docket number, and any accession number. You may also go to the Public Reference Room and submit such a request in person.

eLibrary. This database contains: (A) an index of all documents filed about a project, regardless of date, including a unique accession number for each document; and (B) scanned images of most documents filed since 1989, downloadable in .pdf or Word format. eLibrary is accessible without prior registration at www.ferc.gov/docs-filing/eLibrary.asp. The search logic is straightforward. First, enter the docket number for the project and any date range. The docket number is the unique identification assigned by FERC's Office of Secretary to a project, expressed in the form of P-XX where "P" means "hydropower project" (as distinct from gas and other facilities under FERC's jurisdiction), and "XX" is the unique number (between one and five digits) assigned to a given project. You may narrow the search by specifying author or type of document. See www.ferc.gov/docs-filing/eLibrary/tips.asp.

eSubscription. eSubscription permits any registered user to receive e-mail notice whenever a filing related to a project is made. This supplements service of a paper copy of any filing. See www.ferc.gov/docs-filing/esubscription.asp.

eRegistration. A person must register name, address, user and password in order to enter an eSubscription or make an eFiling. See www.ferc.gov/docs-filing/eregistration.asp.

H. Limitations on Access to the Record: Critical Energy Infrastructure Information

Some project information is deemed non-public. In 2003 FERC created a restricted category, Critical Energy Infrastructure Information (CEII). Information may be classified as CEII if it relates to the production, generation, transmission or distribution of energy; provides strategic information beyond location of the critical infrastructure; or could be used in attack on critical infrastructure. CEII is exempt from mandatory public disclosure under the Freedom of Information Act. In order to obtain CEII you must submit a request to the CEII Coordinator at FERC.⁸ Instructions for making such a request are available at www.ferc.gov/help/how-to/file-ceii.asp.

The licensee, not FERC, decides what should be designated CEII. If you feel like information designated CEII should be available to the public, contact FERC and tell them so.

3.2.3 Deadlines

A licensing proceeding runs on a clock. Certain deadlines have been established by statute, and a participant must meet them or lose associated rights. There are four such deadlines in a typical proceeding. The licensee must file a Notice of Intent (NOI) 5 years before expiration of the existing license (Section 3.2.1) and its application for new license 2 years before such expiration (Section 3.2.2(B)). A rehearing request must be filed within 30 days of the final licensing order

(Section 3.2.5), and the petition for judicial review must be filed within 60 days of FERC's rehearing decision (Section 3.2.7).

Other deadlines are set by federal regulations as published in the Code of Federal Regulations (e.g., 18 C.F.R. Part 5 for the ILP). FERC may also issue "letter orders" in normal course of the proceeding. For example, after the submittal of an application, FERC will publish a notice establishing expeditious procedures for relicensing and a deadline for submission of final amendments, if any, to the application.

FERC often provides a specific date on which to submit comments. A deadline is typically stated as "X days from today's date," rather than as the actual date when the deadline runs. You calculate the actual due date as follows. Under FERC's Rule of Practice and Procedure number 2007, the clock starts the day after the initiating event. For example, if you decide to seek rehearing of a license issued on Tuesday, May 4, any rehearing request is due 30 days thereafter. So the clock starts on

May 5, the day after the final order issues, and the rehearing request is due 30 days from May 5, or June 3. If the due date falls on a weekend or holiday, the due date is the next business day.

3.2.4 Consultation, Comment, Intervention, Hearing

FERC will issue a license only after public notice and hearing. The NOI and all other notices issued by FERC in a proceeding are published in eLibrary and served on the service list of interested parties. See Section 3.2.2. The hearing takes two forms: distribution of pleadings and other documents to the service list, or an actual hearing on disputed factual issues before an Administrative Law Judge. The latter form of hearing includes testimony and cross-examination of witnesses, just like a court hearing. With few exceptions, FERC only offers the paper hearing as the basis for a licensing decision, because of the substantial costs and delays associated with a hearing before an ALJ. We describe below the minimum requirements for comments, motions, and other pleadings in a paper hearing.

A. Consultation

The FPA requires that a licensee must consult with agencies and other participants, from the NOI through the filing of the license application. This reduces the risk that significant issues will be raised for the first time in pleadings filed by participants. More positively, it ensures that the licensee understands the interests of other participants, regardless of whether they agree.

B. Comments and other Standard Filings

Types of Filing. There are many different types of filings. An *application* is the request for a license, in the form prescribed by Rule 204 and 18 C.F.R. Part 4, 5, or 16. A *comment* is a response to another filing. Under Rule 212, a *motion* is a request for an interlocutory order (e.g., to intervene, require a particular study, or resolve a study dispute) preparatory to the final decision. Under Rule 207, a *petition* is appropriate to seek a declaratory order, as described below. Under Rule 206, a *complaint* alleges that a licensee is violating a license, rule, or order. Under Rule 713, a *request for rehearing* is an administrative appeal for FERC's licensing order.

Format. The Rules of Practice and Procedure establish minimum format requirements applicable to all filings except an application, which is subject to special requirements. A filing must be on 8.5 x 11 inch paper. It must have a 1.5-inch left margin.¹ It must be typewritten or otherwise legible. It must begin with the caption that identifies the docket (e.g., the project number and any sub-docket). It must include a heading that describes its purpose (e.g., "Comments on New License Application"). It must then state relevant facts and law including citations. It must be signed. Signing verifies that contents are true to the signer's knowledge, and that the signer (if

not representing him or herself) has authority to represent the party on whose behalf the filing is made.

Submittal. You may submit a pleading to FERC in paper form (by mail or hand-delivery to the Office of Secretary) or in electronic form. In paper form, you must submit the original and eight identical copies to:

Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426.⁹

Electronic filing is now the preferred form of filing. It is cheaper, since paper copies are unnecessary. It is more reliable, since you immediately receive a confirmation of receipt. The Secretary strongly prefers it, because it creates a record in eLibrary without the necessity of a post-filing scan. The eFiling system has an easy sequence of steps. After completing a one-time registration (name, address, telephone number, and email address) via eRegistration, you go to www.ferc.gov/docs-filing/efiling.asp. You log on, identify the party on whose behalf the filing is made, identify the docket and type of document, and then enter the document title. Next, you upload the document in Word or .pdf format. A file name must not contain any spaces or characters other than letters or numbers and must be limited to 25 characters. The file must be 10 MB or less in size; if your filing includes graphics, it may be broken into several parts for eFiling. It is unnecessary to sign an e-filed document, since the log-on substitutes for signature. Finally, you confirm that you intend to complete the filing, and you press “done.” FERC emails to the filer a Notice of Acknowledgement immediately after the eFiling. After the eFiling system converts the file to a .pdf, FERC sends a Notice of Receipt and asks for confirmation of the format, which is optional. Finally, FERC emails a Notice of Acceptance once the Secretary determines that the pleading is in the proper form. If it is not in the proper form, the Secretary may respond with a Notice of Rejection. The Notice of Acceptance or Rejection typically issues within a few business hours of the filing. To be timely, a filing (whether in paper or electronic form) must be received by the Secretary not later than 5 p.m. EST on the due date. We add two notes of caution. First, receipt by the Secretary, not postmark, determines timeliness of a paper filing. Second, the filer takes the risk of delay by the Post Office or FedEx, or the occasional failure of its own ISP or FERC's eFiling system. You should not wait until the last minute to make a filing which, by statute, must be received by the due date (e.g., a rehearing request), since FERC will not excuse late filing even if you are not at fault.

Service. The filer must serve each pleading on the service list maintained by the Secretary. Service is by email through eSubscription, unless: (A) a proceeding commenced before March 21, 2005 and a given party is not so subscribed or (B) the parties agree to use mail, fax, or other means of delivery. Filing with FERC does not constitute service on the service list. The Secretary maintains a service list for each proceeding. This is a list of persons who have intervened and become parties (see Section 3.2.4 (C) below) and of other persons who by statute or otherwise are entitled to receive service in a proceeding. The service list includes name, address, and party represented. The service list for any proceeding is available at www.ferc.gov/docs-filing/service-list.asp. Each pleading must include a declaration of service by the filer, in the following form: “I hereby certify that I have today served the [document title] upon each person designated on the official service list for this proceeding.” See Appendix C for a sample declaration of service.

C. Intervention

While the licensee is a necessary party in every licensing proceeding, any other person who shows a direct interest in the outcome of the proceeding may intervene to become a party. For example, a membership organization has a direct interest if its members use the affected lands and waters.

Why intervene? A person may file comments in a licensing proceeding without becoming a party. An intervener, however, has two fundamental rights: (1) it will be served with all of the

documents that are filed in the proceeding, because the intervenor will be included in the service list (see above), and (2) it may file a motion or, on final decision, seek rehearing or judicial review. While a non-party may now use eSubscription as a substitute for being on the service list, it may not file a motion or, more importantly, may not seek rehearing or judicial review of the final decision.

HRC recommends timely intervention by each participant interested in a project. There is no down-side, other than the receipt of potentially voluminous documents in the event you later lose interest. In that event, you may withdraw from party status and the service list. By contrast, if you do not timely intervene and later move for late intervention, FERC has discretion to deny your motion, in which event you have forfeited the right to seek rehearing or judicial review. In order to ensure that the Commission's ex parte rules apply to a proceeding (see Section 3.2.2(F)) participants should file their intervention in opposition. In order to avoid appearing as a reactionary or obstacle, participants may wish to state their opposition as, "as long as the following goes unaddressed, we oppose the application."

Format. You file a type of pleading called a motion to intervene. The motion includes the heading, "Motion to Intervene by [your name]," which must describe your interest in the proceeding, such as your ownership of adjacent land or your (our your member's) use of the affected lands and waters for recreation. See Appendix C for an example. An intervention may be neutral or take a position on the license application. For example, clearly state you oppose the issuance of the preliminary permit, license, or exemption or that you do not oppose approval of the application on the condition that certain terms and conditions are included in the preliminary permit, license, or exemption.

Timeliness. You may file a motion to intervene once FERC has accepted the relevant application (e.g., new license, permit, or exemption). For example, in the ILP process motions to intervene are appropriate after the formal application is filed (see Section 4.2.2). FERC publishes a notice of acceptance of such application, once it determines the application is in the proper form, and that notice sets the deadline for intervention. eSubscription to that proceeding is the simplest method to assure that you receive that notice. If FERC prepares an Environmental Impact Statement (EIS), it permits a second round of intervention during the public comment period on the draft.

If timely filed, your motion will be granted automatically unless another party opposes your motion.

If another party opposes your motion or your motion is not filed on time, you will become a party only when FERC expressly grants your motion.⁶

If you miss the deadline for filing a timely motion to intervene, you may still file a motion for late intervention. The motion must state that: (A) you have good cause for filing late; (B) your intervention will not disrupt the proceeding or cause prejudice to existing parties; and (C) other parties may not adequately represent your interests. FERC must affirmatively grant any such motion. The odds are inversely proportional to the delay: a late motion filed just after the due date will be approved, while a motion filed after the licensing decision (e.g., to support a rehearing request) will probably be rejected.

D. Interlocutory Relief

If FERC staff make a decision that would cause irreparable harm to your interests, you may request the Commission review the decision, as interlocutory relief. As a general matter, OEP Director and staff conduct a "paper hearing" in a relicensing proceeding. They make all decisions - such as whether to accept an application as adequate, or how to resolve a study plan dispute - through the issuance of written decisions prior to the licensing order. Interlocutory relief against such non-final decisions may take the form of a "Motion for Interlocutory Relief," or in the alternative, "Petition for Declaratory Order."

Motion for Interlocutory Relief. The motion must be made within 15 days of the disputed ruling and must state why prompt Commission review is necessary to prevent detriment to the public interest or irreparable harm to any person. While other parties may answer, the presiding officer is not required to consider answers in issuing its determination. A presiding officer must issue an order, orally or in writing, containing a decision on appeal, and provide the date of the action taken.

If an appeal is granted, the presiding officer will send forward to the Commission a memorandum that sets forth the relevant issues and an explanation of the rulings on the issues, and participant's motion and any answer. Any decision to grant appeal will not suspend the proceeding unless otherwise ordered by the presiding officer or Motions Commissioner.

If the presiding officer does not issue an order within 15 days, the appeal is deemed denied. If the appeal is denied, the participant may appeal the decision to the Motions Commissioner within seven days of the denial. The appeal must state why prompt review by the Commission is necessary to prevent detriment to the public interest or irreparable harm to any person, and must include a copy of the written order denying appeal, or a copy of the transcript of the oral order. If the Motions Commissioner makes no determination within seven days of the date the original motion for interlocutory appeal is denied, the appeal of the presiding officer's denial also will be deemed denied. Unless the Commission acts on an appeal permitted by a presiding officer or Motions

Commissioner within 15 days after the date on which the appeal is granted, the contested ruling of the presiding officer will be reviewed in the ordinary course of the proceeding as if the appeal had not been made.

Petition for Declaratory Order. A participant may petition for a declaratory order to end a dispute before the final decision, such as a dispute about whether a study plan complies with applicable requirements. In effect, such a petition moves the issue to the head of the queue and obliges the Commission to make a decision before the final decision (namely, whether to grant or deny the license application). The normal fee of \$ 19,040, which is charged in natural gas and other non-hydropower proceedings, is waived in licensing proceedings.

HRC recommends that you seek interlocutory relief only in extraordinary circumstance and not when you have a run-of-mill dispute with OEP staff. Such a request seeks special attention from Commissioners, who typically have dozens of final decisions on the agenda for each meeting. Commissioners will not look favorably on an unnecessary request, and they may remember the requestor as “Peter and the Wolf.” You may wish to seek interlocutory relief if, for example, OEP denies a study request which you believe to be critical to the outcome of the proceeding.

3.2.5 Rehearing by FERC

A party may request rehearing of any final order in a relicensing proceeding, including issuance or denial of a new license. Rehearing is an administrative appeal - a final opportunity to persuade the Commission to decide a disputed issue in a particular way. It also is a precondition to judicial review.

Format. This pleading must include the title, “Request for Rehearing of [title of challenged order].” It must comply with the standard format requirements for any pleading.

Contents. Any request for rehearing must identify the alleged error of fact or law in the final decision. It must show that the decision is either not supported by substantial evidence in the record or is an “arbitrary and capricious” exercise of FERC's legal authorities. It must state the grounds for rehearing with specificity, including citations to evidence, statutes, or cases. It may rely on new evidence not otherwise in the record only if the evidence was not available prior to the final decision. It must state the relief requested, which may range from voiding to modifying the disputed decision. Appendix C includes a sample rehearing request.

Scope. The rehearing request may address any disputed issue in the final decision. Rehearing of a licensing order thus may challenge (A) the decision to issue the license (rather than deny it) or (B) the individual articles. While FPA section 313, 16 U.S.C. 825l, requires a rehearing request

as a precondition for judicial review, FERC will not grant rehearing of (or modify) any license article prescribed by another agency under FPA section 4(e) or 18, CWA section 401, or the ESA, absent the consent of the prescribing agency, since it does not have jurisdiction to grant such relief. In that event, the party files the rehearing request to preserve its right to judicial review.

Timeliness. A rehearing request must be filed not later than 30 days after the issuance of the final decision or order.

Answer. Answer is not permitted to a rehearing request. In response to a rehearing request, FERC may permit briefing or oral argument on one or more issues raised by the request.

Rehearing Decision. The Commissioners, not OEP staff, will decide a rehearing request challenging a new license. FPA section 313(a) requires a decision within 30 days of filing. Thus, a request is deemed denied if not granted within 30 days. Before that deadline, FERC typically issues an order, entitled “Order Granting Rehearing For Further Consideration,” which tolls the statutory clock. That tolling order simply means that FERC is still considering the merits of the request. It specifies when FERC expects to make a decision on the merits, ranging from a few months to a few years. On the merits, FERC may grant rehearing, in which event the challenged order is remanded for further proceeding, or deny rehearing. If the denial is based on new grounds, then the party may file a subsequent rehearing request limited to those grounds.

You must seek rehearing in order to obtain judicial review. You should approach both steps with the same questions in mind. First, does FERC have substantial evidence in support of its licensing decision? Second, does the decision comply with the legal requirements for the protection, mitigation, and enhancement of affected natural resources?

Rehearing is not an opportunity to reargue reasonable differences of opinion, since the law requires deference to FERC's in matters within its jurisdiction. Rather, it is the opportunity to argue that FERC missed critical evidence, or did not squarely comply with legal requirements, which instead favor another Action Alternative.

The form of a rehearing request may be simple or complex. Simpler is better, unless you dispute complex issues of fact or law. Focus on the primary deficiencies, and do not worry over trivial issues. Do not introduce new evidence (e.g., evidence which post-dates the licensing order), unless you have a good reason for not offering the evidence in a timely manner.

3.2.6 Appeal to Other Prescribing Agencies

Federal agencies including USFS, FWS, and NMFS currently do not have any procedure for administrative appeal or rehearing of the mandatory conditions they respectively issue. Thus, if a party objects to such a condition when final, it may not obtain rehearing directly from the prescribing agency. While it may include the objection in a rehearing request before FERC, no relief may be granted, because FERC does not have jurisdiction to hear the objection absent the consent of the prescribing agency. Thus, the objecting party is limited to judicial review of the mandatory condition prescribed by an agency other than FERC. As of publication of this Toolkit edition, DOI has proposed to codify the MCRP and add an appeal procedure for its FPA section 4(e) or 18 conditions, NMFS has proposed to codify the MRCP and not establish appeal procedures, and the FS recently rescinded its appeal procedures.

In turn, each state has its own written procedures for water quality certification for hydropower and other projects subject to CWA section 401(a). Such procedures typically include some form of administrative hearing, appeal, or rehearing of a certification. Compliance with those procedures is a precondition to any judicial review in state court.

Rehearing strategy is the same before other agencies.

3.2.7 Judicial Review

Any party dissatisfied with FERC's rehearing decision may petition for judicial review in the U.S. Court of Appeals for the D.C. Circuit or the Circuit where the project is located. A party seeking judicial review must have raised all such claims and supporting arguments in a rehearing request, since the Court is otherwise barred from hearing them. This is a strict requirement to assure exhaustion of any administrative remedy.

Format. The petition must follow judicial form for pleading. Appendix B includes a sample petition, although the details of such form are beyond the scope of this Toolkit.

Content. The petition must identify the challenged order and the specific errors of fact or law that are challenged. As in a rehearing request, the petition must allege that the decision is not supported by substantial evidence in the record or is arbitrary and capricious. Unlike a rehearing request, the petition itself is a short form and does not make argument in support of its claims.

Scope. A petition may challenge: (1) FERC's decision to grant or deny a new license, or (2) specific articles prescribed by FERC or by another federal agency under FPA section 4(e) or 18 or the ESA. Judicial review of water quality certification issued by the State probably lies in state court, not the U.S. Court of Appeals.

Timeliness. A petition for judicial review must be filed within 60 days of the rehearing decision.

Given the expense and risk of adverse precedent, you should appeal only if you have a very significant grievance. FERC has won 75% or more of the appeals of licensing decisions, given that courts properly defer to its expertise and judgment. While specific strategy for judicial review is beyond the scope of this Toolkit, we underscore the general strategy - make your maximum effort before FERC.

4 Integrated Licensing Process

Adopted in 2003, the Integrated Licensing Process (ILP) integrates the development of license application and environmental review, and it coordinates FERC and other regulatory agencies that undertake such environmental review. A licensee may voluntarily use the ILP now. After July 23, 2005, the ILP will be the default process and a licensee will be required to request authorization to use the TLP or ALP at the same time it files its Notice of Intent. After that date, FERC will grant a request to use the TLP or ALP only if the licensee shows "good cause."

Why Develop a New Licensing Process?

Hydropower regulation before the ILP was relatively efficient, by comparison to other federal regulatory programs for energy and other goods and services in interstate commerce. FERC now tends to make relicensing decisions on time, relatively few such decisions are appealed to court, and most participants believe that FERC today is doing a reasonably fair job of balancing energy and environmental quality. So why did FERC adopt the ILP, and why will the ILP become the default process?

FPA Part I mandates minimum steps for a licensing proceeding. Nonetheless, the statute leaves considerable discretion regarding how FERC, licensee and other participants contribute to the development of the record of project impact necessary for a licensing decision. The TLP and even ALP have tended to suffer from recurring process inefficiencies, including running disputes between FERC and other agencies over the boundaries between their respective jurisdictions. As a result, certain participants, including the HRC and the National Hydropower Association, formed the National Review Group (1998-2002), which developed joint recommendations for administrative reform. Federal agencies formed the Interagency Task Force (1999-2001) for the same purpose.

FERC initiated the ILP rulemaking in response to these recommendations. The ILP implements solutions recommended by the HRC and other participants to correct five routine inefficiencies of the ALP and TLP.

First, under the ILP, the Notice of Intent will include a Pre-Application Document that compiles existing information about project impacts on hydrology and other natural resources.

Second, the Office of Energy Projects will start NEPA scoping within 60 days of the NOI in order to assure the consistency of the study plan and the environmental review.

Third, under the ILP, FERC and other agencies will deliberately explore and implement arrangements for cooperation in the preparation of the environmental document. Such cooperation will begin before the study plan is drafted. .

Fourth, the ILP establishes specific criteria for each study request and the licensee's response, including nexus to project impacts and cost-effectiveness compared to an alternative study method. It establishes a mandatory procedure to resolve any study dispute between the licensee and any agency with mandatory conditioning authority. A panel of three members (OEP, disputing agency, and a neutral) will undertake a peer review whether a particular study complies with the stated criteria.

Finally, under the ILP, FERC will publish draft license articles in any draft environmental document, in order to permit early analysis of whether its articles and other draft conditions are consistent.

Structure of ILP Process

The ILP has five functional stages: Notice of Intent (Section 4.1), Study Plan Development and NEPA Scoping (Section 4.2), Implementation of Study Plan (Section 4.3), Preliminary Licensing Proposal and Application (Section 4.4), and Review of Application and Final Decision (Section 4.5). These stages consist of 24 discrete steps as shown in the diagram below. The steps are shown in the attached diagram.

FIGURE 1 INTEGRATED LICENSING PROCESS (ILP)

The ILP runs on a strict clock. All of the steps are subject to deadlines established by the rule, unless modified with FERC's permission. The first step, the Notice of Intent initiates the process and must occur sometime between 5.5 and 5 years prior to the expiration of the existing license. Each subsequent step is relative to the prior step. Deadlines for the entire process will therefore be determined once the NOI is issued. Below, we show below the timing for each step, relative to the prior step.

TABLE 2

TIMING OF ILP STEPS

Step Number Step Description Time (Relative To Prior Step, Unless Otherwise Indicated)

Step 1	Notice of Intent (NOI) and Pre-Application Document (PAD),	5-5.5 years before license expiration
Step 2a	Initial Tribal Consultation	30 days after Step 1
Step 2b	Comments on Request to use TLP or ALP, if requested	30 days after Step 1
Step 3	Notice of Commencement (NOC) and Scoping Document 1 (SD1),	60 days after Step 1
Step 4	Scoping meeting/Site visit	30 days after Step 3
Step 5	Comments on PAD and SD1, Study Requests	60 days after Step 3
Step 6	Proposed Study Plan, Commission Issues Scoping Document 2 (SD2), if necessary	45 days after Step 5
Step 7	Study Plan Meeting	30 days after Step 6
Step 8	Comments on Study Plan	90 days after Step 6
Step 9a	Revised Study Plan for Commission Approval	30 days after Step 8
Step 9b	Agency Comments on Revised Study Plan	15 days after Step 9a
Step 10	Study Plan Determination	30 days after Step 9a
Step 11a	No disputes are filed or Notice of Study Dispute is file	Proceed to Step 14 within 20 days
Step 11b	Mandatory Conditioning Agencies File Notice of Study Disputes	20 days after Step 10
Step 12a	Study Dispute Resolution Process Initiated	
Step 12b	Selection of Study Dispute Panel	20 days after Step 11b

Step 12c Dispute Resolution/Panel Recommendation
50 days after Step 11b

Step 13 Determination on Study Dispute
70 days after Step 11b

Step 14a First Season Studies; Initial Study Report pursuant to approved study plan, or no later than one year after study plan approved

Step 14b Study Meeting 15 days

Step 14c Meeting Summary 15 days

Step 14d Disagreement with Meeting Summary
30 days

Step 14e Responses to Disagreements with Meeting Summary
30 days

Step 14f FERC Resolution of Disagreement; Amendment of Study Plan if appropriate
30 days

Step 15 Second Season of Studies, and Updated Study Report pursuant to approved study plan, or no later than two years after study plan approved

Step 16 Applicant's Preliminary Licensing Proposal
no later than 150 days before application

Step 17 Comments on Applicant's Preliminary Licensing Proposal; Additional Study Requests
90 days

Step 18 (post-filing activity) License Application no later than two years before expiration of applicant's license

Step 19a Public Notice of Application 14 days

Step 19b FERC Decision on Outstanding Requests for Additional Information (AIR)
30 days after Step 18

Step 19c Satisfaction of AIR 90 days after Step 18

Step 20 Notice of Acceptance and Ready for Environmental Analysis (REA)
60 days after Step 19a after satisfaction of AIR, etc.
(30 days after License Application, or longer)

Step 21a Comments on REA; Interventions; Preliminary Terms and Conditions; Applicant files for Water Quality Certification
60 days

Step 21b Reply to Comments on REA 45 days

Step 22a FERC issues non-draft Environmental Assessment (EA)
120 days after Step 21a

Step 22b FERC Issues draft EA or draft EIS
180 days after Step 21a

Step 23a Comments on non-draft EA 30-45 days after Step 22a

Step 23b Comments on draft EA or draft EIS
30-60 days after Step 22b

Step 24 Modified Terms and Conditions
60 days after Step 23a or 23b

Step 25 Commission Issues Final EA or EIS
90 days

Step 26 Final License Order upon completion of all previous Steps

4.1 Notice of Intent (NOI)

At least five years before expiration of an existing license, an existing licensee must file a Notice of Intent (NOI) to renew its FERC operating license. This notice must state the licensee's intent for the project's future, commit to follow the ILP, and include a Pre-Application Document which compiles all reasonably available information about the project and its impacts under the existing license.

In addition to such filing, the NOI must be published in newspapers and distributed directly to agencies, tribes, and other likely participants.

Unless you have notified FERC and the licensee of your interest in the project, you will not receive notice of the NOI and PAD. Once the NOI is issued, the clock starts ticking and there is only a limited time for review of certain documents. Since the licensee may issue the NOI and PAD anytime during the six month period (between 5.5 and 5 years prior to the license expiration, we recommend that you contact the licensee more than 5.5 years prior to state your interest in the proceeding. Ask whether the licensee is interested in collaboration with you and other participants in the preparation of the PAD. Ask to be included in the mailing list for any further consultation or notice, and enter an eSubscription for the project.

4.1.1 Process Selection

After July 23, 2005, the NOI must state whether the licensee will use the ILP or instead requests permission to use the TLP or ALP. A request must explain why the licensee believes that the other process is preferable to the ILP in the specific circumstances of the project. As to the TLP, the request must address five criteria, essentially going to the question: will the other process result in less cost, delay, or controversy? A request for the ALP must address two criteria: does a consensus among likely participants exist in favor of the ALP, and have they adopted a communications protocol? The

NOI must demonstrate that the licensee has consulted with agencies, tribes, and other likely participants regarding process request.³ It must notify that they may comment on the request to FERC within 30 days of the NOI. Any such comments must apply the same criteria.

The process selection is critical. Through the Pre-Application Document (discussed in Section 4.1.2,) the licensee proposes a general process (ILP, TLP, or ALP) as well as implementing details (such as the date for each step) for comment. You should file comments, whether you agree or disagree with the licensee's proposed process and schedule. If you disagree, propose specific alternatives and explain why they are more likely to resolve disputes that may arise in the proceeding. See Section 4.2.5 for specific strategy.

4.1.2 Pre-Application Document

The Pre-Application Document (PAD) compiles all existing information about project facilities, operation, and known or potential impacts on environmental quality, including protection, mitigation, and enhancement measures. Adopted in the ILP, the PAD is required in the TLP and ALP, starting July 2005. Because it is now a common element of all processes, we discuss it in Section 3.2.2(A).

4.2 Study Plan Development and NEPA Scoping

The licensee will develop a study plan in consultation with agencies, tribes, and other participants that describes how it will gather new information required to draft the license application. On a parallel track, FERC will publish a Scoping Document outlining issues to be evaluated in the licensing environmental document. The purposes of this stage are to characterize the environmental baseline affected by the project; identify corresponding management goals and objectives that will be applied by the regulatory agencies; and establish a plan of study (by the licensee) and review (by the agencies) of the project impacts and alternatives to protect, mitigate, and enhance environmental quality.

4.2.1 Tribal Consultation

Within 30 days of the NOI, OEP staff will meet with each affected tribe who is interested in such early consultation. Under its 2003 policy statement on “Consultation with Indian Tribes in Commission Proceedings,” such consultation occurs directly between OEP and the affected tribe, not in public meetings.

4.2.10 Study Plan Determination

Within 30 days of the filing of the revised Study Plan, the OEP Director will issue a Study Plan Determination. The determination will approve the plan subject to any modifications that the Director determines are necessary to assure an adequate record. That determination is final with respect to studies that relate to impacts under FERC's primary jurisdiction - namely, the impacts addressed under FPA sections 10(a) and (j). The licensee must implement the plan as approved and modified by this determination, excluding only any studies subject to a Notice of Study Dispute discussed below

4.2.11 Study Dispute

Within 20 days of the Study Plan Determination, any federal agency with authority to prescribe conditions under FPA section 4(e) or 18, or a state agency or tribe with authority to issue a water quality certification under CWA section 401(a), may issue a Notice of Study Dispute for any study within the scope of those authorities. Within 20 days thereafter, OEP will convene a Dispute Resolution Panel consisting of: its own representative not otherwise involved in the relicensing, a representative of the disputing agency or tribe not otherwise involved in the relicensing, and a neutral panelist selected by the other two panelists. The licensee may file written comments within 25 days of the Notice of Dispute. Other participants may file comments and participate in a technical conference that the panel will hold prior to its own deliberations. The panel will specify the form (oral or written) and scope of the information needed from such participants.

Within 50 days of the Notice of Study Dispute, the panel will make a finding whether each disputed study request meets the study criteria discussed in Section 4.2.4(A). The panel will then make a recommendation to FERC for a final decision, based on the finding. It will compile a record of its deliberations, including all documents submitted by the licensee or other participants. Within 20 days thereafter, the OEP Director will issue a written determination, which functions as an amendment to the Study Plan for those studies subject to the Notice of Study Dispute. The licensee must then implement any such studies. The Notice of Dispute must explain how the disputing agency or tribe's request meets the study criteria as discussed in Section 4.2.4(A). It must include contact information for the representative designated for the Dispute Resolution Panel. *See id.* at §5.14(b).

4.2.2 Endangered Species Act (ESA) Consultation

Although the ILP does not specify an exact time, the licensee must consult early with FWS or NMFS, as appropriate, to determine whether any listed species or its critical habitat, or any species proposed for listing, under the ESA, may occur in the project area. (See Section 2.3.4(F)). The PAD must include any existing information, and it also will serve as the starting point for development of a survey or any other study necessary to resolve whether a listed species may be present or how the project may affect such species or habitat. . Threatened and endangered species are treated the same under ESA section 7.

4.2.3 Notice of Commencement

Within 60 days of the NOI, FERC will issue a Notice of Commencement. The Notice of Commencement triggers the issuance of Scoping Document 1, initiates the comment period on

the Pre-Application Document, and makes some important process decisions. . It will request that participants file comments on the PAD (already issued by the licensee at the same time as the NOI). It will solicit study requests from participants and any recommended modifications to the Process Plan. It will state that that all communications with Commission staff related to the merits of the application must be on-the-record. See Section 3.2.2(E)). It will request that other federal or state agencies or Indian tribes cooperate in some manner in the preparation of an environmental document. It states FERC's intent as to which form of environmental document (EA or EIS) it will publish. It will also provide formal notice for a scoping meeting to be held within 30 days thereafter. Finally, the notice will initiate informal consultation under ESA section 7 and related laws.

The Notice of Commencement establishes deadlines for public comments on three documents. The Notice gives participants 60 days to comment on the PAD and Scoping Document 1, and so submit study requests in response to the PAD. You should provide detailed comments on all three documents. You should get a head start by reviewing the PAD when published with the Notice of Intent (60 days earlier). Also, you may begin drafting study requests even before the Notice of Commencement is issued . If appropriate, FERC will designate the license applicant as its non-federal representative authorized to participate in consultations on behalf of FERC.

4.2.4 Scoping Document and Process Plan

FERC will issue Scoping Document 1 (SD-1) concurrently with the Notice of Commencement. SD-1 outlines the issues that the environmental document will evaluate. It includes a short description of the project; No-Action Alternative (namely, renewal of the existing license without modification); Action Alternatives, such as a range of new or modified conditions in a new license; and yet other alternatives that FERC proposes to eliminate from further analysis. It will also categorize the project impacts to be analyzed. It will also list comprehensive plans relevant to the licensing decision.

SD-1 also outlines a proposed process plan. It sets the date and location for a scoping meeting and site visit where OEP staff will take oral comments on the PAD and SD-1 it. It requests that participants also file written comments. Such written comments must include any information or study requests to supplement the existing information in the PAD. Finally, SD-1 establishes due dates for these comments.

Within 30 days after the issuance of the Notice of Commencement and SD-1, OEP staff will host a scoping meeting in the project vicinity, including an actual site visit. This meeting is open to all interested participants. OEP staff are there to receive preliminary oral comments on: the environmental baseline and project impacts included in SD-1, adequacy of existing information in the PAD to analyze such impacts, and applicable management requirements for protection, mitigation, or enhancement of natural resources. They also will receive oral comments on the Process Plan, including provisions for inter-agency cooperation in the preparation of the environmental document.

4.2.5 Comments on Scoping Document 1 and Pre-Application Document

Within 60 days of the Notice of Commencement, a participant must file any comments on the PAD and SD-1. Comments may be supportive or critical. We explain the form and substance of critical comments below, since “job well done” does not require any further explanation. The filing may be in the form of a letter or a pleading. Whatever form is used, the comments should be organized to separately address the PAD and SD-1, since they are different documents. We begin with the PAD.

A. Pre-Application Document (PAD)

Comments must state any concerns about the PAD's treatment of existing information about project impacts. The commenter may provide additional information omitted from the PAD. Comments must also state any concerns about the schedule or sequence of steps in the licensee's Process Plan and recommend appropriate modifications to that plan.

The Process Plan should establish an agreed upon process regarding communications, meetings, notices, and other communications between participants to the licensing process. The Process Plan should be structured, implemented, and updated as appropriate to mitigate against that risk. At a minimum, the plan should include the following elements. It should establish a clear and realistic schedule for the many steps leading to license application, including time to address contingencies. It should establish an organization structure of committees (e.g., technical by resource, legal or policy, and plenary) that is designed to move discussion to decision. The plan should categorize each issue and assign it to the committee most competent to make a decision (e.g., the location of IFIM transects should not be assigned to a policy committee), should prevent duplication of effort as between committees, and should assure that the plenary committee has the capacity to knit the trees back into a forest. It should include protocols for document production and review, including a protocol for confidentiality of negotiation related to settlement. It should rely on incentives rather than penalties to motivate effective effort, since a participant cannot be required to waive or limit legal rights as a condition of participating. Most importantly, it should include a decision rule for the collaborative process. Some participants may fear that the licensee will unduly control a collaborative process, because it has the greatest resources to draft or attend meetings. A "one-text drafting" protocol mitigates against that risk. Under this protocol, any party may prepare a first draft of a given document, eventually including the settlement. Other parties may comment in advance of the next meeting. The preferred form of comment is: "yes," "no," or "yes if" Parties discuss comments and seek to resolve disputes at the next meeting. A party other than the initial drafter then prepares the second draft, showing proposed changes reflective of meeting discussion in redline/strikeout format. The process continues in this seriatim manner. At any given meeting, only the latest draft is on the table for review.

B. Study or Information Request

Comments on the PAD must include study or information requests. In addition to outlining existing information, the PAD will include a Preliminary Issues and Studies List that describes in general terms the potential studies that the licensee may undertake. This description functions as a preliminary outline of the eventual study plan. Participants should comment on the preliminary issues. However, in commenting on this description, comments must now make a big leap forward in specificity toward the study plan itself. The commenter must specifically identify and justify each study that it requests be included in the study plan. Study requests should include any study which the commenter believes is necessary for any condition in the licensing decision, whether FERC's or another agency's. Study requests should also cover those issues that contribute toward compliance with the National Environmental Act's requirements to evaluate alternatives and their relative impact on resources. Thus, the requests are intended to assure the adequacy of the record for conditions under FPA sections 10(a) and 10(j), which FERC administers, as well as FPA sections 4(e) and 18, CWA section 401(a), and other statutes administered by other agencies as discussed above. Each such request must be in a specific form where the commenter addresses seven criteria (hereafter, study criteria): statement of the subject and purpose of the request (e.g., "this study will assist in our understanding of project impacts on the following resource..."); statement of the relevant management goals of any agency or tribe with jurisdiction over the resource to be studied; explanation of any relevant public interest considerations supporting the request, if the commenter is not an agency; description of existing information concerning the subject and an explanation why additional information is needed; explanation of the nexus between the project and the resource to be studied, and how the study results will inform the development of the license articles; explanation how any proposed study methodology is consistent with generally accepted practice in the scientific community or, as

appropriate, considers relevant tribal values and knowledge; and description of considerations of level of effort and cost, as applicable, and why any proposed alternative studies would not be sufficient to meet the stated information needs.

We recommend several rules of thumb for framing your study requests.

Do your homework. The study plan provides 90% or more of the record on which FERC will make its decision in a typical proceeding. You must take this initiative to assure the quality of that record. If not challenged, a licensee may be inclined to pick a study method which is (A) the least costly option for analyzing a particular impact and (B) least likely to produce study results that require significant changes in existing operations.

Think big. You should timely submit a study request to both FERC and the licensee regarding project impacts of concern to you. The request notifies the licensee what information you believe is needed for a complete application and how to obtain it, either through field studies or library research.

Once you file the request, the licensee must consult with you and may agree, particularly if you have the support of agencies with prescriptive authorities. Nothing ventured, nothing gained. Put in the negative, your right to object to an application as deficient is compromised or may be waived if you do not file a timely request.

Don't waste money. The licensee is required by law to undertake a wide range of studies in order to provide an adequate record for the licensing decision. The mandatory studies generally relate to engineering, safety, economics, environment, and recreation. A study request should be reasonable and necessary in relation to the resource goals and management objectives, and the study methodology should be generally accepted practice.

Take the initiative. In a proceeding with complex environmental issues that require a high level of technical expertise, it may be worthwhile to retain an independent expert to critique the licensee's study plan and identify study needs. If funding is not available to you, ask the licensee, who may agree to the peer review so as to reduce the risk of subsequent dispute, rehearing, or appeal.

Work together. You should collaborate with resource agencies, Indian tribes, and other participants to prepare study requests. In some relicensing proceedings, HRC members and such participants have jointly submitted study requests. Even if study requests are not submitted jointly, the agencies and tribes may be willing to advise you or incorporate your requests into their own.

C. Scoping Document 1

Comments on Scoping Document 1 (SD-1) should be organized topically, following that document's outline. They should state any concerns about the description of project and its impacts or the range of alternatives for the Proposed Action. Such alternatives must bracket what FERC and prescribing agencies may properly consider in reaching the licensing decision. Thus, if a range of minimum flows from X to Y cfs would arguably provide the required protection for a given resource, then the environmental document must consider such a range. The licensee's support or opposition with respect to any such alternative is irrelevant at this early step, since SD-1 or the environmental document which will follow are intended to provide an objective analysis, not a justification for any one position. Indeed, a commenter who requests an alternative in such comments is not expressing support for that alternative in the final decision - merely stating that the alternative should be included in the environmental document to assure an objective basis for the licensing decision. Accordingly, such comments should specifically identify alternatives for operation (such as minimum flow schedule, ramping rate, or lake level) and other environmental conditions that the commenter believes should be included in the NEPA review.

SD-1 often does not describe operational Action Alternatives in a detailed form. Typically, it includes a no-action alternative, the licensee's Proposed Action, a determination whether dam

removal will or will not be evaluated, and a general statement that more defined operational alternatives will be considered as the proceeding goes forward. In short, SD-1 frames the outer boundaries of alternatives and impacts. As discussed above in Section 3.2.4, your comments should propose specific alternatives and their basis.

4.2.6 Scoping Document 2

Within 45 days of the deadline for comments on the PAD and SD-1, OEP may at its discretion publish a Scoping Document 2 (SD-2). This will respond to timely comments on SD-1, both written and oral.

File further comments on SD-2 if you believe that FERC has not responded adequately to prior comments. The strategy is “early and often,” without badgering or repeating - the later in the proceeding you call an issue, the less likely that it will be resolved in your favor.

4.2.7 Proposed Study Plan

Within 45 days of the same deadline, the licensee must file a proposed Study Plan. This must identify the studies the licensee proposes to undertake and otherwise respond to each timely study request. The plan must show that each proposed study, or each rejection of a study request, complies with the study criteria discussed in Section 4.2.5. In other words, the licensee, like a commenter, must address the utility of each study for the licensing decision, as well as cost. In addition, the plan must include a detailed description of the scope, method, and schedule of each study and must provide for continuing consultation with participants and progress reports.

4.2.8 Comments on Proposed Study Plan

Within 30 days of filing the proposed Study Plan, the licensee must hold a meeting to take further comments and more importantly, seek to resolve disputes related to choice of studies. It may hold further meetings for the same purpose. A participant must file any written comments on the proposed Study Plan within 90 days after the plan filing. If the participant disagrees with a choice (or rejection) of a study, the comments must comply with the study criteria discussed above in Section 4.2.5.

4.2.9 Revised Study Plan

Within 30 days after such comments, the licensee will file a revised Study Plan. This revision must include all oral and written comments, describe efforts to resolve disputes, and again comply with the study criteria. A participant may file comments on this revision within 15 days of such filing.

4.3 Implementation of Study Plan

The licensee must implement the approved Study Plan. It will conduct the required studies on schedule. It must file progress reports, disclose study results to any participant who so requests, and seek to resolve disputes that may arise regarding the adequacy of the Study Plan or implementation.

4.3.1 Study Reports

In the first year after the Study Plan Determination as provided in the schedule, the licensee must file an initial Study Report. This report will describe progress in implementing the Study Plan. It must include any variance from the approved content or schedule and must also propose appropriate modifications to the approved plan. The licensee must file an Updated Study Report in the second year after the Study Plan Determination as provided in the schedule.

4.3.2 Additional Study Request

A participant may request a modified or new study in response to a Study Report, as follows. Within 15 days of filing the initial Study Report, the licensee will hold a meeting with participants and OEP staff to discuss the study results and any proposed modifications. Any participant or the OEP staff may file a disagreement with the meeting summary, which the licensee must prepare within 30 days of that meeting. The disagreement may propose a modified or new study. Within 30 days thereafter, the OEP Director will resolve the disagreement and amend the approved Study Plan as appropriate.

The same procedures for review, disagreement, and resolution apply to the Updated Study Report.

The licensee, participant, or OEP staff who proposes a new or modified study must show good cause. The burden of persuasion is proportional to how much change is proposed in the approved Study Plan, or how much time has passed since the Study Plan Determination. Fifteen days after the meeting, the applicant will file a meeting summary.

A. Modified Study Request

A proposed modified study must comply with the study criteria discussed in Section 4.2.4(A) and must also show that: (1) approved studies were not conducted as provided for in the approved study plan; or (2) the study was conducted under anomalous environmental conditions or that environmental conditions have changed in a material way.”

B. New Study Request

A proposed new study must satisfy the study criteria discussed in Section 4.2.4(A). It must also meet the additional criteria: (1) whether any material changes in the law or regulations applicable to the information request has occurred; (2) why the goals and objectives of any approved study could not be met with the approved study methodology; (3) why the request was not made earlier; and (4) whether significant change has occurred in the project proposal, or significant new information material to the study objectives has become available. Further, any proposal for a new study following the Updated Study Plan must show “extraordinary circumstances,” not just good cause.

4.4 Development of License Application

The licensee develops the license application in two steps - a preliminary and then a final form.

4.4.1 Preliminary License Proposal

At least 150 days prior to the deadline for filing a license application, the licensee must file and request comments on a Preliminary Licensing Proposal. The proposal must: (1) provide a project description, including any additions or other modifications to project facilities and waters; (2) describe the existing and the proposed plan for project operation and maintenance, including environmental measures; and (3) include an analysis of existing and any impacts, taking into account the environmental measures. The impacts analysis must apply the study results. The Preliminary Licensing Proposal will also include a draft Biological Assessment to evaluate whether the Proposed Action may have an adverse effect on any species listed under the ESA or its critical habitat (see Section 2.3.4(F)).

The Preliminary Licensing Proposal format is simpler than an application in order to minimize the expense of document production and distribution. A licensee may elect to file a draft license application by providing notice in the Updated Study Report.

Within 90 days of such filing, a participant or OEP staff may comment on the Preliminary License Proposal or draft license application. The comments may include recommendations whether the Commission should prepare an EA (in draft or final form) or an EIS. Any new study request must show extraordinary circumstances and satisfy the criteria described in Section 4.3.2(B).

. A waiver of the requirement to file a Preliminary License Proposal or draft license application may be requested based on a consensus of the participants in favor of such waiver. *See id.* at § 5.16(f).

4.4.2 License Application

The licensee must file a new license application at least 24 months before the existing license expires. In addition to publishing notice in papers of general circulation, the licensee must serve the application on each participant who has been consulted in the proceeding and any adjacent property owners.

A new license application runs into the thousands of pages. The information is in a standard form. The application must identify the licensee and primary contact. It must also identify affected persons in several categories: owners of any lands or waters needed for project construction, operation, or maintenance; any other adjacent property owners; affected federal, state and local agencies, including the county in which the project is located; and affected tribes. The application must contain Exhibits A-F and G,

A. Exhibit E (Environmental Exhibit)

This exhibit must contain the following eight sections.

General Description of the River Basin is self-explanatory.

Applicable Laws includes a discussion of compliance with CWA section 401(a), ESA section 7, CZMA, and other laws external to the FPA that bear on license conditions.

Consistency with Comprehensive Plans analyzes whether the Proposed Action favored by the licensee is consistent with comprehensive plans already accepted by FERC under FPA section 10(a).

Project Facilities and Operation includes: maps and drawings of facilities and lands, the existing and proposed plan of operation (expressed in terms of capacity and generation, as well as reservoir level, minimum flow, ramping rate, and flood control).

Proposed Action and Action Alternatives describes the licensee's proposal for a new license, including all environmental measures. **Affected Environment** includes a detailed description of the area affected by the project, not limited to the project boundary. **Environmental Analysis** analyzes the direct, indirect, and cumulative impacts on each of the resources listed in the PAD (*see* Section 3.2.2(A)). It applies the study results and any other relevant information obtained by the licensee.

Proposed Environmental Measures are the measures that the licensee proposes to address such impacts. The section must describe with specificity the intended environmental benefits. It must also describe why the licensee does not adopt a preliminary measure proposed by a participant in the comments on the PAD or otherwise (*see* Section 4.2.5(A)).

Unavoidable Adverse Impacts must identify any adverse impacts that would occur even if the proposed environmental measures are implemented.

Economic Analysis is an annualized analysis of the costs and revenues to the licensee under the existing license and the proposed new license. This section estimates costs for: any construction, operation and maintenance of the project facilities; property and income taxes; each proposed environmental measure; and any such measure proposed by a participant and rejected by the licensee. Costs include: out-of-pocket payments, as well as foregone revenues associated with alternative flow schedules and other operational restrictions. Revenues include: proceeds from sale of capacity and generation in the electricity markets, as well as miscellaneous revenues associated with recreational and other uses of project facilities.

Cumulative Impacts includes the past and present impacts under the existing license, and the foreseeable impacts under any new license, of the project in combination with other facilities and activities in the river basin. The application must disclose the temporal and geographic scope of the cumulative impacts analysis.

Documentation of Consultation describes consultation with agencies and other participants.

Literature Cited is self-explanatory.

In addition to these required elements of Exhibit E, a license application also will include two related documents, which may be combined with Exhibit E or separately stated. The application must include a **response to new or modified study requests** that were filed in response to the Preliminary Licensing Proposal. It must explain its basis for rejecting any such request. Further, the application will include a **Biological Assessment (BA)** if the project area includes listed species or critical habitat under the ESA. The BA evaluates whether the Proposed Action is likely to have an adverse impact on such species or habitat. The BA must make one of three findings: the Proposed Action will have no effect, is not likely to adversely affect, or is likely to adversely affect the listed species.

B. Exhibit H (Developmental Benefits)

The application must also contain **Exhibit H**, which describes how the project fits within the electricity system. This exhibit must include four sections. **Plan to use project for efficient electricity service** describes project coordination with upstream and downstream facilities. **Need for project electricity** compares the project against alternative sources, in terms of cost, availability, and reliability from the licensee's perspective. **Electricity consumption efficiency program** describes such a program if the licensee is a retail utility or an actual consumer. **Financial capacity** provides the assurance that the licensee will have such capacity to perform license obligations.¹

4.4.3 Tendering and Related Notices and ESA Consultation

The application filing triggers a quick series of steps that FERC takes to prepare for the substantive review of the application, including the preparation of the environmental document.

A. Tendering Notice

Within 14 days of such filing, FERC will publish a “Notice of Application Tendered for Filing.” This notice includes a schedule for environmental review and all other steps leading to readiness of the application for the Commission's decision. It specifically includes a schedule for consultation under ESA section 7 and certification under CWA section 401. In effect, the schedule included in the Tendering Notice amends the schedule previously published in SD-1 or SD-2. FERC will publish the notice in the *Federal Register* and will notify participants by mail.

B. Resolution of Pending Information Requests

Within 30 days of the application filing, the OEP Director will issue an order resolving any requests for new or modified study requests made in response to the Preliminary License Proposal. In addition, the OEP Director will require the licensee to submit any additional information or documents relevant to an informed decision on the application. The application may be dismissed or held in abeyance if the licensee does not timely supply additional information.

C. Notice of Deficiency

Within 30 days of the application filing, OEP Director will determine whether the application is deficient as a result of omission of required exhibits or other information or the failure to consult as required. The application will be rejected if the OEP Director and the Commission jointly determine that: (A) it is patently deficient because it “substantially” fails to conform with these requirements, or (B) for a new project, it seeks to use waters already subject to a preliminary permit or exemption. If merely deficient, the OEP Director will issue a notice that identifies deficiencies and sets a deadline, not to exceed another 90 days, for corrections. A revised

application will be accepted if the deficiencies are cured, or rejected if still deficient. . The Director will notify the applicant of specific deficiencies by letter or by phone for minor deficiencies.

4.5 Substantive Review of License Application

FERC will now undertake the substantive review of a non-deficient license application. This stage includes three critical steps: the Notice of Acceptance and Readiness for Environmental Analysis (REA), after which agencies and other participants must timely submit mandatory and other environmental conditions; the environmental document; and the inter-agency process to resolve any disputes regarding FPA section 10(j) conditions.

4.5.1 Notice of Acceptance and Readiness for Environmental Analysis

The REA Notice is issued once OEP determines that all approved studies have been completed, any deficiencies in the application have been cured, and no other information is required for substantive review. This notice has several functions. It finds that the application is accepted and ready for substantive review. It starts the 60-day clock for any interested participant to file for formal intervention (*see* Section 3.2.4(C)). It requires that agencies submit mandatory conditions under FPA sections 4(e) and 18 in preliminary form, and further that all participants submit recommended conditions under FPA section 10. Further, the REA Notice amends the schedule issued with the Tendering Notice.

A. Mandatory and other Conditions

Agencies and other participants must submit environmental and other conditions within 60 days of the REA notice. Mandatory conditions are preliminary and subject to modification following publication of the environmental document. The license may respond to such comments within 45 days thereafter. Within 60 days of the REA Notice, the licensee must demonstrate the status of compliance with CWA

section 401(a). It must file: a water quality certification or evidence of waiver, or at the minimum, a request for certification, including the date on which the certifying state agency received the certification request.

B. Amendment of Application

Mandatory or recommended conditions, and the certification, may be amended in response to the submittal of a license amendment application that materially changes the plan of development. In that event, FERC will issue a second REA Notice.

4.5.2 Environmental Document

As lead agency under FPA Part I, FERC publishes an environmental document as required by NEPA before making its licensing decision. The document, based on the PAD and Exhibit E, describes the Proposed Action and alternatives and analyzes the direct, indirect, and cumulative impacts of each alternative; and makes a recommendation to the Commission for its licensing decision. The document may be an EA, or a more comprehensive EIS. An EA may be published in final form, or in draft form subject to comment before finalization, while an EIS is always published in draft form before finalization. The publication of the environmental document triggers the final opportunity for submittal of conditions.

A. Environmental Assessment Published Only in Final Form

OEP will issue a final EA within 225 days of the REA notice, if it decides not to publish a draft. The EA will include: (1) draft license articles prepared by OEP; (2) a preliminary determination of whether each condition recommended under FPA section 10(j) is consistent with the FPA, and (3) any preliminary mandatory conditions submitted by other agencies. Such an EA will establish a deadline, typically not more than 45 days, for comments. A participant may stand by its recommended conditions filed in response to the REA Notice, or may file new or amended recommendations based on the analysis in this document. In turn, agencies must file all modified mandatory conditions within 60 days following the close of the comment period.

B. Environmental Document Published First in Draft Form

OEP will issue a draft EA or EIS within 225 days of the REA notice, if it decides not to proceed straight to a final EA. The content is the same, regardless of form. The draft document will set a deadline for comments, typically 30 to 60 days. Agencies must file all modified mandatory conditions within 60 days of the close of the comment period. FERC must then issue a final environmental document within 90 days thereafter.

4.5.3 FPA section 10(j) Process

In response to the Ready For Environmental Assessment (REA) Notice, the FWS, NMFS, or a state department of fish and wildlife may submit recommended conditions under FPA section 10(j) for the protection, mitigation, and enhancement of fish and wildlife resources affected by the project. A submittal must include the management objectives, as well as the evidentiary and legal basis for such conditions, and it must be filed by the deadline set in the REA Notice. Even if it would address the impacts differently on its own initiative, FERC must defer to these recommendations unless it makes an affirmative finding of inconsistency with the FPA. After requesting any needed clarification, OEP will make a preliminary determination regarding consistency of each recommendation with the FPA or other applicable law. If the latter, the finding will include: (1) an explanation why OEP believes the recommendation is inconsistent with the FPA or other applicable law and (2) an explanation how other measures which OEP proposes in the environmental document will adequately and equitably protect, mitigate, and enhance affected fish and wildlife resources.

Any party may comment on this determination within the comment period established for the EA or draft environmental document. The agency or tribe that submitted the contested recommendation may also request a meeting to resolve the dispute, to be held within 90 days of the date when OEP issues the preliminary determination of inconsistency. OEP will provide public notice of the meeting and will prepare a meeting summary thereafter. OEP and the agency must make a good faith effort to resolve the dispute, and OEP specifically must give “due weight” to the expertise and authority of the agency. This process ends when FERC issues its licensing order. If FERC does not adopt a Section 10(j) recommendation, the order must include findings required by FPA section 10(j)(2), as discussed in Section 2.3.3(C).

4.5.4 ESA Formal Consultation Process

On the basis of the Biological Assessment (BA), FERC may find that its proposed licensing action is not likely to adversely affect listed species or critical habitat, as discussed in Section 2.3.4(F). In that event, FERC will request the concurrence of FWS or NMFS as appropriate. If FWS or NMFS agrees after review of all supporting information, it will issue a concurrence letter, which means that FERC has satisfied its Section 7 consultation obligation in that proceeding. However, if FERC (or FWS or NMFS) finds that the licensing action may have an adverse impact on a listed species or its critical habitat, then FERC must request formal consultation, a structured process where FERC and the agency evaluate alternatives and measures to present such effect. At the conclusion of that formal consultation, the agency will issue a Biological Opinion (BO), which includes: (A) analysis of the effects of the Proposed Action; (B) a finding that the action is likely to jeopardize the continued existence of a listed

species or result in the destruction or adverse modification of critical habitat (a “jeopardy BO”), or in the alternative, a finding that the action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat (a “no jeopardy BO”); and (C) depending on that finding, the RPAs or RPMs, as well as the take limitation, discussed in Section 2.3.3(F) above.

4.5.5 Water Quality Certification Process

Under the Clean Water Act section 401(a), the State where a project discharges must certify that the project complies with all applicable water quality standards. See Section 2.3.4(F). The State must act on the licensee's request for water quality certification of a license application within one year of receipt of that request, or its certification authority for that license is waived. The licensee must file that request no later than the date the license application is filed, as discussed in Section 4.4.2(A). The State may deny the request without prejudice if, as the statutory deadline approaches, it finds that the request does not include all information required for certification or it is not otherwise prepared to take final action. A denial without prejudice effectively restarts the one-year clock. Thus, the statutory deadline applies again when the licensee then re-files the certification request. This pattern of request, denial, and re-filing of request may occur several times until the State makes the certification decision. A special process applies if FERC determines that a flow or other discharge from a project may affect the water quality of a State downstream of the actual discharge location. In that event, FERC must notify the downstream State within 30 days of the Tendering Notice.² If the downstream State finds that the discharge in the Proposed Action *will* violate its water quality standards, it will notify FERC of its finding, object to the approval of the Proposed Action, and request a public hearing. Based on evidence presented at the hearing, FERC must condition the license in a manner that ensures compliance with the water quality standards of the downstream State. The license may not be issued if such compliance is not possible.

4.5.6 Coastal Zone Consistency Process

The State must act on the licensee's request for a determination that a license is consistent with the CZMA program, discussed in Section 2.3.4(H), within six months of receipt of a request, or its authority to determine if the license should be forfeited. The State may toll (or pause) that statutory clock by finding that it has not yet received all “necessary data and information” required for such review. In this event, its deadline is related to its subsequent finding that the licensee has provided that necessary information.

4.6 Licensing Order

FERC will issue a licensing order. If FERC grants the license application, the order will state all conditions in the form of numbered articles, and it will make findings of fact and law that support these articles. A denial will make the necessary findings and, for an existing project, must also address decommissioning. The order will be final 30 days after issuance, unless the licensee or other party timely seeks rehearing.

7 Settlements as Preferred Basis for Licenses

As a matter of policy, FERC now encourages settlement as the basis of a license whenever the licensee and a critical mass of other participants believe there is a reasonable prospect of timely success. A settlement is a legal document binding between signatories to settle disputed legal and factual issues. See Appendix D for forms of settlement. FERC prefers settlement as the basis of new license for a given project, no matter which of the licensing processes is used. Practice and Procedure Rule 601 establishes settlement as an accepted method to resolve disputed issues in any proceeding before FERC. This policy reflects FERC's experience that collaboration tends to reduce the transaction (or process) cost incurred by the licensee in the course of the licensing

proceeding. Settlement also prevents or at least reduces the frequency or severity of disputes about the adequacy of the licensee's study plan, such as a model used to predict how alternative flow release schedules may affect the availability and quality of fish habitat below the project. The ILP is projected to be 30% more efficient than the ALP, because of the parallel track of license application development and environmental review. Such process costs may be thought of as overhead associated with the production of a good or service: the lower the overhead, the more the producer may invest in quality.

7.1 Settlement Process

A licensing settlement must be filed with FERC in the form of an Offer of Settlement. As required by Rule 601, an offer must be signed by the supporting parties and must include an explanation why it is a proper basis for the license. FERC will receive and consider comments by non-signatories before decision. It may approve, disapprove, or modify a settlement in its final decision.

7.1.1 Timing

Under Rule 601, an Offer of Settlement may be submitted at any time before FERC's final decision in the proceeding. The best practice is to submit a settlement before or, at latest, during the public comment period on the REA Notice or, in an ALP, the Notice of Acceptance. FERC must base its licensing decision on an environmental document that considers Action Alternatives, and a settlement may be approved only if it is within the scope of one or more such alternatives. While FERC has approved settlements submitted after the publication of the draft or even final environmental documents, it strongly discourages such lateness, which creates a significant risk delay in the final decision if such a document must be supplemented to address a new Action Alternative, or if non-signatories submit adverse comments.

Working backwards from the REA Notice, the licensee and other participants typically decide early in a proceeding whether they will try to negotiate a settlement. The Process Plan in the ILP, like the Communications Protocol in an ALP, must address the intent and schedule for such negotiation.

Inertia is a significant impediment to settlement. Establishing a process structure as soon as possible is critical to overcome inertia. See Section 4.2.5(A) above for specific recommendations on such structure. These recommendations boil down into a few principles: (1) Adopt the process in written form to prevent misunderstanding; (2) Work on a clock; (3) Become accustomed to making little decisions together, in preparation for the bigger decisions involved in settlement; (4) Resolve disputes as they arise, not later; and (5) Negotiate only those issues necessary for settlement.

7.1.2 Form

An Offer of Settlement must include: a settlement of disputed issues in the proceeding and an Explanatory Statement. That statement must show how the settlement is a proper basis for the licensing decision. It must cite all documents and other evidence that support it. An offer may be partial or complete. A offer may be partial in two ways: it may resolve some but not all of the disputed issues in the proceeding, leaving the signatories free to address the unresolved issues; or it may be signed by some but not all of the parties. A settlement in a licensing proceeding will likely be approved if it resolves the most significant project impacts, including flow regulation, and if it is supported by the licensee, agencies, tribes, and other participants representing the diversity of interests affected by a project.

7.1.3 Service

An offer must be served to every party on the official service list. The offer must expressly notify all such non-signatories when comments are due.

7.1.4 Comments

Comments on a settlement must be filed with the Secretary not later than 20 days after the filing of the offer, and any reply comments must be filed not later than 10 days thereafter, unless FERC provides otherwise. Failure to file comments waives objection. Any comment that disputes a factual issue relevant to the settlement must include an affidavit documenting the commenter's position in that dispute.

7.1.5 Decision

Approval of a settlement as the basis of a new license must be based on substantial evidence and must not be arbitrary or capricious. In other words, a settlement must meet the same legal standards as a final decision in a disputed proceeding. If the record does not contain substantial evidence upon which to base a reasoned decision, FERC may establish procedures for the purpose of receiving additional evidence.

7.2 Structure of Settlement

A typical settlement in a licensing proceeding has three parts. **Boilerplate terms** establish the contract whereby all signatories commit to file the Offer of Settlement and thereafter support is as the basis for a license. **Proposed license articles** are environmental or other measures that will be implemented by the licensee to protect, mitigate, and enhance natural resources impacted by the project. **Non-jurisdictional measures** are other measures that non-licensees will implement, either solely or in coordination with the licensee, to complement what the licensee will be obliged to do. FERC will approve the proposed license articles, if supported by substantial evidence and otherwise consistent with the statutory requirements for a licensing decision. FERC may acknowledge or accept the boilerplate terms and the non-jurisdictional measures, but it will not approve or enforce them. That is because its enforcement jurisdiction under FPA Part I only runs to licensees and their licenses. Thus, a license may establish duties for the licensee's performance of environmental measures, and FERC will enforce such duties; while a license may not include any duties of non-licensees (whether agencies, tribes, or other participants), because FERC may not enforce such duties in any circumstance.

7.2.1 Boilerplate Terms

A settlement is a contract between signatories to support FERC's approval of proposed license articles in the license. Like any contract, it thus includes boilerplate terms that establish the relationship between the signatories. Indeed, boilerplate is a misnomer, since it is commonly understood to mean "meaningless." Boilerplate here means that the terms describe how the signatories will relate in the implementation of the settlement, including the response to opposition from any stranger. **Parties** are the signatories of the settlement. **Recitals** are factual statements that provide context, including the status of the licensing proceeding, the negotiation process, and the intent of the signatories for use of the settlement. **Definitions** define terms that are not otherwise defined in general law or rule. **Effective date** is when the contract takes effect - typically, the date when the final signatory signs. **Term** establishes when the settlement expires - typically, when the new license expired, or earlier if the licensee withdraws from the settlement. **Purpose** states the signatories' intent and hope that FERC will approve the proposed license articles as the basis of the license. **Resolved Issues**, like its converse **Unresolved Issues**, define the scope of the settlement and specifically state whether the signatories will dispute any unresolved issues going forward in the proceeding. **Reservation of Rights** or **No Precedent** means that the signatories retain all legal rights except as expressly exercised in the contract. Thus, while a settlement may resolve the proposed license articles for one project, the same signatories are free to take different positions in other proceedings. **Authority to Sign** is a representation that each signatory is authorized to bind the represented party. OEP will never sign a settlement, because it cannot bind the Commissioners in their decision on the offer. Regulatory agencies may sign, subject to a **Reservation of Authority**. This reservation means: (A) the contract does not modify in any way the agency's duty to protect the public interest as

required by its organic statute and implementing rules; and (B) the agency has the right to withdraw from the settlement after signature, take a position inconsistent with the settlement, or take such other action as it determines to be necessary for such compliance. Since a settlement typically is signed before publication of an environmental document or completion of the record, this reservation typically includes the specific right to seek mutually agreeable modifications to the settlement, or withdraw in the absence of such modifications, if the subsequent development of the record requires such modifications in its judgment. An agency which has authority to prescribe conditions under FPA section 4(e) or 18, CWA section 401(a) CZMA, or ESA, may sign a settlement before prescription, and thus may use the settlement as the basis for its prescription, provided the reservation expressly acknowledges its duty to make an independent decision (taking into account the entirety of the record, including public comments) when that decision is due. For example, see Appendix D, pp. D-289, D-666. Most importantly, the boilerplate terms establish duties and procedures for implementation of the settlement. **Duty to Support** commits the signatories to submit the settlement, when effective, as an Offer of Settlement and support it in the face of any adverse comments. From the licensee's perspective, this duty means that its Proposed Action is the license application not as filed, but as modified by the settlement. **Implementation Procedures** will be established to address contingencies that affect whether the settlement is approved. Such contingencies include an agency's adoption of mandatory conditions inconsistent with the settlement, a non-signatory's submittal of adverse comments, or even FERC's disapproval (in whole or part) of the settlement. The procedures address what actions the signatories will take in these scenarios. **Dispute Resolution Procedures** commit the signatories to make best efforts to resolve disputes that arise in the implementation of the settlement and may specify the form of resolution, such as mediation or arbitration. **Amendment Procedures** provide how the signatories will effect any mutually agreeable amendment after initial signing of the settlement. They also address whether the licensee or other signatories may seek, after approval of the settlement, to amend the relevant license. **Withdrawal Procedures** permit a signatory to withdraw if a significant dispute regarding the implementation of the settlement is not resolved through the dispute resolution procedures, and they typically provide that the settlement terminates if the licensee withdraws. **Enforcement Procedures** define the venue and remedies for enforcement of the settlement. They preserve the existing venue of a federal or state court and are typically limited to specific performance, excluding damages. FPA Part I, not the contract, governs enforcement of any proposed articles that FERC incorporates into the license.

Since 1990, more than 200 settlements have been executed and filed with FERC as the basis for licensing decisions. All include boilerplate terms in some form. Paradoxically, there is not yet a standard set of boilerplate terms, which therefore tend to be renegotiated in each proceeding. In these past settlements, the terms covering each topic above range from simple to very complex, depending on project circumstances and drafters' preferences. Simpler is better, other things being equal, since complexity inevitably results in greater difficulty in negotiation or later interpretation of the terms, which, after all, are not the substance of the settlement. You should use the examples included in Appendix D, as well as others not included (simply as a function of space limitations), and extract those terms that appear workable in your circumstances. The licensee may have preferences if it has recently negotiated a settlement for another project.

7.2.2 Proposed License Articles

Proposed license articles are environmental and other measures that the signatories believe fall within FERC's jurisdiction to approve and then enforce. In short, each such measure must: (A) oblige the licensee, and only the licensee, to implementation; (B) be stated in a specific and enforceable form (e.g., "licensee will release X cfs," not "licensee will release an unknown flow"); and (C) have a nexus to a project impact that a relevant statute, such as FPA section 10, requires be addressed in the licensing decision.

As preferred form, proposed license articles are stated in a discrete part of the settlement, such as Appendix A. The boilerplate terms, which form the main text of the settlement, call out specifically that Appendix A is the only part submitted for FERC's approval.

If a licensee agrees that an environmental measure will be implemented in an adaptive or collaborative manner with other signatories, that commitment must be bifurcated, as follows. Because FERC only has jurisdiction over the licensee, the proposed license article (which is being submitted for FERC's approval) should state the licensee's obligation. E.g., "Licensee will convene a Collaborative Management Team consisting of the following parties In consultation with those other parties, licensee will adopt protocols for the team's meetings, including schedule and a decision rule. Licensee shall consult with team before submitting the following monitoring reports to FERC for approval" The obligations of other signatories to participate in the team, and additional details, should be stated separately, as a non-jurisdictional provision in a separate Appendix which, while included in the settlement, is not submitted for FERC's approval. Compare Offer of Settlement on Rehearing, Roanoke Rapids and Gaston Hydroelectric Project, Article 413, available at Appendix D, p. D-625 (collaborative management in jurisdictional form) and Comprehensive Settlement Agreement, Roanoke Rapids and Gaston Hydroelectric Project, Technical Settlement, Article FL1, available at Appendix D, p. D-526 (the same in non-jurisdictional form).

7.2.3 Non-jurisdictional Measures

Non-jurisdictional measures are substantive commitments by non-licensees in the event that the settlement is approved. In other words, leaving aside the boilerplate duty to support the settlement through such approval, a non-licensee signatory may commit to operate a monitoring station on its own property, co-fund a measure which will otherwise be implemented by the licensee at a lesser level of funding, or participate in adaptive management of a license article. As preferred form, such commitments are stated separately from the proposed license articles (e.g., in an Appendix B), and the boilerplate terms clearly state the commitments as enforceable only as a matter of contract and are not submitted for FERC's approval.

8 Conclusion

The HRC hopes that this Toolkit will contribute to effective participation by conservation groups and others interested in licensing proceedings. We welcome your comments, which will help us improve to this Toolkit in future editions. Please address all questions and comments to the HRC Coordinator via e-mail, at coordinator@hydroreform.org.