





Hydropower Licensing—Get Involved

A GUIDE FOR THE PUBLIC







HYDROPOWER IN YOUR COMMUNITY

You may have just learned that the lake near your home, the dam that releases water where you boat, or the area in the ocean where you fish is being considered for a FERC license or relicense. You may be wondering what that means and how it could affect the activities you enjoy.

The Federal Energy Regulatory Commission (Commission or FERC) licenses and relicenses hydroelectric projects, including new hydrokinetic technologies, and wants you to know how to participate in the licensing process. To help you get involved, this brochure explains the Commission's licensing process and addresses the most frequently asked questions about the hydropower program. A glossary is provided at the end of this brochure to familiarize you with some of the technical terms associated with hydropower projects and the work of the Commission.



THE COMMISSION'S ROLE

The Federal Energy Regulatory Commission is an independent federal agency with a mission to regulate and oversee energy industries in the economic, environmental, and safety interests of the American public. Part of this mission involves promoting the development of a strong national energy infrastructure that includes hydropower, which is currently the leading renewable energy source in the United States. Congress has charged the Commission with evaluating whether proposed non-federal hydropower projects should be approved. The Commission does not propose, construct, operate, or own such projects. But it does issue preliminary permits and licenses for hydropower projects, enforces the conditions of each license for the duration of its term, and conducts project safety and environmental inspections.

What is a preliminary permit?

Preliminary permits maintain a permittee's priority to file a license application while it gathers data and studies the feasibility of developing a proposed project at a particular site. Permits expire after three years; they do not authorize any land-disturbing activities or project construction or installation. During the term of the permit, a permittee prepares an application for an original hydropower license.

What is an "original" hydropower license? What is a "new" hydropower license?

An original hydropower license authorizes the construction and operation of a project for a term of up to 50 years. A new license, also called a relicense, authorizes the continued operation of an existing (previously licensed) project, and the license term may be 30 to 50 years. The license term depends on the cost of project development and environmental measures for an original license or of any developmental or environmental modifications for the relicensing of an existing project.

IS IT A PERMIT OR LICENSE

PRELIMINARY PERMIT

- Does not authorize construction or any landdisturbing activities
- ☑ Issued for a term up to 3 years
- ☑ Reserves site for permit holder; includes progress reports
- ☑ No dam or land ownership required

LICENSE

- Authorizes construction and operation of a hydropower project
- ☑ Issued for a term up to 50 years
- ☑ Includes measures to protect the environment
- Requires that licensee has or obtains ownership or easement on project lands and waters

What is the Commission's involvement after a project is licensed?

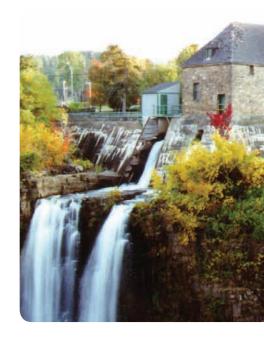
If a proposed project is licensed, the Commission reviews and approves the final designs for project structures before construction begins and monitors the progress of project construction. After construction is complete, Commission staff conducts periodic dam safety inspections to ensure safe project operation, as well as environmental inspections to ensure that project operators comply with environmental safeguards required by the license. The Commission ensures that any required plans, such as shoreline, cultural, or fisheries management plans, are developed and implemented according to the license.

What if a licensee wants to make changes at a licensed project?

During the term of a license, the Commission must approve any proposed changes or amendments to that license. Notices of applications to change license requirements, including discontinuing operations, changing ownership or use of project lands, or modifying project facilities or operation, are published by the applicant in your local newspaper, posted in eLibrary (discussed later), and evaluated before the Commission acts.

OVERVIEW OF COMMISSION PROCEDURES

A license or relicense application must contain the necessary information for the Commission to evaluate project effects and prepare the environmental documents required by the National Environmental Policy Act (NEPA) and its regulations. The Commission's licensing process is designed to identify and obtain needed information during the pre-filing (before the filing of a license application) stage, to inform a comprehensive Commission review of project benefits, effects, and recommendations during the post-filing stage.



Does FERC have a standard licensing process?

The Commission follows three different licensing processes. These are called the Integrated Licensing Process (ILP), the Traditional Licensing Process (TLP), and the Alternative Licensing Process (ALP). The ILP is the Commission's default licensing process. The latter two processes require the Commission's approval to use in lieu of the ILP. All three processes are described in more detail on the Commission's website at www.ferc.gov/industries/hydropower.asp.

What does the pre-filing stage involve?

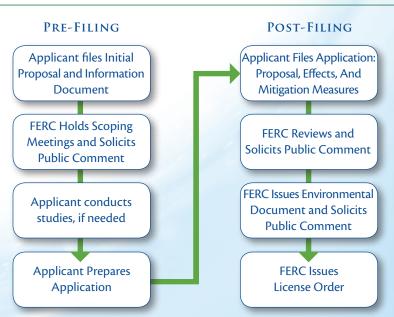
The applicant files an initial proposal and information document to begin the licensing process. Commission staff then seeks input from the public, nongovernmental organizations, Indian tribes, and local, state, and federal resource agencies in order to (1) identify environmental issues regarding a proposed or existing project and (2) determine what studies are needed in order to better understand these issues. To that end, staff will hold public scoping meetings and a project site visit. The applicant then works with Commission staff and stakeholders to develop a scientifically supported study plan that will characterize resources (such as recreation, water quality, etc.) potentially affected by the project and the potential effects on those resources. Studies

typically take one-two years to complete, and the study results are used to develop the license application. The Commission will begin its post-filing environmental analysis only after all necessary information gathering is complete.

What does the post-filing stage involve?

The license application includes detailed descriptions of the project facilities, operation, and any proposed changes (in the case of a relicense), as well as a description of the existing environmental resources, effects of the proposed project on these resources, and proposed mitigation measures. After the license application is filed and accepted as complete, Commission staff will again seek input from members of the public, nongovernmental organizations, tribes, and agencies on the applicant's license application in advance of preparing the environmental documents required by NEPA. Comments and recommendations made by stakeholders are taken into account by Commission staff in the development of the NEPA documents. The Commission will then use the comments and environmental documents to determine whether issuing a license for a project is appropriate and, if so, what environmental measures and operational conditions to include in the license.

INTEGRATED LICENSING PROCESS



LEARN ABOUT PROJECTS NEAR YOU

In this section, we explain how to learn about the hydropower projects in your community.

When will I first learn about a proposed hydroelectric project?

An applicant filing an application for a license is required to publish a public notice in the local newspaper. The Commission also publishes public notices of applications for preliminary permits and licenses in local newspaper(s) and in the Federal Register.

When would I hear that an existing project is up for relicensing?

The owner of an existing project, or licensee, must file with the Commission a notice of intent to apply for a new license at least five years before the existing license expires. The Commission then publishes a notice of commencement of proceeding and scoping document (discussed later) in the local newspaper. An applicant will contact individuals and groups that may have an interest in the project and encourage them to participate in the licensing process. These include landowners affected by the project; representatives of local and national stakeholder groups; tribes; and local, state, and federal resource agencies. Even if you have not been contacted directly about a project, you still have the right to participate in the process. You should contact FERC directly to let us know that you want to be included in the Mailing List (discussed later).



How do I get more information about a project?

There are several tools available to learn about projects near you:

- Many licensees that own and operate hydropower projects have websites that you
 can check for information about their hydropower projects and licensing activities.
- You can look at the Commission's website at www.ferc.gov/hydropower for a list of issued preliminary permits and licenses, as well as their expiration dates, in your state; for additional information, see "For Citizens" on www.ferc.gov, and click on "Projects Near You."
- You also can look in the public notice sections of your local newspapers to learn about preliminary permit and license applications.

How do I stay informed throughout the licensing process?

The most effective ways to monitor licensing activities are to get on the project Mailing List, attend scoping meetings, read the license application and NEPA documents, and get up-to-date project information from the Commission's website through eSubscription and eLibrary (both are discussed in more detail later).

HAVE YOUR VOICE HEARD

You have numerous opportunities to provide comments during both the pre-filing and post-filing phases of the Commission's licensing process. In this section, we explain how you may participate during a licensing proceeding.

Why should I participate? Why is it important for me to get involved early?

It is up to you to inform the Commission of your concerns with, or your support for, a project. The Commission uses your input to help determine how best to balance the benefits of electricity generation with the environmental effects of operating an energy-generating facility. Early involvement allows your issues and concerns to be identified, discussed, and analyzed during the licensing process. Specifically, your participation in licensing discussions may influence decisions about which issues to examine, which studies to conduct, and which environmental measures to include in the license application.

Are individual voices welcome?

Yes. You, as a member of the public, have an important role in the Commission's licensing process, particularly during NEPA scoping and environmental review. NEPA requires that federal agencies evaluate, and disclose to the public, the environmental effects of any major action they are considering, such as issuing a hydropower license.



When and how will I be able to comment on the licensing of a hydropower project?

You will have several opportunities to inform the applicant and Commission of your views about a project. During the pre-filing phase, you may:

- Provide written comments documenting your concerns with, or support for, the project.
- Provide oral comments and ask questions of Commission staff and the applicant at public scoping meetings and the site visit.
- Submit study requests and participate in work groups during study plan development.

During the post-filing phase, you may:

- Provide written comments on the license application, which may include your recommendations for measures to be included as license conditions.
- Provide written comments on the Commission's environmental documents.

All written comments and transcripts of scoping meetings will be placed in the record for the project and made available to the public via the Commission's eLibrary. The Commission's licensing decision is based on information in this record.

What is scoping?

Scoping, which generally refers to the process of identifying the potential impacts that a project would have on the environment or the community, occurs early in the pre-filing phase of the Integrated Licensing Process. During scoping, the Commission issues what is called a scoping document describing the project, identifying issues,

and inviting further comment from the public. The Commission usually conducts one or more public meetings and accepts both written and oral comments on the scoping document. Based on comments received during scoping, the Commission then determines which issues to address and analyze in the environmental documents.

When can I request a study?

Study needs are identified early in the pre-filing phase of the licensing process when the applicant is meeting with stakeholders to decide what information to include in the license application. Studies may also be discussed during scoping meetings.

What do I include in a study request?

You should include an explanation of why the study is needed, along with the study's goals and objectives; public interest considerations; any gaps in existing information that the study will fill; an explanation of how the study is connected to project operations or effects; study methodology; and the level of effort and cost of conducting the requested study.

How are my comments on a license application or NEPA document used by the Commission? Where are my concerns addressed?

All comments are important to the Commission. The Commission addresses comments in its environmental documents and license orders, and they become part of the record upon which the Commission makes its decision. When making comments, you should explain your issue as clearly as possible so that Commission staff can fully understand your concern.



To whom do I send my comments—the applicant, the Commission, or both—whether during the pre- or post-filing phase of the licensing process?

Send all comments to the Commission, with a copy to the applicant. You may eFile your comments, following the instructions provided on the Commission's website, www.ferc.gov/docs-filing/efiling.asp or mail your comments to the Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426. For either method, direct your comment to the Secretary of the Commission. Make sure that you include the FERC project number (also known as the docket number) and sub-docket number on all correspondence. The docket number is the four- or five-digit number (preceded by P-). The sub-docket number is the three digits added to the end of a docket number to distinguish each separate proceeding within that docket and is included on all notices and documents that the Commission issues for a specific project. The project number will be used to identify the project throughout the life of the original and any new licenses.

GET INFORMATION

The Commission has created a variety of user-friendly tools to facilitate public involvement in the licensing process. In this section, we explain how you can get information to and from the Commission.

What is eLibrary? How is it useful to me?

eLibrary is a records information system that provides access to all public documents submitted to and issued by the Commission. You can access eLibrary and its public documents through the Commission's website at www.ferc.gov/docs-filing/eLibrary. asp. The easiest way to access documents in eLibrary is by using the project number (e.g., P-1234) for your particular project, so it is important to record that number in your files.

What is eSubscription? How is it useful to me?

eSubscription is a service offered by the Commission that notifies interested parties by email of any filing, including Commission correspondence, for a specific project. You can sign up for this free service by going to the Commission's website at www. ferc.gov/docs-filing/esubscription.asp and following the steps for registration. Again, you will need the project (docket) number to subscribe.



How do I eFile? Who can help me with eFiling?

eFiling is a system that allows interested parties to submit comments to the Commission through its website. You would prepare your submission in the same manner as you would if you were filing on paper. If you are filing in a docketed proceeding, the document you submit must include the project (docket and sub-docket) number (e.g., P-1234-000) applicable to your submission. All documents must include the name and address of the person responsible for the filing. For more information about submission guidelines, go to www.ferc.gov/docs-filing/efiling.asp. The advantage of eFiling is that the document is generally logged into the eLibrary system the day it is submitted, while submitting comments by first class mail may take longer. If you have questions or need help with a submission, the Commission's eFiling experts can help. They can be reached by telephone at 202-502-8258 or by e-mail at efiling@ferc.gov.

What is an intervenor in a Commission proceeding? How do I become an intervenor?

A person who intervenes in a Commission proceeding, known as a party to the proceeding, is placed on the project's Service List and is entitled to seek rehearing of a preliminary permit or license order and to appeal the Commission's final decision to the appropriate federal court. An intervenor receives the applicant's filings and other Commission documents related to the project, as well as materials filed

by other intervenors. Conversely, an intervenor has an obligation to provide copies of any filings made with the Commission to the applicant and all other intervenors. This can be done through e-mail or first class mail. Filing a motion to intervene is simple; instructions about how to become an intervenor are on the Commission's website at www.ferc.gov/help/other-guide/intervene.asp. The Commission's public notice of a preliminary permit application or a license application will set the deadline for filing motions to intervene in that proceeding.

What is the difference between a Mailing List and a Service List?

If you are on the Commission's Mailing List for a specific project, you will receive copies of all correspondence the Commission issues regarding that project. If you are on the Service List, you will receive the Commission's issuances as well as all filings made by others identified on the Service List (intervenors).

How do I get on (or off) the Commission's Service List or Mailing List for a specific project?

Intervenors are automatically included in the Commission's Service List for that proceeding. If you wish to be added to or removed from the Commission's official Mailing List, you may eFile your request or send your request by first class mail to the Secretary, Federal Energy Regulatory Commission, 888 First Street, NE, Room 1A, Washington, DC 20426. All such requests must specify your wish to be removed or added to the Mailing List and must clearly identify the project name, docket, and sub-docket number on the first page of your request.

OTHER LICENSING QUESTIONS

This section explains several legal issues associated with hydropower licensing.



How is a hydropower project boundary defined?

The project boundary includes lands and waters needed for project purposes. The Commission determines which lands and waters will be needed for an applicant or licensee: (1) to construct and operate



its project and (2) to carry out other project purposes such as recreation, wildlife protection and enhancement, etc. Typically, the dam, reservoir, powerhouse, tailrace, conduits and penstocks, access roads, fish passage facilities, primary transmission lines, recreation sites, and wildlife habitat are included within project boundaries.

Do I get special notice if I am a landowner directly affected by a Commission license?

Yes. For an original license (unconstructed project), the applicant would notify you as a landowner with property directly within the footprint of the proposed project and offer the opportunity to sell outright or grant an easement across any lands that are needed for the project. When an existing project is being relicensed, the Commission requires that landowners be notified if the applicant needs to bring additional lands into the project boundary to protect environmental resources or to construct new facilities.

What is a settlement agreement and how does it relate to the licensing process?

A settlement agreement is a written agreement among the license applicant and stakeholders about how the project will operate and what environmental measures will be implemented over the term of the license. Settlement agreements may be comprehensive or may include only some of the stakeholders or some of the key issues. In either case, the Commission encourages applicants and stakeholders to

reach a settlement. The license will typically include the provisions of a settlement, as long as they are consistent with the Commission's policy on settlements. You can find information about the Commission's policy on settlement agreements at www.ferc.gov/industries/hydropower/gen-info/regulation.asp. Those beginning settlement discussions are encouraged to seek the advice of Commission staff.

What are ex parte communications?

Ex parte communications are off-the-record communications with the Commission and its staff about the merits of a project. Generally, after a license application is filed with the Commission, meetings and discussions among the Commission staff, the applicant, and other stakeholders must first be publicly noticed so that everyone involved has the opportunity to participate. Commission staff may NOT have informal or off-the-record communications about the merits of the project with the applicant, stakeholders, or intervenors in the proceeding. However, communications about procedural issues are allowed.



Is the Commission subject to other federal laws?

Yes. The Commission must comply with a variety of federal laws, such as the Clean Water Act (to protect water quality), the Endangered Species Act (to protect threatened and endangered plant and animal species), and the National Historic Preservation Act (to protect culturally significant places and historic properties).

Why are the cultural resource reports and threatened and endangered species reports handled in a privileged and confidential manner?

If these reports include sensitive information such as the locations of historic properties or threatened and endangered fish, wildlife and plant species, federal regulations require that this information be treated as privileged and confidential to protect the sites and species.

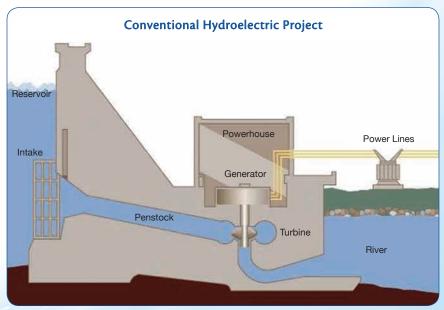
Types of Hydropower Projects

It may be helpful for you to understand the components of a particular hydropower project and how it operates, so that you can provide constructive comments during the licensing process. In this section, we provide information about conventional hydropower and pumped-storage projects and hydrokinetic projects.

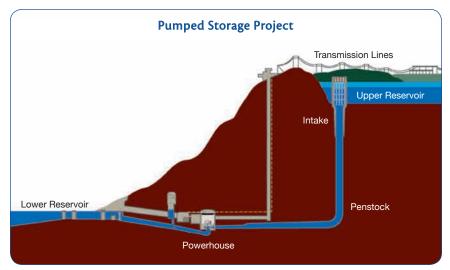
CONVENTIONAL AND PUMPED-STORAGE PROJECTS

What is a conventional hydropower project?

Most conventional hydropower projects consist of: (1) a dam to redirect or impound a source of water; (2) a turbine to harness the potential energy of the falling water; (3) a generator connected to a turbine; and (4) a transmission line to get the power to the market. Water is diverted downhill from the reservoir to a powerhouse where it is directed through the turbine. The flow of the water falling through the turbine causes the turbine to spin. The turbine is attached to the generator, and as the turbine and generator spin the generator creates electricity, which enters the market via the transmission line.



COURTESY OF THE TENNESSEE VALLEY AUTHORITY, AS MODIFIED BY FERC STAFF.



COURTESY OF THE TENNESSEE VALLEY AUTHORITY, AS MODIFIED BY FERC STAFF.

What is a pumped-storage project?

Pumped storage projects consist of: (1) two reservoirs, an upper and a lower; (2) a reversible turbine/generator assembly that can act as a water pump or a turbine (pump-turbine); (3) a penstock; and (4) a transmission line to get the power to the market. Pumped-storage projects act as rechargeable batteries on the electric grid and produce and supply electricity during peak demand. At times of low electrical demand, electricity is used by the generator to reverse the direction of the pump-turbine and pump water from the lower reservoir through the penstocks and up into the upper reservoir. The water is stored in the upper reservoir until the demand for electricity is high. The water is then released from the upper reservoir back through the penstock and the pump-turbine into the lower reservoir, the pump-turbine generates electricity from the flow of the falling water, and the power enters the market via the transmission line.

HYDROKINETIC PROJECTS

What is a hydrokinetic project?

A hydrokinetic project is a project that generates electricity from waves or directly from the flow of water in ocean currents, tides, or inland waterways without the use of a dam or reservoir. Many hydrokinetic technologies are currently in the experimental or developmental stage. Wind turbines are not hydrokinetic; the Commission does not have jurisdiction over wind projects.

How does hydrokinetic energy generation work?

Devices intended to capture energy from tides, ocean currents, and river flow can be similar in concept to traditional turbines, but are placed underwater and directly within the flow. Strategies for capturing energy from waves can vary greatly in design and often use floating buoys.

Are hydrokinetic projects treated differently from conventional projects?

Yes. Because hydrokinetic technologies are new, rapidly changing, and different from conventional projects in that they are not directly dependent on dams, the Commission has made some adaptations to address hydrokinetic projects. For example, to support research and development of hydrokinetic technologies, the Commission will consider expedited licensing for small hydrokinetic technologies.



COURTESY OF VERDANT POWER.

netic projects. The resulting licenses will have shorter license terms and will be subject to special environmental protections. In addition, the Commission has implemented strict requirements for hydrokinetic preliminary permits; developers must show progress in developing an application or the permit will be cancelled so that the site is available to others.

GLOSSARY OF TERMS

Applicant—A utility, municipality, corporation, or individual applying to license or relicense a hydropower project. If a license is granted, the applicant is then referred to as the licensee

Baseline conditions—In a NEPA analysis, baseline conditions are the existing conditions against which the proposed action and all alternatives are considered.

Cooperating agency—When the Commission issues its public notice after a license application is filed, it asks whether any other agencies are interested in cooperating in the preparation of the NEPA documents. Any agency that wishes to be a cooperating agency works with the Commission staff to ensure that the NEPA document can be used to support both the Commission's licensing and the agency's permitting decisions.

Docket and Sub-docket Number—The docket number is the number (preceded by P-) assigned to a hydropower project, also known as a project number. The sub-docket number is the three digits added to the end of a docket number to distinguish each separate proceeding within that docket. All correspondence with the Commission should include the sub-docket number, if known. For example: P-1234-000. P-1234 is the docket number and 000 is the sub-docket number.

Hydropower or hydroelectric power—The production of electricity using water.

Licensing process—One of three approaches to license a project that include the Integrated Licensing Process (ILP); the Traditional Licensing Process (TLP); and the Alternative Licensing Process (ALP). The ILP is the Commission's default licensing process. The latter two approaches require the Commission' approval for use in lieu of the ILP, and are typically reserved for non-controversial projects.

Mailing list—The Commission's list of contacts for a particular project that receive copies of all correspondence the Commission issues regarding that project.

Mandatory terms and conditions—Terms and conditions that by law must be included in a license order. These would include conditions in a water quality certification issued by the appropriate state agency under the Clean Water Act, fishway prescriptions issued by the Secretary of the Interior or the Secretary of Commerce under section 18 of the Federal Power Act (FPA), or conditions issued by federal land managing agencies or tribes for tribal lands under section 4(e) of the FPA.

National Environmental Policy Act, or NEPA—This Act requires federal agencies to integrate environmental values into their decision-making processes by considering

the environmental impacts of their proposed actions and reasonable alternatives to those actions. As discussed throughout this brochure, the public plays an important role in the NEPA process.

Pre-Application Document, or PAD—This is the foundation document that provides the Commission and others with the existing information about a project and its environs. It is filed with the applicant's notice of intent to file a license application. The PAD serves as the basis for determining what additional information is needed to support a license application and ultimately for the Commission's environmental analysis.

Pre-filing process—This is the portion of the licensing process between an applicant's submission of a notice of intent to file a license application and the filing of the actual license application. During this time, the stakeholders and the applicant identify the information needed for the license application, the applicant conducts the studies necessary to provide that information, and the applicant develops the license application.

Proceeding—Generally each application and certain requests before the Commission are considered separate legal proceedings. The sub-docket number (the three digits added to the end of a docket number) distinguishes each separate proceeding within that docket.

Public record—The record of filings maintained in eLibrary that informs the public, stakeholders, tribes, and agencies and supports the Commission's decisions.

Ready for environmental analysis, or REA—The finding the Commission makes when the information in a license application is adequate for the Commission to conduct its environmental analyses. The Commission's issuance of this notice triggers the filing of terms, conditions, and recommendations from stakeholders and agencies.

Scoping—The process of identifying issues to be analyzed in the environmental documents as captured in a scoping document.

Stakeholders—Members of the public, agencies, tribes, and organizations with a stake in the Commission's licensing decision.

Study plan—A document that (1) describes the goals and objectives of each study proposed; (2) addresses resource management objectives; (3) describes existing information; (4) explains the nexus between project operations and effects for the resource to be studied; and (5) describes the proposed study methodology, level of effort, and cost.

ADDITIONAL INFORMATION

For additional information, contact:

Federal Energy Regulatory Commission
Office of External Affairs
888 First Street NE, Washington, DC 20426

Toll Free: 1-866-208-3372

www.ferc.gov customer@ferc.gov

Enforcement Hotline: 202-502-8390

Toll Free: 1-888-889-8030

Other related Commission webpages or documents you may find helpful are available on the Commission hydropower webpage at www.ferc.gov/hydropower, and include the following:

Complete List of Issued Licenses www.ferc.gov/industries/hydropower/gen-info/licensing/licenses.xls

Complete List of Issued Preliminary Permits www.ferc.gov/industries/hydropower/gen-info/licensing/pre-permits.asp

Handbook for Hydroelectric Project Licensing www.ferc.gov/industries/hydropower/gen-info/handbooks/licensing_handbook.pdf

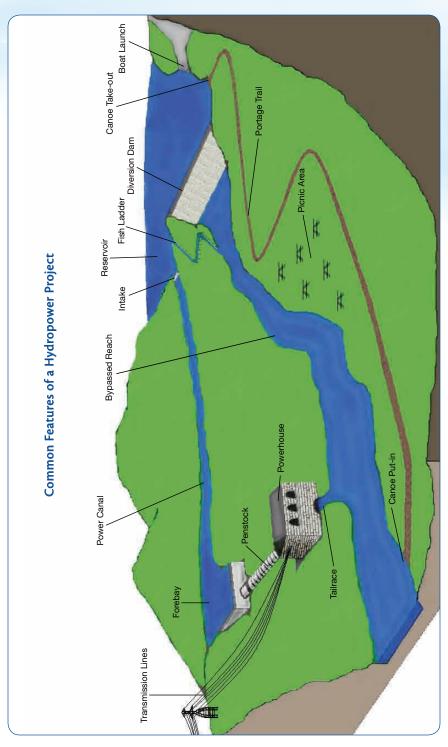
Hydrokinetic Projects web page at www.ferc.gov/industries/hydropower/indus-act/hydrokinetics.asp

Compliance Handbook www.ferc.gov/industries/hydropower/gen-info/handbooks/compliance_handbook.pdf

Safety and Inspections webpage www.ferc.gov/industries/hydropower/safety.asp

Information for Citizens www.ferc.gov/for-citizens/for-citizens.asp

A Guide to Electronic Information at FERC can be viewed at www.ferc.gov/docs-filing/elec-info-guide.pdf





FEDERAL ENERGY REGULATORY COMMISSION

OFFICE OF ENERGY PROJECTS

888 FIRST STREET, NE WASHINGTON, DC 20426 202-502-6088 1-866-208-3372 (TOLL FREE) 202-502-8659 (TTY)

www.ferc.gov

Your project's docket number/sub-docket

Commission contact