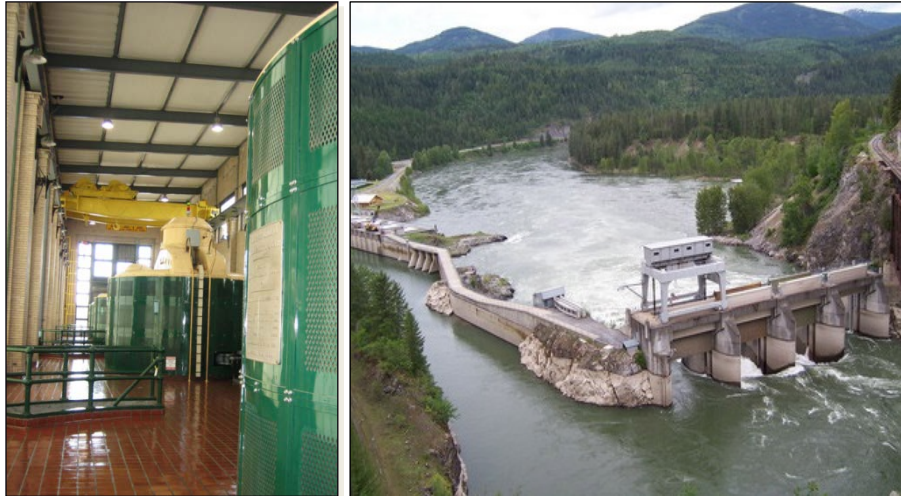


Division of Hydropower Administration & Compliance



COMPLIANCE HANDBOOK



**Office of Energy Projects
2015**

Prelude

The Federal Energy Regulatory Commission (FERC or Commission) is an independent agency that regulates the transmission and wholesale sale of electricity and natural gas in interstate commerce, and regulates the transportation of oil by pipeline in interstate commerce. The Commission also authorizes interstate natural gas pipelines, natural gas storage projects, liquefied natural gas (LNG) terminals, and non-federal hydropower projects. Congress assigned these responsibilities to FERC (formerly the Federal Power Commission) in various laws enacted over nearly 100 years, such as the Federal Power Act, Public Utility Regulatory Policies Act, Natural Gas Act, and Interstate Commerce Act. More recently, as part of the Energy Policy Act of 2005, Congress gave FERC additional responsibility to protect the reliability and cybersecurity of the bulk power system through the establishment and enforcement of mandatory standards, as well as additional authority to enforce FERC regulatory requirements through the imposition of civil penalties and other means.

The Commission is led by five commissioners who are appointed by the President of the United States with the advice and consent of the Senate. Commissioners serve staggered five-year terms and have an equal vote on the orders through which FERC takes action. The President appoints one of the commissioners to be the chairman of FERC, the administrative head of the agency. FERC is a bipartisan body; no more than three commissioners may be of the same political party.

In March 2014, the Commission released its Strategic Plan for FY 2014-2018. FERC's stated mission is to achieve "Reliable, Efficient, and Sustainable Energy for Consumers" by assisting consumers in obtaining reliable, efficient, and sustainable energy services at a reasonable cost through appropriate regulatory and market means. Fulfilling this mission involves pursuing these primary goals:

- (1) ensure just and reasonable rates, terms, and conditions;
- (2) promote safe, reliable, secure, and efficient infrastructure; and
- (3) provide mission support through organizational excellence.

The Office of Energy Projects (OEP) is one of twelve offices into which FERC staff is organized. OEP fosters economic and environmental benefits for the nation through the approval and oversight of hydroelectric, natural gas pipeline, natural gas storage, and liquefied natural gas projects that are in the public interest. Within OEP, the Division of Hydropower Administration and Compliance (DHAC) carries out core functions associated with FERC's goal of promoting safe, reliable, secure, and efficient infrastructure and the objective to foster

economic and environmental benefits for the nation through approval of hydropower projects. These core functions involve conducting thorough and timely review of applications to construct, operate, or modify hydroelectric infrastructure and ensuring hydroelectric infrastructure is constructed and operated in compliance with FERC orders.

DOING BUSINESS WITH THE FERC

The regulations and Internet links cited in this publication are subject to change. Changes to FERC regulations, formal documents issued by the Commission each business day, and most of the Commission issuances discussed in this handbook can be found using the Commission's website home page (www.ferc.gov) or by using one or more of the services described below.

eLibrary

The Commission makes documents available to the public via the eLibrary database. eLibrary is a searchable electronic database containing documents filed with, and issued by, the Commission since November 16, 1981. Documents from 1981 through 1995 are available on microfilm, and documents from 1996 to the present are available for viewing and printing via the Internet.

Within eLibrary, some filings contain Critical Energy Infrastructure Information (CEII). CEII is specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure (physical or virtual) that:

1. Relates details about the production, generation, transmission, or distribution of energy;
2. Could be useful to a person planning an attack on critical infrastructure;
3. Is exempt from mandatory disclosure under the Freedom of Information Act; and
4. Gives strategic information beyond the location of the critical infrastructure.

To understand the Commission's policy regarding CEII, please read the Commission's rulemakings: Order Nos. 702, 630, 630-A, 643, 649 and 683 under our CEII Regulations section of the website (<http://www.ferc.gov/legal/maj-ord-reg/land-docs/ceii-rule.asp>). Additional CEII information is available on our website (<http://www.ferc.gov/legal/ceii-foia/ceii.asp> and <http://www.ferc.gov/legal/ceii-foia/ceii/classes.asp>). To submit questions, comments, and suggestions about CEII, users may contact

FERCSupportOnline@ferc.gov via electronic mail (e-mail). When sending e-mail, please include a current mail address, telephone number, and an email address. Questions may also be directed to the Help Desk at (866) 208-3676.

Doing Business Electronically

FERC Online is the Commission's portal to project documents and allows users to interact electronically with the Commission. You can access all of the services mentioned below on the Commission's website (<http://www.ferc.gov/docs-filing/ferconline.asp>).

eRegistration provides an easy-to-use entry point to do business with FERC and is required for use of some of the Commission's other systems.

eFiling allows users to submit filings electronically. Users must be eRegistered to use the eFiling system.

eComment eFiling also includes an option that allows users to file eComments about a project (docket that begins with p-) without preparing an attachment or formally registering. Comments can be up to 6,000 characters in length. Go to eFiling and click on "eComment." Fill in your name and email address and click "enter." An email will be sent to you with the link that allows you to submit comments. Click on the link, and fill in the docket number(s). You will be asked to select the docket number(s), then type in your comments and click "submit." You will receive immediate confirmation of your submission. Please note you cannot seek to intervene using this method.

eService ensures that parties on the Service List receive electronic notification of Commission issuances and is the Commission's primary method of service of Commission issuances. Users must be eRegistered to use eService.

eSubscription allows users to subscribe to a specific docket (Project Number) and receive notification via email about all future submittals and issuances. Users must be eRegistered to use eSubscription service.

Public Reference Room

The public also may visit the Public Reference Room at Room 2-A, Commission Headquarters, 888 First Street, NE, Washington, D.C. 20246. Filings and other official documents may be viewed free of charge. The free publication *A Guide to Public Information at the Federal Energy Regulatory Commission* is also available from the Public Reference Room, on the Internet (<http://www.ferc.gov/docs-filing/elec-info-guide.pdf>), or through the mail. It may be ordered by contacting **public.reference@ferc.gov**, or by calling (202) 502-8371.

Federal Register

Published each business day, the Federal Register contains official notices of initial filings and applications, as well as the Commission's proposed and final rulemakings. Online access to the Federal Register can be found at www.access.gpo.gov/su_docs/index.htm or www.nara.gov/fedreg.

Federal Energy Guidelines

FERC Reports and *FERC Statutes and Regulations* are electronically indexed services that contain proposed and final rulemakings, orders, notices, opinions, initial decisions, and final decisions. To subscribe to this service, contact Commerce Clearing House, Inc., 4025 West Peterson Ave., Chicago, IL 60646, or call (800) 835-5224, or go to www.cch.com.

Other Electronic Databases

Several services provide access to Commission documents by computer. These include LEXIS and WESTLAW. For information, write or call the offices below.

LEXIS Available from Mead Data Central, P.O. Box 933, Dayton, OH 45401. Phone (800) 544-7390

WESTLAW Available from West Publishing Company, P.O. Box 64779, St. Paul, MN 55164. Phone (800) 328-9833

Purpose of the Compliance Handbook

The Compliance Handbook presents information and instruction on the full range of activities performed by DHAC. Audiences include all DHAC staff, other Commission staff, existing licensees/exemptees, potential licensees, and stakeholders in post-licensing proceedings.

The Compliance Handbook provides guidance and instruction for implementing Commission rules, regulations, policies, and programs designed to ensure effective compliance with hydropower license conditions to protect and enhance beneficial public uses, both developmental and non-developmental, of waterways.

The Compliance Handbook contains five sections, which include an overview of DHAC (section I), DHAC reactive activities (section II), DHAC preventive strategies (section III), DHAC proactive strategies (section IV) and the appendices (section V).

Throughout the handbook, parts of the regulations are cited that apply to the discussion (**e.g., 18 Code of Federal Regulations (CFR)**). The actual regulations can be found at: Title 18 Chapter I of the Code of Federal Regulations (CFR).

TABLE OF CONTENTS

Prelude	i
Purpose of the Compliance Handbook	v
Section I: Overview, Responsibilities, General Philosophy.....	1
1.0 Introduction.....	1
1.1 Overview of the Division of Hydropower Administration and Compliance	1
1.2 DHAC’s General Philosophy.....	2
1.3 DHAC’s Regulatory Practice.....	3
1.4 Doing Business with DHAC.....	4
1.5 Public Involvement in Compliance Proceedings	5
1.6 DHAC Information on www.ferc.gov	6
Section II: Reactive Activities	6
2.0 Action on Environmental, Engineering, and Procedural Filings	6
2.1 Mandatory Compliance Filings.....	7
2.2 Exhibits	7
2.3 Annual Charges.....	8
2.4 Renewable Energy Production Tax Credits	9
2.5 Non-Compliance Issues	10
2.5.1 Allegations of Non-Compliance	10
2.5.2 Self reporting of Non-Compliance.....	11
2.5.3 Overdue Filings.....	12
2.5.4 Operational/Implementation Requirements	12
2.6 Start of Construction Requirements.....	14
2.6.1 Meeting Start of Construction.....	14
2.6.2 Pre-Construction Requirements	15
2.6.3 On-Site Construction	16
2.7 Amendments to Licenses and Exemptions	16
2.7.1 Defining the Need for an Amendment.....	16
2.7.2 Procedural Steps and Contents of Applications for Amendments	24
2.7.3 Compliance with Other Federal Laws	30
2.8 Reopener Requests.....	35
2.9 Surrender, Transfer, and Termination of Licenses and Exemptions	35
2.9.1 Surrender.....	35
2.9.2 Transfer	36
2.9.3 Termination.....	37
2.10 Jurisdictional Determinations for Declarations of Intentions and Unlicensed Projects.....	38
2.11 Conduit Exemptions and Qualifying Conduit Exemptions	40
2.11.1 Conduit Exemptions.....	40
2.11.2 Qualifying Conduit Facilities.....	40
2.12 Federal Lands Review.....	42
2.12.1 Federal Lands Review Definition	42
2.12.2 Applications for Federal Lands Review	43
2.13 Compliance History for Relicense	44
2.14 Headwater Benefits Assessments	45

2.15	Article 5 – Property Rights	46
Section III:	Preventive Strategies.....	47
3.0	Monitoring	47
3.1	Introductory Letter and Transition Meetings.....	48
3.2	Environmental Inspections.....	48
3.3	Recreation Monitoring.....	49
Section IV:	Proactive Strategies.....	50
4.0	Current Program Initiatives.....	50
4.1	Shoreline Management	50
4.2	Commission-Approved Recreation Facilities.....	52
4.3	Promoting Understanding of Criteria for Meeting Construction Start Dates	53
4.4	Non-Operating Projects	53
4.4.1	Restoring Non-Operating Projects.....	53
4.4.2	Surrendering Non-Operating Projects.....	54
Section V:	APPENDICES	55
	APPENDIX A: Website Links and Guidance Documents	56
	APPENDIX B: Standard Land Use Article	58
	APPENDIX C: Suggested Contents of Applications for the Non-project Use and Occupancies of Project Lands and Waters.....	63

FIGURES

Figure 1	Enforcement pyramid showing various activities aimed to achieve licensee/exemptee compliance (activities at the base of the pyramid are used most frequently and activities at the top of the pyramid are used less frequently).....	3
Figure 2	License Amendment Process	29
Figure 3	Endangered Species Process	32
Figure 4	Jurisdiction Review of Unlicensed (UL) Projects.....	39

TABLES

Table 1	DHAC Branches and their functional responsibilities.....	2
Table 2	Required Exhibits for Capacity Amendments.....	26

Acronyms and Abbreviations

Advisory Council	Advisory Council on Historic Preservation
Agriculture	U.S. Department of Agriculture
APE	Area of Potential Effect
BLM	Bureau of Land Management
CEII	Critical Energy Infrastructure Information
CFR	Code of Federal Regulations
Commission	Federal Energy Regulatory Commission
D2SI	Division of Dam Safety and Inspections
DEA	draft environmental assessment
DEIS	draft environmental impact statement
DHAC	Division of Hydropower Administration and Compliance
DHL	Division of Hydropower Licensing
EA	environmental assessment
EIS	environmental impact statement
EPRI	Electric Power Research Institute
ESA	Endangered Species Act
FERC	Federal Energy Regulatory Commission
Forest Service	U.S. Forest Service
FPA	Federal Power Act
FWS	U.S. Fish and Wildlife Service
FY	fiscal year
HCMP	Hydropower Compliance Management Program
HPMP	Historic Properties Management Plan
HWBEG	Headwater Benefits Energy Gains
Interior	Department of the Interior
IRS	Internal Revenue Service
kW	kilowatts
LNG	liquefied natural gas
MOA	Memorandum of Agreement
MW	megawatts
National Register	National Register of Historic Places
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
OEP	Office of Energy Projects
PA	Programmatic Agreement
Park Service	National Park Service
SHPO	State Historic Preservation Officer
SMP	Shoreline Management Plan
T&E	threatened and endangered
THPO	Tribal Historic Preservation Officer
UL	Unlicensed Project

Section I: Overview, Responsibilities, General Philosophy

1.0 Introduction

In 1988, a single Division (known at that time as the Division of Project Administration and Compliance) was established with the responsibility for administering compliance with the requirements contained in licenses, permits, and exemptions. The compliance program was created to ensure, through monitoring and investigation, that actions necessary to protect life, health, and property, and the environment were properly taken. This included a process to issue penalties to entities that violated Commission requirements. On August 17, 1988, the Commission issued a final rule establishing the procedures for the assessment of civil penalties under section 31 of the Federal Power Act (FPA). The rule became effective October 16, 1988.

1.1 Overview of the Division of Hydropower Administration and Compliance

The Commission, through its Division of Hydropower Licensing in the Office of Energy Projects (OEP) issues licenses or exemptions for the operation of hydropower projects under the provisions of the FPA. These licenses and exemptions contain requirements, presented as a series of standard and special articles or Appendices, with which licensees and exemptees must comply. The Division of Hydropower Administration and Compliance (DHAC) in OEP is responsible for ensuring compliance with these conditions, and with Commission rules and regulations. DHAC also resolves complaints from stakeholders alleging noncompliance with license conditions.

DHAC authorizes amendments to licenses and exemptions. Amendments range from the simple to the complex. For example, environmental protection or enhancement measures filed with the Commission pursuant to license articles (article compliance filings) may constitute amendments to licenses. Amendments may also result from resolution of environmental conflicts that were not addressed during the licensing process. DHAC also processes amendments to licenses and exemptions that result from proposed changes in project operations, modifications to project structures, or changes in project boundary. DHAC staff refers to filings required by a Commission order as mandatory filings, and amendment requests not pursuant to a Commission order or regulation as voluntary filings.

In addition, DHAC performs other administrative responsibilities, such as: (1) considering applications for license surrenders; (2) determining whether the FPA requires operating unlicensed projects to be licensed; (3) determining and assessing headwater benefit charges; (4) considering applications for conduit exemptions and qualifying conduits, (5) considering transfers of

licensed/exempted projects, and (6) certifying incremental hydropower generation for production tax credits at existing licensed/exempted hydropower facilities.

DHAC consists of four branches, which includes staff in Washington, DC, and in regional offices in Atlanta, Chicago, New York, Portland (OR), and San Francisco. Major program responsibilities are reflected below:

Table 1 DHAC Branches and their functional responsibilities

<u>Land Resources</u>	<u>Engineering Resources</u>	<u>Environmental & Project Review</u>	<u>Aquatic Resources</u>
Historic/Cultural	Capacity Amendments	Jurisdiction Determinations	Aquatic Habitat
Non-Project Use	Ramping Rates	Navigation Studies	Dredging/Sedimentation
Recreation	Exhibits A, F, G	EAs/EISs	Fish Passage
Shoreline Management	Conduits	Part 12 Support	Water Withdrawals
Encroachments	Erosion	Noxious Weeds	Wetlands
Property Rights	Flooding	Invasive Species	Water Quality
Article 5	Project Operations	Production Tax Credits	Barrier Nets
Form 80	Annual Charges	Surrenders	Dissolved Oxygen
Wildlife	Mining/Federal Land	Non-operating Projects	Water Temperature

1.2 DHAC’s General Philosophy

DHAC focuses on compliance and post-licensing matters. DHAC’s mission is to ensure effective compliance with license and exemption requirements to protect and enhance beneficial public uses, both developmental and non-developmental. DHAC’s philosophy in managing compliance activities includes a mix of reactive, preventive, and proactive strategies.

This approach is consistent with a book “The Regulatory Craft,” published by the Brookings Institution (2000), in which Malcolm Sparrow illustrates a successful method for managing regulatory compliance. He describes the enforcement pyramid concept to illustrate the range of activities used by regulatory agencies in order to achieve compliance and the balance needed among the various activities. In general, the softer approaches at the base of the pyramid are used more frequently, and the tougher sanctions at the top of the pyramid are used less frequently. **Figure 1** provides an example of efforts within DHAC used to achieve compliance.

During the late 1980s and early 1990s, the Commission issued a number of civil penalties to licensees/exemtees for non-compliance matters. Since then, DHAC’s focus has shifted towards activities noted in the base of the pyramid in an effort to assist, rather than force, licensees to achieve compliance. DHAC’s current focus incorporates a variety of efforts, which include: facilitating open lines of communication with licensees and exemtees; hosting license transition meetings; participating in technical workshops (e.g., shoreline management, recreation, and fish passage); conducting environmental inspections; and

publishing brochures and guidance documents. In addition, DHAC staff may contact licensees/exemptees by telephone/email to provide guidance and warnings of possible non-compliance matters, when appropriate.

When warranted, DHAC will issue letters finding licensees/exemptees in violation of requirements. If successive or egregious issues are found, DHAC may issue compliance orders requiring the licensee to comply with the requirements. Depending on the severity of the violation, DHAC may work with other offices in the Commission to issue civil penalties or revoke the license or exemption.

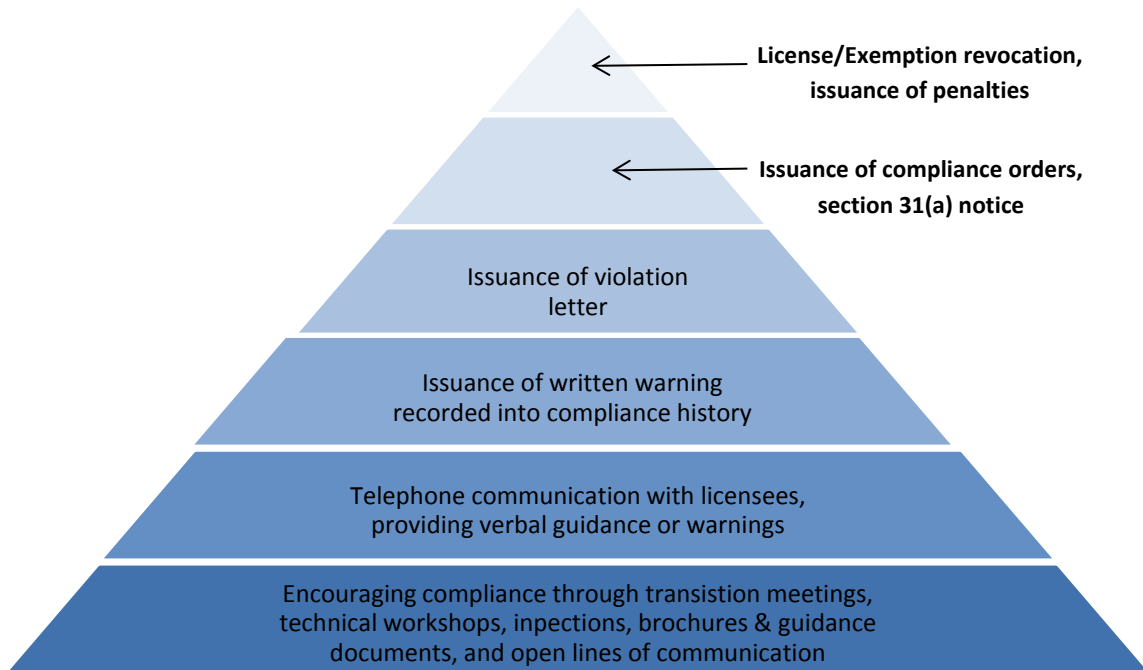


Figure 1 Enforcement pyramid showing various activities aimed to achieve licensee/exemptee compliance (activities at the base of the pyramid are used most frequently and activities at the top of the pyramid are used less frequently).

1.3 DHAC’s Regulatory Practice

Carrying out its mandate to ensure compliance with license/exemption requirements and to protect and enhance beneficial public uses involves a mix of reactive, preventive, and proactive strategies. DHAC’s regulatory practice involves administering laws, delivering services, building partnerships, solving problems, delivering guidance and ensuring compliance. DHAC processes a wide variety of applications, requests, and compliance concerns and provide information and determinations as appropriate. DHAC staff reacts to an increasing case load, and these reactive strategies account for the greatest percentage of our time.

Preventive strategies are intended to reduce the number of non-compliance situations and allegations. Monitoring programs employ preventive strategies that help us identify and resolve issues before they become complaints or non-compliance findings. The face-to-face communication with licensees and exemptees during environmental inspections and site visits allows for the building of partnerships through collaborative problem solving. Routine environmental inspections and site visits help to reduce potential non-compliance complaints and findings over the term of a license. Pre-filing consultation with licensees and exemptees also helps to generally facilitate compliance.

More recently, DHAC has developed several proactive strategies to address emerging issues. The increasing residential and recreational use of over 55,000 miles of shoreline included in hydropower licensed projects pose challenges for licensees. Our shoreline management and recreation workshops and published guidance offer assistance and facilitate discussion between DHAC staff and licensees on how to address public recreation and shoreline development issues with stakeholders and the public. To reduce industry costs, DHAC took advantage of technology advancements to eliminate the requirement for licensees/exemptees to file exhibit drawings in aperture card format and provided guidance on this change on the Commission's internet site.

Implementation of these preventive and proactive strategies allows DHAC to minimize the use of reactive measures, such as revoking exemptions or imposing civil penalties. The success of these preventive and proactive strategies depends on active involvement of staff, licensees, and stakeholders.

1.4 Doing Business with DHAC

The Commission headquarters address is: 888 First Street, NE, Washington, D.C. DHAC encourages interaction between staff and existing and potential licensees and exemptees, as well as stakeholders and the public.

The Commission strongly encourages licensees, exemptees, and stakeholders to communicate with us electronically utilizing the eFiling system in lieu of paper. See **18 CFR 385.2001(a)(1)(iii)** and the instructions on the Commission's web site.

All filings must be addressed to the Secretary of the Commission. The filing should also include a cover letter that describes the information and notes in the upper right corner of the letter the name of the project and its FERC number.

Paper filings mailed to the Commission must include an original and four copies of all information, unless indicated otherwise in a license or exemption. Paper filings must be mailed to the Secretary at the following address:

The Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, D.C. 20426

Whether the filing is made electronically or via mail, the Secretary's office will forward the filing to DHAC, as appropriate. In some instances it may be appropriate to provide staff with a courtesy copy of the filing. This can be done by emailing staff or sending a copy of the filing directly to staff at the following address:

Division of Hydropower Administration and Compliance
(Attn: Staff Name)
Federal Energy Regulatory Commission
Mail Code DHAC, PJ-12
888 First Street, NE
Washington, D.C. 20426

1.5 Public Involvement in Compliance Proceedings

DHAC is committed to being fair and transparent in its decision making process. DHAC processes over 3,000 filings a year for the approximately 1,600 projects it administers. Some of these filings are routine and others involve complex changes or amendments to existing licenses/exemptions.

Pursuant to **18 CFR 4.38(a)(6)(iv) and (v), 4.38(a)(7), and 4.201**, licensees seeking an amendment to a license for a hydropower project must, depending on the nature of the amendment, consult with resource agencies, Indian tribes, and non-governmental agencies. FERC has created an initial consultation contact list to assist in the consultation efforts. This list is not exhaustive and licensees should be aware of and, as appropriate to the amendment, include other interested entities (e.g., angler or recreation groups or local historical societies) during consultation.

Commission staff reviews each filing to determine whether it meets the requirements of the source license or exemption, including any appropriate consultation documentation. For issues that have been analyzed during the licensing (relicensing) proceeding, the staff does not publicly notice the compliance filing.

In determining whether to issue public notice of an application, DHAC staff evaluates the scope of the filing and/or whether the filing is proposing a material change to the project. For example, if the filing memorializes items that were authorized as part of the relicensing proceeding, staff will generally not public notice this filing. If the filing proposes material changes to the project or its operation or includes provisions that were not considered during the licensing/relicensing process, the staff would issue a public notice providing a set time period for interested entities to file comments, motions to intervene, or protests. Motions to intervene must meet the requirements of **18 CFR 385.214** of the Commission's regulations. (See How to Intervene).

Commission staff reviews all comments on a filing before issuing a decision, regardless of whether public notice was issued for the filing. Entities interested in keeping informed of all Commission filings in a particular docket are encouraged to eSubscribe to this docket. Instructions for eSubscribing can be found at <http://www.ferc.gov/docs-filing/esubscription.asp>. Once eSubscribed, an entity will receive electronic notification of all filings and issuances under this docket. In addition, Commission staff encourages interested entities to become involved during the licensing/relicensing process. Many opportunities are available to parties to ensure their views are included into the Commission record. Please note, however, that if an entity intervenes in a particular proceeding during the licensing/relicensing process, this intervention does not carry over into any compliance (post-licensing) proceedings.

1.6 DHAC Information on www.ferc.gov

On the Commission's website (www.ferc.gov), there is considerable information and guidance available under the Compliance section of the hydropower page at <http://www.ferc.gov/industries/hydropower.asp> as well as the Administration and Compliance section at <http://www.ferc.gov/industries/hydropower/gen-info/comp-admin.asp>. Guidance documents and other important information are available for review and are periodically updated. It is best to check the web pages regularly for newly updated information. Appendix A provides a listing of useful links on the website and used in this document. In addition, references to website pages are hyperlinked throughout this handbook.

Section II: Reactive Activities

2.0 Action on Environmental, Engineering, and Procedural Filings

DHAC classifies mandatory compliance filings and applications for amendments as environmental, engineering, or procedural. Filings are distributed to the various branches based upon each branch's functional responsibilities (see **Table 1**).

2.1 Mandatory Compliance Filings

All licenses, exemptions, and orders amending the license or exemption, contain certain requirements and/or terms and conditions. These terms and conditions are found in ordering paragraphs of Commission orders as well as in articles and appendices of those orders. In addition, licenses are subject to mandatory terms and conditions from federal and state agencies, such as mandatory Federal Power Act section 4(e) conditions or Federal Power Act section 18 fishway prescriptions, while exemptions are subject to mandatory conditions under Federal Power Act section 30(c). The mandatory terms in conditions are set forth in appendices of licenses and in either appendices or agency letters as the case of exemptions. The licensee/exemptee must adhere to requirements that govern project operations, conduct monitoring studies, or address a variety of issues related to environmental effects and engineering. License/exemption articles may require the licensee/exemptee to file study plans, mitigation plans, study schedules, or results with the Commission. Such filings are termed compliance filings.

In recent years, many license proceedings have involved settlements that include protection, mitigation, and enhancement measures that parties to the settlement agree are necessary to protect environmental resources. Some of these settlements include adaptive management strategies that require consultation among parties to the settlement during their implementation. Licensees need to factor in these consultation requirements in developing schedules for filing any studies, plans, or reports requiring Commission approval. See Section 2.7 for a discussion of voluntary amendment filings.

2.2 Exhibits

Licensees and exemptees are required to submit project exhibits describing and showing all project features and project boundaries. The types of exhibits that the Commission requires are defined in **18 CFR 4.41** and include:

- Exhibit A - a written description of the project.
- Exhibit F - a general design drawing(s) of the principal project works, showing the major structures. Exhibit F drawings are CEII and must be labeled CEII when filed with the Commission (**18 CFR 388.112** and **388.113(c)**).
- Exhibit G - a map(s) of the project showing its location and principal features, project boundary, impoundments, contiguous/noncontiguous features, federal and nonfederal land ownership, and recreation amenities.

- As-built Site Plan Recreation Drawings - a visual representation of Commission approved recreation sites reflecting as-built conditions and including all site recreation facilities as required by the project license, recreation plan, and/or any recreation plan amendments.

Along with the authorizing documents (preliminary permit, license, or exemption), exhibits are the primary source of information about a hydropower project. Licensees and exemptees must maintain accurate and up-to-date exhibits throughout the term of the license or exemption. Licensees and exemptees must prepare exhibits consistent with the Commission's regulations related to the authorizing document. DHAC reviews and approves revised project exhibits. DHAC also manages approved exhibits and geographic information system data related to the exhibits.

More information on exhibits is available in the Exhibits Guidance Document that can be found on the Commission's website. The exhibit guidance document describes the processes licensees and exemptees should use to prepare exhibits for Commission approval and how to file Commission approved exhibits. It also covers the Commission's requirements for managing project boundary and resource data in a geographical information system format. The intent of this document is to supplement the detailed information related to project exhibits provided in the Commission's regulations.

DHAC also uses exhibits to track and assess project licensees and exemptee annual charges for use of federal lands. See Sections 2.3 and 2.7.1.6 for more information on annual charges. If a project occupies federal lands, DHAC is required to coordinate a land withdrawal from public use with the U.S. Department of Interior's Bureau of Land Management (BLM).

2.3 Annual Charges

The Commission collects annual charges from licensees and exemptees for administration of the FPA and to compensate for the use, occupancy, and enjoyment of federal lands. The Commission also collects annual charges from licensees whose non-federal projects use a government dam for power generation. For the projects that use a government dam, the Commission does not assess a land use charge for a licensee's use of federal lands adjoining or pertaining to federal dams or other structures.

Under current regulations, projects with an authorized installed capacity of less than or equal to 1,500 kilowatts are not assessed an annual charge for installed capacity.

For state or municipal licensees and exemptees, the assessments for annual charges begin on the date of commencement of project operation. For non-state or municipal licensees and exemptees, the assessments for annual charges begin on the date of commencement of project construction for unconstructed projects. For constructed projects, the assessments start on the effective date of the license or exemption, except for any new capacity authorized. For non-municipal projects, the assessments for new authorized capacity start on the date of commencement of construction of the new capacity, and for municipal projects on the date of commencement of operation of the new units.

The collection of funds for administration of the FPA and the use of federal lands and government dams is usually required through a license article similar to the following:

Administrative Annual Charges. The licensee must pay the United States the following annual charges, as determined in accordance with the provisions of the Commission's regulations in effect from time to time:

- (1) effective as of the date of commencement of project construction, to reimburse the United States for the cost of administration of Part 1 of the FPA. The authorized installed capacity for that purpose is X,XXX kilowatts;
- (2) to recompense the United States for the use, occupancy and enjoyment of XXX acres of its lands (other than for transmission line right-of-way);
- (3) to recompense the United States for the use, occupancy and enjoyment of XXX acres of its lands for transmission line right-of-way; and
- (4) to recompense the United States for the use of a government dam.

2.4 Renewable Energy Production Tax Credits

Section 45 of the Internal Revenue Service (IRS) Code of 1986 provides a renewable energy tax credit to owners or operators of electric generation facilities that produce electricity from "qualified energy resources" at "qualified facilities," placed into service by specified dates.

Section 1301 of the Energy Policy Act of 2005 amends section 45 of the IRS' Code to apply the credit to incremental production gains from efficiency improvements or capacity additions at existing hydroelectric facilities placed into service after August 8, 2005 and before January 1, 2014.

Under Section 1301(c), the Commission is required to certify the “historic average annual hydropower production” and the “percentage of average annual hydropower production at the facility attributable to the efficiency improvements or additions of capacity” placed in service after August 8, 2005, and before January 1, 2014.

For more information about the requirements of the tax credit for incremental hydropower generation from efficiency improvements and the type of information the Commission needs to evaluate and certify such incremental increases, please see the instruction document for requesting certification of incremental hydropower production.

2.5 Non-Compliance Issues

DHAC reviews licensees’ and exemptees’ compliance with the requirements, terms and conditions specified in their license or exemption orders and approved plans, and with Commission rules and regulations. Typical examples of instances of non-compliance include: minimum flow deviations, reservoir elevation deviations, water quality deviations, and deviations of required fish passage facility operations. Non-compliance also includes failure to abide by the filing requirements set forth in license articles (e.g., not filing plans and reports by the required due date). Compliance investigations are generally in one of two forms: allegations of non-compliance, or self-reports of non-compliance.

2.5.1 Allegations of Non-Compliance

The typical process that DHAC staff use to address a non-compliance allegation involves three steps.

Allegation: An incident, perceived as unauthorized or inconsistent with Commission regulations, or with the terms of a license, is reported to DHAC by the public, a state resource agency, other licensees, or a Commission staff inspector. DHAC calls such an incident an allegation and, in response, opens an investigation.

Investigation: To begin the review, DHAC staff conducts an initial assessment, which often involves contacting the party who made the allegation to obtain all available information on the incident. DHAC then contacts the licensee or exemptee to obtain its perspective and any pertinent records and typically requires the licensee or exemptee to respond within 30 days. Other agencies, experts, and private citizens are also contacted, as appropriate. The Commission uses all the information it gathers to decide whether the incident is, in fact, a violation, and whether immediate action should be taken.

Finding: Once DHAC determines whether a violation occurred, it notifies interested parties that either no violation occurred, or that a violation occurred and the licensee must take certain steps to regain compliance. A violation is not resolved until the licensee or exemptee is once again in compliance and has adopted preventative measures to minimize the likelihood that the violation will recur.

In summary, when DHAC receives an allegation of non-compliance, it seeks “both sides” of the story before reaching a conclusion and pursuing a follow-up action. DHAC is flexible and responds to a variety of allegations with the appropriate resources. No allegation is taken for granted or dismissed as minor, and all violations are investigated thoroughly. The goal is to achieve compliance through communication and interaction to minimize future non-compliance events.

In the majority of cases, the licensee or exemptee responds to an initial contact letter acknowledging the event occurred, explaining what caused it to occur, and providing a statement that corrective action has been implemented. Depending on the nature of violation, DHAC may require documentation or may inspect a site to verify that corrective action has been taken. If corrective action has been taken, then DHAC sends a letter stating that the investigation has been completed. Letters or orders finding that violations have occurred may or may not require subsequent actions.

The determination that a violation has occurred is kept in the file and used, among other things, to determine the licensee’s compliance history as part of a relicensing proceeding. Staff also considers prior violations in determining the action to take on subsequent violations. If a licensee fails to respond to an initial contact letter or a site visit shows the project owner has not started corrective action, DHAC may issue a compliance order. A compliance order specifies actions the licensee must take to regain compliance and the date by which each action must be completed. Issuance and violation of a compliance order may result in civil penalty proceedings under section 31(a) of the FPA. Staff considers the extent of the violation when determining the amount of any penalties proposed to be assessed

2.5.2 Self reporting of Non-Compliance

Many license articles require the licensee to report deviations from license requirements, often within 10 days of the deviation. These include, but are not limited to, deviations of minimum flow requirements, water quality requirements, reservoir elevations, and fish passage requirements.

When a licensee reports a deviation, DHAC staff will review the incident in a similar manner as presented above and will issue a response letter to the licensee indicating whether or not the deviation is considered a violation of the license and

if any further actions are warranted. License violations are made part of the compliance history of the project and are taken into consideration during future compliance investigations and during project relicensing.

2.5.3 Overdue Filings

Overdue filings are when a licensee/exemptee fails to submit required information on time. Requirements and schedules for submitting information are usually contained in license articles and subsequent Commission orders or letters. License articles may require information such as fishway design drawings, effectiveness studies, erosion and soil control plans, water quality monitoring plans or reports, final recreation plans, and historic properties management plans (HPMP). DHAC monitors compliance with more than 10,000 license conditions.

When a licensee/exemptee does not submit information on time, DHAC contacts the licensee by phone. If the licensee cannot be contacted, DHAC sends a letter notifying the licensee that a filing is overdue. The licensee/exemptee may either submit the overdue information or request an extension of time. Any extension request must include appropriate justification. If the licensee/exemptee does not respond to the overdue notice, DHAC may issue a compliance order. A compliance order specifies actions the licensee must take to regain compliance and the date by which each action must be completed. A compliance order is a significant milestone that may lead to assessment of penalties.

Overdue filings may be considered a violation of the license and, if they are, they will be documented in the compliance history of the project and may be taken into account in future Commission actions.

2.5.4 Operational/Implementation Requirements

2.5.4.1 Flooding Issues

Throughout the term of a license or exemption from licensing, occasions may arise in which a party alleges that the operation of a project has resulted in the flooding of non-project lands. Upon notification of such an allegation, DHAC initiates an investigation of the incident similar to the non-compliance investigation protocol discussed in Section 2.5.1. DHAC obtains data from the licensee and other parties, as appropriate, in order to evaluate the incident. A course of action is determined based upon the findings of the investigation.

2.5.4.2 Erosion

Project licenses contain a standard article requiring licensees to take reasonable measures to prevent soil erosion on lands adjacent to streams and other waters. Additionally, many project licenses contain project specific articles and conditions

that require the licensee to develop an erosion and sediment control plan to protect environmental resources. These plans must be based on actual site conditions, and must include detailed methods for preventing, monitoring and reporting erosion issues. DHAC reviews the reports to ensure compliance with all erosion control requirements.

If DHAC's review of the reports show the licensee is not taking reasonable measures to prevent or control erosion, depending on the specifics of the conditions, DHAC may require the licensee to increase the level of monitoring, to institute additional measures to control erosion, or develop site specific remediation plans. Additionally, DHAC occasionally receives complaints regarding erosion at or near projects. Examples of complaints include: a property owner claiming the project is causing a loss of property; a recreational user claiming erosion is hampering or preventing access to a project recreation facility; or a resource agency claiming erosion is adversely affecting a specific resource. In these cases, DHAC conducts a non-compliance investigation, as explained above, and depending on the results of the investigation, determines the appropriate course of action.

2.5.4.3 Minimum Flows

Most licenses or exemptions contain conditions that require specific minimum flows to be released continuously, or during specified periods of time. The purpose of these minimum flow requirements is to protect and enhance the recreational, scenic, and environmental resource values of a project.

Non-compliance with the minimum flow requirement of a project could adversely affect the project's environmental integrity and quality. For example, alteration of minimum flows could affect water temperatures, fish habitat, and wetlands downstream of the dam.

Therefore, many licenses and exemptions contain monitoring and reporting requirements of minimum flows. DHAC reviews the reports to ensure compliance with minimum flow requirements set forth in licenses and exemptions.

2.5.4.4 Lake Levels

Many licenses or exemptions contain conditions that require specific reservoir water levels to be continuously maintained, or maintained during specified periods of time. Licenses and exemptions may also specify minimum and maximum water-level requirements or target elevations within required reservoir operating bands. The purpose of these water-level requirements is to protect and enhance the recreational, scenic, and environmental resource values of a project.

Non-compliance with the water-level requirements of a project reservoir could adversely affect the project's environmental integrity and quality. For example, water levels that are lower or higher than required may render important fish spawning and rearing areas unusable and may diminish the beneficial functions and values of wetlands. Also, docks and piers designed for specific water levels may be rendered inaccessible for boating, and shoreline beach areas may be unusable for swimming. In addition, lower than required water levels may cause aesthetic impairments and offensive odors from the exposure of littoral-zone substrates along the shoreline. Further, higher than required water levels may cause excessive amounts of woody debris to accumulate near or along a shoreline. Therefore, many licenses and exemptions with such reservoir requirements contain monitoring and reporting requirements of lake levels. DHAC reviews the reports to ensure compliance with lake level requirements set forth in licenses and exemptions.

2.6 Start of Construction Requirements

2.6.1 Meeting Start of Construction

Section 13 of the FPA sets the deadlines for the commencement of construction of project works. These deadlines apply to new, unconstructed licensed projects and to the redevelopment of existing sites that were previously used for non-power purposes or that had been previously abandoned. Section 13 of the FPA states that a licensee must commence construction within the timeframe fixed in the license, which shall not be more than 2 years from the issuance date of the license. The periods for commencement of construction may be extended once, but not longer than 2 years. If the licensee has not commenced actual construction of the project works within the time prescribed, or as extended by the Commission, the license shall be terminated, after due notice has been given. Section 13 of the FPA states the completion of construction shall be carried on in good faith and with reasonable diligence, and may be extended by the Commission when not incompatible with the public interests.

On rare occasions, additional time has been allowed for commencement of construction as the result of stays of the license terms and conditions granted by the Commission, where justified. However, in those limited situations, the licensees have met the burden of demonstrating the construction delays were beyond their control (e.g., agency driven delays). In some cases, projects have been allowed more time as the result of federal legislation. Congress, on a case-by-case basis, has allowed additional extensions, typically not exceeding 10 years from the license issuance.

If a licensee requires an extension of time of its commencement or completion of construction deadline, **18 CFR 4.202(b)** of the Commission's regulations state

that any application for an extension of the time fixed in the license for commencement or completion of construction of project works must be filed with the Commission not less than three months prior to the date or dates so fixed. If the licensee fails to submit its request within this timeframe, the licensee must submit a request for waiver of this regulation with its application.

Commencement of project construction under section 13 of the FPA occurs upon the start of work on facilities or, in limited situations, machinery considered significant and permanent elements of the project. Because construction requirements range from building new dams and powerhouses to refurbishing existing ones, the acts which constitute commencement of construction will vary from project to project.

Typically, licensees must meet the start of construction deadline by commencing construction on the principal civil works of the hydropower project (penstocks, dam, etc.). In limited circumstances, for certain projects where the project is located at an existing dam or an existing powerhouse, licensees have the ability to satisfy the start of construction deadline with the manufacture of turbine-generating units. In those relatively rare cases, the licensee must meet the burden in demonstrating that the equipment is that which was authorized in the license and that the actual time for the off-site manufacture of site-specific turbines or generators is equal to or greater than the period of physical construction at the site. If a licensee is considering satisfying the start of construction with the manufacture of turbine-generating units, we encourage them to contact DHAC early on to determine if this is satisfactory.

Section 13 does not apply to exemptions; however, the exemptee would be subject to standard terms and conditions set forth in the Commission's regulations, **18 CFR 4.94**. More specifically, standard Article 3 allows the Commission to revoke an exemption if construction of the proposed generating facility has not commenced within 2 years or been completed within 4 years of the effective date of the exemption. If an exemptee requires additional time to commence or complete construction, it must submit an extension of time request, which would contain sufficient justification to support its request.

2.6.2 Pre-Construction Requirements

Typically, the license articles that apply to start of construction cases are for the construction of new dams, water conveyances, powerhouses, or generating units or to the modifications of existing structures to accommodate increased generating capacity. It is important to note that the license or exemption contains pre-construction license requirements that the licensee or exemptee must satisfy prior to starting construction. DHAC monitors the licensee's progress toward commencing construction and works closely with the Commission's Division of

Dam Safety and Inspections (D2SI). Once the licensee has met all the pre-construction requirements in its license, D2SI issues a letter authorizing start of construction.

2.6.3 On-Site Construction

Once construction has commenced, D2SI is responsible for overseeing the construction of the project through to completion and start-up. The D2SI regional offices (New York, Atlanta, Chicago, Portland, and San Francisco) include engineers and inspectors who visit the sites and communicate regularly with the licensees and exemptees.

2.7 Amendments to Licenses and Exemptions

Modifications to a project, including changes in project structures, locations, or operations, are often necessary to ensure that the project can continue to operate effectively. A licensee wishing to modify some aspect of its project must first obtain authorization from the Commission. The Commission normally authorizes such changes by issuing amendments to the license. **See 18 CFR 4.200.**

A holder of an exemption may file an application to amend its exemption, although some minor changes can be made in some cases without an application and the Commission's approval. The exemption holder may implement the changes without the Commission's approval if:

- after being notified in writing by the exemption holder of its intended changes, the appropriate fish and wildlife agencies determine that the proposed changes would not cause the project to violate the terms and conditions imposed by the agencies; and
- the changes would not materially alter the design, location, or method of construction or operation. **See 18 CFR 4.104(b).**

In the absence of these two conditions, the exemption holder must obtain the Commission's approval before making the proposed changes to its project.

2.7.1 Defining the Need for an Amendment

Unless already identified in an existing requirement or plan approved by the Commission, most changes to the features or operation of a project requires an amendment to the license or exemption. The Commission processes amendments as small as modifying the diameter of flashboard pins all the way to proposals for major rebuilding of a project. Project amendments are largely straightforward proceedings and requesting an amendment does not trigger a re-examination of the

entire project unless a preexisting requirement or condition warrants it. When reviewing amendments, we concentrate on the proposed modification to determine its dam safety, environmental, operational, and other effects. We also determine if an amendment would be defined in our regulations as a “capacity” or “non-capacity” amendment. These amendments are described further in section 2.7.1.4 below.

Standard Articles 2 and 3 contained in most licenses give the licensee the ability to make minor changes in project works, or in uses of project lands and waters, or to diverge from approved exhibits but only for changes that do not result in substantial alterations. For example, the following minor changes would not ordinarily need prior Commission approval but instead could be made by the licensee pursuant to Articles 2 and 3:

- adding signage for public information purposes where such signage does not conflict with the project’s approved recreation or public safety plans;
- constructing small sheds, garages, and other outbuildings to house maintenance equipment and/or to otherwise support project operations or personnel; and
- installing new electrical control and/or monitoring equipment needed to safely operate the project in a manner consistent with approved license conditions.

The following sections describe a few common amendment applications filed with the Commission. The examples and topics discussed below do not cover all situations in which an amendment might be requested. If a licensee or exemptee is unsure whether an amendment to its license or exemption is necessary, we encourage the licensee or exemptee to contact us via telephone to discuss its proposal.

2.7.1.1 Amendments to License Articles or Approved Plans

New environmental conditions, regulatory requirements, or new information from studies can cause a licensee to seek an amendment to its license articles or approved plans. For example, a licensee may need to move the location of a streamflow gage required by an approved gaging plan if characteristics of the river at the gaging site change over time. A licensee may need to amend its approved recreation plan if survey results or Form 80 data indicates one recreation area is overused while another recreation site at the project is underutilized.

In other scenarios, licenses and exemptions often required the licensee or exemptee to maintain specific reservoir elevations, minimum flows, or to limit changes to water elevations and flow rates to protect aquatic resources, federally-listed threatened and endangered species, or for recreation purposes. Operational requirements in a project license are set at the time of licensing to balance environmental resources and safe and effective project operation. However, if aquatic or recreational conditions change during the term of the license, the licensee or exemptee may find it necessary to seek an amendment to its operational requirements.

In other cases, the licensee or exemptee may request an amendment that would not modify an operational requirement itself, but rather would alter a reporting requirement. As an example, a licensee may be required to file monthly reports providing flow data. The licensee may ask the Commission to amend its license so that the reports can be filed annually and provide justification for the modified reporting timeframe.

When processing such an amendment request, DHAC staff will first review the purpose for the original requirement to understand why it was included in the license or exemption and then DHAC staff will review the amendment proposal to understand the reasons behind the proposed change. However, we will not amend requirements simply because a licensee or exemptee is having difficulty complying with the requirement. Proposed amendments should have a substantive basis for any needed change.

2.7.1.2 Temporary Operational Changes

In certain situations, a licensee may need a temporary variance from the operating requirements of its license. For example, a licensee may need to lower a reservoir below its required minimum elevation so that it can perform important dam safety work. Or a licensee may need to reduce minimum flows during drought conditions when it cannot meet both minimum flow and reservoir elevations requirements at the same time. A temporary variance is also an amendment to license or exemption.

Some articles in a license or exemption contain language that allows the licensee or exemptee to temporarily deviate from the relevant condition “for short periods of time” upon mutual agreement between the licensee and the resource agencies, usually the U.S. Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), and/or state fish and game agency. A short period of time is generally considered to be 2 to 3 weeks. If the license condition contains this language, and the resource agencies agree to the temporary variance, and the change would only last 2 to 3 weeks, then the licensee does not need Commission

approval but must notify the Commission of the change as per the license article requirements (generally within 10 days of the operational modification). Absent these conditions, the licensee or exemptee must seek specific Commission approval before implementing any temporary variance. Licensees should contact the Commission as soon as possible when deciding whether to seek a temporary variance so the Commission has enough time to act on the variance before it is needed.

Finally, an exemptee who needs a temporary variance from the requirements of its exemption should first contact the resource agencies that provided the terms and conditions in its exemption (if any) to get those agencies' approval.

2.7.1.3 Adding/Removing Land from Project Boundary

The Commission, when issuing a license for a hydropower project, requires the licensee to undertake appropriate measures to promote both developmental (power) and non-developmental uses (e.g., scenic, recreational, environmental) of a waterway. These public interest uses, identified by the Commission in its licensing orders, constitute the “project purposes.”

Our regulations provide that:

A project boundary must enclose only those lands necessary for the operation and maintenance of a project and for other project purposes such as recreation, shoreline control, or protection of environmental resources Existing residential, commercial, or other structures may be included in the boundary only to the extent that underlying lands are needed for project purposes (e.g., for flowage, public recreation, shoreline control, or protection of environmental resources).

The inclusion of lands within a project boundary serves the function of indicating that the lands are used in some manner for project purposes. However, the mere inclusion of lands within a project boundary will not restrict landowner uses, since such inclusion does not itself create or alter property rights. A licensee is required to acquire and retain all interests in non-federal lands necessary or appropriate to carry out project purposes. These interests can be obtained through easement, fee title, leases, and other types of conveyances. The instruments of conveyance define the extent of the licensee's right.

As indicated above, the project boundary is an administrative marker to clearly delineate those lands necessary for the operation and maintenance of the project and for other project purposes. Project boundaries may be changed to either exclude land from or include land in the project only upon DHAC's approval of

revised Exhibit G or K drawings (project boundary maps) reflecting the exclusion or inclusion of that land. Such changes are approved only upon a determination that the lands are either needed or not needed for project purposes, including operation and maintenance of the project, recreation, public access, protection of environmental resources, and shoreline control.

As discussed in section 2.7.1.7, DHAC may authorize a project licensee to permit the use and occupancy of project lands for non-project purposes and to convey interests in project lands for non-project uses and occupancies. However, approval of such permits and conveyances does not in itself change the project boundary. Likewise, such permits and conveyance approvals are not a necessary prerequisite for changes to a project's boundary. A licensee may propose changes to a project boundary either in a separate application or as part of an application for non-project use of project lands or other relevant filing.

Project lands that are conveyed for a non-project use may still be needed to serve various project purposes. For example, project lands transferred for the development of private recreation facilities also may be needed for public access, resource protection, and shoreline control. In such cases, the conveyed lands (or the portion thereof that is determined to be needed for a project purpose) would be retained within the project boundary. The licensee would be expected to retain sufficient interests in the retained project lands, consistent with the project purpose(s) served (e.g., public access rights, a conservation easement, or reservations of authority to monitor a grantee's compliance with certain project-related covenants and to take any lawful action necessary to ensure such compliance).

Occasionally, lands outside a project boundary must be used to serve a particular project need or to satisfy a particular license requirement. In most of these cases, the licensee must apply for a change to the project boundary to add those lands to the project and bring the lands into the project boundary. For example, if certain non-project lands were determined to be necessary to accommodate the recreation facilities and activities included in a project's approved recreation plan, proposed changes to the project boundary would be approved to include those lands in the project. Likewise, if it were determined that a project licensee had ongoing license responsibilities in connection with lands not currently within the project (e.g., facility operation and maintenance or resource management requirements), those lands would be brought into the project through approved changes to the project boundary.

2.7.1.4 Changes to Project Design and/or Capacity

Some of the more significant amendments that a licensee may request involve modifications to project design or capacity. There is little doubt an amendment is required for these changes which may involve the construction of new powerhouses, dams, water conveying structures, or significant increases in the maximum elevation or surface area of the reservoir. Broadly, the Commission classifies amendments as capacity related or non-capacity related.

Capacity Related Amendment: The Commission defines a capacity-related amendment as an amendment that would increase the project's actual or proposed total installed capacity by 2 megawatts or more, and increase the project's maximum hydraulic capacity by 15 percent or more. The Commission's regulations at **18 CFR 4.201(b)** describe the requirements to be met by licensees seeking capacity-related amendments.

Non-Capacity Related Amendment: Project modifications not meeting both the installed and hydraulic capacity criteria in the previous section are considered non-capacity amendments. The Commission's regulations at **18 CFR 4.201(c)** describe the requirements to be met by licensees seeking non-capacity-related amendments.

Two significant differences between capacity related and non-capacity related amendments are: (1) how pre-filing consultation is conducted and (2) which exhibits are required in the amendment application. Completing successful pre-filing consultation is an extremely important step that begins early in the process of seeking an amendment. The differences between capacity related and non-capacity related amendments are discussed further in section 2.7.2.

2.7.1.5 Efficiency Upgrades

Licensees sometimes propose modifications to project facilities and/or operations to more efficiently produce power. A few common examples include:

- upgrading generators and/or turbines units;
- rewinding generators;
- replacing turbine runners;
- computerizing turbines and generators controls;
- optimizing flow regulation;

- coordinating operation with hydro facilities located upstream and/or downstream; and
- reducing excess spill.

With the exception of adding units, efficiency upgrades at hydropower projects are generally non-capacity amendments.

DHAC staff is available to discuss what constitutes an efficiency upgrade with licensees prior to filing an amendment application.

2.7.1.6 Annual Charges

In certain amendment proceedings, DHAC must evaluate and revise the annual charges article discussed in Section 3.3. When an amendment of license would result in a change to the project's authorized installed capacity or the project boundary, thereby affecting the amount of federal lands acreage, the annual charges article is modified by the amendment order.

If new capacity is authorized by an amendment order for a licensee or exemptee that is not state or municipal, the annual charge assessments for the new authorized capacity start on the date of commencement of construction of the new capacity. For state or municipal licensees and exemptees, the assessments for the new authorized capacity start on the date of commencement of operation of the new capacity.

2.7.1.7 Non-Project Use of Project Lands and Waters

Under **Standard Article 5** of any license issued by the Commission, a licensee must acquire and retain sufficient control over all property and/or rights necessary or appropriate to construct, operate, and maintain a project, and may not dispose of interests in project property without prior Commission approval, except as specifically permitted under the license (see Section 2.15 regarding Article 5). A licensee of a hydropower project may receive requests from neighboring landowners, government agencies, or private organizations to use project land for a variety of purposes unrelated to operating the project (i.e., non-project uses). A non-project use of project lands is a third-party use and occupancy of project property authorized by the licensee through the conveyance of a specific interest in project lands and waters. These uses may include, but are not limited to, land for boat docks, marinas, bridges, pipelines, water withdrawals, and utility lines.

To provide the licensee with flexibility in responding to such requests, most project licenses contain a condition called a standard land use article (see **Appendix B**). This article allows licensees to convey interests in project lands and waters (through leases, rights-of-way, or fee title conveyances) for certain non-project uses without prior Commission approval. Conveyances allowed under the standard land use article must be consistent with the scenic, recreational, and other environmental values of the project. In addition, the entity requesting the conveyance must fulfill specific requirements before the licensee can convey an interest in project lands or waters. The requirements are based on the characteristics of the proposed use and the type of conveyance. The licensee must also consult with the appropriate federal and state agencies to assure that the proposed use is compatible with the project's recreation plan and resources, and that the instrument of conveyance includes appropriate covenants to protect the scenic, recreational, and other environmental values.

The level of Commission approval needed increases with the scale of the proposed non-project use, and is detailed in the article. If a proposed use does not meet the criteria of the standard land use article, then the licensee must obtain Commission approval prior to issuing the conveyance. The licensee requests Commission approval by filing an application for a non-project use of project lands or waters.

DHAC treats an application for non-project use of project lands or waters as a request for an amendment of the project license. Non-project use amendment applications should include descriptions of the proposed use and type of conveyance, the affected environment, and the anticipated effects on the affected environment, as well as documentation of consultation with resource agencies and interested parties, including licensee responses to any comments and recommendations. **Appendix C** contains a detailed description of the suggested contents of an application for amendment of license for non-project uses and occupancies of project lands and waters. In addition, a tri-fold brochure is available on the Commission's website with this information.

DHAC reviews the application and may request additional information from the licensee. DHAC will determine whether a public notice on the application is needed and if an environmental assessment is warranted. Determinations on whether to prepare an environmental assessment are made on a case-by-case basis, in accordance with Part 380 of the Commission's regulations (See **Part 380.4**). Section 2.7 discusses compliance with National Environmental Policy Act (NEPA).

Based on the results of the Commission's technical and environmental analysis, including a review of the license requirements, comment letters, and other information in the Commission record (public file), the Commission may approve,

modify (approve with conditions), or deny an application for a non-project use of project lands or waters.

Just as the Commission must ensure that licensees meet the requirements of their licenses, licensees must ensure that any authorized non-project use is constructed and operated in substantial conformity with the approved application. DHAC encourages licensees to develop and implement plans or programs to supervise and control authorized uses of project lands. When a non-project use substantially differs from the approved application, or begins to adversely affect project purposes, the licensee must take appropriate enforcement actions to bring the non-project use into compliance. The licensee may require that facilities be modified to conform to the approved application. If the licensee agrees that changes are needed to the approved site, it may file with the Commission an application seeking approval of the proposed changes.

Conflicts involving non-project uses are best resolved among the licensee, the owner, and the interested stakeholders. However, DHAC may become involved in a licensee's administration of project lands and waters when such administration fails to ensure compliance with license requirements and project purposes.

2.7.2 Procedural Steps and Contents of Applications for Amendments

The type of amendment being requested determines the procedural steps necessary in preparing the application, as well as the contents of the application. These elements are summarized below.

2.7.2.1 Pre-Filing Consultation

Once a licensee or exemptee decides to pursue an amendment of its license or exemption, it should determine whether the request would constitute a capacity related or non-capacity related amendment as described in section 2.7.1.6. The licensee is subject to the three-stage consultation requirements outlined in **18 CFR 4.38(b), (c), and (d)**,¹ if it is proposing a capacity related amendment or a non-capacity amendments that includes: (1) construction of a new dam or diversion where none existed before; (2) repair or modification of an existing dam that would result in a significant change in the normal maximum surface area or

¹ Simply put, the three-stage consultation process consists of: (1) reaching out to relevant agencies, Indian tribes, and members of the public; holding a public meeting; and requesting studies; (2) conducting any studies requested by interested parties and providing a draft of the application to relevant resource agencies, tribes, and other interested entities for review and comment; and (3) filing the final application with the Commission.

elevation of an existing impoundment; and (3) the installation of a new turbine other than to replace an existing turbine, for example, replacing one turbine with two turbines. See **18 CFR 4.38(a)(6)(v)**.

As indicated in **18 CFR 4.38(a)(9)**, an applicant that is unsure whether the three-stage consultation process applies to its proposal can file a written request for clarification with the Director of OEP. Additionally, if a licensee has determined a waiver of the three-stage consultation process is suitable for its proposal, it may request such a waiver by filing a written request for waiver with the Director of OEP.

If the non-capacity amendment does not include any of the three actions listed above, the licensee does not need to follow the three-stage process. However, the licensee is still required to consult with relevant agencies and tribes as described in **18 CFR 4.38(a)(7)**.

Generally, we consider pre-filing consultation a necessity for nearly every amendment, particularly those having any nexus with environmental matters over which a particular agency or agencies has jurisdiction. Additionally, parties that would be directly affected by the amendment, such as a private entity or federal agency administering land which an applicant proposes to add to or remove from the project, needs to be consulted prior to filing the application with the Commission. If an applicant does not conduct pre-filing consultation and we determine that resource agencies or tribes should have been contacted, we will suspend our review and require the applicant to conduct the consultation before continuing our review of the amendment request.

2.7.2.2 Contents of Application

The contents of an amendment application are determined, in part, by whether the amendment is considered a non-capacity or capacity related amendment as discussed above. However, all applications to amend a license or exemption need to include an initial or introductory statement as specified in **18 CFR 4.201(a)** and **18 CFR 4.107(b)**. Generally, for any proposal that would result in a change in discharge at the project, the applicant needs to include with its application evidence that it has requested a new or revised state water quality certificate from the appropriate state water quality certifying agency.

Capacity Related Amendment Applications

The required contents of a capacity related amendment application, as explained in the sections above, are based upon the proposed installed capacity of the project, and whether or not the project is fully constructed at the time the application is made. These requirements are spelled out in **18 CFR 4.201(b)** and summarized in

the table below. **Table 2** identifies which exhibits are required and cites the section of the Commission’s regulations the applicant must follow when preparing the exhibit.

Table 2 Required Exhibits for Capacity Amendments

Proposed Installed Capacity	Not Constructed at Time of Application	Constructed at Time of Application
Greater than 5 MW	A, B, C, D, E, F, G [18 CFR 4.41]	A, B, C, D, E, F, G [18 CFR 4.51]
Less than or equal to 5 MW and greater than 1.5 MW	F, G, [18 CFR 4.61] E [18 CFR 4.41]	E, F, G [18 CFR 4.61]
1.5 MW or less	E, F, G [18 CFR 4.61]	E, F, G [18 CFR 4.61]

Non-Capacity Related Amendment Applications

When preparing the contents of a non-capacity related amendment of license, **18 CFR 4.201(c)** specifies that the applicant needs to include only those exhibits that require revision in light of the nature of the proposal. For example, if a licensee intends to install additional units in its powerhouse, it does not need to file a revised Exhibit G to revise the project boundary or show new or unrelated project structures. Additionally, although we prefer that exhibits are revised and filed in their entirety, some exhibits in non-capacity amendment requests only need to examine the environmental resources that may be affected, not all resources that are present at the project. In such cases, the Exhibit E should contain a statement of no effect for resources not affected by the proposed amendment.

2.7.2.3 Amendment Process

Once an applicant files the amendment request, the subsequent issuances it might likely expect to see from the Commission are: one or more requests for additional information, a public notice soliciting comments, motions to intervene, protests, and possibly resource agency conditions; one or more NEPA documents; and a final order approving, denying, or approving with modifications the amendment request.

Additional Information and Public Notice

When first receiving a request to amend a license or exemption, DHAC staff performs an adequacy review to determine if the licensee/exemptee has complied

with the Commission's regulations in preparing the filing and if all necessary information is provided. If the filing is deficient in any way, or if DHAC staff determines that further information is necessary for our review, we ask the licensee/exemptee to correct the deficiencies or provide the additional information.

Upon receiving an amendment application, DHAC staff will also determine whether or not the application should be publicly noticed. Typically, if an amendment application is deficient, staff will wait until the licensee/exemptee responds to the additional information requests before issuing a public notice. However, if only minor additional information is needed, staff may issue the public notice concurrently with the additional information request.

When issuing a public notice, the types of responses solicited and the length of the comment period is dependent upon the nature of the amendment request. The Commission typically issues two types of public notices for amendments: one which solicits comments, interventions, and protests during a 30-day comment period and another which solicits comments, interventions, protests, FPA sections 10(j) and 10(a) recommendations, FPA section 4(e) terms and conditions, and FPA section 18 fishway prescriptions for a 60-day comment period.² The second notice also gives the licensee an additional 45 days to respond to any filings made during the 60-day comment period. Although there is no well-defined procedure for determining whether a particular amendment application will require either type of notice, capacity related amendments and most non-

² Sections 4(e) and 10(a) of the FPA require the Commission to give equal consideration to the power development purposes and to the purposes of energy conservation; the protection, mitigation of damage to, and enhancement of fish and wildlife; the protection of recreational opportunities; and the preservation of other aspects of environmental quality. Any license issued shall be such as in the Commission's judgment will be best adapted to a comprehensive plan for improving or developing waterway or waterways for all beneficial public uses. Section 4(e) of the FPA also provides that any license issued by the Commission for a project within a federal reservation will be subject to and contain such conditions as the Secretary of the responsible federal land management agency deems necessary for the adequate protection and use of the reservation. Under section 10(j) of the FPA, each hydroelectric license issued by the Commission must include conditions based on recommendations provided by federal and state fish and wildlife agencies for the protection, mitigation, or enhancement of fish and wildlife resources affected by the project. Section 18 of the FPA states that the Commission is to require construction, operation, and maintenance by a licensee of such fishways as may be prescribed by the Secretaries of Commerce or the U.S. Department of the Interior (Interior).

capacity related amendments that require three-stage consultation will be publicly noticed using the second type of public notice (providing 60 days). The vast majority of amendment applications, however, are processed using the shorter notice period and some amendments are not publicly noticed at all.

In our public notices, resource agencies, tribes, and members of the public are encouraged to file comments as well as recommendations, terms and conditions, and fishway prescriptions, if applicable. We will then review any responses filed pursuant to the notice and take them into account when processing the amendment.

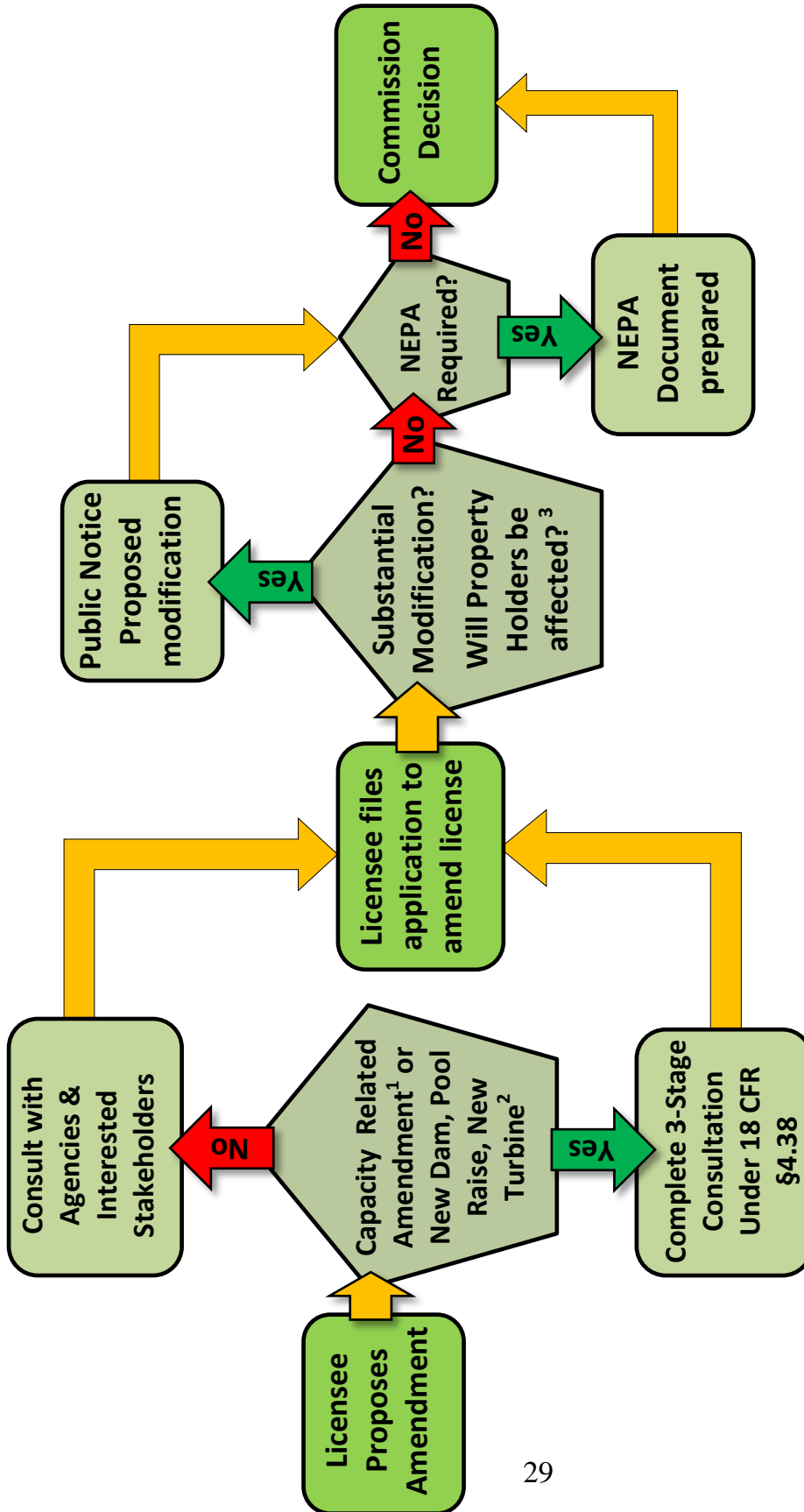
NEPA Documents

During our initial review, DHAC staff will also determine if we need to conduct a review of the amendment application under NEPA (see Section 2.7.1.4). If DHAC staff determines that it is necessary, we will prepare and issue an Environmental Assessment (EA) or Environmental Impact Statement (EIS) that examines alternatives and the likely effects to environmental resources from the proposed amendment. DHAC staff may issue a single EA or a draft and final EA during the review process. This decision is based on the scope of the proposed amendment, whether significant or sensitive resources would be affected, and/or whether the amendment is controversial. DHAC staff issue single EAs or draft and final EAs for most amendment applications but can choose to issue a draft and final EIS for applications that we determine would have significant effects on environmental resources.

Final Decision

Finally, once DHAC staff have completed the review of the amendment and have fulfilled our obligations under federal law, we will issue an order approving the proposal, modifying and approving the proposal, or denying the application. When necessary, DHAC staff may issue an order rejecting, holding in abeyance, or dismissing the amendment application at any point during our review process. The reasons for taking such actions are unique to the particular proceeding, but may involve pending legislation, weather-related events, or at the request of the applicant.

Figure 2 License Amendment Process



¹ See capacity related amendments under 18 CFR §4.201(b).

² See 18 CFR §4.38(a)(6)(v).

³ Does the proposed modification entail substantial changes to the plan of project development or in the terms and conditions of the license, or adversely affect the rights of property holders not contemplated by the license?

2.7.3 Compliance with Other Federal Laws

When reviewing amendment applications, DHAC must comply with federal laws for the protection of environmental resources and ensuring access to project lands and waters. For example, fish, wildlife, or plant species that are present at a project may be listed as threatened or endangered, or delisted, under the **Endangered Species Act (ESA) of 1973**. Historic resources may be listed or determined to be eligible for listing in the National Register of Historic Places (National Register) pursuant to the **National Historic Preservation Act of 1966, as amended**. River segments may be included in the national wild and scenic rivers system under the **Wild and Scenic Rivers Act**. Additional recreational facilities may be warranted at a licensed project if public use of the project area increases. If that is the case, access for persons with disabilities will need to be considered under the **Americans with Disabilities Act of 1990**.

2.7.3.1 National Environmental Policy Act

As discussed, DHAC staff may prepare a single EA, draft and final EA, or even a draft and final EIS for an amendment application depending on the scope of the application, the environmental resources affected, and/or level of controversy. However, some work performed by DHAC is categorically excluded from NEPA under the Commission's regulations at **18 CFR 380.4**. These activities include:

- actions concerning the reservation and classification of United States lands as water power sites and others under Section 24 of the FPA;
- transfers of hydropower project licenses and transfers of exemptions;
- actions concerning headwater benefit assessments;
- compliance investigations;
- approval of piers, landings, landscaping, boat docks and similar structures; embankments, bulkheads, retaining walls, or similar shoreline erosion control structures;
- approval of "as-built" or revised drawings or exhibits that propose no changes to project structures or operations or that reflect changes that have previously been approved or required by the Commission;
- surrender of licenses and exemptions where no project facilities exist, or no ground-disturbing activity has occurred, and amendments to licenses that

do not require ground-disturbing activity or changes to project facilities or operations;

- exemptions for small conduit hydroelectric facilities as defined in **18 CFR 4.30(b)(26)**;
- approval of changes in land rights for hydropower projects, if no construction or change in land use is proposed, and
- filings made in compliance with license conditions.

Even in these categorical exclusions, DHAC, after reviewing the amendment application and/or public comments, may determine that issuing an EA or EIS is warranted. This may occur if the amendment could affect Indian lands; wilderness areas; wild and scenic rivers; wetlands; units of the National Park System, National Refuges, or National fish hatcheries; anadromous fish or endangered species; or when the level of possible environmental effects may be significant or are uncertain.

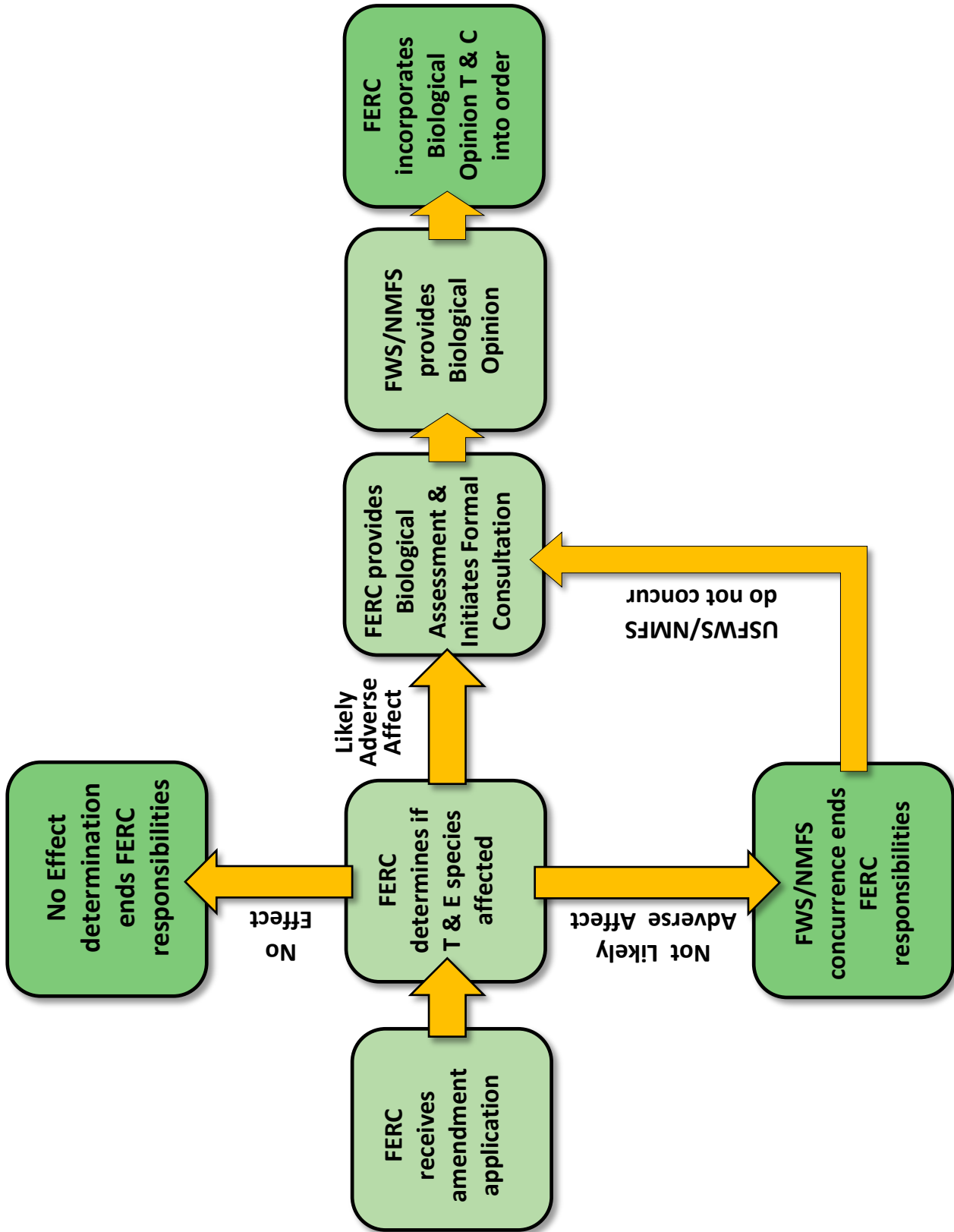
2.7.3.2 *Endangered Species Act*

The ESA was enacted to ensure the preservation of threatened and endangered plants and animals and their habitats. **Section 7(a)(2) of the ESA** requires the Commission to consult with the FWS and/or the NMFS, as appropriate, to ensure that its actions are not likely to jeopardize the continued existence of any threatened or endangered species, or adversely modify the critical habitat designated for those species.

The licenses and exemptions issued by the Commission often contain conditions or articles that specify certain actions a licensee must take to protect threatened or endangered plants and animals. The Commission's responsibility for complying with the ESA does not end when a license or exemption is issued. Should a licensee propose amending its license in a manner that would affect listed species, the Commission may need to consult again with the FWS and/or NMFS regarding the amendment's effects to threatened and endangered species.

Figure 3 generally shows how the Commission consults with the USFWS and/or NMFS pursuant to section 7 of the ESA.

Figure 3 Endangered Species Process



2.7.3.3 *National Historic Preservation Act*

Section 106 of the National Historic Preservation Act requires that a federal agency take into account the effects of its activities and programs on historic properties (36 CFR 800) and afford the Advisory Council on Historic Preservation (Advisory Council) the opportunity to comment. An historic property is a prehistoric or historic district, site, building, structure, or object included in or eligible for inclusion in the National Register of Historic Places (National Register). The Commission has the responsibility of ensuring protection of historic properties at its licensed projects. In many cases, the Commission has executed a Programmatic Agreement (PA) with the State Historic Preservation Officer (SHPO), the Advisory Council, and other entities, as appropriate, including the U.S. Forest Service and/or Indian tribes. The PA, once incorporated into a license or amendment, binds the licensee to follow specific procedures to protect known and unknown historic properties over the term of the license.

When reviewing an amendment application, DHAC staff and/or the licensee complete the following steps to determine if the actions proposed in the application would affect historic properties and whether any mitigation is appropriate:

1. Determine the Area of Potential Effect (APE);
2. Review any available information to determine if there are any historic resources within the APE eligible for listing in the National Register of Historic Places. If no information is available, we require the licensee to determine if there are cultural resource sites that may be eligible for listing within the APE;
3. Determine what effect, if any, the amendment would have on the historic properties; and
4. Follow the appropriate procedures (consistent with the PA and/or approved HPMP if one exists³) to protect or mitigate any effects on the historic properties. These procedures could include avoidance of the historic properties, data recovery, or other measures.

During this review DHAC staff consults with the SHPO or Tribal Historic Preservation Officer (THPO) in the case of a project that might be located on an

³ In May 2002, the Commission and the Advisory Council on Historic Preservation issued joint guidelines for the preparation of Historic Properties Management Plans.

Indian reservation. DHAC staff also consults with any other federal agency that manages land within the APE and with appropriate Indian tribes that may have traditional or cultural interests in the project area.

If DHAC staff determines that the amendment would adversely affect historic properties and there are no procedures contained in the license to address protection of these properties, DHAC staff consults with the SHPO, Indian tribes, and, if appropriate, the Advisory Council to discuss methods for minimizing or avoiding adverse effects on these properties. DHAC staff memorializes any agreed upon mitigation in a Memorandum of Agreement (MOA) that is executed by the Commission and the SHPO (and sometimes the Advisory Council) as signatures to the agreement with the licensee and other interested entities as concurring parties. The Commission is responsible for ensuring that the licensee implements all mitigation measures contained in the MOA in consultation with the SHPO and other appropriate agencies.

2.7.3.4 *Wild and Scenic Rivers Act*

The **Wild and Scenic Rivers Act** provides for the protection and preservation of certain rivers and their immediate environments through inclusion in the national wild and scenic rivers system. Section 7(a) of the Wild and Scenic Rivers Act prohibits the Commission from licensing construction of hydropower projects “on or directly affecting” any river designated as a component of the national wild and scenic river system. The first clause of section 7(a) applies only to the Commission, and bars it from authorizing the construction of any project works on a Wild and Scenic corridor. Specifically, it provides that the Commission “shall not license the construction of any dam, water conduit, reservoir, powerhouse, transmission line, or other project works under the FPA...on or directly affecting” any component of the national wild and scenic rivers system. In our analysis of our proposed action, we include a description of any areas within or in the vicinity of the proposed project that are included in, or have been designated for study for inclusion in, the National Wild and Scenic Rivers System; our assessment of the effects of the proposed action on the designated river reach; and any determinations regarding consistency by the agency administering the reach. We also seek the administering Secretary’s determinations regarding consistency of a project with the provisions of this act.

2.7.3.5 *Americans with Disabilities Act*

Licensees are expected to develop suitable recreation facilities upon project lands and waters and make provisions for adequate public access. See **18 CFR 2.7**. The Commission further expects licensees to consider the needs of persons with disabilities when designing and constructing project-related recreational facilities or public access routes. See **18 CFR 2.7(b)**.

When reviewing amendment applications, we evaluate whether a project's recreational facilities and public access routes consider the needs of persons with disabilities.

Other laws that pertain to providing access for persons with disabilities include Section 504 of the **Rehabilitation Act of 1973** and the **Americans with Disabilities Act of 1990**. In addition to complying with Commission regulations, DHAC staff suggests that our licensees take into account these other applicable laws when developing plans and amendment applications for Commission approval.

2.8 Reopener Requests

The Commission may reopen a license or exemption based upon a mandatory condition that reserves an agency's ability to modify its conditions. Hydropower licenses and exemptions may also contain standard articles that reserve the Commission's authority to require the licensee to make reasonable modifications to project structures and operations for, among other things, the development and conservation of fish and wildlife resources and the construction, operation, and maintenance of fish passage facilities.

The Commission may order these modifications for the protection and enhancement of environmental resources upon its own motion, or upon the recommendation of the Secretary of the Interior, Secretary of Commerce, or other interested federal or state agencies. However, prior to requiring modifications, the Commission must give the affected licensee or exemptee notice that it intends to use its reservation of authority and provide an opportunity for hearing.

In general, the Commission sets a high bar for the use of its reserved authority contained in licenses and exemptions. Reopening proceedings are relatively rare and are generally used when there have been significant changes to environmental conditions at the project and the licensee or exemptee is unwilling to address those changes via a voluntary amendment application.

2.9 Surrender, Transfer, and Termination of Licenses and Exemptions

2.9.1 Surrender

A licensee or exemptee may decide that it no longer wishes to hold the Commission-issued license or exemption for a hydroelectric project because it is no longer economical, or because natural catastrophes have damaged or destroyed project facilities, or for a variety of other reasons. In such instances, the licensee or exemptee needs to apply to the Commission to surrender its hydroelectric project (see **18 CFR 6.1 and 6.2 for licenses, 4.95 for conduit exemptions, and**

4.102 for small hydro exemptions). Hydroelectric projects under the Commission's jurisdiction cannot be simply abandoned; surrenders must be approved by the Commission in order to ensure public safety and any needed environmental protection. The complexity of the surrender process is determined by the site-specific conditions and the implications of ending Commission jurisdiction.

Any surrender application must include a decommissioning plan describing the planned disposition of project facilities; an environmental report that describes the existing environment in the project area, environmental effects that are expected to occur upon surrender, and any measures that would be taken to mitigate those effects; a schedule for implementing any proposed measures; and copies of consultation with relevant federal and state agencies. The application must include plans to restore any federal lands occupied by the project to a condition acceptable to the applicable land management agency.

Upon receipt of an application for surrender, DHAC staff will review the application for completeness, request any additional information from the applicant that may be necessary, and then issue a 30-day public notice soliciting motions to intervene, comments, and protests. DHAC staff generally issues an EA pursuant to NEPA that analyzes the environmental effects of the proposed surrender. Finally, the Commission will issue an order on the surrender application, which takes into account comments by federal and state agencies and other parties filed in the proceeding, and the analysis performed in the EA. The order will contain specific conditions for the surrender that are based on our analysis and protection of the public interest, which may address the disposition of constructed facilities. The conditions in the order must be satisfied before the surrender becomes effective and Commission jurisdiction over the project ends (See **18 CFR 6.2**).

It is important to note that a surrender of license for a project with facilities constructed on federal lands will require that the project lands be restored to a satisfactory condition, and that the licensee will need to continue paying annual charges, before the surrender becomes effective.

Exemptions can be surrendered only upon fulfillment of any obligations imposed by the Commission and the fish and wildlife agencies for the disposition of facilities and site restoration.

2.9.2 Transfer

When a license is issued, the Commission approves both the hydropower project and the licensee. Licensees may decide they want to transfer a hydropower

license to another entity or entities. A license may be transferred only with Commission approval.

An application for a transfer of license must be filed jointly by the existing licensee and the potential transferee. See **18 CFR 9.1**. A licensee who wants to transfer a license must file an application that includes: (1) a statement consistent with **Section 131.20 18 CFR Subchapter D**; (2) a verification statement; (3) a description of the qualifications of the transferee to hold the license; (4) a statement providing evidence of compliance by the transferee with all applicable state laws or how the transferee proposes to comply; and (5) four originals plus one copy for each interested State Public Utility Commission. See **18 CFR 9.2**.

DHAC will issue a public notice of the application prior to acting on the request.

Since issuance of the Commission's Decommissioning Policy Statement in 1994, DHAC has been charged with the obligation to scrutinize license transfers to ensure that a transferor with a poor compliance record is not trying to escape that record and give a transferee an advantage in relicensing, or handing off an increasingly marginal project to a new licensee that lacks the financial resources to maintain the project. We make a determination concerning the proposed transferee's fitness under the FPA.

Approval of the transfer is contingent upon: (1) transfer of title to the properties under license; (2) acknowledgment of acceptance by the transferee filed in triplicate within 60 days of the order approving the transfer; (3) delivery of all license instruments within 60 days of the order approving the transfer; and (4) a showing that the transfer is in the public interest. See **18 CFR 9.3**.

A transferee is subject to all the conditions of the license and to all the provisions and conditions of the FPA, as though the transferee was the original licensee, and shall be responsible for the payment of annual charges that accrue prior to the date of transfer.

Transfers of exemptions are not required to be approved by the Commission prior to the transfer. However, an exemptee must notify the Commission of the transfer or sale of the exemption and must update the contact information. The Commission staff will issue a notice of the transfer of the exemption.

2.9.3 Termination

The Commission can terminate a license if the licensee fails to begin construction of the project within the prescribed time (see **18 CFR 6.3**); if the licensee fails to make a good faith effort to maintain and operate the project (see **18 CFR 6.4**); or if the licensee fails to comply with the terms and conditions in the license and the

Commission has exhausted all other reasonable avenues for bringing the licensee back into compliance with its license.

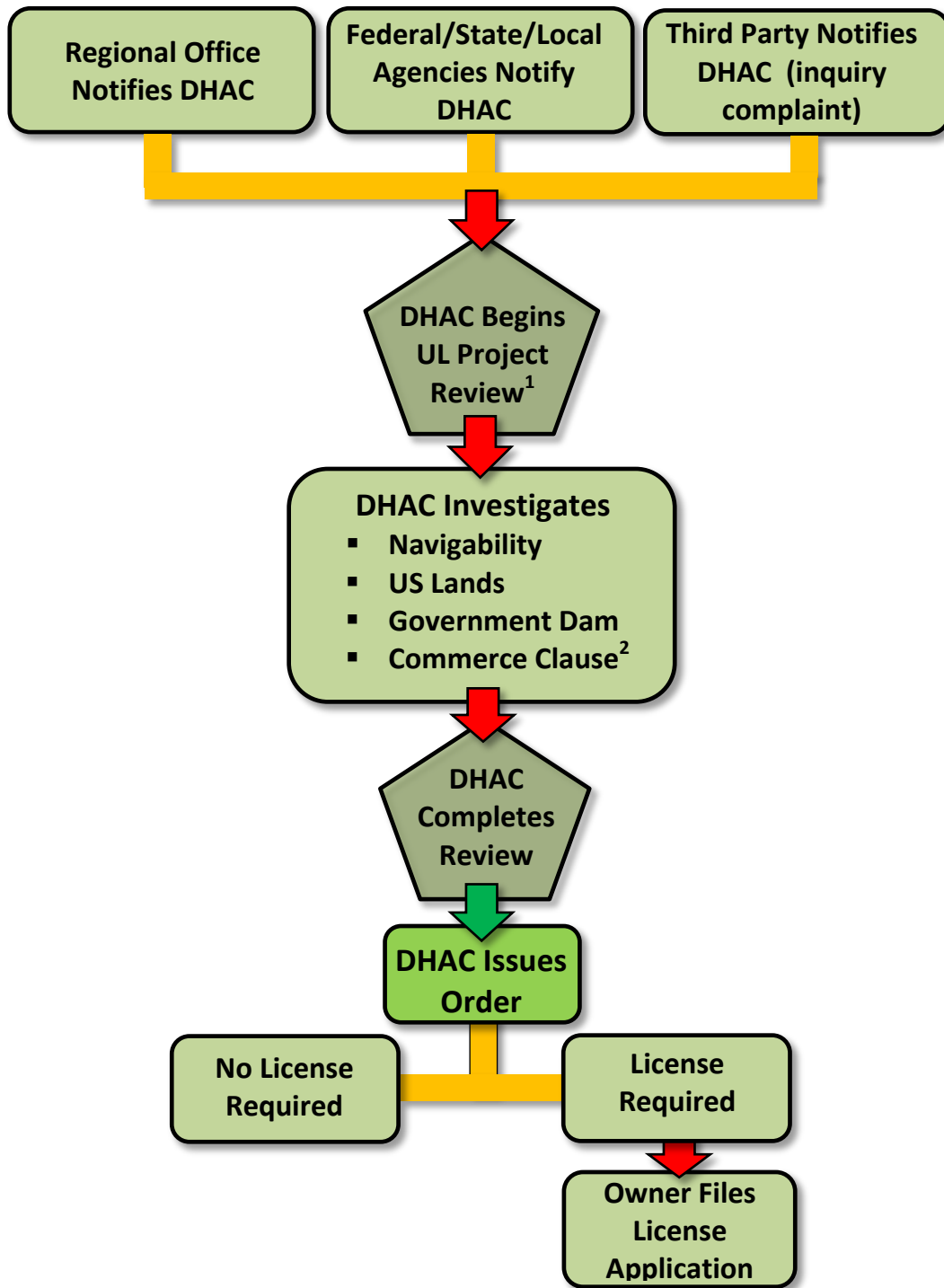
Before terminating a license the Commission must issue a notice of proposed termination giving the licensee 30 days to respond to the notice as well as an opportunity to request an evidentiary hearing before the Commission.

2.10 Jurisdictional Determinations for Declarations of Intentions and Unlicensed Projects

Section 23(b)(1) of the FPA requires that each non-federal hydroelectric project, except those with pre-1920 federal permits that are still valid, must be licensed if it: (1) is located on navigable waters of the United States; (2) occupies lands of the United States; (3) uses surplus water or water power from a government dam; or (4) is located on a body of water over which Congress has Commerce Clause jurisdiction, was constructed or modified after August 25, 1935, and affects interstate or foreign commerce.

To determine if the proposed project requires licensing, an owner of a proposed hydroelectric project can file a Declaration of Intention with the Commission; the owner of an unlicensed operating hydroelectric project can file a Petition for Declaratory Order. Alternatively, a potential project owner may proceed directly to filing a preliminary permit application or initiating a licensing or exemption process.

DHAC also determines whether unlicensed projects are required to be licensed. **Figure 4** shows the process DHAC uses to make this determination when an outside entity reports that a project may be unlawfully operating. Part 24 of the Commission's regulations outlines the necessary information required by the Commission in order to determine if a project is required to be licensed. Project owners/developers should use the regulations as a reference guide to file a Declaration of Intention or Petition for Declaratory Order. To assist in preparing the filing, a template is available on the Commission's website at: <http://www.ferc.gov/industries/hydropower/gen-info/comp-admin/jur-deter.asp>. There are no fees for filing a Declaration of Intention or requesting a Petition for Declaratory Order.



¹ DHAC may inspect the project, contact the owner, and/or issue a public notice.

² See Section 23(b)(1) of the FPA

Figure 4 Jurisdiction Review of Unlicensed (UL) Projects

2.11 Conduit Exemptions and Qualifying Conduit Exemptions

2.11.1 Conduit Exemptions

DHAC processes applications for exemptions of small conduit hydroelectric facilities pursuant to **Section 30 of the FPA**, as amended by the [Hydropower Regulatory Efficiency Act of 2013](#), and **Subpart J of the Commission’s regulations** (see **18 CFR 4.90 through 4.96**).⁴ The Commission defines a small conduit hydroelectric facility as one that has an installed capacity of less than 40 megawatts, uses the hydroelectric potential of a manmade conduit,⁵ and is not an integral part of a dam. The conduit must be operated for the distribution of water for agricultural, municipal, or industrial consumption, and not primarily for the generation of electricity (see **18 CFR 4.30(b)(28)**).⁶

DHAC determines if the applicant meets the eligibility requirements, and if it does, publishes the notice of application in the Federal Register and a local newspaper. DHAC also coordinates with federal and state fish and wildlife agencies as required by the Fish and Wildlife Coordination Act (see 16 U.S.C. 661, et seq.) and includes in any exemption any mandatory terms and conditions provided by these agencies. Typically, DHAC will attach the agency letters to the exemption order. DHAC may determine that other terms and conditions are appropriate for the protection of water resources, to protect health and safety, or to avoid or mitigate other adverse environmental impacts including impacts on historic properties.

2.11.2 Qualifying Conduit Facilities

Under the **Hydropower Regulatory Efficiency Act of 2013** and **Subpart N of the Commission’s regulations** (see **18 CFR 4.400 through 4.401**), certain small conduit hydropower facilities that meet the requirements in section 2.11.1 above

⁴ The “Bureau of Reclamation Small Conduit Hydropower Development and Rural Jobs Act” gives the Bureau of Reclamation the responsibility to authorize hydropower development on Reclamation-owned conduits up to 5 MW.

⁵ Whether, or in what proportion, the small conduit facility’s ability to generate hydropower is due to the conduit’s gradient or the head from an upstream dam is not relevant, so long as the facility is not an integral part of a dam. See *Soldier Canyon Filter Plant*, 151 FERC ¶ 61,228 (2015).

⁶ The conduit exemption however does not include the conduit itself but rather only the hydropower project facilities (i.e. powerhouse, intake pipe from the conduit to the powerhouse, and discharge pipe back to the conduit).

are exempt from the licensing requirements of the FPA. DHAC determines whether the proposed facilities meet the criteria to be considered “qualifying conduit hydropower facilities,” and therefore, are not required to be licensed or exempted by the Commission. In order for DHAC to make this determination, an entity proposing to construct a facility that meets the criteria must file a Notice of Intent to Construct a Qualifying Conduit Hydropower Facility with the Commission.

As for conduit exemptions, a “qualifying conduit hydropower facility” must meet the following provisions:

- A conduit is any tunnel, canal, pipeline, aqueduct, flume, ditch, or similar manmade water conveyance that is operated for the distribution of water for agricultural, municipal, or industrial consumption, and is not primarily for the generation of electricity.
- The facility generates electric power using only the hydroelectric potential of a non-federally owned conduit.⁷
- The facility has an installed capacity that does not exceed 5 MW.
- The facility was not licensed or exempted from the licensing requirements of Part I of the FPA on or before August 9, 2013.

Within 15 days of the filing of a Notice of Intent, DHAC makes an initial determination on whether the proposed project meets the qualifying criteria. If DHAC determines the facility fails to meet the criteria, DHAC terminates the review and issues a letter rejecting the filing and explaining the reasons for the rejection. If the facility meets the criteria, DHAC issues a public notice for 45 days. If no entity contests whether the facility meets the qualifying criteria during the public notice period, the project is deemed to meet the criteria. If an entity

⁷ Qualifying conduits simply generate hydroelectricity by using the water within a conduit operated for the distribution of water for agricultural, municipal, or industrial consumption and not primarily for the generation of electricity. Whether, or in what proportion, the conduit’s ability to generate hydropower is due to the conduit’s gradient or the head from an upstream dam is not relevant, so long as the facility is not an integral part of a dam. *See Soldier Canyon Filter Plant*, 151 FERC ¶ 61,228 (2015).

contests whether the facility meets the criteria, the Commission issues a written determination.

More information concerning the qualifying conduit program can be found on the Commission's website.

2.12 Federal Lands Review

2.12.1 Federal Lands Review Definition

DHAC is responsible for conducting federal power site land reviews and preparing responses to the BLM. Section 24 of the FPA gives the Commission authority to restrict access to and use of federal lands that may be used or are being used for hydropower projects, and to formally designate federal lands exclusively for hydropower use (also referred to as power site lands). The process creates a land withdrawal; which is an encumbrance on the land and restricts its use. [Public Law 359 \(The Mining Claims Rights Restoration Act of 1955\)](#), and a [1966 Memorandum of Understanding with the Department of the Interior](#), also affect the Commission's authority and responsibilities regarding administration of power site lands.

Section 24 of the FPA states that “any lands of the United States included in any proposed project under the provisions of the Part shall from the **date of filing of the application** therefore be reserved from entry, location, or other disposal under the laws of the United States until otherwise directed by the Commission or by Congress.” Power site reserves, water power designations, and power site classification may be revoked by Interior after receiving comments on the proposed revocation from the Commission. In addition, the Commission can vacate a project withdrawal (remove the power-only restriction) under the “until otherwise directed by the Commission” clause in the first sentence of Section 24.

To address concerns that withdrawing or reserving land would inhibit the mining of valuable natural resources, Congress enacted [Public Law 359, the Mining Claims Rights Restoration Act of 1955](#), which opens, for mining, lands withdrawn for power purposes without requiring formal Commission approval, except for lands that are part of any operating project, project under construction, or project under consideration that has an active permit or license issued by FERC or by an Act of Congress, provided that: power generation rights for the affected lands are retained by the United States and any affected licensees and permittees; and the United States, licensees, and permittees shall be able to use their projects without liability for damages to mining operations resulting from use of the project.

On July 20, 1966, the Federal Power Commission and Interior signed a [Memorandum of Understanding \(MOU\)](#) which established procedures for

processing various applications involving lands withdrawn for hydropower purposes and administered by the Bureau of Land Management (BLM). The MOU covers procedures for processing applications such as: mineral leases, letters authorizing use of power sites (for example rights-of-way), and determination/vacations (i.e. vacating a land withdrawal or removing the hydropower-only designation).

The MOU provides that BLM shall refer to the Commission such applications that involve title transfers of U.S. lands. For applications that do not require transfers (and not covered by Section 24), BLM includes power site stipulations in the leases or rights-of-way it grants in accordance with its authority to do so, after consulting with the Commission. An example of a lease that the Commission might object to during such a consultation would be an oil and gas lease within a mile of a large dam or powerhouse since such structures may be affected by subsidence.

2.12.2 Applications for Federal Lands Review

An application for a vacation of a reservation of federal lands resulting from the filing of an application for a preliminary permit or license must be filed with the Bureau of Land Management, Department of the Interior. If the lands included in the application are National Forest lands, then the application also must be filed with the USDA Forest Service. An application for an exemption does not create a land withdrawal under Section 24 of the FPA.

An applicant must provide the following information in its application: (1) full name of applicant; (2) post office address; (3) description of land by legal subdivision, including section, township, range, meridian, county, state, and river basin (both main and tributary); (4) public land act under which entry is intended to be made if land is restored to entry; (5) the use to which it is proposed to put the land; and (6) a statement as to its suitability for the intended use. DHAC evaluates the non-waterpower interest in the federal lands that have been reserved and makes a determination on whether to approve the revocation of power sites and classifications. DHAC also processes applications for the sale or lease of power site reserves and classifications under **Section 24 of the FPA**.

Section 24 of the FPA provides for the automatic withdrawal of federal lands within proposed projects and confers no rights whatsoever to applicants by such action. A withdrawal essentially reserves or protects the land from sale or other uses (such as mining or grazing) without authorization from the managing governmental agency. A withdrawal may remain in effect long after the application for the project has been terminated. The Commission's power to authorize the use of public lands and reservations for hydroelectric projects is

contained in **Section 4(e) and 15 of the FPA**. This authority is independent of Section 24 and would not be diminished if Section 24 were repealed in its entirety.

Licensees may seek to lower their annual charges for federal land use by proposing to exchange lands, thereby reducing federal acreage within project boundaries. However, any federal lands that the Commission allows to be exchanged within project boundaries would be subject to the provisions of Section 24, so that, even though licensees may own the lands after the exchange, the lands are subject to a Section 24 reservation.

2.13 Compliance History for Relicense

As part of the relicensing process, DHAC evaluates how well a licensee has complied with any conditions included in its license. This is called the licensee's compliance history and is required by **section 15(a) (3) (A) of the FPA**.

For each project, the evaluation includes a review of prior compliance with license requirements, annual charge payments, and the status of any headwater benefits charges. It also includes, if applicable, a review of the discussion in Exhibit H (included for major licenses only) of the relicense application. To complete our evaluation, we contact the appropriate Commission Regional Office for information on the project that would be useful in completing the relicensing process.

To help ensure compliance with license conditions, DHAC may require some licensees to develop Hydropower Compliance Management Programs (HCMPs). The requirement to develop an HCMP is usually included in a license as Article 501. When included, Article 501 typically requires a new licensee to submit to DHAC for approval an HCMP within 4 months of license issuance. An HCMP must contain the following information:

- a list of all actions necessary to meet the license requirements and a schedule clearly showing when each action will be completed;
- for each action necessary to complete the license requirements, a schedule showing the start and completion of the consultation process with each resource agency to be consulted; and
- for each action necessary to complete the license requirements, the names of the specific individuals from each entity who must be consulted.

2.14 Headwater Benefits Assessments

DHAC implements the Headwater Benefits Program pursuant to **Section 10(f) of the FPA**. Headwater refers to the water that flows into a project from upstream sources. An increase in headwater means that more water is available to a project to generate power. Headwater benefits refer to the additional energy production possible at a downstream hydropower project resulting from the regulation of river flows by an upstream storage reservoir. Section 10(f) requires that owners of hydropower projects reimburse upstream headwater project owners for an equitable part of the benefits they receive.

DHAC reviews and updates headwater benefit studies on a regular cycle. DHAC may also initiate a headwater benefits investigation when it believes changed conditions in basin development or legislative and regulatory changes dictate a reassessment.

DHAC determines headwater benefits using the energy gains methodology described in **Part I of the FPA** (see **18 CFR 11.11**). The controlled retention and release of water by a storage reservoir alters the downstream river flow. In many cases, the upstream regulation of flows increases the percent of time downstream flows fall within the turbine capacity range in which a downstream hydropower project can generate energy, and the downstream project can generate more energy than it could without the regulation. Energy gains refer to the difference between the kilowatt-hours of energy produced at a downstream hydropower project with and without storage regulation by a headwater project (see **18 CFR 11.10(c)(1)**).

DHAC uses various analytical methods to determine energy gains. The method chosen depends upon the complexity of the river basin and the potential headwater benefits. Complex river basins that include a large number of headwater and downstream projects often require a detailed computer analysis using the Headwater Benefits Energy Gains (HWBEG) computer model, which requires large amounts of input data. This Fortran model can quickly simulate power generation potentials under a variety of scenarios, which DHAC can study and compare to complete its evaluation. Using the data gathered by DHAC on the project's operating history, installed capacities of all downstream projects, operational data from the headwater projects, the hydrology of the river basin, and hydraulic data, the HWBEG model determines the energy gains. River basins that are not complex or in which the headwater benefits are expected to be small may be studied using a flow duration methodology to determine energy gains.

Section 10(f) costs consist of the annual interest, depreciation, and maintenance costs of the headwater project facilities. A federal operating agency, such as the U.S. Army Corps of Engineers or Bureau of Reclamation, typically provides these costs and allocations for the headwater projects. DHAC uses these costs in

conjunction with the energy gains received at downstream projects to apportion the costs among the beneficiaries. Section 10(f) costs are apportioned among the headwater project and downstream beneficiaries in proportion to the energy gains each receives.

Following the completion of the headwater benefits investigation, DHAC notifies project owners of the results. DHAC provides project owners a draft investigation report and an opportunity to provide comments. The Commission considers all comments it receives in preparing the final report. Based on the report's findings, the Commission initially issues a bill to downstream operators for all headwater benefits accumulated in the past, and then each subsequent year issues an annual bill for the headwater benefits accumulated in the prior year. The charge assessed by the Commission is called the **Headwater Benefits Assessment**. No final charge assessed by the Commission may exceed 85 percent of the value of the energy gains (see **18 CFR 11.11**). The owner of a downstream project with an authorized installed capacity of 1.5 megawatts or less, or for which the Commission has granted an exemption from Section 10(f), is not required to pay headwater benefit charges (see **18 CFR 11.10(b)**).

Finally, DHAC is continuing to use new technology, such as geographic information system computer software, to assist in headwater benefit studies. DHAC reviews and updates headwater benefit studies for all river basins on a regular cycle, using simplified procedures, where appropriate.

2.15 Article 5 – Property Rights

Licenses include a standard article (Article 5) which requires licensees, within five years from the date of issuance of the license, to acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The licensee or its successors and assigns must, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Recently in each license, there is a provision for a licensee to provide a report within four years of license issuance showing the licensee's progress in obtaining the necessary rights over project lands. DHAC reviews these filings and the licensee's progress. When appropriate, DHAC also investigates a licensee's compliance with the Article 5 provisions to ensure projects have the necessary rights over project lands in order to effectively implement the license. If a licensee does not have all of the necessary rights, they may use eminent domain to acquire those rights. The Commission's authority regarding eminent domain for licenses comes from **Section 21 of the FPA**.

Section III: Preventive Strategies

DHAC's preventive strategies primarily take the form of monitoring and pre-filing consultation with licensees and exemptees. Monitoring can identify problems common to licensed or exempted projects and can lead to proactive activities to help licensees and exemptees identify and correct common problems.

Public concern about the environmental effects of hydropower operations has increased since many of the original licenses were issued. In addition, the breadth of conditions from agencies has expanded through court interpretation of federal statutes and the number of listings under the ESA has steadily increased. All of these factors resulted in many additional terms and conditions in new licenses and myriad compliance and voluntary amendment filings. In addition, some issues are left for resolution until after licensing (particularly for newly constructed projects), resulting in additional DHAC responsibilities.

3.0 Monitoring

DHAC staff will meet with licensees and their representatives at project locations or Commission offices to discuss license requirements and compliance-related issues. Such occasions may include providing an answer to a single license article question or having a large on-site conference with licensees and interested resource agencies, non-governmental organizations and other stakeholders to provide explanations and guidance concerning settlement agreements, operation matters, filing requirements, or other compliance-related matters.

DHAC monitors and investigates compliance with licenses and exemptions. See **Section 31 of the FPA**. Monitoring activities include environmental inspections and recreational inspections/ground truthing inspections. Licensee assistance efforts and site visits provide opportunities for face-to-face communication with licensees and exemptees and help to foster better working relationships. Through these site visits, DHAC reviews and observes the licensee's or exemptee's compliance with license and exemption conditions. Potential problems are often identified during the site visits, and potential strategies to prevent the problems

from occurring are discussed. These monitoring activities help to reduce non-compliance issues and complaints.

3.1 Introductory Letter and Transition Meetings

Once a license/exemption is issued, Commission staff sends an introductory letter to the licensee/exemptee. This letter is intended to provide the licensee/exemptee with information for implementing its license (exemption). The letter instructs the licensee/exemptee on:

- how to update its contact information;
- how to file information with the Commission;
- when and how to request extensions of time should it not be able to fulfill a requirement;
- when and how to file an amendment;
- where to go for assistance; and
- Part 8 requirements, Annual Charges, and Headwater Benefits (when appropriate).

In addition, once the rehearing period for a license has passed without a rehearing requested or the rehearing request has been resolved, the Commission staff sends out a letter inviting a licensee to meet with staff to discuss the terms of its license, called a **Transition Meeting**. The purpose of the meeting is to introduce DHAC staff to the licensee, and to ensure that the licensee has a clear understanding of its new license requirements. This meeting is optional, but strongly encouraged. It will include staff from the OEP's DHL, DHAC, and D2SI, as well as staff from the Office of the General Counsel. During the meeting, staff and the licensee discuss each of the license requirements or any concerns or issues of the licensee.

3.2 Environmental Inspections

DHAC conducts environmental inspections of licensed and exempted projects to evaluate and assess compliance with the environmental and public use requirements of the licenses. Environmental inspectors look specifically at a licensee's or exemptee's compliance with license or exemption requirements for the protection and enhancement of environmental resources at the project.

Environmental inspections also allow DHAC staff to identify common problem areas and to share information with licensees and exemptees, to assist them with

their responsibilities for maintaining compliance with license or exemption requirements.

DHAC will conduct environmental inspections at projects with on-going non-compliance issues or for projects where resource issues have been identified. Generally, DHAC also will conduct an environmental inspection for projects with significant environmental and/or public use license requirements, such as high recreational use, fish passage facilities, wildlife mitigation areas, etc. Other projects are inspected periodically. Annual inspections may be necessary, regardless of the magnitude of license requirements, when a particular environmental or public use controversy, technical problem, or other issue is under consideration.

The nature and frequency of environmental inspections at exempted projects depends on the type of exemption and the environmental and public use impacts. Environmental and public use requirements typically result from terms and conditions specified by the state and federal resource agencies pursuant to Standard Article 2 of the issued exemption. Standard Article 1 of exemption orders reserves the Commission's right to conduct investigations with respect to any acts, complaints, facts, conditions, practices, or other matters related to the construction, operation, and maintenance of the exempt project. In addition, Standard Article 1 also allows the Commission to revoke the exemption if any term or condition of the exemption is violated. See **18 CFR 4.106**.

3.3 Recreation Monitoring

In accordance with the FPA, the Commission requires owners of licensed projects to allow reasonable year round public access and use of project lands and waters for recreation, unless otherwise specified in the project license or ensuing amendments. To evaluate recreational resources at these projects, the Commission requires most licensees to prepare and submit a FERC Form 80 (Licensed Hydropower Development Recreation Report). See **18 CFR 8.11**. Project owners must submit a Form 80 report every 6 years, unless they receive a letter from DHAC granting an exemption from filing. Each Form 80 must describe a project's recreation amenities and the level of public use of these amenities. The Commission uses the information from these forms to: (1) inventory the recreational facilities located at licensed projects; (2) determine whether projects are meeting the public's recreation needs; (3) identify where additional efforts should be made to meet future needs; (4) determine project developments that may be eligible for an exemption for future filing of Form 80 documents.

DHAC compiles data from Form 80s using a computer database. The database is an additional tool staff can use to prepare environmental assessments, monitor recreational activity, and access trends in recreational activity at licensed projects.

In addition to the Form 80 filing requirements, a project owner may be required to conduct more detailed or specialized recreation monitoring of its licensed project under the approved recreation plan, or recreation plan amendment to address specific monitoring needs.

Exemption from filing a Form 80 expires with the license (i.e., it does not carry forward into a new license) and an initial Form 80 is required for every licensed project unless otherwise stated in the license.

Section IV: Proactive Strategies

Proactive strategies are initiatives developed by DHAC staff, or jointly with other Commission staff, to deal with situations or issues with broad implications for DHAC's administrative and compliance program. The purpose of these initiatives is to educate and work with licensees and exemptees to reduce or eliminate administrative or compliance problems. Stakeholders play a large role in the success of these strategies; therefore, DHAC will continue to look for ways of involving stakeholders in its program initiatives.

4.0 Current Program Initiatives

DHAC is consistently striving to improve its processes and strengthen the compliance program. DHAC continually evaluates feedback from licensees/exemptees, resource agencies, and other stakeholders to identify areas to improve administration of the program. Through several outreach programs, DHAC has identified ways to further provide guidance to the hydropower industry. These initiatives often focus on "hot topics" or major areas of concern for licensees.

DHAC's current program initiatives focus on promoting understanding of shoreline management, recreation management, and start of construction issues, and resolving issues regarding non-operating projects. Proactively pursuing these initiatives will promote the efficiency of DHAC's reactive processes (i.e., DHAC's review and inspection processes are more efficient if the Commission provides clear guidelines to licensees and exemptees on preparing plans or complying with license conditions).

4.1 Shoreline Management

Licensees have a responsibility to ensure that the reservoir shorelines within their project boundaries are managed in a manner that is consistent with project purposes, license requirements, and operations. Project purposes may include operation and maintenance, flowage, public recreation, public access, shoreline control, and the protection of environmental resources. Additionally, licensees

must have sufficient property rights to supervise and control project lands to protect and maintain these project purposes.

A comprehensive plan, such as a shoreline management plan (SMP), can assist a licensee in meeting its responsibilities throughout the term of its license and in managing the multiple resources and uses of the project's shorelines in a manner that is consistent with license requirements and project purposes, and with the needs of the public. Often, licenses require licensees to develop SMPs for project reservoirs. The Commission expects all licensees developing SMPs to involve the public and allow for agency consultation, review, and comment.

As development pressure on lands and waters increases, a wider range of stakeholders are becoming involved in Commission staff's review processes. Stakeholders such as federal, state, and local agencies, along with homeowners' associations, environmental groups, hunting and fishing clubs, water-based recreation groups, real estate interests, and the general public, frequently participate in the review of proposed SMPs and shoreline development applications.

As part of its approval of a proposed SMP, Commission staff may require the licensee to conduct an inventory of its project shoreline property and file a comprehensive report to identify property rights and address any encroachments on project lands and waters. Additionally, Commission staff has recently instituted several practices to improve its ability to track and monitor shoreline development, including collecting location data for Commission approved shoreline development facilities and for shoreline management classifications identified as part of an approved SMP. Commission staff is also requiring licensees to inspect approved shoreline facilities and document that such facilities have been constructed as approved and in a timely manner.

To assist licensees in meeting shoreline management challenges and stakeholder interests in a manner consistent with its license obligations, Commission staff has regularly conducted technical workshops with licensees on a variety of shoreline management and development topics since 1999. The first workshop was held in South Carolina and included licensees from the southeastern United States. Since the first workshops, the participants have gradually expanded to include licensees from across the United States. Additionally, Commission staff has conducted several special inspections of approved shoreline facilities (i.e., ground truthing) as outreach efforts to communicate to licensees the Commission's expectations related to shoreline management.

Finally, Commission staff has prepared and recently updated outreach materials related to shoreline management: (1) [Guidance for Shoreline Management Planning at Hydropower Projects](#), and (2) [Guidelines for Preparing Shoreline](#)

[Development Applications](#). These guidance documents provide information on a number of related topics to assist both licensees and stakeholders.

4.2 Commission-Approved Recreation Facilities

The Commission's policy is to seek the ultimate development of the recreational resources of all projects, consistent with the needs of the project area and the primary purposes of the project. While a variety of recreation facilities may exist within the project boundary of Commission-licensed hydropower projects, only those required by Commission action are considered Commission-approved. Commission-approved recreation facilities may be required by the project license, an approved recreation plan or recreation plan amendment, or any other requirements that address the provision of recreation at the project (e.g., a water quality certificate). Other recreation facilities at the project which are not necessarily required by the Commission may include state parks, municipal and/or county agencies, and/or non-project uses at the project. Typically, Commission-approved recreation facilities are incorporated into the project boundary and the licensee is ultimately responsible for the operation and maintenance of the recreation facilities. Other recreation opportunities may be located either in the project boundary or in the vicinity of the project, but the licensee is not responsible for operation and maintenance of such facilities.

Licensees are required to specify on the Form 80 (see section 3.3 above) recreation amenities approved by the Commission. Commission staff has found that licensees need assistance in more accurately distinguishing between Commission-approved and other recreation facilities at their projects. To address this, Commission staff recently developed a set of tables to identify Commission-approved facilities and Commission-approved amenities at licensed projects. The phrase, **recreation facilities**, is a comprehensive term which includes both infrastructure (i.e., parking, restrooms, access paths, docks, etc.) and amenities (i.e., boat launches, picnic areas, campgrounds, trails, etc.). These recreation facility and recreation amenity tables are being developed upon review of a recreation plan or amendment to a plan, upon the request of a licensee, or upon review of as-built recreation drawings.

In addition to the recreation tables, Commission staff is developing and disseminating guidance to licensees about how to produce and file adequate as-built drawings (overview site plans). Finally, Commission staff collaborates with licensees to participate in workshops to discuss recreation management and compliance issues at Commission-licensed hydro projects, including the Form 80 process.

4.3 Promoting Understanding of Criteria for Meeting Construction Start Dates

As situations arise that test the Commission's criteria for start of construction, the Commission has opportunities to further explain the criteria for determination of start of construction pursuant to **Section 13 of the FPA** to make it clear what is expected of the licensee or exemptee. DHAC encourages the licensee or exemptee to contact DHAC staff to ensure that the requirements for start of construction are clearly understood and avoid potential license violations for failure to commence or complete construction in accordance with the license terms. DHAC initiates this contact by sending licensees and exemptees a letter after the license is issued defining their responsibilities under the terms and conditions of the license, including those pertaining to start of construction.

4.4 Non-Operating Projects

Section 10(c) of the FPA requires that a licensee/exemptee must maintain its hydropower project in a good state of repair to ensure efficient operation of electric generation. Standard articles 5 and 6, for conduit exemptions and small hydropower exemptions, respectively, state, in order to best develop, conserve, and utilize in the public interest the water resources of the region, the Commission may require that the exempt facilities be modified in structure or operation or may revoke an exemption. Projects that are not maintained and operated for an extended period of time are classified as non-operating projects.

DHAC staff works with D2SI to identify and maintain a list of non-operating projects. The Commission's five Regional Offices update this list every April and October and share the results of each update with DHAC. Certain non-operating projects that staff believes may be of interest to others for redevelopment and the resumption of operation are shown on the Commission's website ([Non-Operating Projects](#)) for the public to review.

DHAC and D2SI staff works with licensees/exemptees to rehabilitate and otherwise restore project operations so that projects can be removed from the non-operating list. However, if a licensee or exemptee is unwilling or unable to restore a project to operation, DHAC staff will ask the licensee/exemptee to voluntarily surrender its project. If the licensee/exemptee refuses to restore a project to operation and also refuses to surrender its project, then DHAC staff will start an implied surrender proceeding.

4.4.1 Restoring Non-Operating Projects

DHAC staff will contact the licensee or exemptee to determine why the project is not operating. After this initial contact, we will send the licensee/exemptee a letter

asking for a plan and schedule to restore project operation. While the circumstances of each non-operating project are different, at a minimum, a typical plan and schedule for restoring project operation requires the following:

- A justification for the non-operating status;
- A listing of work required to restore project operation;
- A timeline associated with construction work;
- A narrative describing the estimated cost for the work; and
- An explanation of how the restoration will be financed.

If a licensee/exemptee is able to provide the above information, staff will grant an appropriate extension of time to complete the restoration. The extension will typically require periodic reports (quarterly, bi-annually, etc.) to ensure progress is being made toward resuming operation and to update DHAC and D2SI on the project's status.

If the licensee/exemptee provides a surrender application or does not respond, DHAC begins surrender or implied surrender proceeding as mentioned above.

4.4.2 Surrendering Non-Operating Projects

4.4.2.1 Surrendering Non-Operating Projects

Surrendering non-operating projects follows the same process and requirements applicable to surrendering an operating project. For more information see Section 2.9.1 of this handbook.

4.4.2.2 Terminating Non-Operating Projects by Implied Surrender

After all other avenues have been pursued without success, DHAC staff will recommend terminating a project by implied surrender. Once this recommendation is made, DHAC contacts D2SI to ensure the regional office does not have any dam safety issues that would prohibit the use of implied surrender.

The Commission will then issue a notice of proposed termination giving the licensee or exemptee 30 days to respond to the notice as well as an opportunity to request an evidentiary hearing before the Commission. The Commission would then consider any reply from the licensee or exemptee as well as any other comments filed pursuant to the notice before proceeding with an implied surrender.

Section V: APPENDICES

The following appendices are referenced in the document and are included in this document:

Appendix A – Website Links and Guidance Documents

Appendix B – Standard Land Use Article

Appendix C – Suggested Contents of Applications for the Non-project Use and Occupancies of Project Lands and Waters

APPENDIX A: Website Links and Guidance Documents

FERC Website Links:

[FERC Website](#)

[Hydropower Page on FERC Website](#)

[DHAC Section on FERC Website](#)

Federal Power Act Link:

[Federal Power Act](#)

Code of Federal Regulations 18 CFR Link:

Title 18 Chapter I of the Code of Federal Regulations (CFR)

Guidance Documents:

[Managing Hydropower Project Exhibits – Exhibits Guidance Document](#)

<http://www.ferc.gov/industries/hydropower/gen-info/guidelines/drawings-guide.pdf>

[Guidance for Shoreline Management Planning at Hydropower Projects](#)

<http://www.ferc.gov/industries/hydropower/gen-info/guidelines/smpbook.pdf>

[Guidelines for Preparing Shoreline Development Applications](#)

<http://www.ferc.gov/industries/hydropower/gen-info/guidelines/smpbrochure.pdf>

[Project Recreation Facilities Tables and As-Built Site Plan Drawing Guidance](#)

<http://www.ferc.gov/industries/hydropower/gen-info/guidelines/as-built-site-plan.pdf>

[Joint Guidelines for the Preparation of Historic Properties Management Plans Between the Commission and Advisory Council on Historic Preservation \(May 2002\)](#)

<http://www.ferc.gov/industries/hydropower/gen-info/guidelines/hpmp.pdf>

[Renewable Energy Production Tax Credit: Instructions for Requesting Certification of Incremental Hydropower Production Pursuant to the Energy Policy Act of 2005](#)

<http://www.ferc.gov/industries/hydropower/gen-info/comp-admin/credit-cert.pdf>

APPENDIX B: Standard Land Use Article

Article 4XX. (a) In accordance with the provisions of this article, the licensee must have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain types of use and occupancy, without prior Commission approval. The licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the licensee must also have continuing responsibility to supervise and control the use and occupancy for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a covenant of a conveyance made under the authority of this article is violated, the licensee must take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, canceling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(b) The type of use and occupancy of project lands and water for which the licensee may grant permission without prior Commission approval are:

- (1) landscape plantings;
- (2) non-commercial piers, landings, boat docks, or similar structures and facilities that can accommodate no more than 10 watercraft at a time and where said facility is intended to serve single-family type dwellings;
- (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and
- (4) food plots and other wildlife enhancement.

To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the licensee must require multiple use and occupancy of facilities for access to project lands or waters. The licensee must also ensure, to the satisfaction of the Commission's authorized

representative, that the use and occupancies for which it grants permission are maintained in good repair and comply with applicable state and local health and safety requirements.

Before granting permission for construction of bulkheads or retaining walls, the licensee must:

- (1) inspect the site of the proposed construction;
- (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site; and
- (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline.

To implement this paragraph (b), the licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of project lands and waters, which may be subject to the payment of a reasonable fee to cover the licensee's costs of administering the permit program. The Commission reserves the right to require the licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (b) and to require modification of those standards, guidelines, or procedures.

(c) The licensee may convey easements or rights-of-way across, or leases of, project lands for:

- (1) replacement, expansion, realignment, or maintenance of bridges or roads where all necessary state and federal approvals have been obtained;
- (2) storm drains and water mains;
- (3) sewers that do not discharge into project waters;
- (4) minor access roads;
- (5) telephone, gas, and electric utility distribution lines;
- (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary;

- (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and
- (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir.

No later than January 31 of each year, the licensee shall file a report briefly describing for each conveyance made under this paragraph (c) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(d) The licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for:

- (1) construction of new bridges or roads for which all necessary state and federal approvals have been obtained;
- (2) sewer or effluent lines that discharge into project waters, for which all necessary federal and state water quality certification or permits have been obtained;
- (3) other pipelines that cross project lands or waters but do not discharge into project waters;
- (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary federal and state approvals have been obtained;
- (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile (measured over project waters) from any other private or public marina;
- (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and

- (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally, from project waters at normal surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (d)(7) in any calendar year.

At least 60 days before conveying any interest in project lands under this paragraph (d), the licensee must file a letter with the Commission stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked exhibit G or K map may be used), the nature of the proposed use, the identity of any federal or state agency official consulted, and any federal or state approvals required for the proposed use. Unless the Commission's authorized representative, within 45 days from the filing date, requires the licensee to file an application for prior approval, the licensee may convey the intended interest at the end of that period.

(e) The following additional conditions apply to any intended conveyance under paragraph (c) or (d) of this article:

- (1) Before conveying the interest, the licensee must consult with federal and state fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

- (2) Before conveying the interest, the licensee must determine that the proposed use of the lands to be conveyed is not inconsistent with any approved exhibit R or approved report on recreational resources of an exhibit E; or, if the project does not have an approved exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

- (3) The instrument of conveyance must include the following covenants running with the land: (i) the use of the lands conveyed must not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee must take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project; and (iii) the grantee shall not unduly restrict public access to project lands and waters.

(4) The Commission reserves the right to require the licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(f) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon approval of revised exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project must be consolidated for consideration when revised exhibit G or K drawings would be filed for approval for other purposes.

(g) The authority granted to the licensee under this article must not apply to any part of the public lands and reservations of the United States included within the project boundary.

APPENDIX C: Suggested Contents of Applications for the Non-project Use and Occupancies of Project Lands and Waters

The following is a general list of the information that should be included in applications for proposed non-project uses or facilities. Applications containing this information allow Commission staff to review and process them in a more efficient and timely manner and are less likely to result in Commission requests for additional information in order to prepare environmental assessments on such proposals. While the information below applies to most applications, it is not an inclusive list and not all the individual items may apply to every proposed facility or use. As necessary, please contact Commission staff if you have questions about the application contents or consultation needs for your specific proposal.

1) Description of proposed non-project use or facility

- location, quantity, type of conveyance (i.e., lease, right-of-way, easement, fee-title, etc.)
- major components, materials, and layout or design
- construction and operation methods, construction duration and approximate start and completion dates
- purpose of proposed use
- description of any Federal, state, and local permits or approvals required or obtained for proposed use
- if available, copies of any government agency permits or agency review documents obtained for the proposed use
- maps or drawings showing the location and/or layout of the proposed facility

2) Description of Affected Environment (the immediate area surrounding the site of the proposed facility or use)

- common fish and wildlife species
- threatened and endangered species (request in writing a list of species from NMFS and USFWS)
- wetlands, critical habitats, or significant features
- cultural resources
- common vegetation and trees
- soils and lakebed material
- water quality and approximate depth
- scenic quality
- existing recreation facilities and uses
- existing land and water uses and structures

3) Evaluation of how the proposed use is compatible with:

- Commission approved management plans (i.e., recreation, shoreline or land use, dredging, cultural resource, wildlife protection, etc.)
- project operations and purposes and applicable license requirements
- licensee's own project management guidelines or requirements

4) Documentation of consultation (copies of correspondence) with appropriate Federal, state, and local government agencies and interested non-governmental organizations (NGOs and Tribes) including:

- government agencies or NGOs that own or manage lands or facilities in the immediate area
- government agencies that would likely need to authorize or approve the proposed use
- government agencies that have jurisdiction over resources that may be affected by the proposed use (i.e., T & E species or habitats, wetlands, dredging activities, cultural resources, etc.). These agencies typically include the U.S. Fish and Wildlife Service, the State Historic Preservation Officer, the U.S. Army Corps of Engineers, and state fish, wildlife, recreation and environmental protection agencies.

In addition, please note the following:

- a minimum of 30 days should be provided for consulted parties to reply to requests for comments on a proposed use
- if no reply is received, the filing should include a copy of written request for comments
- the filing should include responses to any specific agency or NGO comments or recommendations. If recommendations are rejected, include site specific reasons for the rejection.
- following a Commission public notice period for the application, responses to any specific comments or recommendations provided on the proposed use should be filed
- if it is generally known that local property owners or entities are opposed to the proposed use, the filing should identify the nature of this opposition and include general responses to the concerns raised.

5) A description of the proposed use's potential impact on each resource area identified under item (2) above. For example, impacts may include:

- vegetation removal
- shoreline erosion or turbidity
- dredging and lakebed disturbance
- impingement and entrainment of fish
- project generation related to water withdrawals
- disturbance of significant resources, species, or habitats
- specific impacts on existing land uses or structures
- cumulative effects on water quality or shoreline resources
- potential discharge of pollutants

6) A description of any proposed construction, design, and/or operation practices or measures to minimize or mitigate for any specific impacts identified under item (5) above. For example, measures may include:

- erosion control measures
- avoidance of affected resources
- changes in design or location of a proposed facility
- close oversight to ensure compliance with licensee mandated permitting programs or land use regulations, Commission approved plans, or agency permit requirements
- Intake screen approach velocity and screen mesh size