

ADMINISTRATOR'S MEMORANDUM

To: Regional Offices
Water Allocation Bureau
Application Processing No.75
Permit Processing No. 21
Licensing No. 14

From: Jeff Peppersack 

Re: Term Limits for Hydropower Use

Date: January 13, 2014

INTRODUCTION

House Bill No. 50 from the 2013 legislative session amended Idaho Code § 42-203B. The statute was amended in response to a footnote in *Idaho Power Company v. Idaho Department of Water Resources*, 151 Idaho 266 (2011), suggesting that IDWR's traditional hydropower term condition may not comport with the statute because it does not set a fixed termination date for the water right.

The revised statute no longer requires the Director to limit a hydropower permit or license only to a "specific term" but instead expands the Director's conditioning ability by providing that the Director may "limit a permit or license for power purposes to a term, which may be in the form of a fixed date or by reference to a Federal Energy Regulatory Commission (FERC) license or other authorization issued or contract executed, in connection with the power project." *Idaho Code § 42-203B(6)*.

The revised legislation provides for modification of the water right if the Director decides to review the water right and issues an order modifying it prior to the expiration of the term. The legislation provides for the automatic extension of the term if the Director chooses not to review the water right.

This memo addresses how IDWR will determine the lengths of terms for hydropower water rights given the new legislation and how the terms will be stated in the conditions of future water rights for power generation. This memo is intended to serve as general guidance. Situations may arise that justify variance from this memo. If an applicant seeks a term condition different from the conditions used in this memo, or if a different condition seems warranted for some other reason, staff members are encouraged to consult their regional manager, section manager, or bureau chief.

CATEGORIES OF HYDROPOWER FACILITIES

The amended statute requires the Director to evaluate the following factors, **among others**, when setting a term:

- The term of any FERC license for the hydroelectric project.
- The term of a power purchase contract associated with the hydroelectric project.

- Existing downstream water uses.
- The policy and authority of the Idaho Public Utilities Commission (IPUC) to enforce the Public Utility Regulatory Policies Act of 1978 (PURPA).¹

To facilitate selecting the most appropriate term condition, we can classify most water rights for power purposes into one of three categories.

Category I -- Water rights for hydroelectric projects that require a FERC license.

Category II -- Water rights for FERC exempt hydroelectric projects with power purchase contracts subject to IPUC review.²

Category III -- Water rights for hydroelectric projects that are outside the jurisdiction of the FERC and the IPUC.

DEFINITIONS OF THE TERM CONDITION CATEGORIES

Category I -- Hydroelectric projects that require a FERC license.

According to FERC:

A license from FERC is required to construct, operate, and maintain a non-federal hydroelectric project that is or would: (a) be located on navigable waters of the United States; (b) occupy U.S. lands; (c) utilize surplus water or water power from a U.S. government dam; or (d) be located on a stream over which Congress has Commerce Clause jurisdiction, where project construction or expansion occurred on or after August 26, 1935, and the project affects the interests of interstate or foreign commerce.³

¹ The Idaho Public Utilities Commission has jurisdiction over electric utilities, pursuant to the authority and power granted it under Title 61 of the Idaho Code and the Commission's Rules of Procedure, IDAPA 31.01.01.000 *et seq.*, and the Public Utilities Regulatory Policies Act of 1978 (PURPA). The IPUC has the authority under PURPA and the implementing regulations of the Federal Energy Regulatory Commission (FERC) to set avoided costs, to order electric utilities to enter into fixed term obligations for the purchase of energy from qualifying facilities, and to implement FERC Rules. Reference 18 C.F.R. Section 292. PURPA established a class of generating facilities which would receive special rate and regulatory treatment. They are known as Qualifying Facilities (QFs). Through a provision of PURPA, regulated utilities are required to offer to buy energy from Qualifying Facilities. Although it is a federal law, states determine the rates paid to the Qualifying Facilities. It is the authority that the IPUC has under PURPA which puts power contracts under their purview.

² A few FERC-exempt projects do not benefit from a power purchase agreement and so are not subject to IPUC authority. The terms for these projects can be set like Category III projects. See pages 4-5 of this memo.

³ From <http://www.ferc.gov/industries/hydropower/gen-info/licensing/small-low-impact/get-started/exemp-licens.asp>

Test (d) includes linking a hydroelectric project to the interstate transmission grid.⁴

A FERC license is issued with an expiration date and must be renewed at the end of each term. An “original” license authorizes the construction and operation of a project and is issued for a term of up to 50 years. A “subsequent” or “new” license, (a.k.a. a relicense), authorizes the continued operation of a previously licensed project. The new license term is 30 to 50 years, depending on the costs that were incurred to develop the project.⁵

As indicated above, the amended statute authorizes IDWR to take the term of the FERC license into account when setting the water right term, and it indicates that the water right term may be established by reference to the term of the FERC license.

Category II -- FERC exempt hydroelectric projects with power purchase contracts subject to IPUC review.

FERC issues two types of development authorizations -- licenses (discussed above in Category I) and exemptions. “Exempt” projects are not exempt from federal and state review and permitting. An exemption is a permit process like a FERC license, but with fewer steps. Unlike a FERC license, a FERC exemption has no expiration date. It is issued in perpetuity.

To determine which projects fit into this category, IDWR will rely on the types of FERC exemptions available when the water right application is filed. FERC currently issues two types of exemptions:⁶

1. 5-MW Exemptions:

Hydropower projects which are 5 megawatts or less may be eligible for a

⁴ Quoting from the Federal Power Act (16 USC§§ 796):

(11) “project” means complete unit of improvement or development, consisting of a power house, all water conduits, all dams and appurtenant works and structures (including navigation structures) which are a part of said unit, and all storage, diverting, or forebay reservoirs directly connected therewith, the primary line or lines transmitting power therefrom to the point of junction with the distribution system or with the interconnected primary transmission system, all miscellaneous structures used and useful in connection with said unit or any part thereof, and all water-rights, rights-of-way, ditches, dams, reservoirs, lands, or interest in lands the use and occupancy of which are necessary or appropriate in the maintenance and operation of such unit. See <http://www.gpo.gov/fdsys/pkg/USCODE-2011-title16/pdf/USCODE-2011-title16-chap12-subchapl-sec796.pdf>

⁵ During the water right application phase, staff may also encounter a preliminary permit issued by FERC. Before applying for a FERC license, a hydropower developer may apply to FERC for a preliminary permit. A preliminary permit is like staking a claim. Preliminary permits maintain a permittee’s priority to file a license application while he gathers data and studies the feasibility of a project at a particular site. Preliminary permits typically expire after three years, and they do not authorize any land-disturbing activities or project construction. During the term of the permit, the permittee prepares an application for an original hydropower license.

⁶ For a chart that shows the major differences between a FERC license, a conduit exemption, and a 5-MW exemption, see [Project Comparison Chart](#) or <http://www.ferc.gov/industries/hydropower/gen-info/licensing/small-low-impact/get-started/exemp-licens/project-comparison.asp>

5-MW exemption. The applicant may install or add capacity to a project located at a non-federal, pre-2005 dam, or at a natural water feature. The project can be located on federal lands but cannot be located at a federal dam. The applicant will have all the real property interests or an option to obtain the interests for any non-federal lands.

2. Conduit Exemptions:

Hydropower projects which are 15 megawatts or less for non-municipal project and 40 megawatts or less for a municipal project may be eligible for a conduit exemption. The conduit (such as an existing canal or pipeline), has to have been constructed primarily for purposes other than power production and be located entirely on non-federal lands. The applicant will have all the real property interests necessary to develop and operate the project or an option to obtain the interests.

Because FERC exemptions have no fixed term, IDWR must use other criteria to set the term of a water right in this category. Among the criteria set forth in Idaho Code § 42-203B, the expiration date of a power sales/purchase contract is the most applicable.

Power sales/purchase contracts are effective for a specific term. 1980s vintage contracts were often written for terms of 35 years. The IPUC limits the term of contemporary contracts to 20 years. A developer may choose a shorter term, but a power sales contract is usually important for financing of a hydroelectric project, so most developers choose a 20-year term.

Category III – Hydroelectric projects with neither a FERC license nor a power purchase contract subject to IPUC review.

Although FERC has broad authority, it does not have jurisdiction over all hydropower projects. IPUC's authority over hydropower facilities is also limited. IPUC is responsible for reviewing power purchase contracts which involve a utility company, but other power purchase arrangements do exist. Therefore, a third category is needed. Category III is a catch-all category for hydropower projects that do not fit into Category I or II.

Most hydropower projects in Category III will be for personal use. These micro hydroelectric projects will be completely contained within the right holder's property. Often the project will be a battery-based system with a single, turbine-generator unit. Due to limitations in the AC to DC technology, the unit will generate less than 4 kW of electrical power, and the power will be consumed by the owner.

Category III includes FERC-exempt hydropower projects that do not benefit from a power sales agreement. Either the project produces power too intermittently to be described by a power sales agreement, or all the power is consumed by the developer rather than sold. In the former case, the power can still be purchased by a utility but the

purchase will be in accordance with that utility's tariff schedule (which can be revised every year) rather than through a long-term agreement.

Also in Category III are projects developed by the Bureau of Reclamation or by a non-federal developer who has entered into a Lease of Power Privilege (LOPP) agreement with the Bureau of Reclamation. These projects do have operational constraints, but they are not accountable to the agencies which have the authority to set the Category I and II fixed term obligations.

The statute allows the Director to employ a range of criteria to set a term for Category III projects. One of the most practical is the useful life of the power generating equipment. IDWR can expect a custom built, conscientiously maintained, large-scale, turbine-generator system to have a 45 – 50 year lifespan. 'Personal use' micro hydros are not as rugged, but a well maintained system can be expected to last 20 - 25 years.

TIMING CONSIDERATIONS

Category I

FERC's pre-authorization processes and IDWR's water rights application processes may overlap in time. However, pursuant to Water Appropriation Rule 45.01.c,⁷ the Department will not necessarily require the FERC license to have been issued before a water right permit is issued for the same hydropower project.

Ideally, a FERC order granting an exemption or issuing an original license would be in place before IDWR issues a permit. However, if the term cannot be established at permitting because the FERC review process is not complete, the statute directs IDWR to set the term "as soon thereafter as practicable". In the past, IDWR has considered the act of licensing to be the most practicable point in time. However, delayed water right licensing has resulted in criticism of IDWR's practice. Therefore, IDWR will strive to collect the information needed to set the term when processing proof of beneficial use statements, and IDWR will strive to issue licenses shortly after the proof of beneficial use statement has been submitted. For this reason, term conditions for permits will, in some cases, be different than term conditions for the corresponding water right licenses. Nevertheless, even for permits, IDWR will employ conditions explaining that terms may automatically renew.

⁷ c. Criteria for determining whether the application is made in good faith. The criteria requiring that the Director evaluate whether an application is made in good faith or whether it is made for delay or speculative purposes requires an analysis of the intentions of the applicant with respect to the filing and diligent pursuit of application requirements. The judgment of another person's intent can only be based upon the substantive actions that encompass the proposed project. Speculation for the purpose of this rule is an intention to obtain a permit to appropriate water without the intention of applying the water to beneficial use with reasonable diligence. Speculation does not prevent an applicant from subsequently selling the developed project for a profit or from making a profit from the use of the water. An application will be found to have been made in good faith if:.....

ii. The applicant is in the process of obtaining other permits needed to construct and operate the project;.....

Category II

The developer of a hydropower facility will know in advance whether the facility will generate power in excess of his needs. The negotiations of a power purchase contract between the developer and a regulated electric utility should precede a project's first energy date. But the Department will likely issue a permit to the developer of a qualifying facility before the IPUC concludes its review and closes the case on the relevant power contract.

The first energy date is a prerequisite to the execution of a power purchase/sales agreement. It is also the first instance of beneficial use. Therefore, it is reasonable to expect that an executed power sales/purchase agreement will be effective when the Proof of Beneficial Use statement is submitted.

Category III

In most cases, it will be impossible to know the plant's first energy date when the permit is issued. Therefore, the term will be calculated from the year of permit issuance. For ease of administration, the term ending date should be December 31 of the year of expiration.

IDWR PERMIT AND LICENSE TERM CONDITIONS

Category I a) -- A FERC license is required but not yet issued.

For permits issued for hydropower projects in this category, apply the following term condition. Because a FERC license will be a prerequisite for the power generation that constitutes beneficial use, this condition will not be applicable to water right licenses.

The term of this permit shall coincide with the term of the license issued by the Federal Energy Regulatory Commission (FERC) for this hydropower project. The term shall automatically extend to run concurrently with any annual renewals of the project's FERC license. Prior to the issuance of a subsequent or new FERC license for the project, the Director may review the water right permit or subsequent water right license and may issue an order canceling all or any part of the use, establishing a new term, or revising, adding or deleting conditions under which the water right may be exercised. The order shall take effect on the date the current term, as may be extended through annual renewals, expires. If the Director does not issue such an order, the term shall automatically extend to a length equal to the project's subsequent or new FERC license and any prior conditions on the water right permit or subsequent water right license shall remain in effect.

Also apply the following new condition requiring that FERC license information be submitted with the proof statement:

If it has not been previously provided, the permit holder shall submit a copy of the FERC licensing order for this project in conjunction with the Proof of Beneficial Use statement.

Category I b) -- A FERC license has been issued.

For some permits in Category I and for all water right licenses in Category I, a FERC license will have been issued already. In such cases, apply the following term condition:

The term of this <permit> <water right> shall run concurrently with <FERC Project Name> license <FERC Docket Number> issued by the Federal Energy Regulatory Commission (FERC), which expires on <Expiration Date>. The term shall automatically extend to run concurrently with any annual renewals of the project's FERC license. Prior to the issuance of a subsequent or new FERC license for the project, the Director may review the <water right permit or subsequent > water right license and may issue an order canceling all or any part of the use, establishing a new term, or revising, adding or deleting conditions under which the water right may be exercised. The order shall take effect on the date the current term, as may be extended through annual renewals, expires. If the Director does not issue such an order, the term shall automatically extend to a length equal to the project's subsequent or new FERC license and any prior conditions on the <water right permit or subsequent > water right license shall remain in effect.

Category II a) -- IPUC review of the power purchase agreement required but not yet completed.

For some projects in Category II, IDWR will issue a permit before the power purchase contract is complete. In such cases, apply the following term condition. Because the power purchase contract, when finalized, will coincide with beneficial use of water, there should be no water right licenses that fall into this subcategory.

The term of this permit shall run concurrently with the length of any effective energy sales agreement between the right holder and a purchasing utility. Prior to the expiration of the term, the Director may issue an order canceling all or any part of the use authorized herein, may establish a new term, or may revise, delete, or add conditions under which the water right permit or subsequent water right license may be exercised. The order shall take effect on the date the current term expires. If the Director does not issue such an order, the term shall automatically extend to a length equal to the prior term and any prior conditions on the water right permit or subsequent water right license shall remain in effect.

Also apply the following new condition requiring that information be submitted with the proof statement:

If it has not been previously provided, the permit holder shall submit a copy of the FERC exemption order and a copy of the effective energy sales/purchase agreement for this project in conjunction with the Proof of Beneficial Use statement.

Category II b) -- A power sales agreement has been approved by IPUC.

For permits and licenses for hydropower projects in this category, apply the following term condition:

The term of this <permit> <water right license> shall run concurrently with energy sales agreement <IPUC Case number, Order number> approved by the Idaho Public Utilities Commission, which expires on <Expiration Date>. Prior to the expiration of the term, the Director may issue an order canceling all or any part of the use authorized herein, may establish a new term, or may revise, delete, or add conditions under which the <water right permit or subsequent> water right license may be exercised. The order shall take effect on the date the current term expires. If the Director does not issue such an order, the term shall automatically extend to a length equal to the prior term and any prior conditions on the <water right permit or subsequent> water right license shall remain in effect.⁸

Category III -- Outside of FERC and IPUC processes.

The statute allows the Director to employ a range of criteria to set a term for Category III projects. One of the most practical is the useful life of the power generating equipment. If the Department finds no other relevant criteria on which to base the term for a Category III hydropower project, it may be based on the expected equipment life of a well maintained system. As noted above, a conscientiously maintained, large-scale, turbine-generator system can have a 45 – 50 year lifespan, and a typical ‘personal use’ micro hydro can be expected to last 20 - 25 years. IDWR staff members issuing approvals are authorized to exercise professional discretion in estimating the lifespan of a hydropower system and whether it is necessary to require the water right owner to provide additional information about the potential lifespan.

Unless other criteria are used, such as the term of an LOPP agreement with the Bureau of Reclamation, the term for Category III projects can be based on the expected

⁸ IDWR intends that a term date based on a power sales agreement will always anticipate the expiration of the contract. It is not uncommon, however, for projects to obtain approved power sales agreements but subsequently fail to meet first energy or scheduled online dates. In these cases, contract amendments are common to extend the term of the power sales agreement beyond the term specified in the original agreement. For projects that have an approved power sales agreement which is subsequently amended to extend the term of the agreement, the amended term can be addressed when a water right license is issued.

equipment life of a well maintained system. Permits and licenses in this category should be issued with the following term condition:

The term of this <permit> <water right license> shall extend to [(permit issued year + expected equipment lifespan) = specific date]. Prior to the expiration of the term, the Director may issue an order canceling all or any part of the use authorized herein, may establish a new term, or may revise, delete, or add conditions under which the <water right permit or subsequent> water right license may be exercised. The order shall take effect on the date the current term expires. If the Director does not issue such an order, the term shall automatically extend to a length equal to the project's prior term and any prior conditions on the <water right permit or subsequent> water right license shall remain in effect.

WHERE TO FIND DOCUMENTATION

Going forward, the owners of water right permits for power use will be expected to have the documents which will establish the term and to submit copies of them in concert with their applications for permit or their Proof of Beneficial Use statements. Water right files for hydropower use that pre-date this memo will often lack documentation for the basis of a term. Either the field examiner or the reviewer will need to locate these foundational documents and provide copies of them for the water right file. The most straightforward method may be to ask the permit holder to provide the documents. Information may also be found at the locations described below.

Category I -- Term dates are based on FERC license expiration.

A complete list of the FERC issued licenses or a list of issued exemptions is available as an Excel spreadsheet and can be accessed from:

[Complete list of Issued Licenses](#)  or <http://www.ferc.gov/industries/hydropower/gen-info.asp>

[Issued Exemptions](#)  or <http://www.ferc.gov/industries/hydropower/gen-info.asp>

Category II -- Term dates are based on power purchase contracts under the IPUC's authority.

A list of Qualifying Facility contracts is maintained by IPUC personnel as an Excel spreadsheet. Although the information is public, the spreadsheet is not currently posted where the public or IDWR can access it.

In the absence of access to this IPUC list, IDWR agents will need to either request a copy of any energy sales agreement from the right holder or query the IPUC website, <http://www.puc.idaho.gov> for individual case records.

Category III -- Term dates are based on equipment life expectancy or other considerations.

The small personal use projects will likely be known only to IDWR.

New large-scale, federal hydropower projects are rare. Existing federal hydropower projects may add turbines which would increase the amount of water used for power generation. Existing federal dams in Idaho which have hydropower are: the U.S. Bureau of Reclamation projects at Anderson Ranch, Black Canyon, Boise Diversion, Minidoka, and Palisades; and the Army Corps of Engineers project at Dworshak.

A site list of potential LOPP projects in the Pacific Northwest can be found at <http://www.usbr.gov/power/CanalReport/PN%20Maps.pdf>