



May 4, 2020

By Electronic Mail

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Re: Comments of the National Hydropower Association and Northwest Hydroelectric Association on EPA Region 10's Proposed NPDES Permits for Federal Hydroelectric Facilities on the Lower Columbia and Lower Snake Rivers

Dear Ms. Wu:

The following comments are submitted on behalf of the National Hydropower Association ("NHA") and the Northwest Hydroelectric Association ("NWhA") (collectively, the "Associations"). The comments relate to EPA Region 10's proposed NPDES permits for four federal hydroelectric facilities on the Lower Columbia river (Bonneville Project, Permit No. WA0026778; The Dalles Lock and Dam, Permit No. WA0026701; John Day Project, Permit No. WA0026832; and McNary Lock and Dam, Permit No. WA0026824) and four federal hydroelectric facilities on the Lower Snake river (Ice Harbor Lock and Dam, Permit No. WA0026816; Lower Monumental Lock and Dam, Permit No. WA0026808; Little Goose Lock and Dam, Permit No. WA0026786; and Lower Granite Lock and Dam, Permit No. WA0026794) (collectively, the "Proposed Permits").

NHA is a non-profit national association dedicated exclusively to advancing the interests of the United States hydropower industry, including conventional, pumped storage, and new hydrokinetic technologies. NHA promotes the role of hydropower as a clean, renewable, and reliable energy source that advances national environmental and energy policy objectives. NHA's membership consists of more than 240 organizations, including public power utilities, investor-owned utilities, independent power producers, project developers, equipment manufacturers, environmental and engineering consultants, and attorneys.

NWhA is a non-profit trade association that represents and advocates on behalf of the Northwest hydroelectric industry. NWhA has over 135 member companies from all segments of the industry. NWhA is dedicated to the promotion of the Northwest region's waterpower resources as a clean, efficient and cost-effective source of energy while protecting the fisheries and environmental quality that characterize the region.

In the United States, hydropower facilities provide about 6 to 7 percent of the nation's total electric generation and pumped storage hydropower plants provide the vast majority of energy storage, approximately 97 percent. The membership of the Associations includes companies with facilities in EPA Region 10, including in the state of Washington. Although our members are not directly affected by the Proposed Permits, our members have a vested interest in the underlying analysis supporting those permits as it pertains to hydropower facilities generally. In particular, the analysis makes broad statements regarding the scope and applicability of Clean Water Act ("CWA") §316(b) that affect all hydropower facilities to the extent they are represented to reflect EPA policy, and are relied on by other EPA regions and state permit writers.

Specifically, the Associations' comments are focused on special condition E, "Cooling Water Intake Structure (CWIS) Plan and CWIS Annual Reports," imposed pursuant to §316(b) of the CWA and EPA's 2014 implementing regulation.¹ See NPDES Fact Sheet, USACE Lower Columbia River Hydroelectric Generating Permits at 52 ("Lower Columbia River Fact Sheet");² NPDES Fact Sheet, USACE Lower Snake River Hydroelectric Generating Permits at 51 ("Lower Snake River Fact Sheet") (collectively, the "Fact Sheets"). According to this special condition and the discussion in the Fact Sheets for these Proposed Permits, EPA asserts that federal hydroelectric facilities must meet §316(b) requirements established by EPA on a case-by-case, best professional judgment basis under 40 C.F.R. § 125.90(b).

The Associations' position, set forth in greater detail below, is that:

1. The language and legislative history of §316(b) demonstrate that it does not apply to hydroelectric facilities, and thus special condition E and all related language in the Fact Sheets and Proposed Permits should be removed;
2. EPA's 2014 §316(b) implementing regulation does not apply to hydroelectric facilities;
3. The comprehensive regulatory framework that applies to hydroelectric facilities, and in particular the FERC licensing process, already addresses impingement and entrainment;
4. Clarification is needed regarding the four-factor test outlined in the Proposed Permits; and
5. The requirement for separate reporting on CWIS should be removed.

¹ Final Rule to Establish Requirements for Cooling Water Intake Structures at Existing Facilities and Amend Requirements at Phase I Facilities, 79 Fed. Reg. 48,300 (Aug. 15, 2014) ("2014 Regulation").

² Although the Proposed Permit for McNary Lock and Dam does not include this condition, it includes a requirement to submit annually a CWIS report which EPA should remove.

I. CWA §316(b) Requirements Do Not Apply to Hydroelectric Facilities, and Thus the Conditions Relating to §316(b) Should Be Removed from the Proposed Permits.

Section 316(b) of the Clean Water Act must be read in context with the entirety of Section 316, which is focused on thermal discharges. Section 316(a) is focused on establishing effluent limitations for the heat contained in wastewater discharges; §316(b) is focused on the large withdrawals that are used by steam electric generating and industrial facilities for cooling purposes and that generate the thermal discharges. The two sections represent the two sides of the same coin. When reviewed together, the language demonstrates that the basis for this provision was to address impacts associated with steam electric generating facilities, more specifically facilities that employ the steam cycle.³

Even if read independently of §316(a), the text of §316(b) does not support EPA's imposition of §316(b) conditions on hydroelectric facilities. The plain language of §316(b) indicates that it applies only where EPA establishes nationally applicable standards under CWA §301 (effluent limitations) and §306 (new source performance standards) for point sources. To illustrate, §316(b) reads as follows:

Any standard established pursuant to section 1311 [301] of this title or section 1316 [306] of this title and applicable to a point source shall require that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.

33 U.S.C. § 1326(b).

The use of the word “standards” in §316(b) is significant. EPA has established technology-based effluent limitation guidelines and new source performance standards for multiple source categories that generally discharge large volumes of water. But EPA has not issued any such standards for hydroelectric facilities. Establishing such standards for hydroelectric industry would not be reasonable given the *de minimis* nature of their discharges.

And, as noted above, §316(b) must be read in context with the entirety of §316. Sections 316(a) and 316(c) use the term “effluent limitations,”⁴ contrasting with the use

³ The legislative history of Section 316(a) explains that the focus of this provision was on steam-electric generating plants as the “major source of the discharges of heat.” House Consideration of the Report of the Conference Committee (Oct. 4, 1972), *reprinted in* 1 A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 263 (1973) (statement of Rep. Clausen).

⁴ The language of §316(a) authorizes the imposition of technology-based “effluent limitations under [sections 301 and 306] for such plant, with respect to the thermal component of such discharge...” 33 U.S.C. § 1326(a) (emphasis added). Similarly, §316(c) includes the phrase “effluent limitations established under section 1311 of this title” in §316(c), when it referred to what technology-based limits should apply to “any point source of a discharge having a thermal component, the modification of which point source is commenced after October 18, 1972... .” 33 U.S.C. § 1326(c).

of the word “standards” in §316(b). Effluent limitations are established on a case-by-case basis for a specific facility. However, standards refer to nationally-applicable effluent limitation guidelines of new source performance standards – which establish standards on an industry-wide basis.

The legislative history for §316(b) also confirms that Congress did not intend it to apply to hydroelectric facilities. Congress added §316(b) in 1972 to address adverse environmental impacts associated with industrial facilities such as steam electric generating facilities. In September 1972, the conference committee amended §316 by adding a provision to address CWIS and submitted its report for approval by both the House and Senate.⁵ During the House of Representatives consideration of the conference report, Rep. Donald Clausen made the following statement:

Section 316 was originally included in the House-passed water pollution control bill because of the belief that the arguments which justified a basic technological approach to water quality control did not apply in the same manner to the discharges of heat.... [S]team-electric generating plants are the major source of the discharges of heat.... Section 316(b) requires the location, design, construction, and capacity of cooling water intake structures of *steam-electric generating plants* to reflect the best technology available for minimizing any adverse environmental impact.⁶

Rep. Clausen’s statement indicates that Congress intended §316(b) to apply to steam electric generating plants that use significantly larger volumes of water for cooling purposes. By contrast, hydroelectric facilities divert *de minimis* amounts of cooling water. In general, cooling water accounts for less than 1% of the total water transported through the facility and in some cases less than 0.1%.⁷

The organization of the statute, its plain language, and the legislative history of this provision demonstrate that §316(b) does not apply to hydroelectric facilities. Thus, the discussion of §316(b) in the Fact Sheets for the Proposed Permits and the §316(b)-related conditions included in the Proposed Permits should be removed.

⁵ See H.R. Rep. No. 92-1465, at 68, 137 (Sept. 28, 1972).

⁶ House Consideration of the Report of the Conference Committee (Oct. 4, 1972), *reprinted in* 1 A LEGISLATIVE HISTORY OF THE WATER POLLUTION CONTROL ACT AMENDMENTS OF 1972, at 262–64 (1973) (statement of Rep. Clausen) (emphasis added).

⁷ The Associations recognize that each of the facilities subject to this permitting action withdraw greater than 2 MGD for cooling purposes. While EPA indicates that the volume of withdrawals at these facilities is higher than the regulatory threshold in EPA’s 2014 Regulation, this threshold is not relevant in the hydropower context. As explained in more detail in these comments, the 2014 Regulation was not focused on hydropower facilities, and EPA did not evaluate its applicability or appropriate regulatory thresholds to be used in this context. Moreover, water withdrawals from the facilities subject to the Proposed Permits are still significantly lower than those of steam electric generating facilities and are substantially smaller than the volume of water released through the dams associated with these projects.

II. EPA §316(b) Regulations Do Not Cover Hydroelectric Facilities.

The administrative record associated with EPA's §316(b)-related regulations confirms the understanding that §316(b) does not apply to hydroelectric facilities. EPA's first rule implementing §316(b), issued in 1976, did not indicate that it applied to hydroelectric facilities.⁸ That rule, codified at 40 C.F.R. § 401.14, was based on an economic impact analysis as it related to "electric powerplants – which are the largest industrial users of cooling water" – and the proposed rule referred specifically to "standards of performance for the steam electric power generating industry."⁹ Consistent with the language and intent of the CWA, that rule required compliance with §316(b) by point sources subject to EPA standards established pursuant to §§301 or 306.¹⁰

Since 1976, EPA has issued a series of regulations implementing §316(b) for certain new facilities,¹¹ existing steam electric plants,¹² and manufacturing facilities.¹³ During the development of these rules, EPA has never suggested that any of the rules would apply to hydroelectric facilities. Although some of these rules have been withdrawn as a result of unrelated litigation, the fact that EPA's §316(b) implementing rule does not apply to hydroelectric facilities has not changed.

Indeed, in the current rule, promulgated by EPA in 2014, EPA estimated that a total of 1,065 facilities (544 electric generators and 521 manufacturers) would be subject to the regulation.¹⁴ None of those facilities were hydroelectric power generators. In its notice of proposed rulemaking for that rule, EPA expressly indicated that water withdrawals for generation of electricity by hydroelectric facilities were not subject to the rule.¹⁵ Not surprisingly, as a result of that express statement, not a single member of hydroelectric industry commented on the proposed rule.¹⁶ EPA received no comments

⁸ 41 Fed. Reg. 17,387 (Apr. 26, 1976) (although not relevant here, the rule was later vacated by the court).

⁹ *Id.* at 17,389; *see also* notice of proposed rulemaking for that regulation, 38 Fed. Reg. 34,410 (Dec. 13, 1973) ("regulations were developed in the course of studies undertaken in support of effluent limitation guidelines and standards of performance for the steam electric power generating industry").

¹⁰ See 40 C.F.R. § 401.14 ("The location, design, construction and capacity of cooling water intake structures of any point source for which a standard is established pursuant to section 301 or 306 of the Act shall reflect the best technology available for minimizing adverse environmental impact, in accordance with the provisions of part 402 of this chapter.").

¹¹ See Phase I rule establishing national technology-based performance requirements for new facilities that withdraw greater than 2 MGD of surface water and use at least 25 percent of the water they withdraw for cooling purposes. 66 Fed. Reg. 65,256 (Dec. 18, 2001).

¹² See Phase II rule establishing requirements for existing steam electric plants with flows greater than 50 MGD. 69 Fed. Reg. 41,576 (July 9, 2004).

¹³ See Phase III rule establishing requirements for lower flow steam electric plants and all manufacturing facilities. 71 Fed. Reg. 35,006 (June 16, 2006).

¹⁴ 79 Fed. Reg. at 48,305.

¹⁵ See 76 Fed. Reg. 22,174, 22,190 (Apr. 20, 2011) ("Given the diversity of industrial processes across the U.S., there are many other industrial uses of water not intended to be addressed by today's proposed rule. ... [H]ydro-electric plant withdrawals for electricity generation are not cooling water uses and are not addressed by today's proposal.")

¹⁶ There is no reference to hydroelectric facilities in EPA's 467-page response to comments document.

regarding the potential applicability of §316(b) to hydroelectric facilities from other non-industry commenters. Similarly, none of EPA's Information Collection Requests ("ICRs") under the 2014 Regulation were directed at hydroelectric facilities, nor did EPA use any other method to collect or consider information from hydroelectric industry.

Furthermore, EPA has not based the 2014 Regulation on information that would account for the specifics of hydroelectric industry, nor did it evaluate the impacts of the rule on hydroelectric facilities. First, EPA did not include hydroelectric facilities in its Economic Analysis, a key document that underpins agency rulemakings.¹⁷ Second, for its Benefits Analysis, EPA extrapolated data from 98 model facilities based on information it received in the 2000 ICR.¹⁸ These included industrial facilities that utilize large quantities of cooling water and specifically, steam electric plans, and excluded hydroelectric facilities because they do not generate electricity through steam.¹⁹ Third, EPA did not analyze hydroelectric facilities in its Technical Development Document, a 372-page document outlining EPA's analyses supporting the conclusions in the 2014 Regulation. Tellingly, EPA indicated that 559 facilities would be subject to the 2014 Regulation; they did not include any hydroelectric facilities.²⁰

In advancing the Proposed Permits, therefore, EPA seeks to upend this entire, uniform precedent, rooted in the plain language, purpose, and intent of the CWA. EPA itself acknowledges that "EPA never intended that the rule's substantive provisions would apply to [hydroelectric facilities]." Lower Columbia River Fact Sheet at 52; Lower Snake River Fact Sheet at 51. Nonetheless, EPA goes on to conclude that hydroelectric facilities are subject to the provisions of §316(b) pursuant to 40 C.F.R. § 125.90(b) – **part of the very rule that EPA acknowledges was never intended to apply to hydroelectric facilities.** And EPA's statement is not supported by the regulatory language. The CWIS' not subject to the requirements in §§ 125.94 through 125.99 are those CWIS' that withdraw less than 2 MGD or use less than 25% of the water withdrawn for cooling purposes.²¹ This threshold for the rule's applicability is not at all focused on hydroelectric facilities. Rather, it is a threshold set by EPA to ensure that 99.8% of the steam electric generating facilities and manufacturers covered by §316(b) are subject to the substantive requirements.²²

Response to Comments Document for the Final 316(b) Existing Facilities Rule (May 19, 2014) (EPA-HQ-OW2008-0667-3679).

¹⁷ Economic Analysis for the Final 316(b) Existing Facilities Rule at 2A-4 (May 2014) ("2014 Economic Analysis"). In fact, the only discussion of hydroelectric facilities in EPA's 2014 Economic Analysis is a general description of hydroelectric facilities' contribution to electricity generation. See *id.* at 2A-3.

¹⁸ Benefits Analysis for the Final Section 316(b) Existing Facilities Rule at 3-5 (May 2014).

¹⁹ Information Collection Request, Detailed Industry Questionnaires: Phase II Cooling Water Intake Structures & Watershed Case Study Short Questionnaire at 4 (Aug. 18, 1999).

²⁰ Technical Development Document for Final Section 316(b) Existing Facilities Rule, Exhibit 4-26 (May 19, 2014).

²¹ 40 C.F.R. § 125.91.

²² 79 Fed. Reg. at 43,808.

To the extent EPA takes the position that §125.90(b), as it existed prior to the 2014 rulemaking, already covered hydroelectric facilities, there is no indication in the preambles or analyses supporting prior versions of this provision that this was ever EPA's intention. As explained above, §316(b) is focused on industries for which national standards have been developed. EPA has never indicated otherwise. And the Proposed Permits and Fact Sheets do not explain or support EPA taking such a position.

Given this extensive regulatory history – all of which excluded the collection of any information relevant to hydropower facilities, the discussion of the application of §316(b) requirements to hydropower facilities, or the involvement of the hydropower stakeholders – it is arbitrary and capricious for EPA to make a determination in permits issued to individual facilities that §316(b) applies to hydropower facilities. Such a significant decision cannot be undertaken lightly. In fact, a decision with this significance, departing from the longstanding history and regulatory record relating to §316(b) would typically only be undertaken after a national rulemaking, allowing the input of all stakeholders and a uniform understanding of the scope, applicability, and criteria. That is certainly the case if EPA were to require any technology beyond already existing technology. Including §316(b) provisions in the Proposed Permits is not the appropriate means of making national policy decisions. The 2014 Regulation does not provide any support or basis for imposing §316(b) requirements on hydropower facilities.

III. The Existing Regulatory Framework for Hydroelectric Facilities, Including the FERC Licensing Process, Already Addresses Impingement and Entrainment.

The Proposed Permits are a departure from the regional general permit proposals issued by EPA Regions 1 and 10 in 2018, which would have applied to hydroelectric facilities in those Regions for which EPA is the NPDES permitting authority. As NHA commented then and reiterates here, §316(b) does not and should not apply to hydroelectric facilities. Given the extensive regulatory framework that already exists for hydroelectric facilities, which includes consideration of impingement and entrainment impacts, there is no practical purpose or need to apply §316(b) to hydroelectric facilities.

All hydroelectric projects are subject to review under the National Environmental Policy Act ("NEPA") and the Endangered Species Act ("ESA"). As part of the NEPA review, impacts to aquatic resources including aquatic species susceptible to impingement and entrainment are reviewed, and alternatives to those impacts are considered. Where a hydroelectric project may impact federally threatened and endangered fish or other aquatic species, a formal consultation with the U.S. Fish and Wildlife Service ("FWS") and National Marine Fisheries Service ("NMFS") is required. Through this process, these agencies and the project proponent work together to eliminate or minimize potential impacts to these species. At the conclusion of this process, these agencies impose conservation and mitigation measures to minimize impacts to protected species from hydroelectric facilities, including from the diversion of

cooling water. For projects that will result in incidental take, these agencies recommend imposition of reasonable and prudent measures to minimize the take of listed species.

Non-federal hydroelectric facilities undergo even greater scrutiny. They are subject to the Federal Power Act (“FPA”), which creates a rigorous FERC licensing program. Under the FPA, FERC must consider and address impingement and entrainment impacts from the facility as a whole. FPA grants FWS, NMFS, and state water quality agencies the authority to mandate conditions for inclusion in the FERC license to protect aquatic species and state water quality. Section 18 of the FPA requires FERC to include in any license “the construction, maintenance and operation by the licensee at its own expense of . . . such fishways as may be prescribed by the Secretary of the Interior or Secretary of Commerce.”²³ These “mandatory” prescriptions cannot be rejected or modified by FERC; they must be included in any license issued by FERC for a hydropower project.²⁴

Similarly, beyond the requirements of the FPA, FERC licenses are subject to CWA Section 401 certification from states to ensure that water quality standards are met. Here again, the state review encompasses the whole project. Any conditions included in a state 401 certification must be included in the FERC license.²⁵

The ability of FWS, NMFS, and state water quality agencies to mandate inclusion of conditions is significant for two reasons. First, it provides assurance that protection of aquatic species and state water quality are preeminent in the licensing process. They are controlling factors and must be addressed before a license can be issued. Second, this process demonstrates that there is no need for §316(b) to apply to non-federal hydropower facilities. The goal of §316(b) is to ensure the protection of aquatic species from impingement and entrainment, and to protect water quality. The FPA gives authority to FWS, NMFS, and state water quality agencies to mandate conditions to protect these very same resources. Subjecting such projects to additional §316(b) review will not add any benefit, is unnecessarily duplicative, and is unlikely to result in any changes to the projects.

What is more, application of §316(b) to non-federal hydroelectric facilities on a case-by-case basis as suggested by EPA would demand significant resources. Given that FERC, FWS, NMFS, states, tribes and other stakeholders address impingement and entrainment over a multi-year FERC process, it may not be a beneficial use of EPA’s time and resources to undertake such a complex (and duplicative) analysis. This is especially true given EPA’s lack of data regarding hydroelectric facilities on which to base their decisions.

In addition to the role of FWS, NMFS, and state water quality agencies, the FPA charges FERC with independent responsibility to ensure that each licensed project is

²³ 16 U.S.C. § 811.

²⁴ *Am. Rivers v. FERC*, 201 F.3d 1186 (9th Cir. 1999).

²⁵ 33 U.S.C. § 1341(d).

“best adapted to a comprehensive plan for improving or developing a waterway or waterways” for a number of public benefits, including “the adequate protection, mitigation, and enhancement of fish and wildlife (including related spawning grounds and habitat)”²⁶ When developing license requirements, in fact, FERC is directed to give “equal consideration to the purposes of energy conservation, the protection, mitigation of damage to, and enhancement of, fish and wildlife (including related spawning grounds and habitat), the protection of recreational opportunities, and the preservation of other aspects of environmental quality.”²⁷

Once FERC issues a hydropower license, the licensee must include approval of all plans and specifications for the project, which must be designed to meet the conditions outlined above. Significantly, no changes can be made to such plans or specifications unless approved and made a part of the FERC license.²⁸ Accordingly, regulating the fish impacts of non-federal hydropower projects under both CWA §316(b) and the FPA leads to potential conflicts, lengthy project delays, and a burdensome administrative process. This is only heightened by the fact that the licenses issued for non-federal hydropower projects are issued for periods of 30 – 50 years.²⁹ And the FPA requires these licenses to be for fixed conditions that can only be modified upon mutual consent of FERC and the licensee.³⁰ By contrast, NPDES permits are valid for a 5 year period. Revisiting the fish protections every 5 years under the guise of a CWA §316(b) requirement undoubtedly would undermine the foundational statutory policies reflected in the FPA: long license term with fixed condition, to provide certainty of investment in our nation’s hydropower resources. It would also significantly disincentivize investment in hydroelectric facilities.

As a result of this comprehensive regulatory framework, impacts from hydroelectric facilities are addressed – including and especially impacts to aquatic species, which is the driving purpose of the §316(b)-related provisions of the Proposed Permits. The preamble to EPA’s 2014 Regulation acknowledges that such legal requirements may be applied to address “adverse environmental impact caused by cooling water intake structures” at facilities not subject to NPDES permitting requirements.³¹ They are similarly the appropriate mechanisms for addressing such impacts at hydroelectric facilities.

IV. Clarification Needed on BPJ Determination of BTA Included in the Proposed Permits.

The Fact Sheets accompanying the Proposed Permits appropriately recognize that hydroelectric facilities’ existing controls are technologies that satisfy the requirements of best technology available (“BTA”) to minimize entrainment and

²⁶ 16 U.S.C. § 803(a)(1).

²⁷ 16 U.S.C. § 797(e).

²⁸ 16 U.S.C. § 803(b).

²⁹ 16 U.S.C. §§ 799, 808(e).

³⁰ 16 U.S.C. § 799.

³¹ 79 Fed. Reg. at 48,307.

impingement mortality. Lower Columbia River Fact Sheet at 53; Lower Snake River Fact Sheet at 52. This further supports the conclusion that §316(b) does not apply to hydroelectric facilities. The Fact Sheets go on to outline four factors used by EPA as part of its BPJ analysis to determine whether the federal facilities proposed for permitting meet the BTA requirement.³² The Associations' comments are focused on this four-factor analysis.

A. BTA Should Be Satisfied if Any of the Four Factors are Met.

Clarification about how the four factors will be considered by EPA is needed. The Fact Sheets state that EPA may consider any of the four factors, and that “any combination of *one or more* of the factors” may be used to address entrainment and impingement. Lower Columbia River Fact Sheet at 53 (emphasis added); Lower Snake River Fact Sheet at 52 (emphasis added). EPA should revise these statements to make clear that if any one of the four factors is met, the BTA requirement is satisfied. Facilities should have the option of demonstrating compliance with any one of the options. As most, if not all, hydropower facilities will satisfy Factor 2, that is likely the option most facilities will choose to pursue. They should be able to do so without having to provide any information or analysis for the other three factors.

B. EPA Should Provide Additional Guidance Regarding the Four Factors.

Little information is available as to how each of the four factors are interpreted and applied by EPA. While this is appropriate given that Factor 4 is used to evaluate the federal facilities, it would be helpful for EPA to provide guidance in the Fact Sheets regarding the factors.

Factor 1 – Efficiency of Power Generation

It is unclear how Factor 1 is evaluated. The description in the Fact Sheets is simply a statement regarding the fact that hydroelectric facilities use cooling water more efficiently than a once through steam electric facility. Lower Columbia River Fact Sheet at 53; Lower Snake River Fact Sheet at 52. It is also unclear how this factor relates to Factor 2, discussed below, which appears to already account for the fact that hydropower facilities withdraw significantly smaller amounts of water for cooling purposes. Additional guidance in the Fact Sheets is needed about how this condition may be met.

The statement in the Fact Sheets that hydroelectric facilities “generate less waste heat” is accurate and illustrates the points made earlier in these comments that §316 of the CWA is designed to address thermal discharges (and the water withdrawn to generate those discharges). Such discharges are associated with steam electric generating facilities rather than hydroelectric facilities.

³² As noted earlier in these comments, it is inappropriate to establish regulatory criteria for an entire category of facilities through the issuance of individual permits. Such criteria are typically developed through a national rulemaking process.

By virtue of the differences between steam electric generating facilities and hydroelectric facilities, comparison between the two types of projects is not an apples-to-apples comparison. Hydroelectric facilities inherently use water more efficiently than steam electric generating facilities. Thus, it would appear that every hydroelectric facility would satisfy this criteria, supporting the fact that §316(b) should not be applied to hydroelectric facilities.

Factor 2 – Percentage of Water Withdrawn for Cooling Purposes

The Associations agree with EPA's statement that "The cooling water withdrawn at each facility is a small fraction of the water passed through the dam for generating purposes, often less than 1%; EPA expects such withdrawals will be almost always below 5%." Lower Columbia River Fact Sheet at 53; Lower Snake River Fact Sheet at 53. Thus, it appears that EPA is stating that where the amount of water used for cooling purposes is a small fraction of the total volume of water passing through the dam, this could satisfy BTA. Another consideration may be the low volume of cooling water used as compared to the overall flow of the river. Where the water withdrawn for cooling purposes is less than 5% of the river flow, this could also satisfy BTA. In either scenario, the "technology" is the minor withdrawal of water for cooling purposes. Confirmation from EPA that this is how Factor 2 applies would be helpful.

Factor 3 – Location of Intake Structure

The Associations agree that location of the intake structure is a relevant consideration when assessing BTA. Hydroelectric facilities vary significantly in terms of design and configuration, especially when it comes to the pipes and structures that divert water for purposes of cooling. Generally, water diverted for cooling is primarily sourced from three locations within the hydroelectric facility: (1) the penstock – a closed conduit or pipe that conveys water from the reservoir to the turbine, (2) the turbine scroll case – a spiral-shaped steel structure distributing water flow through the wicket gates located just prior to the turbine, or (3) a water inlet port located on the face of the dam. There likely are exceptions to these locations, because each facility has a unique, location-specific design to take maximum advantage of the hydraulics of that location.

This factor should allow a facility to explain whether it is possible to monitor or otherwise assess entrainment or impingement mortality given the location of the CWIS. Similarly, a facility should be able to explain whether the configuration of the facility as a whole – including the location of the CWIS – is sufficient to prevent impingement and entrainment from occurring.

Factor 4 – Technologies at the Facility

The fourth factor considers technologies at the facility. This factor should make clear that the technology being assessed – and regulated by EPA – is the CWIS.

Reevaluation of other technologies at the facility such as fish passage structures or turbine velocities is not within the purview of EPA.

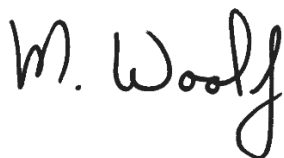
Another option for Factor 4 would be a determination that the configuration of the hydropower facility, including any measures employed as a result of consultation with the FWS or NMFS, could be deemed to satisfy the BTA requirement. But this determination should be made with the recognition that EPA has no jurisdiction over these components – it is simply a determination that the configuration is such that no additional requirements are needed at the CWIS.

C. EPA Should Eliminate Any Separate Reporting Requirement for CWIS.

The Proposed Permits include a separate annual reporting requirement focused on the performance of CWIS at the covered facilities. Hydroelectric facilities are already subject to extensive monitoring and reporting requirements. Moreover, EPA's Fact Sheets already reflect the minimal impacts of CWIS at hydroelectric facilities. Including this additional reporting requirement is unnecessary and will impose costs without any corresponding benefit and should be eliminated.

NHA and NWAHA appreciate the opportunity to comment on the Proposed Permits. Thank you for your consideration of these comments. If you have any questions or would like any additional information, please contact Dennis Cakert at Dennis@hydro.org or 202-697-2404.

Sincerely,



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