



UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE  
West Coast Region  
1201 NE Lloyd Boulevard, Suite 1100  
Portland, OR 97232

February 28, 2014

Jim La Spina  
Energy Facility Siting Specialist  
Washington Energy Facility Site Evaluation Council  
P.O. Box 43172  
Olympia, WA 98504-3172

Re: National Marine Fisheries Service (NMFS) comments on Columbia Generating Station National Pollutant Discharge Elimination System (NPDES) Permit No. WA-002515-1 and accompanying Fact Sheet

Dear Mr. LaSpina:

This letter conveys the comments and concerns of National Marine Fisheries Service regarding the proposed NPDES permit renewal for the Columbia Generating Station (CGS), near Richland, Washington. We also take this opportunity to respond to questions you have raised (e-mail of January 29, 2014 from Jim LaSpina, EFSEC, to Rich Domingue, NMFS) regarding our involvement in this permitting process.

We previously commented on the pre-public review draft (Letter of August 6, 2013, attached), expressing concern that the existing cooling water intake screening system posed an unacceptable risk to juvenile salmon and steelhead that may encounter them. As Washington's Energy Facility Site Evaluation Council (EFSEC) has chosen to not adopt our recommended changes in the draft permit, our prior comments and concerns remain relevant. At that time, we recommended that the draft permit be modified to require Energy Northwest ((ENW) – the project owner and operator) to bring the screens into compliance with NMFS' Anadromous Salmonid Passage Facility Design manual's fish passage criteria. During November 2013, ENW staff and their consultant provided us with additional information regarding the design of the intakes and their analysis of the likely effects of intake operation on anadromous fish. NMFS responded to this analysis with a letter to ENW (letter of December 12, 2013 – attached) which we shared with you.

On February 3, 2013, EFSEC released its draft NPDES permit and accompanying fact sheet for the CGS. We have reviewed this permit and fact sheet and offer the following comments.

**General Comment:**

NMFS disagrees with EFSEC's determination in the associated Fact Sheet (the draft permit is silent regarding the cooling water intake structure) that the existing cooling water intake screens represent the best available technology to minimize adverse environmental effects. NMFS has extensive experience in fish exclusion and passage systems, has evaluated the CGS intake screen designs and supporting studies, and has determined that they are notably out-of-date and would likely harm some of the juvenile salmon that encounter them. Our specific comments on analyses presented in your Fact Sheet follow.



**Specific Comments:**

Page 24. The Energy Facility Site Evaluation Council presents its determination that NMFS' juvenile fish screen criteria contained in NMFS' Anadromous Salmonid Passage Facility Design manual do not apply to the CGS: "EFSEC has determined that this guidance is not applicable to CGS, an existing facility, based on the applicability statement in the document itself and the absence of information indicating impingement or entrainment of listed species from the intake structures."

The applicability statement referenced from NMFS Anadromous Salmonid Passage Facility Design manual is:

*"Existing facilities may not adhere to the criteria and guidelines listed in this document. However, that does not mean these facilities must be modified specifically for compliance with this document. The intention of these criteria and guidelines is to ensure future compliance in the context of major upgrades and new designs of fish passage facilities."*

The Energy Facility Site Evaluation Council assertion that by that statement, NMFS effectively foreclosed application of the criteria to existing facilities not undergoing major upgrades and new fishway designs is incorrect. NMFS Anadromous Salmonid Passage Facility Design manual is a guidance document, applicable at NMFS' sole discretion under the particular factual situation. The fish screen criteria contained in the manual are based on field and laboratory studies, are designed to provide a high level of protection to juvenile salmonids, and have been widely accepted, including by Washington's Department of Fish and Wildlife. NMFS screen criteria are available on NOAA Fisheries Service West Coast Regional website, ([http://www.westcoast.fisheries.noaa.gov/publications/hydropower/fish\\_passage\\_design\\_criteria.pdf](http://www.westcoast.fisheries.noaa.gov/publications/hydropower/fish_passage_design_criteria.pdf)), and are used as the basis for screen design for any new or existing water intake where NMFS has a current jurisdictional involvement, and the existing water intake screen design (or lack thereof) provides inadequate fish protection. NMFS generally does not pursue existing facilities for screen design revisions unless there is current evidence of Endangered Species Act (ESA) species take, or until a new Federal action requires ESA consultation with NMFS. The U.S. Nuclear Regulatory Commission's relicensing of the CGS is such a new Federal action. Effects associated with implementing the NPDES permit are effects of NRC's relicensing action upon which we are consulting.

As regards to the lack of evidence of harm to ESA-listed salmon and steelhead cited as justification for your determination that the existing intakes are highly protective, the evidence from entrainment studies conducted during the 1980s is weak. NMFS provided its assessment of these studies to EFSEC during the pre-public review process. We are attaching these prior comments and a DVD containing the references cited for your ready reference.

The position that listed fish of a small enough size to be affected by the intakes do not occur in their vicinity is incorrect. Recent steelhead redd surveys conducted by the U.S. Department of Energy in the Hanford Reach of the Columbia River has verified upper Columbia River steelhead spawning in the vicinity of CGS.<sup>1</sup> Prior work on the cross-sectional distribution of juvenile Chinook and steelhead in the Hanford Reach found juveniles of both species throughout the river cross-section, indicating that both yearling and sub-yearling juvenile ESA-listed fish likely occur in the vicinity of the CGS intakes.<sup>2</sup> We have included copies of these reports for your use on the enclosed disk.

<sup>1</sup> USDOE. 2014. Hanford Site Steelhead Redd Monitoring Report for Calendar Year 2013. Prepared for the U.S. Department of Energy Assistant Secretary for Environmental Management.

<sup>2</sup> Dauble, D.D., T.L. Page, and R.W. Hanf. 1989. Spatial distribution of juvenile salmonids in the Hanford Reach, Columbia River. U.S. Fishery Bulletin 87:775-790

Further, the Hanford reach of the Columbia River is the primary spawning location for upper Columbia River summer/fall Chinook salmon. While this Evolutionarily Significant Unit (ESU) is currently healthy and not listed under the ESA, its essential habitat, including river substrate, is protected under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). NMFS is charged with implementing the MSA. Abundant fry from this species utilize essential fish habitat in the project vicinity and are susceptible to impingement and entrainment at the intakes.

Page 24-25, Conclusions. This section references ENW's arguments that hydrodynamic effects of the intake structures and fish behavior lead to very small risks to ESA-listed salmon and steelhead juveniles at the intakes, but fails to acknowledge NMFS' rebuttals to those arguments that were provided to EFSEC (letter of December 12, 2013 - attached). Failure to consider our responses indicates that EFSEC's approach to developing its best professional judgment is incomplete.

**Responses to questions raised in Mr. Jim LaSpina's email of January 30, 2014.**

**1. What is the status of the consultation between NMFS and the U.S. Nuclear Regulatory Commission (NRC) regarding CGS?**

NMFS and NRC remain in consultation. The process is in abeyance until there is a complete proposed action on which we could complete consultation. The proposed action cannot be fully defined until the NPDES permit is issued. NRC requested our concurrence with its determination that the project was not likely to adversely affect listed species. Due to the outdated design of the intake structures that risks impingement and entrainment of juvenile fish, we could not concur. Further, certain actions required by your current permit, (e.g. electrofishing for bioassay monitoring) presents risks of harm to ESA-listed fish. To provide NRC and ENW (and potentially the State of Washington) with coverage for potential harm to listed fish from operation of intake screens and electrofishing monitoring would require us to complete formal consultation. To be clear, we cannot exempt electrofishing in occupied habitats not associated with scientific research from the prohibitions of take without a formal consultation.

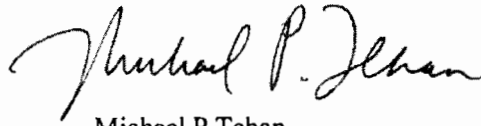
**2. Why not pursue NRC to complete its consultation?**

The NRC represents that it cannot modify in any way conditions imposed under an NPDES permit. Nevertheless, in its ESA Section 7(a)(2) consultation with NMFS, the effects of the cooling water intake structure and other aspects of the project regulated by the NPDES permit, are considered part of the total effects of operating the plant pursuant to the NRC license. Hence, our involvement in this NPDES permit process is to ensure that the permit that issues comports with the ESA, facilitating completion of our consultation with the NRC.

Our usual course for ensuring protection of ESA-listed species and their critical habitats in consultations on Federal permitting actions is to use the authorities of the Federal permitting agency to modify the permitted action as needed. Our sole reason for involvement in EFSEC's issuance of a new NPDES permit for this project is the NRC's lack of authority to implement protective measures for facilities covered under the project's NPDES permit. Hence, we are seeking EFSEC to employ its Federally-approved authority under the Clean Water Act to issue a new NPDES permit that regulates the cooling water intake structure and other aspects of this facility's operation to protect ESA-listed species.

We appreciate the opportunity to comment on this important action. Should you have any questions with regard to these comments, please call or e-mail Rich Domingue of my staff (503-231-6858, [richard.domingue@noaa.gov](mailto:richard.domingue@noaa.gov)).

Sincerely,

A handwritten signature in black ink, appearing to read "Michael P. Tehan". The signature is fluid and cursive, with the first name "Michael" being the most prominent part.

Michael P. Tehan  
Assistant Regional Administrator  
Interior Columbia Basin Office  
NOAA Fisheries, West Coast Region

Cc: Shannon Khounnala, ENW  
Dennis Logan, NRC  
Bill Moore, WDOE  
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