

**James Yost**  
Chair  
Idaho

**W. Bill Booth**  
Idaho

**Guy Norman**  
Washington

**Tom Karier**  
Washington



## Northwest **Power** and **Conservation** Council

**Jennifer Anders**  
Vice Chair  
Montana

**Tim Baker**  
Montana

**Ted Ferrioli**  
Oregon

**Richard Devlin**  
Oregon

January 8, 2019

### MEMORANDUM

**TO:** Council members

**FROM:** Patty O'Toole, Program Implementation Manager

**SUBJECT:** Briefing on the Fish and Wildlife amendment process

- Overview of recommendations and schedule: Patty O'Toole
- Briefing on the adequate, efficient, economical and reliable power supply standard: John Shurts, general counsel; and Ben Kujala, director, power division

### BACKGROUND:

**Presenter:** Patty O'Toole, John Shurts, Ben Kujala

**Summary:** Staff will brief the Council on the amendment schedule, amendment recommendations, and the AEERPS standards and analysis.

**Relevance:** The Council called for recommendations to amend its Columbia River Basin Fish and Wildlife Program in May of last year. Recommendations were due on December 13<sup>th</sup>, 2018, two days after the December Council meeting.

At the January Council meeting the staff will brief the Council members on the recommendations received for amending the 2014 Fish and Wildlife Program and review the amendment process schedule.

The Program amendment recommendations were due to the Council on December 13, 2018. The Council received 51 sets of recommendations. These are available on the [Council's website](#) along with instructions to provide comments on the recommendations, which the Council is now accepting. Although the Council encourages public comment and discussion throughout the amendment process, we ask comments on the

recommendations to be submitted by February 8<sup>th</sup>, 2019. At that point the Council will begin to work with the recommendations and the comments received to begin to draft amendments.

The agenda item will also include a briefing on the standard in Section 4(h)(5) of the Northwest Power Act that calls for the Council to adopt the fish and wildlife program “while assuring the Pacific Northwest an adequate, efficient, economical and reliable power supply” – commonly known as the AEERPS standard. The briefing will focus on what the Act requires of the Council, how the Council has implemented this standard in the past in terms of both approach and analysis, and what factors may be relevant to the AEERPS considerations in this amendment process. See page three for an outline of this briefing.

## AEERPS

Northwest Power Act, Section 4(h)(5):

“The [fish and wildlife] program shall consist of measures to protect, mitigate, and enhance fish and wildlife affected by the development, operation, and management of such facilities *while assuring the Pacific Northwest an adequate, efficient, economical, and reliable power supply.*”

- Key terms are not defined; little guidance in rest of Act or its legislative history. (Basic principles of law would say that in the absence of specific definitions, apply common-sense ordinary meanings of these terms.)
- AEERPS is a consideration in fish and wildlife decisionmaking; but little guidance in the Act as to *how* the Council is to make/demonstrate this determination.
- AEERPS involves a power system analysis and conclusion, and so seems a more appropriate consideration for the power plan. Yet, AEERPS is not officially a decisionmaking standard for the power plan in Sections 4d and 4e. On the other hand, AEERPS is one of the overarching purposes of the Act. [See Section 2(2): A purpose of the Act is “to assure the Pacific Northwest of an adequate, efficient, economical, and reliable power supply”.] And the fish and wildlife program is part of the power plan as well. So, AEERPS is an important consideration in power planning too, in some way – see more below.
- All of this leaves lots of room for Council discretion/judgment in how to make and document the AEERPS conclusion.

## We do know a few things:

- The language is *not* written as a balancing effort or a tradeoff – it’s written in a way that tells the Council to do both, that is, to create a program that protects, etc. fish and wildlife and to do so while also assuring the region a continuing AEERPS. Have-it-all-optimism common to much natural resource/environmental legislation of the 1970s/80s. One implication of this is that the power plan resource strategy becomes important in being able to realize both objectives in a particular way.
- Focus is to be on “region”’s “power supply”
  - As the Ninth Circuit said in 1994 (in a footnote) – what the Council is to assure is an adequate, etc. “power” supply, not “hydropower” supply. “This highlights, again, conservation and the development of other resources as purposes of the Act.”
  - Note especially that the focus is to be on the *region* and whether the *region*’s power supply as a whole is adequate, reliable, economical, etc. – the focus is not on (or not just on) the federal system/Bonneville and its power supply and financial situation. *But* see more below.
- Also, from both the provisions in the Act and the legislative history, we know that Congress expected that the fish and wildlife program would derate the hydropower system to a degree – reducing and shifting generation - making the power supply as a whole that much less adequate, efficient, and reliable. Congress also expected that the fish and wildlife operations, dam passage improvements, and other program measures would cost the power system money – either in direct expenditures or in reduced revenue - and that the Council is not to reject a recommended fish and wildlife program measure just because it will affect the power supply and cost money – thus ensuring that the fish and wildlife program will inherently make the power system more expensive and less “economical” in that sense. The AEERPS consideration is thus to be a relative and subjective conclusion, not a bright line – at least up to some unknown point.
- One obvious key to making this work is the power plan resource strategy. The Act assumes the Council would use the power plan to adapt the power system, adding the necessary least-cost resources to make sure the system stays adequate and reliable and yet as least-cost

and economical as possible, and to do so in a way that makes sure Bonneville can meet its obligations, which are defined in Section 6(b) to include not just its contractual power sales obligations but also its ability to implement the requirements of Section 4(h), that is, the requirement to protect, mitigate and enhance fish and wildlife affected by the hydroystem in a manner consistent with the Council's program.

## History of how the Council has implemented the AEERPS provision:

- Pre 1994 - evaluate generation and revenue effects; look at rate impacts especially as compared to elsewhere in the nation; aok

- 1994 Fish and Wildlife Program

### Context/issue

- Fish and wildlife costs and other system costs up, especially as new ESA listings and additional recommendations for fish and wildlife are in the pipeline; at the same time, power market prices are down and there is real concern about Bonneville's financial situation and its future, especially how attractive will the power it offers for sale be when the contracts are up in 2001 - sound familiar?
- Fish and wildlife costs are just a part of this situation, and really not the critical part - but the only consideration Council had at this moment. Also, we recognized that the particular Bonneville issues were not the same as the effects on the overall regional power supply and regional economy, so how to factor in the Bonneville piece?
- Obvious need to delve into AEERPS subject with more consideration.

### What the Council did

- Collaborative effort led by the Power Division (especially Dick Watson as director with Fazio and Morlan); Legal Division (Volkman and Shurts); Fish and Wildlife (especially Applegate the director and Ruff); with fairly intensive involvement by Ed Sheets (Exec Dir), too.
- Result was Appendix B and especially Appendix C to the 1994 Fish and Wildlife Program. Appendix B was a thorough analysis of impacts of fish and wildlife program on hydrogeneration, system power supply, and costs. Appendix C was the first detailed analysis of what AEERPS is to mean, how to understand and analyze the standard; what might be the relevance of the Bonneville situation in what is otherwise an evaluation of the region's economy; and a recommended conclusion.  
<https://www.nwcouncil.org/media/26490/apdxc.pdf>
- The Council then adopted these appendices as part of the program, and wrote a summary explanation and conclusion in the text of the program itself.

- And, we made clear that the analysis and conclusion in the Fish and Wildlife Program would always be *tentative*; dependent on and assuming certain things about the follow-on power planning.

#### Substance of the analysis and conclusions in 1994

- “adequacy,” “efficiency” and “reliability”
  - well-understood terms in the industry, and so we will use those meanings
  - again, recognized that the fish and wildlife operations make the power system to some extent less adequate, etc., but that alone is not a reason for concern, just expected
  - in general: satisfying these three concepts was really just a matter of time and money - identify in fish and wildlife program analysis possible effects on adequacy, reliability, etc., and then solve in power plan resource strategy
  - Council did recognize there can be a bright-line limit that would justify rejecting a program measure - CRITFC recommended flow measures that analysis showed would or could result in a failure to refill at critical water, presenting potentially serious problems for system reliability, etc. - only time a program measure has been rejected based on the AEERPS analysis and the standard in Section 4h5
- Whether the power system remains “economical” is what most people cared about then (and now); how to analyze?
  - again, recognized this as a “relative” consideration, as we knew the supply would cost more with the fish and wildlife program and thus be less economical in that sense
  - main context or focus is on the *region’s* economy
  - comparison to rates elsewhere in nation is part of it, but not all
  - look at impact on region’s economy; also look at impact on important sectors of region’s economy (types; geographic regions)
  - in this aspect of the analysis, program’s financial impact on the regional power supply and regional economy was significant and measurable but not exceptional or problematic – and especially, not a factor significant enough by itself to be an issue
  - but, also do need to focus the analysis on Bonneville and its financial situation and future: If Bonneville’s power is uneconomical for region compared to alternatives/market,

- Bonneville ultimately not be able to generate revenue to cover obligations the Act imposes, including fish and wildlife.
- so Council looked at Bonneville, too – significant analysis, but no magic threshold; the analysis was in many ways more important than the conclusion; not clear what would be the AEERPS implications if the Council couldn't see light at the end of the Bonneville tunnel, other than it would not be fair or right to put the onus only on fish and wildlife - this was a system problem; saw a path out in 1994 conclusion but needed more study and regional work
  - Post-1994: same basic approach or template to the AEERPA analysis/conclusion/documentation used in subsequent fish and programs - 2003 mainstem amendments; 2009 program; 2014 program

## Now in 2019?

- In some ways we are in a situation similar to 1994: On the one hand, there may be little issue whether the *region's* power supply as a whole is adequate and economical, etc., and in the analysis of that regional issue the component of regional power supply costs represented by the Columbia fish and wildlife program is unlikely to be determinative – power supply adequacy, reliability, economics etc. will depend mostly on whether the region takes the necessary resource steps to keep the system adequate and reliable in the most low-cost, cost-effective way, etc. (e.g., add low-cost efficiency; add demand response; use existing gas resources more efficiently; add resources but not further overbuild new resources further than RPS standards; manage overall costs effectively; etc.)
- And yet on the other hand, as in the mid-1990s, we are in situation in which people are worried about *Bonneville's* financial situation and especially its ability to market power competitively a decade or so from now in a dynamic regional power market in which there will be lots of alternatives with less or at least fixed costs. This makes it difficult to assure that Bonneville will always be able to meet all of its important financial obligations and commitments at their current levels, including its commitments to continue funding fish and wildlife protection and mitigation under the Program at the appropriate scale. A Bonneville financial problem; not a regional AEERPS problem necessarily, and a Bonneville problem that is more systemic than just the component of fish and wildlife costs.
- There are obvious differences from the mid 1990s too, in both the power system dynamics and in the fish and wildlife program. One significant difference is how much more constrained Bonneville and the federal agencies are in terms of mandated fish and wildlife operations and fish and wildlife spending to comply with not just Northwest Power Act responsibilities but also ESA requirements, court orders, etc. Not sure if that has any relevance to the AEERPS analysis and conclusions, but it is something to ponder.
- With all these considerations, it is this fish and wildlife program – and the follow-on power plan – that are the pivots on which the Council can take a detailed look at the AEERPS considerations in both the regional and the Bonneville context and make some judgments and

recommendations as to how the region and Bonneville can move forward and continue to provide a responsible power supply while also meeting our obligations to protect and mitigate fish and wildlife affected by the hydrosystem.

- We do not propose to take a different *approach* to the AEERPS standard – its meaning, what factors to analyze, how to analyze, what considerations to take into account; how to document; etc. The approach first developed in 1994 remains a useful template. Not prejudging at this moment what the conclusions will be, but the approach should look familiar.