

NW Power and Conservation Council
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To Whom It May Concern,

As the Northwest Power and Conservation Council prepares their annual report to Congress, great attention should be given to the results of the recently completed Seventh Power Plan. From hundreds of hours of computer time, which modeled eight hundred water years and several special case scenarios, a Least Cost Resource Strategy resulted. Letting Congress know of these results should be the focus of your upcoming letter.

Key Findings (from 7th Plan’s Resource Strategy Scenario Analysis, September 9, 2015)

1. Least Cost Resource Strategies consistently rely on Conservation and Demand Response to meet nearly all forecast growth in regional energy and capacity needs.

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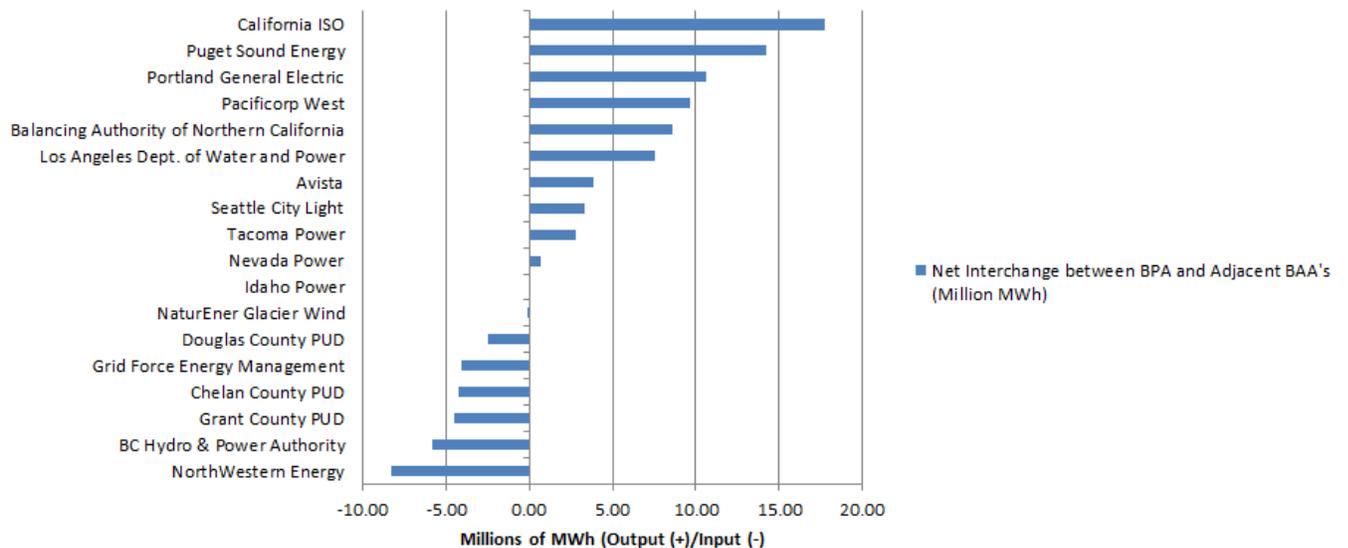
4. Northwest Exports Play a Significant Role in Regional Resource Development.

The Snake River Dam Removal scenario (aka. Planned Loss of Major non-GHG Emitting Resource) relies upon Conservation and Demand Response. But mostly, a reduction in Power Exports plays a significant role in the Dam Removal scenario of the Seventh Power Plan's Least Cost Resource Strategy.

Strategy: Export Less

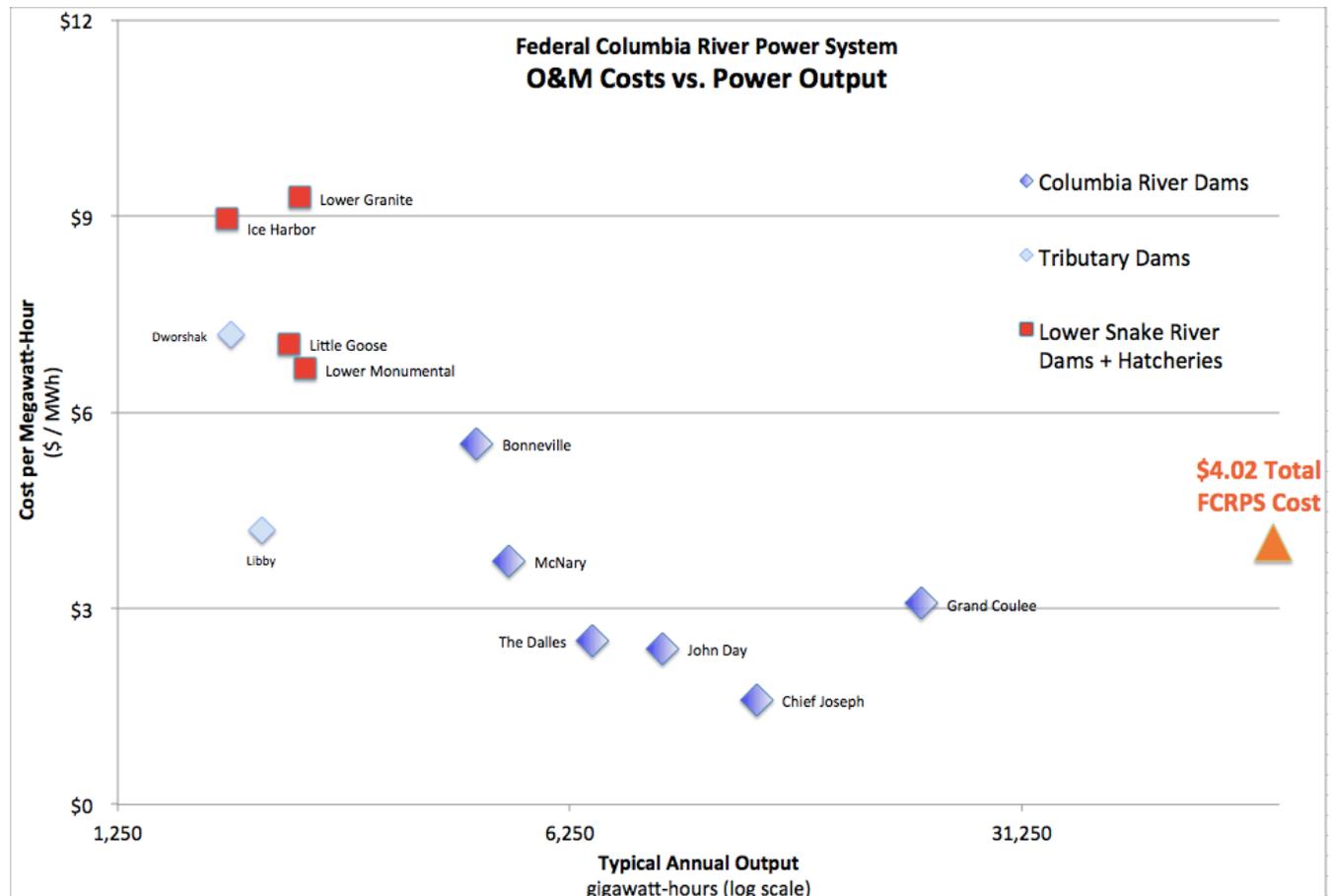
For over a decade now, one-quarter to one-third of the Federal Columbia River Power System (FCRPS) electricity production is exported to three California Balancing Authorities (California ISO, Balancing Authority of Northern California, Los Angeles Department of Water and Power). This is power that is surplus of regional needs.

Net Interchange between BPA and Adjacent BAA's (Million MWh)



Source: 2015 Annual Electric Balancing Authority & Planning Area Report, Part II, Schedule 5, "Balancing Authority Area Scheduled and Actual Interchange"

These "surplus sales" add to the revenue side of Bonneville Power Administration's books. When market prices are high, these substantial revenues can contribute to a lowering of BPA power rates. But when market prices are low, or when by comparison the cost of production is high, these "surplus sales" may actually add to BPA power rates. Such is currently the case with low natural gas prices duly noted in the Council's Seventh Power Plan.



Data Sources:

[Integrated Program Review & Capital Investment Review Detail Publication, BPA, 2016](#)
[Federal Columbia River Power System Full Asset Strategy, BPA, 2016](#)

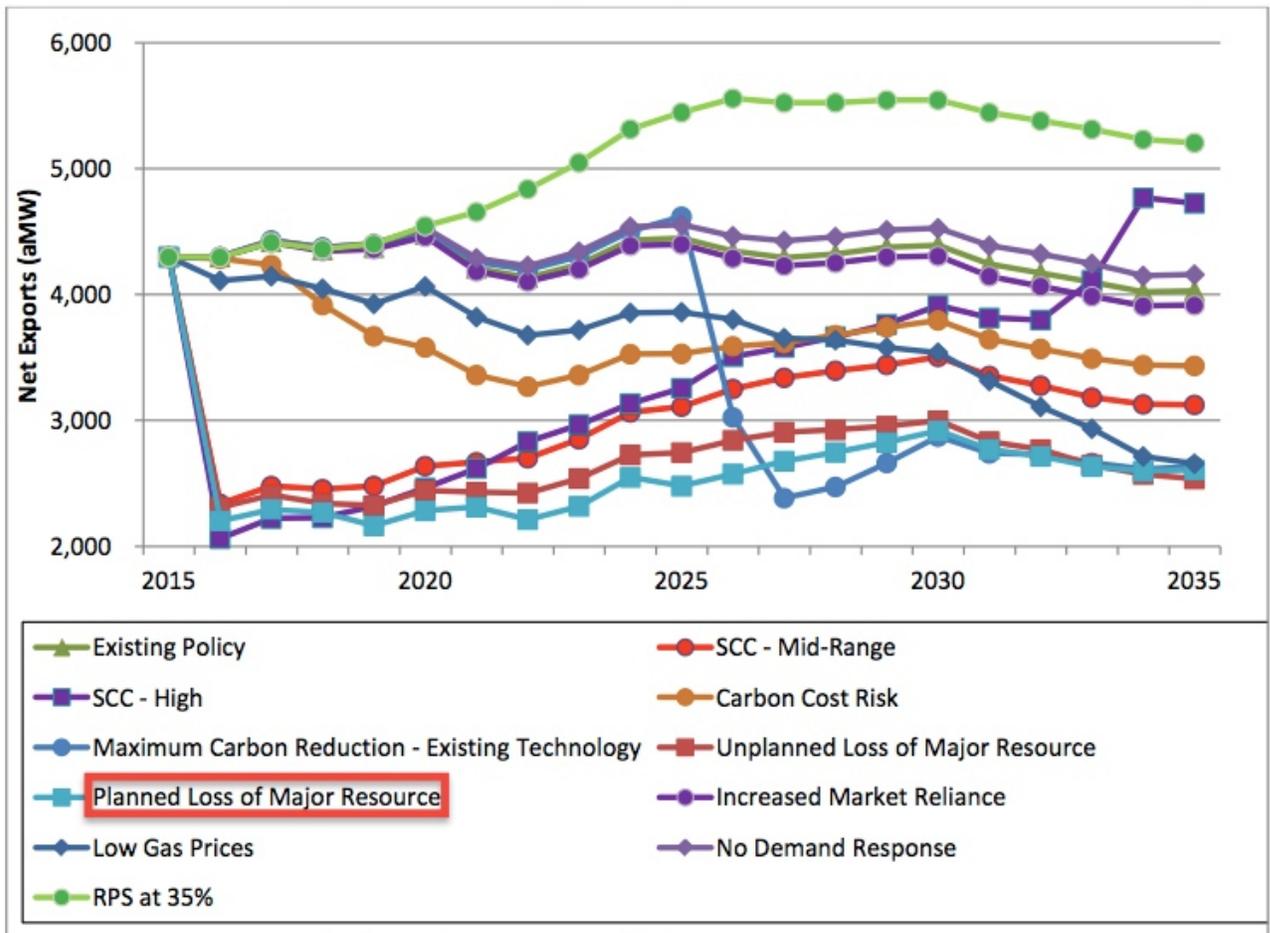
With market prices now typically running below Bonneville Power Administration Priority Firm Tier 1 Power rates of \$32 - \$34 per megawatt-hour, (see BPA's [Fact Sheet](#)), it should come as no surprise that the shedding of high cost producers would be a prudent economic choice in developing a Least Cost Resource Strategy. The draft of the Seventh Power Plan underscores this point with its Figure 3-14 titled "Average Annual Net Regional Exports for Least Cost Resource Strategies (see next page).

Mid-C Prices in \$/MWh

Source: Power Ops report regularly emailed by BPA's Josh Warner

	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
2015	23.05	18.83	18.51	19.75	27.05	#N/A	40.20	31.50	26.98	23.13	21.18	21.34
2016	22.76	16.70	13.03	12.14	14.69	#N/A	31.15	35.27	28.01	22.98	19.06	#N/A

Figure 3 - 14: Average Annual Net Regional Exports for Least Cost Resource Strategies



Oddly, this Figure 3-14 graphic did not make it into the Final version of the Seventh Power Plan nor was it included in the appendix along with all the other graphics from the draft plan. After hearing my many oral Public Comments over the past year, one should be well aware of this suspicious omission.

Seventeen months ago, a heat wave lingered over the Pacific Northwest. Of the more than four thousand Sockeye adults crossing Bonneville Dam aiming for their natal spawning grounds in Idaho, ninety-nine percent died on their upstream journey. The Lower Snake River reservoirs held lethal-temperature reservoir water. This heat also flowed downstream adding heat to the warm reservoirs of the Lower Columbia River. You've heard the testimony before; the warm water reservoirs were fully responsible for this dismal run of Idaho's Sockeye.

Without question, the Lower Snake River reservoirs are acting opposite to your Endangered Species Act directive of seeking the conservation of listed species. Judge Michael Simon has highlighted this point.

E. Designated Critical Habitat (page 15 - Opinion and Order, Case No. 3:01-cv-00640-SI)

Under the Endangered Species Act, federal action may not be taken if it is likely to result in “destruction or adverse modification” of designated “critical” habitat of listed species. The Endangered Species Act defines “critical habitat” to include those areas with the physical or biological features “essential to the conservation” of listed species. “Conservation,” in this context, means “the use of all methods and procedures which are necessary to bring any endangered species or threatened species to the point at which the measures provided pursuant to this chapter are no longer necessary.” NOAA Fisheries has designated critical habitat for 12 of

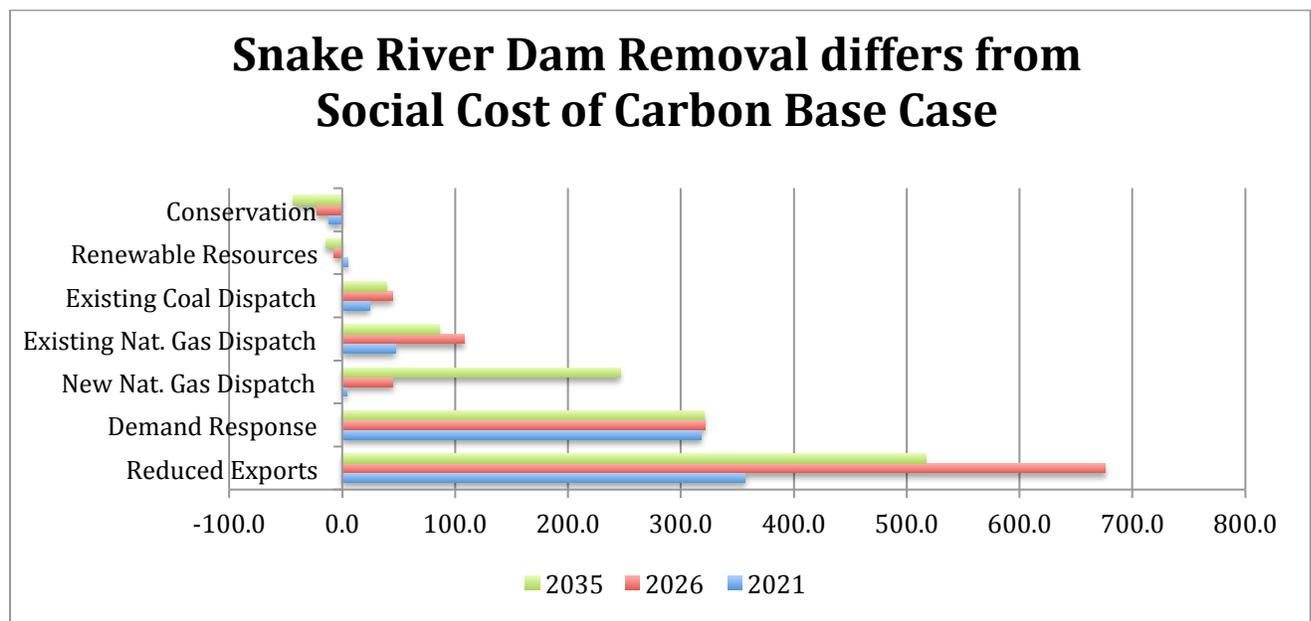
the 13 relevant listed species. The designated critical habitat includes the migratory corridor, and NOAA Fisheries concluded that “safe passage” through the migratory corridor, water temperature, water quantity, and water quality are some of the primary constituent elements of this critical habitat.

NOAA Fisheries acknowledges that the migration corridors, among other designated critical habitats, are degraded, are not functional, and do not serve their conservation role. In this situation, where critical habitat is already severely degraded and the operation of the FCRPS has been found to adversely modify critical habitat, questioning whether the suite of 73 reasonable and prudent alternatives is sufficient to allow this degraded habitat to retain its current ability to someday become functional fails to comply with the congressional directive of the Endangered Species Act. NOAA Fisheries must analyze whether the federal action will adversely modify—meaning alter in a manner that appreciably diminishes the value of critical habitat for either survival or recovery of the listed species—the designated critical habitat. Simply maintaining the status quo when there is severely degraded habitat that does not serve its conservation role and will be adversely modified unless changes are made to the operations of the FCRPS does not suffice. The reasonable and prudent alternatives need not restore habitat to a fully functioning level, but they must at least include improvements sufficient to avoid adverse modification.

Who might be interested in concealing important information from Congress?

Much to the dismay of Save Our Dams advocates, the Seventh Power Plan's Least Cost Resource Strategy for the "Snake River Dam Removal" scenario (aka. Planned Loss of a Major non-GHG Emitting Resource), does not support their often repeated contention that Lower Snake River dam removal will "devastate" the economics of the Pacific Northwest; Not even close.

The Least Cost Resource Strategy finds that reducing surplus Power Exports and providing Demand Response services is all that it will take to meet the Northwest Region's power needs without the Lower Snake River dams being in place. This will NOT bring about a rise in power rates, as the Bonneville Power Administration's own numbers clearly show. And if Lower Snake River Compensation Plan hatcheries are shuttered, the cost savings will most certainly pressure Bonneville's rates lower (See FCRPS O&M Costs vs. Power Output graphic above). Those four dams are economic losers.



Moreover, the rate of Conservation called for in the Seventh Power Plan, is enough to replace the power output of one Lower Snake River dam each and every year. Congress needs to know this.

“It doesn’t matter how smart you are, you have to have the best information possible to make the best decisions possible.” -- President Obama responds to Trevor Noah on The Daily Show

The Endangered Species Act makes it clear that you, as an employee of the federal government, are to work towards the conservation of listed species. Doing otherwise is punishable by a fine, jail time or both. Acting in a legal manner is sufficient but the public also expects that your agency to be honest, transparent and morally responsible. I appreciate your consideration of this comment.

Sincerely,

Scott Levy
bluefish.org

Promoting an open and honest dialogue concerning the plight of Idaho's wild Salmon and Steelhead.

Before the Name Change

(From Slide 19 of NW Power & Conservation Council March 11, 2015 PowerPoint [presentation](#).)

Scenario Name:

Major Resource *Uncertainty* Anticipated Loss of Major Resource(s) (e.g., Snake River Dam Removal)

Scenario Description:

Determine the resource strategies best suited to managing the loss of a major hydro resource

Key Stress Factors / Constraints Tested

Cost and risk associated with replacement of existing hydro-generation.

Delineated by 4B:Loss of Major Resource - 2C:Existing Policy with GHG reduction risk/target.

Reduction in export of surplus electricity

Data behind Figure 3-14 from Draft 7th Power Plan
Net Imports (Negative = Region is a net exporter) (aMW)

Year	Scene 2B	Differ 4A-2B	Percent Difference
2016	(2338)	29	-1.2%
2017	(2479)	72	-2.9%
2018	(2455)	114	-4.7%
2019	(2481)	156	-6.3%
2020	(2637)	195	-7.4%
2021	(2668)	238	-8.9%
2022	(2700)	276	-10.2%
2023	(2851)	312	-10.9%
2024	(3065)	338	-11.0%
2025	(3110)	365	-11.7%
2026	(3251)	408	-12.6%
2027	(3339)	432	-12.9%
2028	(3396)	470	-13.8%
2029	(3442)	486	-14.1%
2030	(3505)	507	-14.5%
2031	(3355)	522	-15.6%
2032	(3277)	508	-15.5%
2033	(3183)	535	-16.8%
2034	(3129)	556	-17.8%
2035	(3124)	588	-18.8%

Scenario 4A - Unplanned Loss of Major Non-GHG Emitting Resource (which includes a Social Cost of Carbon)

Scenario 2B - Carbon Reduction - Social Cost of Carbon

(From spreadsheet "**Data behind Figure 3-14 from Draft 7th Power Plan**", provided by NW Council Power Planning Staff under direction from Ben Kuajala).

Least Cost Resource Strategy of "Snake River Dam Removal" Scenario

(From RPM Scenario Results Data, August 25, 2015)

	Scene 2B	Scene 4A	Differ 4A-2B
Revenue Requirement per MWh	\$93	\$93	\$0.21/MWh

Average Residential Monthly Bill	\$102	\$103	\$0.32/Month
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Conservation

by 2021	1427	1415	-12.1 aMW
by 2026	3135	3113	-22.3 aMW
by 2035	4529	4486	-43.1 aMW

Renewable Resources

by 2021	2	7	5.0 aMW
by 2026	61	43	-7.1 aMW
by 2035	340	290	-14.4 aMW

New Gas Generation Dispatch

by 2021	5	9	4.0 aMW
by 2026	23	68	44.7 aMW
by 2035	328	574	246.1 aMW

Demand Response

by 2021	696	1014	318.2 aMW
by 2026	697	1019	321.3 aMW
by 2035	698	1019	320.5 aMW

Existing Resource Dispatch

Gas

in 2021	3178	3225	47.3 aMW
in 2026	3072	3180	108.0 aMW
in 2035	2911	2997	86.0 aMW

Existing Resource Dispatch

Coal

in 2021	1132	1156	24.1 aMW
in 2026	972	1016	44.5 aMW
in 2035	1148	1188	39.3 aMW

Net Market Exports (Exports minus imports)

in 2021	2668	2312	-356.7 aMW
in 2026	3251	2575	-675.9 aMW
in 2035	3124	2608	-516.8 aMW