



Forging our path ahead

A discussion with Clallam PUD

January 13, 2020

Public Power Council Overview

- Since 1966, PPC has helped consumer-owned NW utilities have a unified voice on key energy issues
- We focus on the FCRPS and the Bonneville Power Administration at the regional and federal levels
- PPC represents more than 100 public power entities across 5 states – very small to very large
- Affordability and reliability are at our core, and it involves us in both power and transmission
- From BPA rates and contracts to power supplies to costs for fish and other investments – we're on it
- Staff includes diverse group of professionals with expertise in economics, communications, law, government affairs and more



Public Power Council Overview

All PPC initiatives boil down to this simple but important fundamental view about BPA competitiveness



Toward 2028: PPC initiatives

Making BPA more competitive via...

- Cost allocation efforts
- Fish & Wildlife costs
- Columbia River Treaty negotiations
- Carbon fee payment allowances
- EIM and other market enhancements
- Ongoing rates, IPR processes
- BPA and partner capital and O&M spending
- Diligence around CRSO outcomes/impacts



Toward 2028: Our Public Power Community

- Stick together: We will have differences, but collaboration is key
- Share your community perspective and context
- Help us advocate for transparency
- Join us where and when you can – public officials like constituents
- Share your ideas on strategy and vision
- PPC will be the nexus for public power negotiation with BPA on future contracts

PPC Value Proposition

- PPC is a lean organization dedicated to protecting the value of the federal hydro and transmission systems for the benefit of public power
- In this last BPA rate cycle, PPC advocated for budget, rate and policy positions that were reflected in these final BPA decisions:
 - \$56.5 million reductions in annual program expenses below previous levels
 - \$11.2 million surplus sales credit increase per year
 - \$10 million reduction in maximum financial reserves surcharge
- In total this is \$77.7 million per year of benefit in current rates compared to an operating budget of \$2.3 million

Status of BPA Financial Health

- Recently, there has been a trend of hyperbolic rhetoric that BPA is going “bankrupt” or heading for a financial “cliff”
- BPA has long-term strategic challenges, but also valuable underlying assets and strong overall financials
- More work to be done, but encouraging signs
 - Reaffirmed high investment-grade credit rating
 - Progress on cost control and spending prioritization
 - Decreasing leverage (i.e. debt-to-asset ratio)
 - Access to low-cost financing for future capital investments in generating and transmission assets

Status of Pacific Northwest Power Supply

- Rapidly changing energy landscape in the West
 - Increasing intermittent wind and solar resources
 - Retirements of baseload coal and natural gas
 - Affects mix in the region AND ability to import
- Results in looming shortage of flexible peaking capacity
- Supported by extensive analytics:
 - Northwest Power Planning and Conservation Council (NPWCC)
 - Northwest Power Pool (via E3 Consulting)
- Loss of any additional flexible capacity increases the issue

What is being done?

- Northwest Power Pool working to establish new “Resource Adequacy” standard for the region
- Funding, support and staffing for this effort comes from all of the public utilities and investor-utilities operating generation and balancing authorities plus BPA and BC Hydro
- Some entities in Washington supporting this consensus position and effort:
 - Seattle City Light, Snohomish PUD, Tacoma Power, Puget Sound Energy, Avista, Pacificorp, Chelan PUD, Douglas PUD, and Grant PUD
- Extensive further information and analysis available on NWPP website

Power Supply Role of Lower Snake River Dams

- 4 hydroelectric projects
- 940 aMW of energy average annually
 - 561 aMW of energy during dry or “critical” conditions
- 3,033 MW of nameplate capacity
- 2,650 MW of “sustained peaking” during winter
 - Ability to meet peak loads during extended cold snap (10hrs/day for 5 days)
- Instantaneous response to variations in demand to maintain grid stability



Costs of Operation and Maintenance

- O&M expenses steady at less than \$50 million per year
- Lower Snake River Compensation Plan - \$31 million per year
 - Hatchery plan specific to Lower Snake projects
- Low levels of incremental capital investment
- Taken together, \$14 per MWh levelized cost of generation
 - All known and forecasted costs over 20 years
- Refreshed numbers coming in the next few months
 - No expectation of significant change



What are the alternatives?

- Prudent comparison of capital investment alternatives requires comparison of relevant costs and benefits between alternatives
- In addition to the costs that could be avoided by terminating the projects, what is the cost of replacement capacity and energy?
- *Output cannot be replaced reliably with existing resources*
 - Comparison to spot market prices is not valid economics
- Every credible study on this topic has concluded that replacing the Lower Snake River Dams would result in a combination of:
 - Increased costs
 - Increased green house gas emissions
 - Lower grid reliability

What are the alternatives? (continued)

- Entities that have studied the cost and benefits of Lower Snake River Dam alternatives include:
 - Northwest Power Planning and Conservation Council
 - Northwest Power Pool and Public Generating Pool (via E3 consulting)
 - Northwest Energy Coalition (via Energy Strategies consulting)
 - Northwest River Partners (via EnergyGPS consulting)
 - BPA
- Different methodologies and scopes, but all the same conclusions
- Even Northwest Energy Coalition, which advocates for dam removal, finds replacement power cost would be a *minimum* of \$400M *per year*

What if something big changes?

- Nothing prevents reassessment of costs and benefits in the future
- “Real Option”
 - The ability to change or abandon a plan of capital investment related to a physical asset



Response to Rocky Mountain Econometrics

- PPC's background fact sheet on the Lower Snake River Dams was given to Anthony Jones of Rocky Mountain Econometrics (RME) for review
- PPC staff has closely reviewed the RME analysis
- RME conclusion that Lower Snake project output is “surplus” to BPA or regional need is incorrect
 - Based on flawed understanding of BPA operations and meaning of net interchange from BPA balancing authority
- Prior RME analysis of Lower Snake project costs is incorrect and has no relationship to the actual costs of operating the projects
- Overall RME analysis of BPA and hydropower issues is based on fundamental errors and should not be given substantial weight by decision makers

The Path Ahead

- Discussion today has been focused on power supply
- Hydropower operations does impact fish and wildlife, and these effects need to be mitigated
- Public power and BPA have shown long-term commitment to science-based and cost-effective mitigation
- Ultimately the balance of costs and benefits of operating the hydro system must be balanced under the requirements of federal law including the National Environmental Policy Act and Endangered Species Act
- However this balance is ultimately determined, the power supply benefits of the Lower Snake River projects are large and unambiguous
 - Consensus position in the regional utility community and even removal advocates

Key Takeaways

- BPA faces challenges, but is also a source of value to the region and public power
- The Lower Snake River Dams provide tremendous operational and financial value relative to alternative power supply sources
- Public power and BPA have demonstrated long-term commitment to fish and wildlife mitigation
 - Regardless of the future path, it is time for incremental costs of mitigation to be shared in alignment with social benefits
- PPC will continue to work hard to ensure that BPA provides the most value possible to public power customers both now and in the future



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QUESTIONS?

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