

THE LOWER SNAKE RIVER DAMS POWER REPLACEMENT STUDY

FACT SHEET

Reliable and affordable clean energy options that help restore salmon and protect the environment

ABOUT THE STUDY

The study was commissioned by the NW Energy Coalition and conducted by Energy Strategies, an independent consulting firm whose clients include power producers, transmission developers, utilities, and government agencies.

WHAT THE STUDY FOUND

- Balanced portfolios of clean energy resources, including solar, wind, energy efficiency, demand-response, and storage can replace the power and energy services provided to the Northwest by the four Lower Snake River Dams.
- New gas-fired generation is not required to address regional capacity needs.
- Replacing the dams with clean and renewable resources provides superior or equal results to replacing them with natural gas for cost, carbon emissions, system reliability, and ability to meet peak load requirements.
- The cost of replacing the dams with balanced clean energy portfolios is small compared to the cost of the regional power system and would amount to not much more than a dollar a month on an average residential bill.
- Balanced portfolios of clean energy resources have only minor impacts on GHG emissions (about 1%). If implemented in conjunction with regional greenhouse gas reduction policies, substantial emission reductions can be achieved.
- Even more cost effective and environmentally efficient outcomes than the study found are possible. That's because the study did not try to identify an optimal mix of clean energy resources and its assumptions concerning the future costs of renewables were conservative.

WHAT THE FINDINGS MEAN

The Lower Snake River Dams Power Replacement Study has important implications for the federal agencies that own and operate the dams and who must, by court order, find an alternative management plan for the Columbia River power system that does not jeopardize the continued existence of salmon.

- <u>Dam removal isn't a choice between salmon and clean energy.</u> The study shows that replacing the Lower Snake River dams with clean and renewable resources is a viable, reliable, and affordable option. The study also offers a framework from which the federal agencies can draw as they conduct their own court-ordered analysis.
- <u>Even better solutions than the ones found by the study are possible.</u> The study demonstrates the viability of replacing the dams with clean and renewable energy resources. However, it did not seek to identify an optimal clean energy solution. The court-ordered process offers the federal agencies an opportunity to do just that.
- <u>A full study of dam removal needs to address factors beyond the scope of this study.</u> These factors include the cost of decommissioning the dams, but also what are likely to be the even greater savings from avoided dam rehabilitation costs and the elimination of ineffective fish restoration programs.

For more information visit NWEnergy.org/LSRDStudy

April 4, 2018

"The region can remove the four Lower Snake River Dams and replace the power they provide with a portfolio of conservation and renewable energy resources while maintaining grid and transmission reliability at levels equal to or better than the current system and with little or no increase in greenhouse gas emissions."

Energy Strategies, Lower Snake River Dams Power Replacement Study (April, 2018)

