



Priest Rapids Hydroelectric Project No. 2114

Item No.: H-1
April 17, 2008

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Good morning Mr. Chairman and Commissioners.

My name is Kim Nguyen from the Office of Energy Projects. Seated at the table with me are Jennifer Hill and Bob Easton from the same office, along with John Katz and Elizabeth Molloy from the Office of the General Counsel.

The draft order in Item H-1 issues a new 44-year license to the Public Utility District No. 2 of Grant County, Washington, for the Priest Rapids Hydroelectric Project.

Project Location

- Mid-Columbia River
- Seven-dam system
- Furthest downstream among 7 dams
- Hanford Reach: 52-mile unimpounded reach



The project is an integral part of the seven-dam mid-Columbia River Hydroelectric System, which is the single largest coordinated hydroelectric system in the country, at over 13,256 megawatts (MW).

The 1st two dams are federal dams while the next five are FERC-licensed.

The mid-Columbia River extends from the Grand Coulee Dam nearly 210 miles downstream to the Hanford Reach. The Hanford Reach extends for 52 miles is immediately downstream of the Priest Rapids Project, and is the only free-flowing, non-tidal stretch of the Columbia River in the United States. This reach provides substantial spawning habitat for salmon.

Project Developments

- Two developments
- 1,893 megawatts
- Ten turbines at each dam
- Two fish ladders at each dam and one downstream fish passage at Wanapum

WANAPUM DAM



PRIEST RAPIDS DAM



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The project has two developments, Wanapum and Priest Rapids, with integrated dams and powerhouses spanning the width of the river.

At 1,893 MW, the project is the 2nd largest, in capacity, under FERC license. The 1st is the Niagara Hydroelectric Project at 2,755 MW.

There are also two fish ladders at each dam and one downstream fish passage unit at Wanapum.

Salmon and Steelhead

- Upstream and downstream passage improvements
- Hatchery enhancement
- Habitat restoration
- Predator control
- Effectiveness monitoring

SALMON EGGS



CHINOOK SALMON



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The major issue for relicensing of the Priest Rapids Project is addressing effects on salmon and steelhead species, including two that are listed as endangered under the Endangered Species Act.

Chinook salmon, coho salmon, sockeye salmon, and steelhead are culturally and economically important fish in the region.

The draft license includes specific measures to:

- improve upstream and downstream salmon and steelhead passage facilities and operations,
- enhance hatchery facilities and increase stocking levels,
- perform habitat restoration projects,
- perform control programs for avian and fish predators of juvenile salmon and steelhead, and
- follow-up with monitoring to ensure the success and effectiveness of these programs.

Other Aquatic Resources

WHITE STURGEON



- Management plans: bull trout, white sturgeon, Pacific lamprey, and resident fish
- Water quality improvements and monitoring

SPILLFLOW MONITORING



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For other aquatic resources, the draft license includes management plans for bull trout, white sturgeon, Pacific lamprey, and resident fish.

To address water quality, the draft license requires implementation of a program to monitor water quality and improve total dissolved gas levels. Dissolved gases are important because saturation levels well in excess of 100 percent can cause gas bubble disease and mortality in fish.

Other Resources

CANOEING ON HANFORD REACH



- Wildlife habitat management
- Transmission line avian protection
- Cultural resource management
- Recreation management
- Shoreline management

THE WANAPUM INDIANS



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This draft license also includes measures for:

- wildlife habitat improvements, such as installation of waterfowl nesting platforms, raptor-proofing of transmission lines, and noxious weed control;
- evaluation, protection, and mitigation of nearly 700 archeological sites and protection of traditional cultural resources of the Wanapum Indians.
- recreational enhancements, such as additional campsites, picnic areas, and trails; and
- provisions for shoreline management.

Hydro Potential in the U.S.

CURRENT

- 96,000 MW of capacity in the U.S.
- 54,000 MW regulated by FERC



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In addition to the 1,893 MW of capacity from this project, there is a potential for significantly more hydro in the U.S.

There is currently 96,000 MW of hydro capacity in the U.S., of which 54,000 MW are regulated by FERC.

Hydro Potential in the U.S.

POTENTIAL

- **Pending Applications before FERC**
 - Conventional – 430 MW of additional capacity
 - Pumped Storage – 900 MW of additional capacity
- **Pre-filing**
 - Conventional – 448 MW
 - Pumped Storage – 2,783 MW
 - Kinetics - over 6,000 MW in preliminary permits

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Potentially due to tax credits, state renewable portfolio standards, and the high cost of oil, we are seeing a trend of increasing numbers of applications and requests for pre-filing consultation for new hydropower development. A substantial amount of this new capacity would be from pumped storage projects.

Pending before FERC are applications for conventional projects and pumped storage projects that would increase hydropower capacity by 430 MW and 900 MW, respectively.

Original projects currently in pre-filing have the potential to add 448 MW from conventional hydro and 2,783 MW for pumped storage. In addition, over 6,000 MW of capacity is being proposed from hydrokinetics projects. In total, over 10,000 MW of new hydropower is currently before the Commission. We have not seen this level of interest in more than a decade.

That concludes our presentation. We will be happy to answer any questions you may have.