SYSTEM OPERATIONAL REQUEST: #2005-15

The following State, Federal, and Tribal Salmon Managers have participated in the preparation and support this SOR: U.S. Fish & Wildlife Service, Idaho Department of Fish and Game, Oregon Department of Fish and Wildlife, the Washington Department of Fish and Wildlife, NOAA Fisheries, Nez Perce Tribe, Shoshone-Bannock Tribes, and the Columbia River Inter-Tribal Fish Commission.

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FROM:  David A. Wills, Chairperson, Salmon Managers

DATE:   June 2, 2005

SUBJECT:   Actions required at Lower Granite Dam when head differentials across VBS reach 1.5 feet.

SPECIFICATIONS:  According to FPP, page LWG-10, paragraph 8, “When a head differential of 1.5’ is reached, the respective turbine unit should be operated at a reduced loading, not more than 110 MW...clean VBSs as soon as possible...”. The Salmon Managers recommend that the COE operate to these specifications. We also recommend that the Project follow up with video monitoring of the VBSs after raking trashracks to ensure they are clear of debris.

JUSTIFICATION:  Juvenile fish facility mortality for subyearling Chinook at Lower Granite was 1.1% on June 2nd. Smolt monitoring personnel report that the mortalities showed high levels of descaling. That indicates fish are likely being injured due to high debris levels in trash racks or screens. The Project completed trashrack raking on Units 2, 3, and 4 on June 1 and completed the other two Units (5 and 6) by the end of the day on June 2.

We are concerned that after the trashracks have been raked that debris can accumulate downstream on the VBS. We therefore recommend the COE closely monitor the debris levels on the screens and clean them if necessary.

The COE should reduce loading of Turbines as a first step when the head differentials reach the criteria of 1.5 feet. Then the operators should proceed with trashrack raking rather than continue high loading while trashracks are being cleaned. The reduction in loading is a precaution to reduce impingement of fish on the screens.