MEMORANDUM

TO: Bob Heinith, CRITFC

FROM: Michele DeHart

DATE: June 28, 2005

RE: Requested Documents

In response to your request we have attached documents that reflect our activities relative to FERC licensed projects. The FPC provides technical support in the form of data compilations, summaries, and analysis which help the state agencies, tribes and US Fish and Wildlife Service develop recommended license conditions for FERC projects. Our recent activities relative to FERC licensed projects fall into the following categories:

- The Adult and Juvenile Fish Facilities Inspection Program.
  - This is a program of monthly inspections at Columbia and Snake rivers mainstem dams. The mid-Columbia FERC licensed dams include, Wells, Rocky Reach, Rock Island, Wanapum and Priest Rapids.
  - FPC staffs carry out inspections with the utility staff, trains inspectors to do monthly inspections and those inspection reports are sent to FPC for review. Any problems with operation of passage facilities is noted and brought to discussion and resolution with the Public Utility Operators.
  - An annual report is developed each year summarizing the inspections at all the projects, the problems and the resolution.
  - The FPC staff coordinates fish facility operations, modifications or emergency operations that occur at these FERC projects with regional fishery agencies.

- The Smolt Monitoring Program
  - The FPC staff designs and implements the Smolt Monitoring Program (SMP) which occurs throughout the Snake and Columbia Basin. The SMP has maintained a monitoring site at Rock Island Dam, a FERC licensed project.
  - The SMP has also included mark groups in the Mid-Columbia through the FERC licensed projects, originating above Wells Dam and Rock Island Dam.
The SMP at Rock Island Dam includes gas bubble trauma monitoring.

- **Fish Passage Analysis**
  - The FPC staff has completed several analyses of survival and juvenile fish passage through the Mid-Columbia Reach of five FERC licensed dams. This has generated juvenile migration timing, passage duration, survival estimation of juvenile fish through the Mid-Columbia FERC licensed dams.
  - Several unique analysis and data summaries have been completed that relate to FERC licensed projects and license issues within the scope of technical assistance to the agencies and tribes. These include:
    - The FPC staff wrote computer programs to quantify the number of dewatered redds which would occur under various flow and operation scenarios at Grant County FERC license project of Priest Rapids and Wanapum dams.
    - The FPC staff compiled a data base of hourly flows at Priest Rapids and Wanapum dams from 1962 through 2002 to provide a historical data base for FERC license operations at Priest Rapids and Wanapum dams.
    - The FPC staff wrote a computer program that simulates hourly flows at Priest Rapids dam under various operations constraints at Priest Rapids Dam.
    - The FPC staff analyzed actual Priest Rapids and Wanapum project operations in order to examine the flow fluctuations that occur in the fall period relative to the capability of the Priest Rapids projects to limit project operation fluctuations in the spring period.
    - The FPC houses and operates the MASS I model of the Hanford Reach.