

T1 FY06 Plan and Beyond

The FY06 plan will consist of four phases with the second through fourth phases being optional. The first Phase will consist of completion of the "Proof of Concept" evaluation. The second Phase is incorporation of a successful index test box from Phase I into the GDACS, at a project, as a demonstration. Third Phase is demonstration on other than a GDACS controlled turbine (some are not on GDACS). Fourth Phase is implementation in the BPA region.

PHASE I

Complete the "Proof of Concept" evaluation. The proposed steps are:

1. Allow the contractor more time and money to complete a version of the Index Test Box that complies with W9127N-04-D-0009.
 - a. Provide a modular form of the pre-developed software as required.
 - b. Provide required analysis software.
 - c. Perform demonstration actual index test on Unit 9 at McNary
2. Prepare a contract modification to allow completion by November 30, allow an additional \$15,000. Arrange a demonstration test on McNary Unit 9 during week October 31st.
3. Perform a Government analysis of the data collected on Unit 5 at McNary and Unit 9 at McNary.
4. Through the Unit 9 field test and analysis determine if contract has been complied with and if techniques and results prove the "Proof of Concept" for a Kaplan turbine.
5. Regardless of Unit 9 field test results, take contractor supplied device and software to Chief Joseph for testing on a Francis turbine with absolute flow measurement devices in place. Evaluate the device for use on Francis type turbines in December 2005.
6. Prepare a technical report on findings and recommend further actions by March 31, 2006.

PHASE 2

Should the "Proof of Concept" be proven for both or either Kaplan or Francis turbines. The proposed steps are:

1. Select a turbine design at a powerhouse for a demonstration test of the "Proof of Concept"—a small number of Kaplans is preferred, say 3 units at one of the Lower Snake projects.
2. Purchase under the W9127N-04-D-0009 an additional device as a commercial product (\$ 11,000) for installation on another GDACS controlled turbine.
3. Prepare a contract for incorporation of the "Proof of Concept" into the GDACS system as a self contained, stand alone, program module.

4. Prepare a contract for procurement of relative flow measurement equipment to send a data signal to the GDACS system.
5. Perform a demonstration test on the selected turbines and evaluate data for implementation on a larger scale.

PHASE 3

Should the "Proof of Concept" be proven for both or either Kaplan or Francis turbines. The proposed steps are:

1. Select a turbine design at a powerhouse for a demonstration test of the "Proof of Concept"—a small number of Kaplans or Francis is preferred, say 3 units.
2. Purchase under the W9127N-04-D-0009 an additional device as a commercial product (\$ 11,000) modified for installation on other than a GDACS controlled turbine with source code and build system.
3. Prepare a contract for procurement of relative flow measurement equipment.
4. Perform a demonstration test on the selected turbines and evaluate data for implementation on a larger scale.

PHASE 4

Develop a plan and schedule for implementation in GDACS controlled turbines in the BPA control region and in non-GDACS controlled turbines in the BPA region.