HOT Sub-group mtg. 3 Mar 06

T1 ITB Phase 1 Status

- Background: Phase 1"Proof of Concept" Field Test conducted McNary U9 Dec 14-16 05
- Limited range tested, but results promising
- Similar results obtained whether in AGC or local unit control
- Continuous monitoring of unit to identify "steady-state" operation and when to log data
- Interfaces with GDACS
- Numerous fixes & improvements identified
- Once corrected, "unattended and automatic" collection of data possible

T1 ITB Phase 1 Update

- Parallel test @ IH conducted Feb '06
- Results virtually identical to those obtained using COE data acq system
- No system crashes
- Data logging fix implemented
- Ready for "unattended, automated" data collection
- For Kaplan units this limited to 2 days data collection, after which no blade perturbation occurs
- For Francis units, longer duration feasible

- Shortcomings:
  - Flexibility of system very limited (cant readily add x-ducers, channels not currently sent to GDACS)
  - Blade perturbation issue for Kaplan units
  - Potential security hurdle?

Type 1 ITB Phase 2

- Demonstration project, multiple units: Francis Site, DWO
  - Procure additional GDACS ITB specific to DWO
  - Ideally abs flow output into GDACS before testing
  - Unattended, automatic operation for extended period – no blade perturbation req'd.

- Demonstration project, multiple units: Kaplan Site, LGR 4-6
  - Resolve GDACS/ITB communication issue
  - Use existing prototype ITB + additional procured ITB

T1 Future Work

- W-K Rel Flow Signal into GDACS
  - X-ducers w/ automated flushing system on each unit
    - 97 Kaplan & 27 Francis installations
  - E&D FY06
  - Implementation FY07 & FY08
    - Walla Walla District FY07
    - Portland & Seattle District FY08
- Develop new discharge tables