

Sheldon, Lee H NWP

From: Hays, Roger P NWW
Sent: Monday, August 30, 2004 10:36 AM
To: Richardson, Leroy J NWW; Wanderscheid, Kenneth M NWW; Fisk, Joseph W NWW
Cc: Lapeyre, Joseph A NWW; Coleman, Dave R NWW; Roberts, Timothy J NWW; McIver, Doug R NWW; Golladay, Roger M NWW; Gillespie, Chris M NWW; Johnson, Randall S NWW; 'LSheldon01@houston.rr.com'; 'DudleyDevices@aol.com'
Subject: RE: meeting with Doug Albright, Lee Sheldon, Rdf Wittinger

your welcome, t'was fun

-----Original Message-----

From: Richardson, Leroy J NWW
Sent: Monday, August 30, 2004 10:24 AM
To: Hays, Roger P NWW; Wanderscheid, Kenneth M NWW; Fisk, Joseph W NWW
Cc: Lapeyre, Joseph A NWW; Coleman, Dave R NWW; Roberts, Timothy J NWW; McIver, Doug R NWW; Golladay, Roger M NWW; Gillespie, Chris M NWW; Johnson, Randall S NWW; 'LSheldon01@houston.rr.com'; 'DudleyDevices@aol.com'
Subject: RE: meeting with Doug Albright, Lee Sheldon, Rdf Wittinger

Thanks, Roger. Your knowledge of the systems and their history was valuable and much appreciated.

Roy

-----Original Message-----

From: Hays, Roger P NWW
Sent: Monday, August 30, 2004 10:15 AM
To: Richardson, Leroy J NWW; Wanderscheid, Kenneth M NWW; Fisk, Joseph W NWW
Cc: Lapeyre, Joseph A NWW; Coleman, Dave R NWW; Roberts, Timothy J NWW; McIver, Doug R NWW; Golladay, Roger M NWW; Gillespie, Chris M NWW; Johnson, Randall S NWW; 'LSheldon01@houston.rr.com'; 'DudleyDevices@aol.com'
Subject: meeting with Doug Albright, Lee Sheldon, Rdf Wittinger

8/26/04 Meeting with Doug Albright, Lee Sheldon, Rod Wittinger.

Toured project and observed:

Existing unit 5 Seawell 3D cam and new 3D cam (Doug was very interested in the Panelmate setup as he believes this maybe the easiest place to extract the data he needs)

Location of the stilling wells (The out put of units 6&7 will have an affect on forebay and tailwater because of the location of the stilling wells.)

Location of the Winter Kennedy taps (the taps are located on the land side of the barrel on the elev 268 level, unit 9 still has a complete transducer setup left over from index testing)

Connection points for retrieving MW's, forebay, and tailrace info (Doug has the prints with the connection points to pick MW's, forebay, tailwater)

Prints (Doug has copies of the I/O network, panel prints, 3D cam layout)

Equipment (Doug took a working Soft PLC, key # 0010-21348, and Panelmate #33900,

back to Illinois)

Future: Unit 5 is slated to get the new cam installed 10-18 to 11-4 (Doug needs a copy of the independent prototype 3D cam program from unit 4 and a copy of the Panel mate software. When Doug returns he may need to coordinate his work with unit outages. There may need to be some criteria established for running units 6&7 because of level sensing)

At McNary Dam, I will need to meet with Leroy Richardson and Roger Hays.

Technical tasks to do there will be:

1. Inspect the governor and blade control system of Unit #5.
2. Figure out how the computer for the Index Test box computer and the hardware for the signal conditioner interface system will be installed.
3. Consider and discuss how the independent 3-D cam SoftPLC will interface with the existing GDACS and governor control SoftPLC. (Took pictures of RTU equipment)
4. Inspect headwater and tailwater transducer type and sensor location. forebay and tailwater pressure transducers are located between units 6&7, intake and tailrace
5. Determine the signal type from these water level measuring systems. 4-20 ma loop across a 250 ohm resistor
6. Find out how the gate and blade positions are measured, and what the signal types are. Took pictures of Blade/Gate loop connections
7. Inspect the Winter Kennedy taps, measure for plumbing fixtures to the transducer. Actual transducers setup is intact on unit 9. Valving is located on land side of unit at elevation 267.
8. Measure how much wire will be needed to connect WK transducer to the Index Test Box.
9. Inspect the Watt Transducer interface and determine how to connect into this current loop for the index test box. Needs to be able to connect to the MW signal at I/O block, has prints and connection points
10. Look at the rotating watt meter and figure out how to get a timing signal to go to Index Test Box as power output reference.
11. Look at the control system on Unit #1 if the Tuesday and Wednesday meetings indicate USACE is considering an interface to the Digital Governor project.

-----Original Message-----

From: Richardson, Leroy J NWW

Sent: Tuesday, August 24, 2004 1:24 PM

To: Wanderscheid, Kenneth M NWW; Hays, Roger P NWW; Fisk, Joseph W NWW

Cc: Lapeyre, Joseph A NWW; Coleman, Dave R NWW; Roberts, Timothy J NWW

Subject: FW: elaboration

FYI

Doug Albright will be here to take a look at our governors for the Blade Angle Index Test Block. I understand that we will not be able to provide him with stand alone 3D Cam software in a PLC at that time. I have reserved the 346 conference room. Come on up/down if you like.

Roy

-----Original Message-----

From: Wittinger, Rodney J NWP
Sent: Monday, August 23, 2004 5:19 PM
To: Richardson, Leroy J NWW
Subject: FW: elaboration

Leroy--FYI--Below is a message from Mr. Albright--It discusses what he expects to happen while here in Portland and at McNary. I have not read---if you see problems in what he wants to see at McNary let me know---Can you get us a conference space---I would suggest Meet at say 0830 Thursday at McNary (some place) 2 hr to talk and introduce, let him tell what he expects and plans to do, 1-2 hrs for looking-- Lunch, 2 hr for rehash, 1 hr to look some more, meet to define next steps and collect items that he needs and that COE can provide. If you wish you can make a more detailed agenda and include what he can and cannot do, what facilities he can use and where they are etc. safety, security.... Thanks Rod

-----Original Message-----

From: Lee Sheldon [mailto:lseldon01@houston.rr.com]
Sent: Friday, August 20, 2004 9:43 AM
To: Wittinger, Rodney J NWP
Cc: Ebner, David A
Subject: Fw: elaboration

----- Original Message -----

From: DudleyDevices@aol.com
To: LSheldon01@houston.rr.com
Sent: Friday, August 20, 2004 7:53 AM
Subject: elaboration

Lee,
I'd like to elaborate on the task list in the spreadsheet.

Tuesday 24 October

The primary task of this trip is to acquire the 3-D cam SoftPLC. It should be on its way here already. If it was sent last Friday as you indicated, it should be here by now. If it's not been sent when we get to McNary, I'll need to collect it when I get there and UPS it to myself.

This search and seize mission will include the four levels of software for the 3-D cam: the SoftPLC Operating System, the 3-D cam program, the 3-D cam data and the programming host interface package.

I would like to see the MockUp that was used for the original development of the 3-D cam. If allowed, I'd like to take some of the components of this unit to use in completing the turbine simulator we're building now.

The simulator will use a mechanical output of the SoftPLC computer to simulate the blade input signal. This will consist of a stepping motor with similar characteristics to the stepping motor currently on the 3-D cam on Unit #5. A potentiometer will be installed on the stepping motor to spoof the Winter Kennedy transducer signal. The output of the wiper of the pot will dip at the center of travel to simulate a decrease in flow. This logic of the Index Test Box program is essentially to seek a minimum flow -- all else being equal. The potentiometer will be moveable along the travel of the stepping motor to allow the simulated efficiency peak to be moved around so the