

Bluemner, Steven D

From: Cooper, Richard D  
t: Tuesday, October 11, 2005 3:59 PM  
o: OSAG; Witt, Warren A; Birk, Mark C; Schoolcraft, Steven J; DL AE PSS  
Cc: Scott, Jeffrey T; Hollenkamp, Thomas L; Bluemner, Steven D; DL TaumSauk - Everyone; Fronick, Charles J; Ratliff, Matthew M; Thompson, Phillip M; Buhr, Thomas A  
Subject: FW: Taum Sauk Problems

The diver visited today. He feels confident that the upper reservoir level xmtr piping can be straightened out but we have to develop/manufacture a new tie down system for the pipes. See attached file photo. The pipes are supposed to be attached to the cables. I will send out an email when we are ready to do this work. We may need a window of non-generation time with the pipes under water to straighten them. Then we'll need a period of time with the upper reservoir at 1525 or 1526 elev to mount the new tie down system. I don't know yet when this will occur. I assume this might have to occur on some weekend. We will work with ESO to schedule this work as soon as the tie down system material is ready.

Rick

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

From: Cooper, Richard D  
Sent: Monday, October 10, 2005 2:07 PM  
To: OSAG; Witt, Warren A; Birk, Mark C; Schoolcraft, Steven J; DL AE PSS  
Cc: Scott, Jeffrey T; Hollenkamp, Thomas L; Bluemner, Steven D; DL TaumSauk - Everyone; Fronick, Charles J; Ratliff, Matthew M; Thompson, Phillip M; Buhr, Thomas A  
Subject: FW: Taum Sauk Problems

We have a diver scheduled to look at the upper reservoir level xmtr piping tomorrow Tues, 10/11/05. Both units seemed to run fine this past weekend as far as vibration. Will let you know more after tomorrow's meeting with the diver.

Rick

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

From: Cooper, Richard D  
Sent: Friday, October 07, 2005 7:31 PM  
To: OSAG; Witt, Warren A; Power Supply, Supervisor; Birk, Mark C  
Cc: Scott, Jeffrey T; Hollenkamp, Thomas L; Bluemner, Steven D; DL TaumSauk - Everyone; Fronick, Charles J; Ratliff, Matthew M; Thompson, Phillip M; Buhr, Thomas A  
Subject: Taum Sauk Problems

We have several things going on at once and I'll try to explain each one and the impact. If we make it through the weekend we will address them on Monday.

- 1) At the upper reservoir: We have four 4" pipes going down into the reservoir that carry our pressure transducers that indicate upper reservoir level. A week or so ago we noticed that the reservoir was fuller than normal after pumpback was completed. We saw yesterday that these pipes have come loose from their mooring and have a bend in them down about 50 feet. We have been able to see this now because we have been finishing our normal daily generation run earlier in the day. This bend in the pipes gives us a false reading and causes the reservoir level to look lower than it actually is. Until these pipes can be re-attached we are lowering the pumpback shutdown setpoint to 1594, down from 1596. We want to give ourselves enough cushion so that we won't pump over the reservoir walls. We will be having a diver look the situation over next week to see if he can re-attach the pipes without draining the upper reservoir.

12/21/2005

~~Staff~~ Exhibit No. 18  
Case No(s). ES-2007-0174  
Date 8-21-07 Rptr KF

Ex 18

IMG128064

- 2) Down at the plant: Yesterday evening, 10/6, Unit 1 tripped on high vibration in generate mode. This morning, 10/7, Unit 2 tripped on high vibration in pump mode. Several other observations during this period of time have led us to believe that some epoxy material has come (is coming) loose from the tunnel liner that was installed last fall. This is different material than was installed in the upper reservoir. The epoxy material was installed in the tunnel to cover cracks in the steel liner. The size of the epoxy "patch" was about 1 inch thick, 6 feet wide and 100 feet long. Our tunnel drains are now flowing a full pipe of water like they were before we installed the epoxy patch. The vibration trip points were initially raised because we thought it was an indication problem. We have lowered them back to their normal levels. Both units ran in generate mode today with no noticeable problems.

What to do this weekend: We feel confident that lowering the upper reservoir level shutdown setpoint will keep us from over pumping the reservoir wall. We are not sure whether there will be more epoxy patch material that will turn loose and go through the turbines. With the vibration protection still working on the turbines this should protect them if more material is released. To do an inspection of the tunnel liner would require draining the upper reservoir. I will send out another email updating our situation next Monday.

Thanks,  
Rick Cooper

12/21/2005

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