

From: Barry Gordon
Sent: Thursday, November 2, 2006 1:52 PM
To: Ray, Howie; Knepper, Dave P.; Fiorello, Daniel J; Lambert, Craig; Kettering, David B.; Tamburro, Peter
Subject: RE: Privileged & Confidential--ITPR of DW water evaluation--2 main concerns/comments

Howie, et al.,

I just wanted to let you know that although the requested calculation is rather straight forward it is going to introduce additional chemistry terms such as moles (and people had trouble with ug/l, ppb and ppm), have several equations and add a couple of references and perhaps a figure.

Barry

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

From: howie.ray@exeloncorp.com [<mailto:howie.ray@exeloncorp.com>]
Sent: Thursday, November 02, 2006 10:10 AM
To: dave.knepper@exeloncorp.com; daniel.fiorello@exeloncorp.com; Craig.Lambert@exeloncorp.com; david.kettering@exeloncorp.com; Barry Gordon; Peter.Tamburro@exeloncorp.com
Subject: FW: Privileged & Confidential--ITPR of DW water evaluation--2 main concerns/comments
Importance: High

the following are the two pressing questions that MPR has at this time.
I believe they are easily answered but we need to enhance the documents to make it obvious.

Pete, please address question 1.
Barry please work on addressing question 2.

MPR will provide additional comments as they move on.

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

From: Schlaseman, Caroline [<mailto:cschlaseman@mpr.com>]
Sent: Thursday, November 02, 2006 12:09 PM
To: Ray, Howie
Cc: Nestell, Jim
Subject: Privileged & Confidential--ITPR of DW water evaluation--2 main concerns/comments
Importance: High

Howie--

Jim has 2 significant concerns that your team should start working on

OCLR00015433

ASAP:

1. Structural Integrity--The Tech Eval A2152754 E09 identifies UT measurements that are less than 0.736" and accepts them based on local acceptance criteria of 0.49" wall loss in an area 2" or less in diameter. Attachment 1, pages 4 & 5, of the Tech Eval identify 2 adjacent UT readings less than 0.736". The UT readings below and on one side of the low readings are above 0.736", but there are no readings above and to the other side. Therefore, it is unknown whether the area that does not meet global wall thickness requirements does or does not meet the local thickness requirements because the thinned area could extend beyond a 2" diameter circle. Although this area is above the 10'-3" water level which is the focus of this evaluation, there is a potential design basis compliance issue at this location. [Also, note that the white paper Section 2.9, "NDE inspections," does not discuss structural margins or impact of the UT measurements in the original area of the trenches in Bays 5 and 17. Additionally there should be a separate section that discusses structural margins.]

2. Chemistry (SIA report conclusion)--The SIA conclusion depends in part on the high pH of concrete pore water in contact with the DW shell. Although SIA addresses the issue of higher corrosion rates during outages when oxygen is present, chemistry data from samples reported in Section 7.3 show that the pH decreases rapidly during CRD rebuild operations, and in fact the protective pH cannot be assumed to exist during outages anywhere below the 10'-3" level in the DW. SIA should evaluate the effect of combined oxygen and lower pH on corrosion during outages to estimate how much corrosion will occur during each outage, and show by calculation that it is insignificant. This is a loose end, more than a "show-stopper". [Note that the Tech Eval, Section 2.5 "Water Samples," reports that pH measurements were taken on "initial water samples" (plural). Only one pH measurement is reported from the initial samples in the supporting documentation. If more than one measurement was made, this should be documented. Also, the water chemistry report, Attachment 7.3, should include a discussion of all water samples, including the initial ones, and pH results for all should be included.]

Please call me or Jim (703-519-0421) if you have any questions about these comments.

--Caroline

Caroline S. Schlaseman, PE

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