From: Scott Barber RI
To: R1Allegation
Date: 4/30/04 9:03AM
Subject: Fwd: Re: Allegation Follow Up - CRD Operation
Place: R1Allegation

Although not stated in the attached. This is for 2004-0027.

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RI

From: Marc Ferdas
To: Mel Gray; Scott Barber
Date: 4/29/04 5:02PM
Subject: Re: Allegation Follow Up - CRD Operation
Place: R1Allegation

Please see attached
>>> Scott Barber 04/27/04 03:42PM >>>
We had a "to do" for allegations process to observe CRD performance during restart. If I remember correctly, I think it was reasonably good. We need to document a few words to that effect, or if it wasn't good we need to say that. Could one of you do that by COB tomorrow?

CC: R1Allegation

Objective:
NRC inspectors observation of CRD performance during startup from maintenance outage (March 19 - April 14).

Results:
During the Hope Creek startup (April 8-14, 2004) PSEG experienced a total of 12 stuck control rods. Five of the 12 stuck under went scram time testing prior to their initial movement. Control rods (26-23, 30-31, 22-15, 38-11, 26-39, 30-19, and 26-35) were scram time tested on April 14. Operators entered abnormal procedure HC.OP-AB.IC-0001 each time they experienced a stuck control rod. The chart below summarizes the control rod performance and what actions they performed.

Control Rod	Condition	Actions Taken
45-15	Stuck not @ 00	Step I.2 - .2 Operated drive in both directions
22-11	Stuck @ 00	Step F.1 -.4 Operated drive in both directions, vent, and double clutch.
22-35	-Stuck @ 00 -Stuck not @ 00	-Step F.1 -.4 Operated drive in both directions, vent, and double clutch. *-Step I.1-I.2 Operated drive in both directions*
38-27	Stuck not @ 00	Step I.1-.4 Operated drive in both directions; raised d/p to 292 psid
26-51	Stuck @ 00	Step F.1-.4 Operated drive in both directions, vent, and double clutch.
50-27	Stuck not @ 00	Step I.1-.4 Operated drive in both directions; raised d/p to 293 psid
38-11	Stuck @ 00	Unstuck @ normal pressure
26-39	Stuck @ 00	Step I.1-.4 Operated drive in both directions; raised d/p to 444 psid
30-19	Stuck @ 00	Unstuck @ normal pressure
26-23	Stuck @ 00	Step I.1-.4 Operated drive in both directions; raised d/p to 480 psid
26-35	Stuck @ 00	Step I.1-.4 Operated drive in both directions; raised d/p to 300 psid(Rod double notching)

Summary:
Hope Creek had 6 control rods stick on startup and in two cases elevated pressures was used to free the rod (38-27 and 50-27). Hope Creek had 5 additional rods (38-27, 50-27, 26-39, 26-23, and 26-35) stick at position 00 following scram time testing. This result is somewhat expected, and why operators usually will perform control rod exercising during a outage.

Talking w/ operators they were satisfied w/ control rod performance coming out of the forced outage and believe that it was improved over past startups.

-Marc S. Ferdas, Resident Inspector-Hope Creek