

## NMC &gt; Sites &gt; Duane Arnold &gt; Corrective Action Process (CAP)

## Section 1

Activity Request Id: CAP050122

Activity Type: CAP

Submit Date:

6/1/2007 10:32:49 PM

One Line Description: P-1 check at 75% power exceeded mismatch limits in 2 of the 5 calculations

## Detailed Description:

6/1/2007 10:32:49 PM - MANKIN, DAVID L:

P-1 check required at approximately 75% power per IPOI 3 was unsat. The primary P-1 check had a mismatch value of -99.49%, outside the allowed mismatch range of +2.76% to -12.97%. This was expected due to known problems with AMAG UFM indications for 'A' and 'B' feedwater loop flows. The AMAG UFM values printed out on the P-1 check were both 0.00 Mlb/hr. Refer to CAP048900, CAP049083 and work order A77879. However, what was not expected was that one of the four alternate P-1 check calculations was also outside the allowed mismatch band of +2.76% to -12.97%. The alternate P-1 check calculation using "Unit Gross Heat Rate" determined a mismatch of -17.04%.

An electronic copy of the P-1 check results is attached to this CAP.

6/2/2007 12:48:39 AM - MANKIN, DAVID L:

The daily P1 check was performed at 0012 hours on 06/02/2007. The primary P1 check (Alt CTP/C179) was -99.68%, outside the allowable mismatch band of between +2.00% to -10.0%. All four alternate P1 check calculations, including the "Unit Gross Heat Rate" P1 check calculation were within the allowed mismatch band. The P1 check as determined by the "Unit Gross Heat Rate" calculation had a mismatch value of +1.20%.

A copy of the daily P1 check performed on 6/2/2007 is attached.

6/2/2007 12:55:33 AM - GORDON, THOMAS H:

Unit not "unite"

6/4/2007 2:28:44 AM - MANKIN, DAVID L:

On 6/4/2007, the daily P1 check per the alternate method of 'Unit Gross Heat Rate' was outside the allowed mismatch band of +2.0% and -10.0%. The calculated mismatch was +2.37%. Reactor power per computer point C179 was 1870 MWth. The Feedwater Correction Factor had been installed manually the previous day per STP NS440101. The daily P1 check for 6/3/2007 that was performed without the Feedwater Correction Factor being installed, was sat as determined by the alternate method of 'Unit Gross Heat Rate'. The P1 check mismatch was calculated by 'Unit Gross Heat Rate' method was 1.18%, within the allowed mismatch band of +2.0% to -10.0%. At that time, reactor power as determined by computer point C170 was 1860 MWth.

Electronic copies of the daily P1 checks for 6/3/2007 and 6/4/2007 are attached.

Initiator:	MANKIN, DAVID L	Initiator Department:	DOPS Operations DA
Date/Time of Discovery:	6/1/2007 10:11:34 PM	Date/Time of Occurrence:	6/1/2007 10:11:34 PM
Identified By:	Site-identified	System:	31.01 DA
Equipment # (1st):	(None)	Equipment Name (1st):	(None)
Equipment # (2nd):	(None)	Equipment Name (2nd):	(None)
Equipment # (3rd):	(None)	Equipment Name (3rd):	(None)
Site/Unit:	Duane Arnold		
Why did this occur?:	6/1/2007 10:32:49 PM - MANKIN, DAVID L: Unknown.		
Immediate Action Taken:	6/1/2007 10:32:49 PM - MANKIN, DAVID L: Discussed P-1 check results with RE. No cause for the alternate P-1 check calculation using "Unit Gross Heat Rate" being unsat could be determined. P-1 check would be performed again at 100% power. CAP written.		
Recommendations:	6/1/2007 10:32:49 PM - MANKIN, DAVID L: Have P-1 check results evaluated by Program Engineering and Computer Services.		

SRO Review Required?: Y

B-89

Section 2

**Operability Status:** NA **Compensatory Actions:** N

**Basis for Operability:** 6/2/2007 12:55:33 AM - GORDON, THOMAS H:  
Concern does not adversely affect installed SSC's or their supporting systems.

**Unplanned TSAC Entry:** N **External Notification:** N

Section 3

**Screened?:** Y **Significance Level:** (None)

**INPO OE Req'd?:** N **Potential MRFF?:** N

**QA/Nuclear Oversight?:** N **Licensing Review?:** N

**Good Catch/Well Doc'd?:** NA **Assigned Department:** (None)

**Vendor Repairable Item:** No