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10CFR 50.73

November 26, 2007

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Peach Bottom Atomic Power Station (PBAPS) Unit 3
Facility Operating License No. DPR-56
NRC Docket No. 50-278

Subject: Licensee Event Report (LER) 3-07-01

This LER reports a condition prohibited by Technical Specifications involving two Safety Relief Valves (SRVs) and one Safety Valve (SV) that did not meet their Technical Specification $\pm 1\%$ set point tolerance when tested in the laboratory. There are no regulatory commitments contained in the LER. If you have any questions or require additional information, please do not hesitate to contact us.

Sincerely,



Michael J. Massaro
Plant Manager
Peach Bottom Atomic Power Station

MJM/djf/IR 680967/653733/654019

Attachment

cc: PSE&G, Financial Controls and Co-owner Affairs
R. R. Janati, Commonwealth of Pennsylvania
INPO Records Center
S. Collins, US NRC, Administrator, Region I
R. I. McLean, State of Maryland
US NRC, Senior Resident Inspector

CCN 07-106

IER2
NRR

LICENSEE EVENT REPORT (LER)

(See reverse for required number of digits/characters for each block)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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4. TITLE
Laboratory Analysis Identifies Safety Relief Valves and Safety Valve Set Point Deficiencies

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REV NO.	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
10	4	2007	07	- 01	- 00	11	26	2007		05000
									FACILITY NAME	DOCKET NUMBER
										05000

9. OPERATING MODE 1	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply)			
10. POWER LEVEL 100	<input type="checkbox"/> 20.2201(b)	<input type="checkbox"/> 20.2203(a)(3)(i)	<input type="checkbox"/> 50.73(a)(2)(i)(C)	<input type="checkbox"/> 50.73(a)(2)(vii)
	<input type="checkbox"/> 20.2201(d)	<input type="checkbox"/> 20.2203(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(viii)(A)
	<input type="checkbox"/> 20.2203(a)(1)	<input type="checkbox"/> 20.2203(a)(4)	<input type="checkbox"/> 50.73(a)(2)(ii)(B)	<input type="checkbox"/> 50.73(a)(2)(viii)(B)
	<input type="checkbox"/> 20.2203(a)(2)(i)	<input type="checkbox"/> 50.36(c)(1)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(iii)	<input type="checkbox"/> 50.73(a)(2)(ix)(A)
	<input type="checkbox"/> 20.2203(a)(2)(ii)	<input type="checkbox"/> 50.36(c)(1)(ii)(A)	<input type="checkbox"/> 50.73(a)(2)(iv)(A)	<input type="checkbox"/> 50.73(a)(2)(x)
	<input type="checkbox"/> 20.2203(a)(2)(iii)	<input type="checkbox"/> 50.36(c)(2)	<input type="checkbox"/> 50.73(a)(2)(v)(A)	<input type="checkbox"/> 73.71(a)(4)
	<input type="checkbox"/> 20.2203(a)(2)(iv)	<input type="checkbox"/> 50.46(a)(3)(ii)	<input type="checkbox"/> 50.73(a)(2)(v)(B)	<input type="checkbox"/> 73.71(a)(5)
	<input type="checkbox"/> 20.2203(a)(2)(v)	<input type="checkbox"/> 50.73(a)(2)(i)(A)	<input type="checkbox"/> 50.73(a)(2)(v)(C)	<input type="checkbox"/> OTHER
	<input type="checkbox"/> 20.2203(a)(2)(vi)	<input checked="" type="checkbox"/> 50.73(a)(2)(i)(B)	<input type="checkbox"/> 50.73(a)(2)(v)(D)	Specify in Abstract below or in NRC Form 366A

12. LICENSEE CONTACT FOR THIS LER

FACILITY NAME PBAPS Unit 3, James Armstrong, Regulatory Assurance Manager	TELEPHONE NUMBER (Include Area Code) 717-456-3351
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANU-FACTURER	REPORTABLE TO EPIX
X	SB	RV	T020	Y	X	SB	RV	D245	Y

14. SUPPLEMENTAL REPORT EXPECTED	15. EXPECTED SUBMISSION DATE	MONTH	DAY	YEAR
<input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE)	<input checked="" type="checkbox"/> NO			

ABSTRACT (Limit to 1400 spaces, i.e., approximately 15 single-spaced typewritten lines)

Based on information received during the 10/4/07 - 10/6/07 time period from a laboratory performing Safety Relief Valve (SRV) / Safety Valve (SV) as-found testing, Site Engineering personnel determined that SRV / SV set point deficiencies existed with two SRVs and one SV that were in place during the Unit 3 16th operating cycle. The SRVs / SV were determined to have their as-found set points in excess of the Technical Specification allowable $\pm 1\%$ tolerance. All three SRVs / SV outside of their Technical Specification allowable range were within the ASME Code allowable of $\pm 3\%$. The cause of the three SRVs / SVs being outside of their allowable as-found set points is due to set point drift. The three SRVs / SV were replaced with refurbished SRVs / SV for the 17th Unit 3 operating cycle.

There were no actual safety consequences associated with this event.

There were two previous LERs identified.

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NARRATIVE

Unit Conditions Prior to Discovery of the Event

Unit 3 was in Mode 5 for its 16th Refueling Outage when the event was discovered during the 10/4/07 - 10/6/07 time period. The condition was discovered during routine laboratory as-found testing for Safety Relief Valves (SRVs) and a Safety Valve (SV) removed during the 16th Unit 3 Refueling Outage. There were no structures, systems or components out of service that contributed to this event.

Description of the Event

Based on information received during the 10/4/07 – 10/6/07 time period from a laboratory performing SRV (EIS: RV) and SV (EIS: RV) as-found testing, Site Engineering personnel determined that SRV / SV set point deficiencies existed with two SRVs and one SV that were in place during the 16th Unit 3 operating cycle. These three SRVs / SV had been removed during the 16th Unit 3 Refueling Outage and were sent to an off-site laboratory for as-found testing and routine refurbishment. Two of the SRVs and the SV were determined to have their as-found set points in excess of the Technical Specification allowable $\pm 1\%$ tolerance. All three SRVs / SV were within their ASME Code allowable $\pm 3\%$ tolerance. The three SRVs / SV as-found set points were as follows:

SRV Serial Number (S/N)	Required Set Point (psig)	As-Found Set Point (psig)	% Outside of Technical Specification Allowable Tolerance
19 - SRV	1124 - 1146	1149	+ 0.26%
81 - SRV	1124 - 1146	1148	+ 0.17%
BL-1095 - SV	1247 - 1273	1286	+ 1.02%

The two SRVs and one SV were replaced with refurbished SRVs / SV for the 17th Unit 3 operating cycle.

This report is being submitted pursuant to:

1. 10CFR 50.73(a)(2)(i)(B) - Condition Prohibited by Technical Specifications - Technical Specification Limiting Condition for Operation (LCO) 3.4.3 requires that 11 of the 13 SRVs / SVs be operable. Contrary to this requirement, three SRVs / SV were found with set points outside of the Technical Specification requirements. Additionally, on 7/25/07, it was discovered that the frequency of the In-service Testing Program for testing the BL-1095 SV was not complied with. As a result, an extension of the associated surveillance frequency was implemented based on a risk assessment allowed by Technical Specification Surveillance Requirement 3.0.3.

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Analysis of the Event

There were no actual safety consequences associated with this event.

The ASME Boiler and Pressure Vessel Code requires that the Reactor Pressure Vessel (EIIIS: RCT) be protected from overpressure during upset conditions by self-actuated relief valves. As part of the nuclear pressure relief system, the size and number of SRVs and SVs are selected such that the peak pressure in the nuclear system will not exceed the ASME Code limits for the Reactor Coolant Pressure Boundary. The 11 installed SRVs exhaust steam through discharge lines to a point below the minimum water level in the Suppression Pool. The 2 installed SVs discharge steam directly to the Drywell. The SRVs and SVs are located on the four main steam lines (EIIIS: SB) within Primary Containment. The SRVs are 'three-stage' valves consisting of a main valve disc and piston (third stage) operated by a second stage disc and piston displaced by either a first stage pressure-sensing pilot (for overpressure protection) or a pneumatically-operated mechanical push rod (for remote-manual operation). The SVs are direct-acting, spring loaded relief valves.

During Unit 3 Cycle 16 operations, there were no plant transients that required automatic SRV / SV operation. The as-found set points for the three SRVs / SVs that tested outside of their Technical Specification allowable range were slightly high. There were a total of six SRVs and one SV removed for testing and replacement during the 16th Refueling Outage. All three SRVs / SV outside of their Technical Specification allowable range were within the ASME Code allowable of $\pm 3\%$. An analysis determined that the aggregate as-found set point results were bounded by existing analyses, and therefore, there was no significant impact on the PBAPS design basis analyses for the cycle. One of the two SRVs (i.e. SRVs S/N 19) was also an Automatic Depressurization System (ADS) valve. The set point drift had no impact on the ADS or manual function of the valves.

This event is not considered risk significant.

Cause of the Event

The cause of the SRVs / SV being outside of their allowable as-found set points is due to set point drift. A historical review of SRV as-found test set points indicates that approximately 20% of valves tested over time do not meet the $\pm 1\%$ Technical Specification set point.

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NARRATIVE

Corrective Actions

The two SRVs and the one SV were replaced with refurbished SRVs / SV for the 17th Unit 3 operating cycle.

To be more consistent with industry practices, changes to the PBAPS licensing basis will be considered to allow for SRV / SV setpoint tolerances of $\pm 3\%$ as allowed by the ASME code.

Previous Similar Occurrences

There were two previous LERs identified involving SRVs / SVs exceeding their Technical Specification $\pm 1\%$ setpoint requirement. LER 3-05-04 reported a situation involving four SRVs having their as-found set points in excess of the Technical Specification allowable $\pm 1\%$ tolerance. LER 2-06-02 reported one SV having its as-found set points in excess of the Technical Specification allowable $\pm 1\%$ tolerance. The previous SRV / SV as-found setpoints were all within the $\pm 3\%$ ASME code allowable setpoint tolerance. Corrective actions addressing setpoint drift for these previous events were to replace the SRVs with different SRVs. None of the SRVs / SV reported in this LER (3-07-01), were the same as these previously reported SRVs / SV in LERs 3-05-04 and 2-06-02.