



Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
600 Rocky Hill Road
Plymouth, MA 02360

March 7, 2008

Kevin H. Bronson
Site Vice President

U.S. Nuclear Regulatory Commission
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Washington, DC 20555

SUBJECT: Entergy Nuclear Operations, Inc.
Pilgrim Nuclear Power Station
Docket No: 50-293
License No. DPR-35

Licensee Event Report 2008-001-00

LETTER NUMBER: 2.08.016

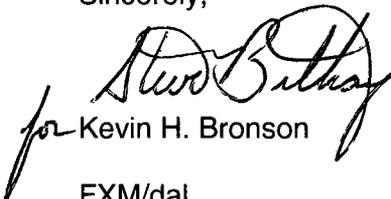
Dear Sir or Madam:

The enclosed Licensee Event Report (LER) 2008-001-00, "Failure to meet Technical Specification requirements for Secondary Containment" is submitted in accordance with 10 CFR 50.73.

This letter contains no commitments.

Please do not hesitate to contact Joseph Lynch, (508) 830-8403, if there are any questions regarding this submittal.

Sincerely,


for Kevin H. Bronson

FXM/dal
Enclosure

cc: Mr. James S. Kim, Project Manager
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NRR

LICENSEE EVENT REPORT (LER)

Estimated burden per response to comply with this mandatory information collection request: 80 hrs. 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 and information collection does not display a currently valid control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

1. FACILITY NAME PILGRIM NUCLEAR POWER STATION	2. DOCKET NUMBER 05000-293	3. PAGE 1 of 5
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4. TITLE
Failure to Meet Technical Specification Requirements for Secondary Containment

5. EVENT DATE			6. LER NUMBER			7. REPORT DATE			8. OTHER FACILITIES INVOLVED	
MONTH	DAY	YEAR	YEAR	SEQUENTIAL NUMBER	REVISION NUMBER	MONTH	DAY	YEAR	FACILITY NAME	DOCKET NUMBER
01	10	2008	2008	001	00	03	07	2008	N/A	05000
									N/A	05000

9. OPERATING MODE N	11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR: (Check one or more)											
	<input type="checkbox"/> 20.2201(b)			<input type="checkbox"/> 22.2203(a)(3)(i)			<input type="checkbox"/> 50.73(a)(2)(j)(C)			<input type="checkbox"/> 50.73(a)(2)(vii)		
	<input type="checkbox"/> 22.2202(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(3)(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(3)(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)			OTHER Specify in Abstract below or in NRC Form 366A		
	<input checked="" 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)					

12. LICENSEE CONTACT FOR THIS LER (

NAME Joe Lynch, Licensing Manager	TELEPHONE NUMBER (Include Area Code) (508) 830-8403
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13. COMPLETE ONE LINE FOR EACH COMPONENT FAILURE DESCRIBED IN THIS REPORT

CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX	CAUSE	SYSTEM	COMPONENT	MANUFACTURER	REPORTABLE TO EPIX
E	BD	DMP	P014	N					

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

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

On January 10, 2008 between 0700 and 1600 hours, on-line testing of the Reactor Building Isolation Control System (RBICS) ventilation dampers was performed. This testing identified that in the closed position, damper AO-N-78 did not fully close. The damper was reported to have a one-half inch gap opening across two of the four damper blades and did not meet Technical Specification requirements for full damper closure. Subsequently, Technical Specification compensatory actions to restore operability or to secure the damper were not taken for approximately 96 hours. Reactor power was at 100% prior to and during the event.

The cause of not performing the Technical Specification compensatory actions for 96 hours is failure of non-licensed, utility workers to report the damper closure failure to the Control Room.

Corrective action was taken to repair the damper. Corrective actions planned include development of enhanced damper maintenance procedure instructions, establishment of a damper preventative maintenance repetitive task, and overhaul of the RBICS isolation damper actuators. Additional corrective actions planned include event discussions with operations, maintenance and engineering personnel. The focus of these discussions will be to address pre-job brief adequacy; test failure reporting responsibilities; and to ensure that sufficient detail is included in maintenance work plans.

The event posed no threat to public health and safety.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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Narrative

BACKGROUND

The Reactor Building Isolation Control System (RBICS) is a subsystem of the Secondary Containment System (SCS). The SCS consists of four subsystems:

1. Reactor Building
2. RBICS
3. Standby Gas Treatment System (SGTS)
4. Main Stack

The purpose of the SCS is to limit radioactive material release during normal plant operation to within 10CFR20 limits and to limit the release to the environs of radioactive materials so that offsite doses from a postulated DBA will be below the guideline values of 10CFR100.

The RBICS trips the reactor building supply and exhaust fans, isolates the normal ventilation system and starts the SGTS in the event of a postulated LOCA inside the drywell or a postulated fuel handling accident in the Reactor Building. RBICS initiates the closure of isolation dampers in the normal ventilation system. Normally open, air-operated isolation dampers are provided on the discharge side of the Reactor Building and refueling floor supply fans. Two dampers in series are provided throughout the isolation system to provide redundancy. Both dampers fail closed upon loss of dc power to the solenoids or upon loss of instrument air to the dampers. The isolation dampers are designed to close after receipt of the secondary containment isolation signal. They also must close to allow the SGTS to reduce and maintain the Reactor Building at sub-atmospheric pressure during the postulated accidents.

On April 03, 2007, AO-N-78, AO-N-79 and AO-N-80 were tested and were found to not go fully closed on demand. Procedure 8.7.3, Secondary Containment Leak Rate Test, Attachment 1, Preventive Maintenance of Secondary Containment Isolation Dampers was used to perform the damper isolation test. These damper failures were evaluated and were found to meet operability requirements. Total blade gap area was less than that allowed per Calculation No. C15.0.3381, Allowable Secondary Containment System Leakage Area and Gaps at Doors (CR-PNP-2007-01172).

A secondary containment leak test was performed on April 5, 2007 per Procedure 8.7.3. Test results met Technical Specification requirements, but Secondary Containment leakage was noted to be increasing since 1995. The System Engineer suspected that the test results were due to isolation damper leakage. The System Engineer initiated maintenance work orders to re-inspect all of the isolation dampers to assure full closure and tight sealing. Dampers were to be tested on-line and repaired or replaced as necessary to attain tight sealing.

The on-line inspection of the Reactor Building Isolation Control System (RBICS) dampers began on January 8, 2008. This work was performed using Attachment 1 to Procedure 8.7.3 inspection requirements and acceptance criteria. These inspections ended on January 11, 2008. Damper AO-N-78 was the only damper that failed to fully close. AO-N-78 is the outboard isolation damper for Reactor Building supply fans VSF-203A & B located on Reactor Building 74 ft. elevation in Fan Room No. 3.

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Narrative

Technical Specification (TS) Limiting Condition for Operation (LCO) 3.7.C.1 requires, in part, that whenever the reactor is critical, secondary containment integrity must be maintained. TS Section 1.0 defines secondary containment integrity and requires as one of its conditions that all automatic ventilation system valves must be operable or secured in the closed position.

EVENT DESCRIPTION

On January 10, 2008 damper AO-N-78 failed to go fully closed on demand. In the close position, AO-N-78 had a one-half inch gap opening across two of the four damper blades. After the test the damper was re-opened and normal ventilation system operation was restored.

On January 14, 2008 a Maintenance Supervisor initiated WO 00135566 to repair damper AO-N-78. During the work order screening review it was recognized that the damper may be inoperable in its present configuration. This concern was forwarded to the Control Room Shift Supervisor for operability review. The System Engineer was contacted to evaluate the damper's gap opening area. The damper gap was determined to exceed the limit allowed per Calculation No. C15.0.3381, Allowable Secondary Containment System Leakage Area and Gaps at Doors. The damper was declared inoperable and the LCO action for TS 3.7.C.2.a was entered. Work activities were immediately initiated to repair the damper. Repairs were completed and damper operability was restored on January 14, 2008 at approximately 1830 hours.

CAUSE

The direct cause of the event was failure of the AO-N-78 damper to close. Troubleshooting by maintenance mechanics found that the damper blades were being stopped from closing fully by what appeared to be interference from the blade edge seal (jamb seal). The damper could be manually fully closed by moving the external linkage in the closed direction. This indicated that the actuator piston was not resting on its mechanical stop and blade travel was being stopped prior to full closure. The end seals were then inspected and re-cleaned. After re-cleaning the edge seal surfaces the damper was stroked several times, successfully fully closing each time. It appears that dirt/grime deposits on the edge seal surfaces increased the blade edge to edge seal surface friction enough to prevent the actuator from being able to fully close the damper. The actuator spring could not supply the necessary force to overcome the additional friction to fully close the damper or actuator output force has decreased over time such that it did not supply the necessary force to fully close the damper under fouled edge seal conditions.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

The cause of the failure to notify the Control Room was determined to be the result of unclear procedure instructions and inadequate assignment of test procedure reporting responsibilities. On January 10, 2008, maintenance was working WO 51534380. The work order was to inspect each RBICS isolation damper to determine sealing capability. Damper AO-N-78 was tested and found not to fully close when given a close signal from the control switch in the Main Control Room. The top and bottom blades had approximately a one-half inch gap between blade and blade stop when damper position indication indicated full closed. Results of this finding were not reported to Operations until January 14, 2008 due to misunderstanding of the inspection acceptance criteria and lack of identified deficiency reporting requirements. It appears that since this damper was previously found to not fully close but was still considered operable on April 03, 2007, the present condition was also thought to be acceptable. Results were recorded in the work order and in Procedure 8.7.3, Attachment 1. WO 00135566 was initiated on January 14, 2008 to repair AO-N-78. It was during the WO screening process on January 14, 2008 that it was recognized that AO-N-78 and the SCS may be inoperable.

CORRECTIVE ACTION

Corrective action taken included repairing AO-N-78. The damper was repaired and verified to go fully closed on January 14 at approximately 1830 hours. An extent of condition review was performed and determined that other Reactor Building isolation dampers were operable.

Corrective actions planned to prevent future damper failures include development of enhanced damper maintenance procedure instruction, establishment of a damper maintenance repetitive task, and initiation of a work order to overhaul the RBCIS isolation damper actuators.

Corrective actions planned to prevent failure to notify the Control Room of damper testing problems includes action to update on-line damper inspection procedures to address clear acceptance criteria and requirements for immediate corrective action. In addition, action will be taken to conduct event discussions with maintenance, operations, and engineering personnel. The focus of these discussions is to address pre-job brief adequacy, test failure criteria, reporting requirements, and requirements to ensure that sufficient detail is included in maintenance work packages.

These actions are being tracked in the Corrective Action Program (CR-PNP-2008-140 and CR-PNP-2008-143).

SAFETY CONSEQUENCES

The event posed no threat to public health and safety.

The plant was operating at 100% power prior to and during the time period when AO-N-78 failed to fully close and required repair. All other secondary containment isolation dampers were operable during this time period.

Failure of AO-N-78 to fully close on 1/10/08 would not have prevented the RBICS from performing its isolation function since the in-series damper (AO-N-79) in the same ventilation penetration was operable and capable of fully closing. This is apparent because AO-N-79 was demonstrated to fully close when tested January 10, 2008 and again on January 14, 2008. Thus the Reactor Building ventilation penetration opening would have been sealed by closure of AO-N-79 had secondary containment isolation been required.

Technical Specification 3.7.C requires that the secondary containment be operable in the RUN mode. The Secondary Containment integrity definition was not satisfied during this time period.

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TEXT (If more space is required, use additional copies of NRC Form 366A) (17)

Technical Specification definition for Secondary Containment Integrity means that the reactor building is intact and the following conditions are met:

1. At least one door in each access opening is closed,
2. The standby gas treatment system is operable,
3. All automatic ventilation system isolation valves are operable or secured in the isolated position.

Only item 3 was not satisfied during the period between January 10 and 14, 2008. However, the redundant damper in the same ventilation penetration pathway was operable and would have isolated in response to a Secondary Containment Isolation signal. On January 14, 2008 action was taken to restore secondary containment integrity. AO-N-79 was closed until AO-N-78 was repaired and returned to operable status.

REPORTABILITY

This report was submitted in accordance with 10 CFR 50.73(a)(2)(i)(B).

SIMILARITY TO PREVIOUS EVENTS

A review was conducted of Pilgrim Station LERs since 1974. The review identified a similar event that occurred in 1985. LER 85-18 addressed an event where a Secondary Containment damper (AO-N-90) would not fully close and compensatory actions were not taken for nineteen (19) hours. This event was reported as an event where Technical Specifications were not satisfied.

ENERGY INDUSTRY IDENTIFICATION SYSTEM (EIIS) CODES

The EIIS codes for this report are as follows:

COMPONENTS	CODES
Damper	DMP
SYSTEMS	CODES
Containment Leak System	BD