

Oyster Creek Generating Station
Route 9 South
PO Box 388
Forked River, NJ 08731

www.exeloncorp.com

10 CFR 50.73

June 10, 2009
RA-09-046

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

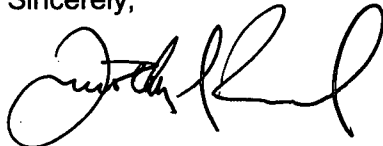
Oyster Creek Nuclear Generating Station
Facility Operating License No. DPR-16
NRC Docket No. 50-219

Subject: Licensee Event Report (LER) 2009-003-00, Manual Reactor Shutdown
Caused by Loss of Cooling to the Main Transformer

Enclosed is Licensee Event Report 2009-003-00, Manual Reactor Shutdown Caused by Loss of Cooling to the Main Transformer. This event did not affect the health and safety of the public or plant personnel. This event did not result in a safety system functional failure. There are no new regulatory commitments made in this LER submittal.

If any further information or assistance is needed, please contact James Barstow, Regulatory Assurance Manager at 609-971-4947.

Sincerely,



T.S. Rausch
Vice President, Oyster Creek Nuclear Generating Station

Enclosure: NRC Form 366, LER 2009-003-00

cc: Regional Administrator, USNRC Region I
USNRC Project Manager, Oyster Creek
USNRC Senior Resident Inspector, Oyster Creek
File No. 09054

JE22
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.

| | | |
|---|-------------------------------------|--------------------------|
| 1. FACILITY NAME Oyster Creek, Unit 1 | 2. DOCKET NUMBER 05000219 | 3. PAGE 1 OF 3 |
|---|-------------------------------------|--------------------------|

4. TITLE
Manual Reactor Shutdown Caused by Loss of Cooling to the Main Transformer

| 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 |
| 04 | 25 | 2009 | 2009 | - 003 | - 00 | 6 | 10 | 2009 | N/A | N/A |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER |
| | | | | | | | | | N/A | N/A |

| | | | | | | | | | | |
|--|--|---|--|---|--|--|--|--|--|--|
| 9. OPERATING MODE N | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) | | | | | | | | | |
| | <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) | | | | | | |
| 10. POWER LEVEL 100 | <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 checked="" 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 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 James Barstow, Regulatory Assurance Manager | TELEPHONE NUMBER (Include Area Code) (609) 971-4947 |
|--|--|

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 |
|-------|--------|-----------|--------------|--------------------|-------|--------|-----------|--------------|--------------------|
| X | EL | CNTR | G080 | Y | X | EL | XFMR | G080 | 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 | N/A | N/A | N/A |

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

On April 25, 2009, with the unit at 100% power, loss of cooling to the Main Power Transformer M1A resulted in a manual plant scram. The loss of cooling was caused by a faulted cooling bank motor starter, resulting in the failure of the M1A auxiliary control power transformer and subsequent loss of control power for the remaining cooling bank motor starters. A reactor load reduction was commenced in accordance with the alarm response procedure to maintain M1A temperatures below the alarm set points. While reactor power was being reduced, transformer operation was limited to 30 minutes without forced cooling. Operations secured the power reduction and manually scrammed the reactor from 74% power in accordance with plant procedures. The post scram response was normal and the required notifications were made.

All safety systems operated as expected following the reactor scram.

There were no safety consequences impacting plant or public safety as a result of this event.

This event is being reported pursuant to 10CFR50.73(a)(2)(iv)(A) due to manual actuation of the reactor protection system.

LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET

| 1. FACILITY NAME | 2. DOCKET | 6. LER NUMBER | | | 3. PAGE | | |
|----------------------|-----------|---------------|-------------------|---------|---------|----|---|
| Oyster Creek, Unit 1 | 05000219 | YEAR | SEQUENTIAL NUMBER | REV NO. | 3 | OF | 3 |
| | | 2009 | - 003 | - 00 | | | |

NARRATIVE

Corrective Actions:

The M1A Main Power Transformer, replaced in February 2009, was supplied to Oyster Creek from the Eddystone Generating Station. There is no pertinent equipment history information for this auxiliary control power transformer or the motor starter, contactor coil. The control power transformer and the #1 cooling bank motor starter assembly were replaced, properly rated fuses were installed, and the cooling system control circuitry was modified to have a backup independent power supply to address a single point vulnerability. In order to prevent future similar failures and eliminate another single point vulnerability, modifications were performed for the cooling circuits on both Main Power Transformers (M1A and M1B). These modifications added individual fuses for each cooling group and coordinated the rating of the control power fuses such that only one cooling group circuit is lost on an electrical fault within that same cooling group circuitry.

The plant returned to power operation on March 2, 2009.

Additional enhancements were incorporated into the Alarm Response Procedures. Guidance was provided for the maximum allowable operation time for a total loss of cooling to the main transformers and actions to take in an attempt to restore cooling power.

Previous Occurrences

There have been no similar Licensee Event Reports events at Oyster Creek in the last three years, involving a loss of a main transformer's cooling system leading to a reactor scram.

Component Failure Data

Component: Motor Starter (CR106C002AA with a 15D21G2 contactor coil)
 Manufacturer: GE (Supplied with the main transformer from the Eddystone Generating Station)
 Serial No: N/A
 Cause: Faulted (shorted coil)

Component: Control Power Transformer (460/115 VAC, 0.500KVA – MOD# 9T55Y50)
 Manufacturer: GE (Supplied with the main transformer from the Eddystone Generating Station)
 Serial No: N/A
 Cause: Overload failure of its windings