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**Ken Peters**  
Director, Nuclear Safety Assurance  
Waterford 3

**W3F1-2003-0030**  
**A4.05**  
**PR**

April 25, 2003

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555

Subject: Waterford 3 SES  
Docket No. 50-382  
License No. NPF-38  
Annual Environmental Operating Report - 2002

Gentlemen:

Attached is the 2002 Annual Environmental Operating Report for Waterford 3. This report is submitted pursuant to Subsection 5.4.1 of the Environmental Protection Plan (Appendix B to the Operating License).

Should you have any questions regarding this report, please contact Oscar P. Pipkins at (504) 739-6707. There are no commitments contained in this submittal.

Very truly yours,

  
K.J. Peters 4/25/03  
Director, Nuclear Safety Assurance

KJP/OPP/cbh  
Attachment

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cc: (w/Attachment)  
E.W. Merschoff (NRC Region IV)  
N. Kalyanam (NRC-NRR)  
J. Smith  
N.S. Reynolds  
B. Hammatt (LA DEQ)  
R. H. Gibson (EPA)  
NRC Resident Inspectors Office

**Attachment To**

**W3F1-2003-0030**

## WATERFORD 3 2002 ANNUAL ENVIRONMENTAL OPERATING REPORT

This report describes implementation of the Environmental Protection Plan (EPP) for the calendar year 2002, and provides the information required by the EPP.

A. Summaries and analyses of the results of the environmental protection activities required by EPP subsection 4.2:

This section of the EPP provides protection of the two cultural resource areas on the Waterford 3 site. There were no activities which affected either the Plantation Overseer's House site or the Plantation Quarter's site, both eligible for the National Register of Historic Places, during this reporting period.

B. EPP noncompliance's and the corrective actions taken to remedy them:

There were no noncompliance's with the requirements of the EPP during the reporting period.

C. A discussion of changes in station design or operation, tests, or experiments made in accordance with the EPP subsection 3.1 which involved a potential significant unreviewed environmental question:

During the reporting period, there were four station changes or evolutions requiring environmental reviews. Of these activities reviewed, none of them required a detailed environmental evaluation to ensure that a potential significant unreviewed environmental question did not exist. Environmental screenings, reviews and evaluations are performed in accordance with instructions contained in procedures LI-101 and EV-115.

1. An environmental review was conducted to support work required for replacement of Main Transformer A. This environmental review was triggered by a "Yes" response to the question "Will the proposed change being evaluated involve the use or storage of chemicals or oil?" of the environmental screening section of the 50.59 evaluation. Reference: ER-W3-2001-0297-000.

The environmental review determined that the proposed activity was governed by or controlled by Waterford-3's SPCC Plan, UNT-007-064. Replacement of the transformer would involve the transport and loading/off-loading of oil. A review of the SPCC Plan determined that the details of the proposed activity were already addressed by instructions and requirements in the procedure. No modifications to UNT-007-064 were required and the activity was approved.

2. An environmental review was conducted to support plant changes and work required to implement a rated thermal power level increase as set forth by 10CFR50 Appendix K. NRC approved this activity in Amendment No. 183 to the Waterford 3 Facility Operating License. The Amendment authorizes an increase in rated thermal power from 3390 MWt to 3441 MWt, a 1.5 percent rated thermal power increase. This environmental review was triggered by a "Yes" response to the question "Will the proposed change being evaluated Increase the amount of thermal heat being discharged to the river or lake?" of the environmental screening section of the 50.59 evaluation. Reference: ER-W3-2000-1018-003.

The environmental review determined that the proposed activity was governed by or controlled by Waterford-3's LPDES water discharge permit LA0007374. A review of LPDES permit LA0007374 determined that the water quality impacts of the proposed activity were within the limitations of the current LPDES permit and the activity was approved.

During the previous LPDES permit renewal cycle, Waterford-3 requested that temperature and thermal limits be increased to support a planned future thermal power up rate project. LDEQ approved the following requested increases: increase the instantaneous daily maximum temperature limit from 110F to 118F and increase the daily maximum heat limit from 8.5E+09 BTU/hr to 9.5E+09 BTU/hr. As stated in the permit fact sheet, LDEQ had determined that no adverse environmental impact would occur with these new permit limitations. Thus, the current LPDES permit limits allow Waterford-3 to increase thermal output by an additional 12% above the previous value (8.5E+09 BTU/hr with a core rated thermal output of 3390 MWt). The thermal power increase to a core rated power of 3441 MWt (a 1.5% increase) is within the limitations of the permit.

3. An environmental review was conducted to support plant changes and work required to implement plant security improvements and enhancements. These changes were as a result of the terrorist attacks that occurred within the United States on September 11, 2001. NRC issued an order on February 25, 2002 requiring licensees to implement the subject changes. This environmental review was triggered by a "Yes" response to the question "Will the proposed change being evaluated involve the use or storage of chemicals or oil?" of the environmental screening section of the 50.59 evaluation. Reference: ER-W3-2002-0137-000.

The environmental review determined that the proposed activity was governed by or controlled by Waterford-3's SPCC Plan, UNT-007-064. A vehicle barrier using hydraulic oil for its operation was proposed. A review of the SPCC Plan determined that the details of the proposed activity were already addressed by instructions and requirements in the procedure. No modifications to UNT-007-064 were required and the activity was approved.

4. An environmental review was conducted to support work required for implementing a continuous hydrogen purge for the Stator Cooling Water System tank. This environmental review was triggered by a "Yes" response to the question "Will the proposed change being evaluated Discharge any chemicals new or different from that previously discharged?" of the environmental screening section of the 50.59 evaluation. Reference: ER-W3-2002-0670-000.

The environmental review determined that the proposed activity was governed by or controlled by Waterford-3's Air Permit 1255 (M-2). Implementing a hydrogen purge will create an emission of hydrogen gas. A review of the Air Permit 1255 (M-2) and the Louisiana Air Quality Regulations and permitting requirements was performed. It was determined that hydrogen gas was not a hazardous air pollutant nor does it need to be regulated in an air emissions permit. The projected daily release quantity (0.521 lbm) was within the Louisiana RQ limitation of 100 lbm/day. No modifications to Air Permit 1255 (M-2) were required and the activity was approved.

D. Nonroutine reports submitted in accordance with subsection 5.4.2:

During the reporting period, there were three non-routine reports submitted in accordance with subsection 5.4.2.

1. On 2/21/2002, an Oil & Grease analysis result for Outfall 104 (Yard Oil Separator) sample obtained on 2/4/2002 was reported to Waterford-3 by a contract laboratory with a result of 25.9 ppm. This value exceeded the maximum allowed (20 ppm) by the LPDES permit LA0007374. Discharges were suspended on 2/21/2002 and maintenance was performed on the Oil/Water separator. Discharges were resumed after the separator was cleaned and proper operation verified, on 2/25/2002. This information was reported to LDEQ (carbon copy to NRC, also) in the next Discharge Monitoring Report (DMR) submittal on 3/14/2002 as required by the LPDES permit. Maintenance Department is to evaluate long term actions (maintenance scheduling) to reduce recurrence of high Oil & Grease discharges from Outfall 104.
2. On 3/9/2002, an unauthorized discharge of sewage wastewater was identified spraying into a ditch on the Waterford-3 property. The discharge was terminated by de-energizing the sewage lift station pumps providing flow. The cause of the discharge was due to a broken above ground PVC/plastic pipe. The discharge was into a drainage ditch and did not create an emergency condition. The pipe was repaired on 3/10/2002 and the sewage lift station placed back in operation. LDEQ was notified via telephone at 1510 on 3/9/2002 and subsequently by letter (carbon copy to NRC, also) on 3/14/2002. No additional long terms actions were prescribed.
3. On 9/30/2002, water was observed leaking from the base of the levee of the McCubbins Pond at approximately 1 gpm. The pond was sampled and pH was determined to be 8.69. The discharge was into a drainage ditch and did not create an emergency condition. LDEQ was notified via telephone at 1545 on 9/30/2002 in accordance with the pond interim operation plan issued by LDEQ in an Order to Close. The leak began after tropical storm Isidore increased the water level about 10 inches. Pumping began on 9/30/2002 with portable pumps sending water to the Waterford-1&2 facility. The leak had stopped the following day after pumping had reduced level approximately 12 inches. LDEQ was consulted to determine if a written follow-up report was required as none was specified in the pond interim operation plan. LDEQ informed that no further reporting was required. Long term actions were to close and demolish the pond which was completed on 12/16/2002.