

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION IV 611 RYAN PLAZA DRIVE, SUITE 400 ARLINGTON, TEXAS 76011-4005

September 9, 2005

Joseph E. Venable Vice President Operations Waterford 3 Entergy Operations, Inc. 17265 River Road Killona, LA 70066-0751

# SUBJECT: WATERFORD STEAM ELECTRIC STATION, UNIT 3, FOLLOW-UP LETTER REGARDING RESTART

Dear Mr. Venable:

Waterford Steam Electric Station, Unit 3, was shutdown on August 28, 2005, in preparation for the arrival of hurricane force winds on site from Hurricane Katrina. Following the hurricane, the NRC requested that Entergy not restart its Waterford Steam Electric Station, Unit 3 facility until a review of the emergency response infrastructure was performed. The purpose of the review was to provide reasonable assurance that adequate emergency preparedness processes and facilities were available to support plant restart and operation. You agreed to our request.

On September 6, 2005, representatives of the Federal Emergency Management Agency (FEMA), with NRC staff accompaniment, commenced a disaster initiated review of the status of the offsite emergency preparedness infrastructure surrounding the Waterford Steam Electric Station, Unit 3, site. This review was completed on September 8, 2005, and the results of this review were documented in a letter from FEMA to the NRC dated September 9, 2005. A copy of that letter is enclosed. During that same period, NRC inspectors also conducted an assessment of the general condition of the onsite emergency preparedness status in accordance with NRC Inspection Manual Chapter 1601, "Communication and Coordination Protocol for Determining the Status of Offsite Emergency Preparedness Following a Natural Disaster, Malevolent Act, or Extended Plant Shutdown." These assessments concluded that the emergency preparedness infrastructure, both onsite and offsite, was adequate to support plant restart and provide reasonable assurance that protective measures can be taken to protect public health and safety in the event of a radiological emergency. The results of the NRC assessment will be documented in a future inspection report. In a conference call conducted on September 9, 2005, between you and your staff and the NRC. Entergy provided its basis for assurance that Waterford Steam Electric Station, Unit 3, can resume safe operation including a discussion of the actions that you have taken to restore off-site electrical power and to address the communications issues. We also understand that you are taking appropriate steps to monitor grid conditions during plant startup to ensure that stable offsite power is available to support full power plant operation. Based on your affirmative statements related to readiness to resume safe operation of Waterford Steam Electric Station, Unit 3, as well as the

Entergy Operations, Inc.

satisfactory independent reviews discussed above, this letter documents our authorization for Entergy to resume operation of the Waterford Steam Electric Station, Unit 3. This authorization was granted via a telephone call on September 9, 2005.

Should you have any questions regarding this letter, or if there are any adverse changes in the status of the emergency preparedness infrastructure addressed in our reviews, please contact us.

Sincerely Bruce S. Mallett, Regional Administrator

Docket No.: 50-382 License: NPF-38

Enclosure: As stated

CC:

Senior Vice President and Chief Operating Officer Entergy Operations, Inc. P.O. Box 31995 Jackson, MS 39286-1995

Vice President, Operations Support Entergy Operations, Inc. P.O. Box 31995 Jackson, MS 39286-1995

Wise, Carter, Child & Caraway P.O. Box 651 Jackson, MS 39205

General Manager, Plant Operations Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, LA 70066-0751 Entergy Operations, Inc.

Manager - Licensing Manager Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, LA 70066-0751

Chairman Louisiana Public Service Commission P.O. Box 91154 Baton Rouge, LA 70821-9154

Director, Nuclear Safety & Regulatory Affairs Waterford 3 SES Entergy Operations, Inc. 17265 River Road Killona, LA 70066-0751

Michael E. Henry, State Liaison Officer Department of Environmental Quality Permits Division P.O. Box 4313 Baton Rouge, LA 70821-4313

Parish President St. Charles Parish P.O. Box 302 Hahnville, LA 70057

Winston & Strawn LLP 1700 K Street, N.W. Washington, DC 20006-3817 Entergy Operations, Inc.

Electronic distribution by RIV: Regional Administrator (**BSM1**) DRP Director (**ATH**) DRS Director (**DDC**) DRS Deputy Director (**KMK**) Senior Resident Inspector (**MCH**) Branch Chief, DRP/E (**DNG**) Senior Project Engineer, DRP/E (**VGG**) Team Leader, DRP/TSS (**RLN1**) RITS Coordinator (**KEG**) RSLO (**WAM**)

 SISP Review Completed:
 \_A1⁄\_\_\_\_ ADAMS: √ Yes
 □ No
 Initials: \_\_TV\_\_\_\_

 √ Publicly Available
 □ Non-Publicly Available
 □ Sensitive
 √ Non-Sensitive

RIV:C:DRP/E	DRS/OB	NRR/DD	NSIR/DRP/EP	D NSIR/DPR
DNGraves	RELantz	RWBorchardt	ACMcMurtray	EJLeeds
/RA/	/RA/	T - TVegel	E - TVegel	EnWeber For
9/9/05	9/9/05	9/9/05	9/9/05	9/9/05
RC	DD:DRP	DRA 00	RA n	N
KSFuller	TVegel /	TPGwynn	/ BSMallett /	$\Lambda$
E - TVegel	AV		M V	0
9/9/05	9/9 /05	9/9/05	9/9/05	
OFFICIAL RECORD COPY		T=	Telephone	E=E-mail F=Fax

R:\_Reactors\Waterford\Wat Restart Letter 9-9-05



# **Facsimile Transmission**

То:	Fax: (301) 816-5151 Date: 9/09/05 Senders fax number: (202) 646-4321	
Roy Zimmerman/Anthony McMurtray		
From:		
Craig Conklin/Craig Fiore		
Number of pages including coversheet:		

RE:

FEMA Disaster Initiated Review - Waterford 3

Notes/Comments:

Preparedness Division Nuclear and Chemical Hazards Branch Chemical Stockpile Emergency Preparedness Section (PR-NC-CS) 500 C Street SW, Room 202 Washington, DC 20472

NO. 898 P. 2

U.S. Department of Homeland Security 500 C Street, SW Washington, DC 20472



Roy P. Zimmerman Director Office of Nuclear Security and Incident Response U.S. Nuclear Regulatory Commission Mail Stop T4D22A Washington, D.C. 20555

SEP -9 2005

Dear Mr. Zimmerman:

This letter is to inform you that the Federal Emergency Management Agency (FEMA) has completed its disaster initiated review (DIR) of the State of Louisiana and local offsite response organizations continued capability to adequately respond to an incident at the Waterford-3 Steam Electric Station in the aftermath of Hurricane Katrina.

On September 6-8, 2005, a comprehensive investigation and collection of field data was performed by the joint FEMA/Nuclear Regulatory Commission DIR Team, in accordance with FEMA's "Post-Natural Disaster Assessment of Offsite Preparedness Capabilities" procedure. In addition to the field observations, the Team conducted interviews with the Louisiana Department of Environmental Quality, St. Charles Parish, St. John the Baptist Parish, Waterford-3 Emergency Planning, and Entergy personnel.

Based on our review of all of this information, FEMA concludes that offsite radiological emergency preparedness is adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency at the Waterford-3 Steam Electric Station. At this time, FEMA is not aware of any unresolved offsite emergency preparedness issues around Waterford-3, and therefore, we have no objections to plant startup and full-power operations.

Please find enclosed a copy of the FEMA Region VI DIR Report for the Waterford 3 Steam Electric Station for your information. Please contact me at (202) 646-3030, if you have any questions or require any further assistance on this matter.

Sincerely,

Inaiz Conklin

W. Craig Conklin Chief Nuclear and Chemical Hazards Branch

Enclosure

www.fema.gov

ILS. Department of Homeland Security FEMA Region 6 800 North loop 288 Depton TX 26200-3698

NO. 898

NT/ND



AMIRUSAN

September 9, 2005

MEMORANDUM FOR:

W. Craig Conklin, Chief Nuclear and Chemical Hazards Branch Preparedness Division

ATTENTION:

Vanessa Quinn, Chief Radiological Emergency Preparedness Section

FROM:

SUBJECT:

Disaster Initiated Review – Waterford 3 Steam Electric Station

Lisa R. Hammond, Chief

#### Background:

Hurricane Katrina moved through Waterford 3 Steam Electric Station on the morning of Monday, August 29, 2005. The maximum sustained winds experienced by Waterford 3 were less than hurricane force. The plant shut down at 1:18 p.m. on Sunday August, 28 2005 in accordance with plant procedures and regulatory requirements. Other than an impact on off-site power and communications the plant was unaffected. FEMA Region VI conducted a review of state and local emergency preparedness. The 10-mile Emergency Planning Zone (EPZ) for Waterford 3 consists of portions of St. Charles Parish and St. John the Baptist Parish.

On September 6 and 7, 2005, FEMA Region VI conducted an assessment of off-site capabilities utilizing the Assessment of Off-Site Capabilities – Post Natural Disaster form as the basis for the assessment. Nan Calhoun and Timothy Pflieger, REP Emergency Planners for the Louisiana Department of Environmental Quality; Tab Troxler, St. Charles Parish Emergency Management Director; Paul Oncale, St. John the Baptist Parish Emergency Management Director; Ron Perry, Waterford 3 Emergency Planning; Bill Maier, NRC Region IV State Liaison; Robert Trojanowski, NRC Region II State Liaison; Stephen Borth, FEMA REP Training Specialist; and Scott Flowerday, FEMA Region VI REP Program Manager participated in the review.

www.fema.gov

02/05

#### Assessment:

### 1. Emergency Response Facilities

The State of Louisiana, St. Charles Parish, and St. John the Baptist Parish Emergency Operations Centers are all operational. Each of the facilities are structurally safe and are operating on primary power.

There is one shelter open in St. Charles Parish with five evacuees from New Orleans. This shelter is functioning as a pass through to shelters further away from the impacted area and personnel in the shelter are moved after processing. The shelter had a population of five at the time the review was conducted. There are no shelters currently open within St. John the Baptist Parish.

The two hospitals used for the treatment of radiologically contaminated, injured individuals are open and ready to respond if necessary (West Jefferson and Ochsner). In addition to these hospitals, Louisiana Department of Environmental Quality has confirmed that Our Lady of the Lake Hospital in Baton Rouge is available. Our Lady of the Lake is designated as a back-up hospital in the state plan for Waterford 3, River Bend Station and Grand Gulf Nuclear Station.

The Emergency News Center that was located in New Orleans is not available. Waterford 3 will utilize the Alternate Joint Information Center for River Bend Station; which is operated by the same utility. This facility is located in Baton Rouge. Louisiana and both parishes have been informed of this change and interim plans been developed to implement this change.

The Alternate Emergency Operations Facility (EOF) is not available. The Alternate EOF for River Bend which is located in Baton Rouge has been designated as the temporary alternate EOF for Waterford 3. The near site primary EOF was verified to be functional.

# 2. <u>Emergency Response Organizations</u>

All emergency response organizations are available. Louisiana Office of Homeland Security & Emergency Preparedness (LHLS/EP), Louisiana Department of Environmental Quality (LDEQ), St. Charles Parish, and St. John the Baptist Parish have indicated that they are capable of implementing the REP plan in response to Waterford 3 if necessary. During interviews with both St. Charles Parish and St. John the Baptist Parish both parish emergency management directors have indicated that they have an increased capability due to additional resources in the parishes that are not normally available.

NO. 898

#### 3. <u>Communications</u>

The operational hotline from the plant to both parishes, LDEQ and LHLS/EP has been restored and tested. This test was confirmed by the NRC as part of the onsite emergency preparedness review. The industrial hotline that links the plant and the St. Charles Parish is operational. Satellite telephones are available both on-site, at both parish EOCs, at LDEQ, and at LHLS/EP. Amateur radio is available at both parishes. Normal telephone service is in the process of being restored in both parishes. Cell phone service in both parishes is available but is limited. Statewide 800 MHz radio is available between the state offices and the parishes as an additional option this system is a shared system.

#### Public Alert and Notification

The Waterford 3 10-mile EPZ has 72 sirens that are placed throughout the two parishes. All 72 of the sirens are functional. The sirens at Waterford 3 are powered by DC batteries with AC connections that provide a trickle charge to the installed batteries. The utility is in the process of restoring AC power to the sirens. At the time of this report, 51 sirens are operating with AC power restored. The remaining 21 are operational using their installed batteries. Those sirens that do not have AC power restored are on a periodic maintenance schedule ensuring the batteries in use are properly charged with battery changeout being accomplished as necessary. Operability of each EAS radio station has been confirmed and communications between the parish EOCs and the radio stations was also confirmed with the parishes. Emergency Management Directors at both parish EOCs confirmed their ability to accomplish route alerting (referred to as Fan Out Warning Teams in St. John the Baptist Parish). Waterford 3 has confirmed that the contracted helicopter service for exception area alerting is available.

# 5. Evacuation Routes

Representatives from the assessment team have traversed all the evacuation routes and found them passable. As was indicated by both parishes' traffic and access control has been enhanced through additional law enforcement resources available due to the hurricane response.

#### 6. <u>EPZ Population</u>

An updated evacuation time estimate (ETE) was completed in May of 2003. EPZ population at that time was 83,448 with population combined within both parishes reported at 91,116. The transient population within both parishes is fluctuating. The utility contracted with Earth Tech, Inc. to update the ETE with 10%, 20% and 30% increases to the population with a baseline 2005 population. The updated

NO. 898

study was provided to the Assessment Team. National Guard members are being lodged at a magnet high school in St. Charles Parish. The utility is providing public information materials and posters regarding evacuation to the National Guard.

Shelters outside of both risk parishes are operating at or near capacity. The reception centers (for monitoring and decontamination) are located at some of these shelters. The ability to establish monitoring and decontamination operations at the plan locations is impaired because of the current shelter population. This issue has been identified to both the utility and the state. The utility has provided a mutual support statement committing monitoring resources from River Bend Station and Grand Gulf. The state will monitor restoration of monitoring and decontamination capacity at each of the plan reception centers and will advise when normal capacity has been restored.

#### 7. <u>Accident Assessment</u>

The ability of the State of Louisiana to conduct independent accident assessment analysis and field monitoring was not adversely impacted by Hurricane Katrina. The state laboratory in Baton Rouge is also operational and was not impacted.

# 8. <u>Supporting Documentation</u>

All supporting documentation gathered by the Assessment Team will be on file in the FEMA VI Regional Office in Denton, Texas.

#### Conclusions:

Based on the results of the post disaster assessment the review team has made the following conclusions:

- 1. No significant changes to the infrastructure of the Waterford 3 Steam Electric Station EPZ have occurred which would necessitate the development of extra-ordinary compensatory measures.
- 2. Compensatory measures taken for loss of off-site facilities outside the EPZ in New Orleans have been reviewed and found to be adequate. These facilities include:
  - a. The Waterford 3 Emergency News Center which will now be located in the back-up Joint Information Center for River Bend Station which is located in Baton Rouge (approximately 70 miles from Waterford 3).
  - b. The Waterford 3 temporary alternate Emergency Operations Facility which will now be co-located with the River Bend Station

09/09/2005 FRI 11:38 [TX/RX NO 6426] 2006

NO. 898

alternate EOF that is in the same building as the Joint Information Center in Baton Rouge.

3. The Off-site Response Organizations capabilities to respond to a radiological accident at Waterford 3 Steam Electric Station are intact and there is reasonable assurance that off-site emergency response capabilities are sufficient to protect public health and safety.