December 10, 1999

Mr. Zdenek Kriz
INES Coordinator
Division of Nuclear Safety
International Atomic Energy Agency
Wagramerstrasse 5
P.O. Box 100
A-1400 Vienna
Austria

Dear Mr. Kriz:

Enclosed is a completed Event Rating Form for an event at the Waterford 3 Steam Electric Station. The event involved an unexpected loss of reactor coolant system inventory while the unit was shut down. This event was rated in accordance with the 1998 Revised INES Users Manual. A rating of level 2 was assigned to this event.

Sincerely,

/s/ Joseph G. Giitter

Joseph G. Giitter, Chief
Operations Section
Incident Response Operations

Enclosures:
1. INES Rating Form
2. Press Release

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NAME	FJCongel									
DATE	12/ 10 /99									

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PDR ADOCK

D Fol

THE INTERNATIONAL NUCLEAR EVENT SCALE (INES)

EVENT RATING FORM (ERF)

TO BE SENT TO THE IAEA INES CO-ORDINATOR BY

IAEA, WAGRAMERSTRASSE 5. P.O. BOX 100, A-1400 VIENNA, AUSTRIA

• FAX: + 43 1 2600 29723
• PHONE: + 43 1 2600 26068
• E-MAIL: Z.KRIZ@IAEA.ORG

EVENT TITLE	LOSS OF REACTOR COOLANT SYSTEM INVENTORY	EVENT DATE
		27.11.99

RATING	RATING DATE	OUT OF SCALE	BELOW SCALE	ON SCALE								SAFETY ATTRIBUTE		
				0	1	2	3	4	5	6	7			
PROVISIONAL ☐													DEGR. DEFENCE IN-DEPTH	■
FINAL ■													ON-SITE IMPACT	
	10.12.99					■							OFF-SITE IMPACT	

COUNTRY	USA	FACILITY NAME	WATERFORD 3 STEAM ELECTRIC STATION	FACILITY TYPE	PWR

ASPECTS OF SIGNIFICANCE TO THE PUBLIC:	YES	NO
ACCIDENT ☐ INCIDENT ■ DEVIATION ☐		
- RADIOACTIVE RELEASES OFF-SITE	☐	■
- RADIOACTIVE RELEASES ON-SITE	☐	■
- WORKERS INJURED BY RADIATION	☐	■
- WORKERS INJURED PHYSICALLY	☐	■
- PLANT SAFETY IS UNDER CONTROL	■	☐
- THE EVENT REPORTED IS A DISCOVERY OF A DEFICIENCY BY ROUTINE SURVEILLANCE	☐	■
- A PRESS RELEASE WAS MADE (IF YES, PLEASE ATTACH IT)	■	☐

SHORT DESCRIPTION OF THE EVENT: With the unit shut down and the reactor coolant system (RCS) at 295°F (146 C) and 350 psia (2,413 kPa), plant operators were preparing to place one train of shutdown cooling into service. When they opened the motor-operated suction valve for the 'B' low pressure safety injection pump, indicated pressurizer level decreased from 35% to offscale low, and RCS pressure decreased to 100 psia (689 kPa). Operators closed the pump suction valve to terminate the coolant loss, and tripped the operating reactor coolant pumps due to low RCS pressure. Approximately 5,500 gallons (20,818 litres) of coolant flowed from the RCS to the refueling water storage pool. Pressurizer level was restored after operators manually started one of the high pressure safety injection pumps. The licensee declared an ***ALERT*** emergency classification due to this event.

JUSTIFICATION OF THE RATING: This event was rated as level 2 in accordance with Section IV-3.2.1.3(a) of the 1998 Draft INES Users Manual, as an event with an actual initiator of possible frequency and safety function operability within operating limits and conditions.

CONTACT PERSON FOR FURTHER INFORMATION		
	NAME	Joseph G. Giitter
	ADDRESS	USNRC, Washington, DC 20555
	PHONE	(301) 415-7485
	FAX	(301) 816-5151

PLEASE ATTACH ADDITIONAL INFORMATION ON JUSTIFICATION OF THE EVENT RATING AND DIFFICULTIES ENCOUNTERED, IF NEEDED

Enclosure 1

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF PUBLIC AFFAIRS, REGION IV
611 Ryan Plaza Drive - Suite 400
Arlington, Texas 76011-8064

RIV: 99-39
CONTACT: Breck Henderson
OFFICE: 817-860-8128
CELLULAR: 817-917-1227
E-Mail: bwh@nrc.gov

FOR IMMEDIATE RELEASE
November 27, 1999

NRC MONITORS ALERT AT WATERFORD NUCLEAR PLANT

The U.S. Nuclear Regulatory Commission is monitoring closely activities at the Waterford 3 nuclear power plant operated by Entergy Operations, Inc. near Taft, Louisiana, following the declaration of an "Alert" condition at that plant at 5:33 a.m.

An "Alert" is the second lowest emergency action level in the NRC required emergency response plan for nuclear power plants. An "Alert" indicates that events are in progress that involve the potential for a substantial degradation of the level of safety at the plant. There has been no release of radioactivity from the plant, operators are in complete control of all systems and the plant is safely shut down.

In response to the "Alert" declaration, the NRC has staffed its incident response center in the Region IV offices in Arlington, Texas. NRC engineers and inspectors are monitoring the activities of Entergy operators, both from the incident response center and from the control room at Waterford, where our resident inspector is stationed.

At about 5:00 a.m., Entergy operators were shutting down the plant to repair a small steam leak. With the nuclear reactor shutdown, operators were initiating the plant's shutdown cooling system, which continues to cool the nuclear core when normal components are taken off line. When a valve was opened to start shutdown cooling, primary cooling water unexpectedly flowed from the primary system into a large storage pool. The valve was quickly shut, remaining open for approximately two minutes, however about 3,000 gallons of primary cooling water was lost from the primary system. That water was quickly restored with backup water supply systems.

-More-

Currently, the nuclear core is being cooled by natural circulation through one of the plant's steam generators. Natural circulation is a designed capability that takes advantage of the fact that cooler, denser water will fall to the bottom of a system due to gravity. The primary system components are physically arranged such that warm water can rise from the reactor core into the steam generators where it is cooled, and then the cold water can fall naturally to the bottom of the core to be heated again, in a continuous process.

Entergy operators are now working to determine why primary cooling water flowed out of the system. When that problem is corrected, it is expected that normal shutdown cooling will be established and the initially planned repair activities will go forward.

All appropriate officials of the State of Louisiana and local communities surrounding the plant have been notified.

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