

## PRELIMINARY NOTIFICATION - REGION III

August 12, 2011

### PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE - PNO-III-11-009

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by the Region III staff on this date.

#### Facility

Duane Arnold Energy Center  
NextEra Energy  
Palo, IA  
Docket: 50-331  
License: DPR-49

#### Licensee Emergency Classification

Notification of Unusual Event  
 Alert  
 Site Area Emergency  
 General Emergency  
 Not Applicable

SUBJECT: DUANE ARNOLD UNPLANNED SHUTDOWN GREATER THAN 72 HOURS

DESCRIPTION: On August 11, 2011, at 3:27 a.m. (CDT), Duane Arnold Energy Center commenced a reactor shutdown (Event Notification 47142) as required by Technical Specification 3.7.2.B after both trains of the River Water Supply system were declared inoperable. The system was declared inoperable after the traveling screens for the river water supply pumps stopped working. These screens filter out river debris from the water before it enters the pumps. The River Water Supply system provides water to safety-related and non-safety related cooling systems in the plant. Currently, the River Water Supply system is available and supplying the required flow of river water to safety-related systems. The licensee has preliminarily identified sand buildup as the cause of the traveling screen malfunction and is continually monitoring for additional debris buildup. Additionally, the licensee has verified alternate means for decay heat removal, if necessary, in accordance with Technical Specifications.

During the shutdown, reactor water level momentarily decreased to the Low Level setpoint before returning to the normal level (not unexpected per normal plant response). Reaching this setpoint initiated Primary Containment Isolation System protection signals. All systems functioned as designed and the isolation signal was subsequently reset. This event was reported to the NRC as Event Notification 47143.

The plant is currently in a stable, cold shutdown condition. The licensee is inspecting the traveling screens and removing sand/debris to restore the full capability of the River Water Supply system. The NRC resident inspectors are onsite and monitoring the licensee's activities.

State and local officials have been informed of the plant shutdown.

The information presented herein has been discussed with the licensee and is current as of August 12, 2011 at 10:00 a.m. (CDT).

NRC Region III will update this PN after plant restart.

ADAMS Accession Number: **ML112240805**.

CONTACT:

Ken Riemer  
630-829-9628

Nirodh Shah  
630-829-9821