



UNITED STATES
NUCLEAR REGULATORY COMMISSION
LISLE, IL 60532-4352

June 29, 2017

MEMORANDUM TO: Kenneth G. O'Brien, Director
Division of Reactor Safety
Region III

FROM: Hironori Peterson, Chief */RA Valerie Myers Acting for/*
Health Physics and Incident Response Branch
Division of Reactor Safety
Region III

SUBJECT: 2017 DRESDEN GENERATING STATION EMERGENCY
RESPONSE EXERCISE AFTER-ACTION REPORT

On April 19, 2017, the U.S. Nuclear Regulatory Commission participated in an emergency response exercise with the Dresden Generating Station and the State of Illinois.

Enclosed is the After-Action Report for the U.S. Nuclear Regulatory Commission's participation in this exercise. Observations and analyses are provided for the core capabilities with areas for improvement. All areas for improvement have been added to the Incident Response Corrective Action Program database and will be monitored through completion.

Enclosure:
2017 Dresden Generating Station Emergency
Response Exercise After-Action Report

CONTACT: Brent Boston, DRS
630-829-9764

Memo to Kenneth G. O'Brien from Hironori Peterson dated June 30, 2017

**SUBJECT: 2017 DRESDEN GENERATING STATION EMERGENCY RESPONSE EXERCISE
AFTER-ACTION REPORT**

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OFFICIAL RECORD COPY

2017 Dresden Generating Station Emergency Response Exercise

After-Action Report

June 22, 2017

EXERCISE OVERVIEW

Exercise Name	2017 Dresden Generating Station Emergency Response Exercise
Exercise Dates	April 19, 2017
Core Capabilities/ Ratings	<p>National Core Capability:</p> <ul style="list-style-type: none"> • Public Information and Warning • Operational Coordination • Situational Assessment <p>Core capabilities rated as performed, but with Major Challenges: None</p> <p>Core capabilities rated as Unable to be Performed: None</p>
Scenario	<p>This plume exercise was developed to test the licensee's ability, in coordination with offsite response organizations, to carry out the facility's emergency response procedures while minimizing off-site consequences. The scenario began with an alert due to elevated radiation levels caused by a crane failure while moving condensate filters. The scenario progressed to Site Area Emergency and General Emergency due to a loss of coolant followed by multiple safety system failures.</p>
Participating Organizations	<p>Participants:</p> <ul style="list-style-type: none"> • State of Illinois • Grundy, Kendall, and Will counties, Illinois • Exelon Generation Company, LLC • NRC Headquarters Operations Officers, Executive Team Decision Maker and Region III
Related Documents	Exercise Plan (ML17170A300)
Point of Contact	Brent Boston , RIII Emergency Response Specialist, (630) 829-9764

STRENGTHS

The following strengths were identified during the exercise:

Strength 1: Regional response was improved by a second qualified Emergency Response Manager who focused on Site Team (ST) preparations, including assigning responders to Site Team positions, allowing the regular Emergency Response Manager to concentrate on the Base Team (BT).

Strength 2: The Base Team sent two members of the ST as an Advance Team (AT) to the licensee's Emergency Operations Facility (EOF) which enhanced the timely integration of the ST into the EOF upon the arrival of the remaining ST members. The AT had two Senior Executive Service-level managers; one was focused on the Management Bridge communications while the other focused on licensee actions in the EOF. The early dispatch of the AT also enhanced NRC response and oversight of licensee emergency operations.

ANALYSIS OF CORE CAPABILITIES AND OBJECTIVES

CORE CAPABILITIES WITH AREAS FOR IMPROVEMENT

All core capabilities were performed with no major deficiencies. The following core capability had areas for improvement:

Situational Assessment

- ☒ Core capability performed with no major deficiencies
- ☐ Performance of the core capability involved major deficiencies
- ☐ Core capability was not performed

Improvement Item 1: The NRC's efforts to independently verify Emergency Action Level (EAL) declarations were hindered because E-Library did not have the current version of EAL criteria. Using Emergency Action Levels for Dresden Station updated in Nov 2016, the licensee declared a General Emergency using a criterion which was not listed in the Sep 2012 version in E-Library which the NRC responders were using. The licensee declared EALs correctly.

Analysis: NRC responders need to have access to the current EAL criteria to independently verify EAL classifications. E-library has no formal process or staff to update E-Library content.

OBJECTIVES WITH AREAS FOR IMPROVEMENT

All objectives were met with no major deficiencies. No objectives had areas for improvement.