



**UNITED STATES
NUCLEAR REGULATORY COMMISSION**

REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, IL 60532-4352

May 29, 2012

Mr. Peter Wells
Vice President
NextEra Energy Duane Arnold, LLC
3277 DAEC Road
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER BASELINE EMERGENCY
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000331/2012503

Dear Mr. Wells:

On May 18, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Duane Arnold Energy Center. The enclosed report documents the results of this inspection, which were discussed on May 18, 2012, with you, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, there were no findings identified during this inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any), will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ By Don Funk Acting For/

Richard Skokowski, Chief
Plant Support Branch
Division of Reactor Safety

Docket No. 50-331
License No. DPR-49

Enclosure: Inspection Report 05000331/2012503
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ™

U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket No: 50-331
License No: DPR-49

Report No: 05000331/2012503

Licensee: NextEra Energy Duane Arnold, LLC

Facility: Duane Arnold Energy Center

Location: Palo, IA

Dates: May 14 through 18, 2012

Inspectors: Robert Jickling, Senior Emergency Preparedness Inspector
James Beavers, Emergency Preparedness Inspector
Luke Haeg, Senior Resident Inspector
Jim McGhee, Senior Resident Inspector
Jeff Laughlin, Senior Emergency Preparedness Specialist
John Cassidy, Senior Health Physicist

Approved by: R. Skokowski, Chief
Plant Support Branch
Division of Reactor Safety

Enclosure

SUMMARY OF FINDINGS

IR 05000331/2012503, 05/14/2012 – 05/18/2012; Duane Arnold Energy Center;
Baseline Emergency Preparedness Biennial Exercise Inspection.

This report covers a 1 week period of announced baseline inspection by three regional inspectors, two senior resident inspectors and one emergency preparedness specialist. The NRC's program for overseeing the safe operation of commercial nuclear power reactors is described in NUREG-1649, "Reactor Oversight Process," Revision 4, dated December 2006.

A. NRC-Identified and Self-Revealed Findings

Cornerstone: Emergency Preparedness

No findings were identified.

B. Licensee-Identified Violations

No violations were identified.

REPORT DETAILS

1. REACTOR SAFETY

Cornerstone: Emergency Preparedness

1EP1 Exercise Evaluation (71114.01)

.1 Exercise Evaluation

a. Inspection Scope

The inspectors reviewed the May 16, 2012, biennial emergency preparedness exercise's objectives and scenario to ensure that the exercise would acceptably test major elements of the licensee's emergency plan and to verify that the exercise's simulated problems provided an acceptable framework to support demonstration of the licensee's capability to implement its plan. The inspectors also reviewed records of other drills and exercises conducted in 2010, 2011, and 2012, to verify that those drills' scenarios were sufficiently different from the scenario used in the May 16, 2012, exercise.

The inspectors evaluated the licensee's exercise performance, focusing on the risk-significant activities of emergency classification, notification, and protective action decision making, implementation of accident mitigation strategies, and correction of past exercise weaknesses in the following emergency response facilities:

- Control Room Simulator (CRS);
- Technical Support Center (TSC);
- Operations Support Center (OSC);
- Emergency Operations Facility (EOF); and
- Joint Information Center (JIC).

The inspectors also assessed the licensee's recognition of abnormal plant conditions, transfer of responsibilities between facilities, internal communications, interfaces with offsite officials, readiness of emergency facilities and related equipment, and overall implementation of the licensee's emergency plan.

The inspectors attended post-exercise critiques in the CRS, OSC, TSC, and EOF to evaluate the licensee's initial self-assessment of its exercise performance. The inspectors later met with the licensee's lead exercise evaluators and managers to obtain the licensee's findings and assessments of its exercise participants' performances. These self-assessments were then compared with the inspectors' independent observations and assessments to assess the licensee's ability to adequately critique its exercise performance. Documents reviewed are listed in the Attachment to this report.

This exercise evaluation inspection constituted one sample as defined in Inspection Procedure (IP) 71114.01-05.

b. Findings

No findings were identified.

4. OTHER ACTIVITIES

Cornerstone: Emergency Preparedness

40A1 Performance Indicator (PI) Verification (71151)

.1 Drill/Exercise Performance

a. Inspection Scope

The inspectors sampled licensee submittals for the Drill/Exercise Performance PI for the period from the third quarter 2011 through first quarter 2012. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the Nuclear Energy Institute (NEI) Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the performance indicator to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI, assessments of PI opportunities during pre-designated control room simulator training sessions, and performance during other drills. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one drill/exercise performance sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.2 Emergency Response Organization Drill Participation

a. Inspection Scope

The inspectors sampled licensee submittals for the Emergency Response Organization (ERO) Drill Participation PI for the period from the third quarter 2011 through first quarter 2012. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI; performance during the 2011 and 2012 drills; and revisions of the roster of personnel assigned to key emergency response organization positions. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one ERO drill participation sample as defined in IP 71151-05.

b. Findings

No findings were identified.

.3 Alert and Notification System

a. Inspection Scope

The inspectors sampled licensee submittals for the Alert and Notification System (ANS) PI for the period from the third quarter 2011 through first quarter 2012. To determine the accuracy of the PI data reported during those periods, PI definitions and guidance contained in the NEI Document 99-02, "Regulatory Assessment Performance Indicator Guideline," Revision 6, were used. The inspectors reviewed the licensee's records associated with the PI to verify that the licensee accurately reported the indicator in accordance with relevant procedures and the NEI guidance. Specifically, the inspectors reviewed licensee records and processes including procedural guidance on assessing opportunities for the PI and results of periodic scheduled ANS operability tests. Documents reviewed are listed in the Attachment to this report.

This inspection constituted one alert and notification system sample as defined in IP 71151-05.

b. Findings

No findings were identified.

4OA6 Management Meetings

.1 Exit Meeting Summary

On May 18, 2012, the inspectors presented the biennial exercise inspection results to you and other members of the licensee staff. The licensee acknowledged the issues presented. The inspectors confirmed that none of the potential report input discussed was considered proprietary.

.2 Public and Media Briefing

On May 18, 2012, the inspector summarized the NRC's preliminary exercise inspection conclusions at a public and media briefings hosted by Department of Homeland Security/Federal Emergency Management Agency Region VII Field Office staff at the Linn County Emergency Operations Center in Cedar Rapids, Iowa.

ATTACHMENT: SUPPLEMENTAL INFORMATION

SUPPLEMENTAL INFORMATION

KEY POINTS OF CONTACT

Licensee

P. Wells, Site Vice President
G. Pry, Plant General Manager
R. Anderson, Business Manager
S. Catron, Licensing Manager
M. Davis, Emergency Preparedness Manager
L. Helms, Senior Emergency Preparedness Coordinator
J. Kalamaja, Operations Manager
D. Mothena, Corporate Functional Area Emergency Preparedness Manager
R. Porter, Chemistry & Radiation Protection Manager
B. Simmons, Training Manager
R. Wheaton, Maintenance Director
T. Zimmerman, Senior Emergency Preparedness Coordinator

Nuclear Regulatory Commission

L. Haeg, Senior Resident Inspector
R. Murray, Resident Inspector

LIST OF ITEMS OPENED, CLOSED AND DISCUSSED

Opened, Closed and Discussed

None

LIST OF DOCUMENTS REVIEWED

The following is a list of documents reviewed during the inspection. Inclusion on this list does not imply that the NRC inspectors reviewed the documents in their entirety, but rather, that selected sections or portions of the documents were evaluated as part of the overall inspection effort. Inclusion of a document on this list does not imply NRC acceptance of the document or any part of it, unless this is stated in the body of the inspection report.

1EP1 Exercise Evaluation

- Duane Arnold Energy Center 2012 Evaluated Exercise Manual, March 15, 2012
- DAEC Emergency Plan; Revision 34
- DAEC Drill and Exercise Corrective Action Program Condition Reports; May 2010 - April 2012
- DAEC Drill and Exercise Scenario Timelines; May 2010 – April 2012
- DAEC 2012 Evaluated Exercise Performance Conclusions; May 17, 2012
- EPIP 1.1; Determination of Emergency Action Levels; Revision 28
- EPIP 1.2; Notifications; Revision 42
- EPIP 1.5; Activation and Operation of the EOF; Revision 12
- EPIP 2.2; Activation and Operation of the TSC; Revision 28
- EPIP 3.3; Dose Assessment and Protective Action; Revision 30
- EPIP 6.1; Drill and Exercise Program; Revision 3
- AR 01768412; Exercise-CRD Venting Procedure Requirements Not Met; May 17, 2012
- AR 01768265; Exercise-TSC Status Board Inaccuracies; May 17, 2012
- AR 01768017; Exercise-Controller Inject Required For Scenario Timeline; May 16, 2012
- AR 01768010; Exercise-TSC and OSC Priorities Were Ineffectively Managed; May 16, 2012
- AR 01768002; Exercise-OSC Work Tracking Process Needs Improvement; May 16, 2012
- AR 01768000; Exercise-OSC and TSC Priorities Misalignment Lead to Delays; May 16, 2012
- AR 01767999; Exercise-Radiological Data Not Consistent Throughout Plant; May 16, 2012
- AR 01767938; Exercise-TSC Priorities Communicated to Control Room Needs Improvement; May 16, 2012
- AR 01767928; Exercise-Use of Simulated Response Personnel; May 17, 2012
- AR 01767925; Exercise-TSC Command and Control Transfer Communications Error; May 16, 2012
- AR 01767876; Exercise-Air Sampler Equipment Malfunction; May 16, 2012

4OA1 Performance Indicator Verification

- Monthly Data Elements for NRC Emergency Response Organization Drill Participation; September 2011 – March 2012
- Monthly Data Elements for NRC Drill/Exercise Performance; July 2011 – March 2012
- Monthly Data Elements for NRC ANS Reliability; July 2011 – March 2012
- AR 01737421; EOF Table Top Scenario Did Not Include All EALs; February 23, 2012
- AR 0172166; EP Siren Semi Annual Inspection Exceeded Deadline; January 5, 2012

LIST OF ACRONYMS USED

ADAMS	Agencywide Documents Access and Management System
ANS	Alert and Notification System
CFR	Code of Federal Regulations
CRD	Control Rod Drive
CRS	Control Room Simulator
DRS	Division of Reactor Safety
EOF	Emergency Operations Facility
EP	Emergency Preparedness
ERO	Emergency Response Organization
IMC	Inspection Manual Chapter
IP	Inspection Procedure
IR	Issue Report
JIC	Joint Information Center
NEI	Nuclear Energy Institute
NRC	U.S. Nuclear Regulatory Commission
OSC	Operations Support Center
PAR	Protective Action Recommendation
PARS	Publicly Available Records System
PI	Performance Indicator
RPT	Radiation Protection Technician
SCBA	Self-Contained Breathing Apparatus
SDP	Significance Determination Process
TSC	Technical Support Center

Mr. Peter Wells
Vice President
NextEra Energy Duane Arnold, LLC
3277 DAEC Road
Palo, IA 52324-9785

SUBJECT: DUANE ARNOLD ENERGY CENTER BASELINE EMERGENCY PREPAREDNESS
BIENNIAL EXERCISE INSPECTION REPORT 05000331/2012503

Dear Mr. Wells:

On May 18, 2012, the U.S. Nuclear Regulatory Commission (NRC) completed a Baseline Emergency Preparedness Biennial Exercise inspection at your Duane Arnold Energy Center. The enclosed report documents the results of this inspection, which were discussed on May 18, 2012, with you, and other members of your staff.

The inspection examined activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel.

Based on the results of this inspection, there were no findings identified during this inspection.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter, its enclosure, and your response (if any), will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records System (PARS) component of NRC's Agencywide Documents Access and Management System (ADAMS), accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

Sincerely,

/RA/ By Don Funk Acting For/

Richard Skokowski, Chief
Plant Support Branch
Division of Reactor Safety

Docket No. 50-331
License No. DPR-49

Enclosure: Inspection Report 05000331/2012503
w/Attachment: Supplemental Information

cc w/encl: Distribution via ListServ™

DISTRIBUTION:

See next page

DOCUMENT NAME: DAEC Exercise Report 2012 503.docx

Publicly Available Non-Publicly Available Sensitive Non-Sensitive

To receive a copy of this document, indicate in the concurrence box "C" = Copy without attach/encl "E" = Copy with attach/encl "N" = No copy

OFFICE	RIII	RIII	RIII	RIII
NAME	DFunk for RJickling:cs	DFunk for RSkokowski		
DATE	05/29/12	05/29/12		

OFFICIAL RECORD COPY

Letter to Peter Wells from Richard Skokowski dated May 29, 2012

SUBJECT: DUANE ARNOLD ENERGY CENTER BASELINE EMERGENCY
PREPAREDNESS BIENNIAL EXERCISE INSPECTION REPORT
05000331/2012503

DISTRIBUTION:

Shawn Williams

RidsNrrDorLp13-1 Resource

RidsNrrPMDuaneArnold Resource

RidsNrrDirslrib Resource

Chuck Casto

Cynthia Pederson

Steven Orth

Jared Heck

Allan Barker

Carole Ariano

Linda Linn

DRPIII

DRSIII

Patricia Buckley

Tammy Tomczak

ROPreports.Resource@nrc.gov