



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION III  
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March 16, 2018

Mr. Dean Curtland  
Director of Site Operations  
NextEra Energy Duane Arnold, LLC  
3277 DAEC Road  
Palo, IA 52324-9785

**SUBJECT: DUANE ARNOLD ENERGY CENTER—NRC TRIENNIAL FIRE PROTECTION  
INSPECTION REPORT 05000331/2018010**

Dear Mr. Curtland:

On February 8, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed a Triennial Fire Protection Inspection at your Duane Arnold Energy Center. On February 8, 2018, the NRC inspectors discussed the results of this inspection with Mr. M. Davis and other members of your staff. The results of this inspection are documented in the enclosed report.

Based on the results of this inspection, the NRC has identified two issues that were evaluated under the risk significance determination process as having very-low safety significance (green). The NRC has also determined that two violations were associated with these issues. Because the licensee initiated condition reports to address these issues, these violations are being treated as Non-Cited Violations (NCVs), consistent with Section 2.3.2 of the Enforcement Policy. These NCVs are described in the subject inspection report.

If you contest the violations or significance of these NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; the Director, Office of Enforcement; and the NRC Resident Inspector at the Duane Arnold Energy Center.

If you disagree with a cross-cutting aspect assignment or a finding not associated with a regulatory requirement in this report, you should provide a response within 30 days of the date of this inspection report, with the basis for your disagreement, to the U.S. Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington, DC 20555-0001; with copies to the Regional Administrator, Region III; and the NRC resident inspector at Duane Arnold Energy Center.

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with 10 CFR 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

*/RA/*

Robert C. Daley, Chief  
Engineering Branch 3  
Division of Reactor Safety

Docket Nos. 50-331; 72-032  
License No. DPR-49

Enclosure:  
IR 05000331/2018010

cc: Distribution via ListServ®

Letter to Dean Curtland from Robert C. Daley dated March 16, 2018

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U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Docket Numbers: 50-331; 72-32

License Numbers: DPR-49

Report Numbers: 05000331/2018010

Enterprise Identifier: I-2018-010-0006

Licensee: NextEra Energy Duane Arnold, LLC

Facility: Duane Arnold Energy Center

Location: Palo, IA

Dates: January 8, 2018, through February 8, 2018

Inspectors: A. Dahbur, Senior Reactor Inspector (Lead)  
I. Hafeez, Reactor Inspector  
J. Patel, Reactor Inspector (Region I)

Approved by: Robert C. Daley, Chief  
Engineering Branch 3  
Division of Reactor Safety

Enclosure

## SUMMARY

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring licensee’s performance by conducting a Triennial Fire Protection at Duane Arnold Energy Center in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC’s program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information. NRC and self-revealed findings, violations, and additional items are summarized in the table below. There were no Licensee-identified violations.

### List of Findings and Violations

Failure to have Adequate Pre-Fire Plans			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Initiating Events	Green NCV 05000331/2018010–01 Opened and Closed	[H.7] – CCA Documentation	71111.05XT
<p>The inspectors identified a finding of very-low safety significance (Green), and associated Non-Cited Violation of Title 10 of the <i>Code of Federal Regulations</i>, Part 50.48(c), and National Fire Protection Association (NFPA) 805, Section 3.4.2, “Pre-Fire Plans.” Specifically, the inspectors identified two examples for the licensee’s failure to have current and detailed pre-fire plans. The first example for the failure to provide adequate guidance in the pre-fire plans for smoke and heat removal in the event of a fire in switchgear rooms. The second example was for the failure to show the addition of the Flexible Coping Strategies battery packs as a potential hazard in the pre-fire plan for the battery room corridor.</p>			

Failure to Include Operator Action in the Plant Operating Procedure			
Cornerstone	Significance	Cross-Cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000331/2018010–02 Opened and Closed	None	71111.05XT
<p>The inspectors identified a finding of very-low safety significance (Green), and associated Non-Cited Violation of Title 10 of the <i>Code of Federal Regulations</i>, Part 50.48(c), and NFPA 805, Section 4.2.4.1.6, “Operations Guidance.” Specifically, during the transition process to NFPA 805, performance-based standard for the Fire Protection Program, the licensee inadvertently removed a required operator action in the control room from plant operating procedure AOP 913, “Fire.”</p>			

### Additional Tracking Items

None

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## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards."

## REACTOR SAFETY

### 71111.05XT—Fire Protection—NFPA 805 (Triennial)

The inspectors evaluated the following from January 8, 2018, to February 8, 2018:

#### Fire Protection Inspection Requirements (4 Samples)

The inspectors evaluated the Fire Protection Program implementation in the following selected areas:

- (1) Fire Zone 10E, West Switchgear Room
- (2) Fire Zone 12A, Control Room
- (3) Fire Zone 01E, High-Pressure Coolant Injection Room
- (4) Fire Zone 10A, Corridor, Battery Rooms

#### B.5.b Inspection Activities (2 Samples)

The inspectors evaluated feasibility of the following B.5.b Mitigating Strategies:

- (1) NEI 06-12, Section 3.4.5, Make up to Condensate Storage Tank
- (2) NEI 06-12, Section 3.4.9, Inject Water Into Drywell

## INSPECTION RESULTS

### 71111.05XT—Fire Protection—NFPA 805 (Triennial)

Failure to have Adequate Pre-Fire Plans			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Initiating Events	Green NCV 05000331/2018010-01 Opened and Closed	[H.7] – CCA Documentation	71111.05XT
The inspectors identified a finding of very-low safety significance (Green), and associated Non-Cited Violation (NCV) of Title 10 of the <i>Code of Federal Regulations</i> (CFR), Part 50.48(c), and National Fire Protection Association (NFPA) 805, Section 3.4.2 "Pre-Fire Plans." Specifically, the inspectors identified two examples for the licensee's failure to have current and detailed pre-fire plans. The first example was for the failure to provide adequate guidance in the pre-fire plans for smoke and heat removal in the event of a fire in switchgear			

rooms. The second example was for the failure to show the addition of the Flexible Coping Strategies (FLEX) battery packs as a potential hazard in the pre-fire plan for the battery room corridor.

Description: During a walkdown of Fire Zone 10A "Battery Room Corridor," the inspectors noted the addition of new battery packs and Uninterrupted Power Supply which were added per Engineering Change 281991 for the Diverse and FLEX modification. These battery packs consisted of two adjacent units, each unit about 2 x 2 x 3.5 feet tall. Each unit consisted of multiple individual lead acid batteries with Polypropylene cell and cover design. The Fire Zone 10A corridor was approximately 75 feet in length and 8 feet in width. The inspectors reviewed the pre-fire plan for this area, PFP-CB-757, and determined that the FLEX battery packs were not shown on the pre-fire plan drawing. The pre-fire plan drawing depicted the existing fire protection features and hazard, including the existing 1XLUPSA battery bank located on the north wall adjacent to the primary fire area access on the west end of the corridor. The Newly added 1D099/UPS099 FLEX battery packs were located on the north wall at the east end of the corridor. In addition, the inspectors noted that the Chemical Hazard Section of the pre-fire plan did not list Sulfuric Acid in batteries.

The inspectors were concerned that not including information about the FLEX battery packs as a hazard and not accurately showing their location could complicate firefighting activities of the fire brigade. Although the fire brigade members receive extensive training to deal with unexpected contingencies, the licensee acknowledged that the pre-fire plans needed to be corrected.

Additional review of pre-fire plans associated with the west and east switchgear room Fire Zone 10E and Fire Zone 10F which were part of Fire Area CB2 and CB3 respectively was performed by the inspectors. The inspectors noted that the ventilation section in the pre-fire plan specified the use of normal exhaust ventilation to remove smoke in the event of a fire in either of these zones. The inspectors were concerned that this method of removing smoke from the switchgear room could result in smoke in the control room via a common supply exhaust duct with the areas. The control room complex shared a common supply exhaust duct ventilation system with Fire Area CB2 (West Switchgear Room and West Battery Room) and CB3 (East Switchgear Room and East Battery Room). The licensee had a Fire Probabilistic Risk Assessment (PRA) analysis that showed a low-risk value of delta-CDF 7E-8/year for the impact of potential smoke in the control room from switchgear room fire scenario. Although, the risk was low, the licensee acknowledged that using the normal exhaust ventilation to remove smoke from the switchgear rooms was not acceptable.

Corrective Action(s): As immediate corrective actions, the licensee revised all affected pre-fire plans and deleted the use of normal ventilation due to the risk of forcing smoke into the control room and provided directions to use negative pressure to exhaust smoke. Also the licensee revised the pre-fire plan associated with battery room corridor and added the battery packs associated with the FLEX modification.

Corrective Action References: AR 02244170 and AR 02245669

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee's failure to have current and detailed pre-fire plans available to the fire brigade was contrary to NFPA 805, Section 3.4.2 and was a performance deficiency. Specifically, the licensee failed to have



current and correct guidance in pre-fire plan for three fire zones. The pre-fire plan for fire zone 10A "Battery Room Corridor," failed to show battery packs that were added per the FLEX modification as a hazard in the area. The pre-fire plans for Fire Zones 10E and 10F incorrectly specified the use of normal exhaust ventilation to remove smoke from the areas. This could result in smoke in the control room due to the ventilation system for these zones being common with the control room.

**Screening:** The inspectors determined the performance deficiency was more-than-minor because it adversely affected the Initiating Events cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of limiting the likelihood of events that upset plant stability and challenge critical safety functions during shutdown as well as power operations. Specifically, the lack of information regarding the hazards in the area and incorrect guidance to remove the smoke from the area could complicate firefighting activities by the fire brigade and could either increase the likelihood of a larger fire event or the severity of the fire.

**Significance:** In accordance with Inspection Manual Chapter (IMC) 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 2 the inspectors determined the finding affected the Initiating Events cornerstone. The finding degraded fire protection defense-in-depth strategies and the inspectors determined, using Table 3, that it could be evaluated using Appendix F, "Fire Protection Significance Determination Process." The inspectors assigned this finding to the "Manual Fire Fighting," category in Step 1.4 of IMC 0609, Appendix F. The inspectors then answered yes to question 1.4.6-B, "Is the fire finding associated with pre-fire plans?" and determined that the issue screened as having very-low safety significance (Green).

**Cross-Cutting Aspect:** The finding had a cross-cutting aspect in the Documentation component of the Human Performance cross-cutting area, which states that the licensee creates and maintains complete, accurate and up-to-date documentation. Specifically, the licensee failed to identify and update the pre-fire plan for Fire Zone 10A when they installed the battery packs and associated Uninterrupted Power Supply in the battery room corridor for the FLEX modification per Engineering Change 281991 from 2015 through 2017. (H.7).

**Enforcement:**

**Violation:** License condition 2.C(3) requires the licensee to implement and maintain in effect all provisions of the approved Fire Protection Program that complies with 10 CFR 50.48(a) and 10 CFR 50.48(c), "NFPA Standard NFPA 805," as approved in the safety evaluation report dated September 10, 2013. Section 3.4.2 "Pre-Fire Plans," of NFPA 805 stated that current and detailed pre-fire plans shall be available to the industrial fire brigade for all areas in which a fire could jeopardize the ability to meet the performance criteria described in Section 1.5. In addition, Section 3.4.2.1 stated that the plans shall detail the fire area configuration and fire hazards to be encountered in the fire area.

Contrary to the above, as of February 8, 2018, the licensee failed to implement and maintain in effect all provisions of the approved Fire Protection Program that complied with 10 CFR 50.48(c). Specifically, the licensee failed to have pre-fire plans that detailed the fire hazard to be encountered in for Fire Zone 10A "Battery Rooms Corridor", Fire Zone 10E and 10F "Switchgear Rooms," as required per Section 3.4.2 of NFPA 805.

Disposition: This violation is being treated as a NCV, consistent with Section 2.3.2 of the Enforcement Policy.

Failure to Include Operator Action in the Plant Operating Procedure			
Cornerstone	Significance	Cross-cutting Aspect	Report Section
Mitigating Systems	Green NCV 05000331/2018010-02 Opened and Closed	None	71111.05XT
<p>The inspectors identified a finding of very-low safety significance (Green), and associated NCV of 10 CFR 50.48(c), and NFPA 805, Section 4.2.4.1.6 "Operations Guidance." Specifically, during the transition process to NFPA 805, performance-based standard for Fire Protection Program, the licensee inadvertently removed a required operator action in the control room from plant operating procedure Abnormal Operation Procedure (AOP) 913, "Fire."</p>			
<p><u>Description:</u> During the inspectors' review of the Nuclear Safety Capability Assessment (NSCA) for the selected fire areas, the inspectors identified several operator actions that were listed in the NSCA that were incorrectly removed from the abnormal operating procedure (AOP 913, "Fire"). Analysis FPE-R96-004 "Feasibility of Operator/Recovery Actions and Verification of Alternate Shutdown Time Constraints," Attachment 3, provided a consolidated list of the operator actions resulted from NFPA 805 NSCA that were needed to be taken in the control room. Prior to transitioning to NFPA 805, these control room actions and local manual actions were included in AOP 913. During the transition to NFP 805, all actions including the control room operator actions were removed. Only the local manual actions should have been removed because they were fully analyzed using the performance-based approach. The inspectors were concerned that the removal of the control room operator actions from AOP 913 could challenge the ability of the operators to safely shutdown the plant in the event of a fire.</p> <p>In response to the inspectors' concern, the licensee performed a detailed evaluation and circuit analysis and determined that except for one operator action to close motor-operated valve (MOV) MO2700 from the control room in the event of a fire in Fire Area RB3, all other operator actions were no longer required.</p> <p>The NSCA for Fire Area RB3, FPLDA013-PR-019, identified a control room action for the operator to manually isolate the Reactor Water Clean Up (RWCU) system flow path from the reactor pressure vessel, so that reactor pressure vessel inventory is preserved and the potential loss of coolant accident event could be mitigated. The NSCA determined that a fire in the RB3 fire area could potentially impact the ability to achieve safe and stable plant conditions. A fire-induced faults on cable and equipment located in RB3 could impact RWCU equipment leading to either an over pressure and/or over-heat conditions. These conditions could result in pipe rupture of the low pressure piping and subsequently loss of coolant accident outside containment. To mitigate this potential scenario, the NSCA credited an operator action from the control room to isolate RWCU by manually closing the MO2700, RWCU suction inboard isolation valve. This action was credited in the analysis to demonstrate that the nuclear safety performance criteria were met. By demonstrating this, it was assured that safe and stable plant conditions could be achieved in the event of a fire.</p>			

Corrective Action(s): As immediate corrective actions, the licensee performed a detailed circuit analysis and evaluation for all the missing operator actions and implemented a compensatory measure by issuing a shift order 18-05 that directs operator to perform the required actions. In addition, the licensee performed a Fire PRA evaluation to determine the risk impact of removing the operator action to isolate RWCU from AOP 913.

Corrective Action Reference: AR 02246388

Performance Assessment:

Performance Deficiency: The inspectors determined that the licensee's failure to ensure required operator action included in the plant operating procedure was contrary to NFPA 805, Section 4.2.4.1.6 and was a performance deficiency. Specifically, the licensee failed to ensure that plant operating procedure AOP 913 contained guidance for operators to manually close MOV MO2700 from the control room in the event of a fire in Fire Area RB3.

Screening: The inspectors determined the performance deficiency was more-than-minor because it adversely affected the Mitigating Systems cornerstone attribute of Protection Against External Factors (Fire) and affected the cornerstone objective of ensuring the reliability and capability of systems that responds to initiating events to prevent undesirable consequences (i.e., core damage). Specifically, lack of guidance for the operators to close MO2700 in the event of a fire in RB3 did not ensure a successful safe shutdown path was available. Failure to close MO2700 could result in either an over pressure condition in low-pressure piping and/or an over-heat condition in low temperature piping resulting in a subsequent pipe rupture.

Significance: In accordance with IMC 0609, "Significance Determination Process," Attachment 0609.04, "Initial Characterization of Findings," Table 3 the inspectors determined the finding affected ability to reach or maintain SSD conditions in event of a fire. Therefore, screening under IMC 0609, Appendix F, "Fire Protection Significance Determination Process," was required. The inspectors performed a Phase 1 SDP screening for this issue using Task 1.6.1, "Screen by Licensee PRA-based Safety Evaluation." The licensee completed a detailed risk based evaluation which indicated a delta-CDF of 2.77E-8/year. A Region III Senior Reactor Analyst reviewed the licensee's fire PRA evaluation and confirmed the finding to be of very-low safety significance (Green).

Cross-Cutting Aspect: The finding did not have a cross-cutting aspects because it was considered not to be indicative of current licensee performance (i.e., deficiency existed for more than 3 years).

Enforcement:

Violation: Duane Arnold Energy Center Facility License Condition 2.C.(3) required the licensee to implement and maintain in effect all provisions of the approved Fire Protection Program that complies with 10 CFR 50.48(a) and 10 CFR 50.48(c), "NFPA Standard NFPA 805," as approved in the Safety Evaluation Report dated September 10, 2013. Section 4.2.4.1.6 "Operations Guidance," of NFPA 805 stated in part, guidance shall be provided to plant personnel that details the credited success paths for each fire area, including the performance of recovery actions.

Contrary to the above, as of January 25, 2018, the licensee failed to provide guidance to plant personnel that detailed the credited success path for each fire area as required per Section 4.2.4.1.6 of NFPA 805. Specifically, plant operating procedure AOP 913, did not contain guidance for operator to manually close MOV MO2700 from the control room to isolate RWCU in the event of a fire in Fire Area RB3 to ensure a safe shutdown success path.

Disposition: This violation is being treated as a NCV, consistent with Section 2.3.2 of the Enforcement Policy.

## **EXIT MEETINGS AND DEBRIEFS**

The inspectors confirmed that proprietary information was controlled to protect from public disclosure. No proprietary information was documented in this report.

- On February 8, 2018, the inspector presented the Triennial Fire Protection inspection results to Mr. M. Davis and other members of the licensee staff.

## **DOCUMENTS REVIEWED**

### **Condition Reports – Issued During Inspection**

- AR 02243736; FHA-400 error for HPCI Room summary; 01/09/2018
- AR 02243774; FPE-B06-005 conclusion has future actions; 01/09/2018
- AR 02243789; FPE-S06-005 incorrectly identifies pendent sprinklers; 01/09/2018
- AR 02244091; Incorrect basis statement for 1P298 operation; 01/11/2018
- AR 02244109; OP-025 battery light charging; 01/11/2018
- AR 02244120; Include copy of OP-025 in ERBS; 01/11/2018
- AR 02244127; Procedure change for actions in SAMP 716; 01/11/2018
- AR 02244129; Evaluate locking V33-0447 in the open position; 01/11/2018
- AR 02244155; Include SAMP 711 equipment in OP-025; 01/11/2018
- AR 02244159; B.5.b with the Security check point removal; 01/11/2018
- AR 02244170; FHA-400 10A discussion regarding smoke exhaust; 01/11/2018
- AR 02244181; SAMP 726 equipment specificity in OP-025; 01/11/2018
- AR 02244185; Nozzle monitor anchor not in box; 01/11/2018
- AR 02244194; SAMP box in NECR needs SAMP 711 label; 01/11/2018
- AR 02244210; Hose trailers do not have hydrant wrenches; 01/11/2018
- AR 02244244; SAMP 711 does not have a step to verify LPCI lineup; 01/11/2018
- AR 02245669; PFP-CB-757 Inaccuracies; 01/22/2018
- AR 02245778; Combustible loading error in FHA-400; 01/23/2018
- AR 02246388; Fire actions removed from AOP 913; 01/25/2018
- AR 02246730; FPE-R96-003 enhancement; 01/29/2018
- AR 02248487; BECH-E321 drawing error; 02/08/20

### **Procedures**

- SAMP 711; Emergency Drywell Makeup with the Portable Diesel Fire Pump; Revision 4
- SAMP 715; Portable Diesel Fire Pump Operation; Revision 12
- PFP-CB-757; Pre-Fire Plan Control Building Elevation 757; Revision 3
- AOP 913; Abnormal Operating Procedure Fire; Revision 80
- AOP 915; Abnormal Operating Procedure Shutdown Outside Control Room; Revision 61

- OI 304.2; 4160V/480V Essential Electrical Distribution System; Revision 100
- AOP 301.1; Abnormal Operating Procedure Station Blackout; Revision 71
- GMP-ELEC-03, Section C; Safe Shutdown Lights Illumination Checks; Revision 18
- GMP-ELEC-03, Section D; Safe Shutdown Lights Battery Checks; Revision 21
- OP-025; SAMP Equipment Inventory; Revision 16
- SAMP703; RCIC Operation Following Loss of Electric Power; Revision 8
- SAMP710; Emergency CST Makeup With the Portable Diesel Fire Pump; Revision 4
- SAMP715; Portable Diesel Fire Pump Operation; Revision 12
- SAMP716; Initial Response Extensive Damage Mitigation Guidelines(EDMG); Revision 3
- NS13E006; Fire Hose/ Flex Hose Hydrostatic Pressure Testing; 17

### **Drawings**

- BECH-E001; Sheet 001; Single Line Diagram Station Connections; Revision 40
- BECH-E104; Sheet 010; 4160V & 480V System Control & Protection; Revision 16
- BECH-E104; Sheet 012; 4160V & 480V System Control & Protection; Revision 19
- BECH-E122; Sheet 002A; Nuclear Steam Supply Shutoff System; Revision 9
- BECH-E122; Sheet 004; Nuclear Steam Supply Shutoff System; Revision 14

### **Calculations and Evaluations**

- 0027-0042-000-004; DAED Fire Risk Evaluation; Revision 0
- 0493080001.006; DAED Fire PRA NFPA 805 RAI Model Update Quantification Report; Revision 3
- CA02220661-01; NFPA 805 Change Evaluation; Revision 0
- FHA-500; Fire Protection Program – Nuclear Safety Capability Assessment; Revision 8
- FPE-R13-012; Fire Area RB3 Nuclear Safety Capability Assessment; Revision 0
- FPE-R96-004; Feasibility of Operator Manual/Recovery Actions and Verification of Alternate Shutdown Time Constraints; Revision 16
- FPLDA013-PR-010; At-Power Analysis for Fire Area CB2; Revision 0
- FPLDA013-PR-012; At-Power Analysis for Fire Area CB4; Revision 0
- FPLDA013-PR-018; At-Power Analysis for Fire Area RB1; Revision 0
- FPLDA013-PR-019; At-Power Analysis for Fire Area RB3; Revision 0
- PDA-BFJR-17-061; Fire PRA Evaluation for Logic Changes and MCA Scenarios Associated with EC 281991; Revision 0
- PDA-BFJR-18-011; Fire PRA Evaluation of PCIS Group 5 Isolation of RWCU; Revision 0

### **Work Orders**

- 40510646-01; STP NS130009 John Deere B5B Portable Diesel Fire Pump; 10/16/2017
- 40388767-01; STP 3.3.3.2-016 Remote Shutdown Panel SRV; 10/20/2016
- 40463909-01; STP 3.3.3.2-03; Remote Shutdown Panel Functional Test for CS and Instruments; 08/10/2017
- NS13F002; Fire Door and Frame Inspection; Revision 35
- 40516172-01; Monthly Lighting Inspection; 11/20/2017
- 40466774-01; Inspect & Testing Lighting; 03/11/2017
- 40358516-01; Replace EMGY LIT Batteries in TB-757/780 & CB-757; 12/14/2015
- 40377923-01; Replace Batteries EMGY LTS RB 757,CB757 & TB757; 01/25/2016