



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
REGION IV  
1600 EAST LAMAR BOULEVARD  
ARLINGTON, TEXAS 76011-4511

May 16, 2018

Mr. Fadi Diya, Senior Vice President  
and Chief Nuclear Officer  
Ameren Missouri  
Callaway Plant  
P.O. Box 620  
Fulton, MO 65251

SUBJECT: CALLAWAY PLANT - NRC BIENNIAL PROBLEM IDENTIFICATION AND  
RESOLUTION INSPECTION REPORT 05000483/2018010

Dear Mr. Diya:

On April 12, 2018, the U.S. Nuclear Regulatory Commission (NRC) completed a problem identification and resolution inspection at the Callaway Plant. The NRC inspection team discussed the results of this inspection with Mr. Tim Herrmann, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

The team reviewed the station's corrective action program and the station's implementation of the program. The team assessed the program's effectiveness in identifying, prioritizing, evaluating, and correcting problems, and whether the station was complying with NRC regulations and licensee standards. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

The team evaluated the station's processes for use of industry and NRC operating experience. The team also evaluated the effectiveness of the station's audits and self-assessments program. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

Finally, the team reviewed the station's programs to establish and maintain a safety-conscious work environment and interviewed station personnel to evaluate the effectiveness of these programs. Based on the team's observations and the results of these interviews, the team found no evidence of challenges to your organization's safety-conscious work environment. Your employees appeared willing to raise nuclear safety concerns through at least one of the several means available.

The NRC inspectors did not identify any finding or violation of more than minor significance.

F. Diya

2

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/**

Gerond A. George, Team Leader  
Inspection Programs and Assessment Team  
Division of Reactor Safety

Docket No. 50-483  
License No. NPF-30

Enclosure:  
Inspection Report 05000483/2018010  
w/ Attachments:

1. Information Request dated January 23, 2018
2. Document Request dated April 4, 2018

**U.S. NUCLEAR REGULATORY COMMISSION  
Inspection Report**

Docket Number: 05000483

License Number: NPF-30

Report Number: 05000483/2018010

Enterprise Identifier: I-2018-010-0054

Licensee: Union Electric Company

Facility: Callaway Plant

Location: Steedman, Missouri

Inspection Dates: March 26, 2018, to April 12, 2018

Inspectors: H. Freeman, Senior Reactor Inspector  
D. Bradley, Senior Resident Inspector  
S. Alferink, PhD, Reactor Inspector  
C. Stott, Reactor Inspector

Approved By: Gerond A. George, Team Leader  
Inspection Programs and Assessment Team  
Division of Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a biennial problem identification and resolution inspection at the Callaway Plant 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.

### **List of Findings and Violations**

No findings or violations of more than minor significance were identified during the inspection.

## 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.

## OTHER ACTIVITIES – BASELINE

### 71152—Problem Identification and Resolution Biennial Inspection (1 Sample)

The inspectors performed a biennial assessment of the licensee's corrective action program, use of operating experience, self-assessments and audits, and safety-conscious work environment. The assessment is documented below.

- (1) Corrective Action Program Effectiveness: Problem Identification, Prioritization, Evaluation, and Corrective Actions – The inspection team reviewed the station's corrective action program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards. The sample included approximately 220 condition reports and 50 jobs (work orders). This included an in-depth 5-year review of condition reports associated with the essential service water and ultimate heat sink systems.
- (2) Operating Experience, Self-Assessments, and Audits – The team evaluated the station's processes for use of industry and NRC operating experience. The team also evaluated the effectiveness of the station's audits and self-assessments program. The sample included 26 industry operating experience communications and associated site evaluations.
- (3) Safety-Conscious Work Environment – The team evaluated the station's safety-conscious work environment. The team interviewed station personnel and the employee concerns program manager. The team reviewed selected case files from the employee concerns program and sampled condition reports that had been anonymously submitted. The sample included focus group interviews with approximately 40 individuals from 5 different working groups (engineering, fix-it-now, operations, mechanical maintenance, nuclear oversight, and security) and a review of the most recent safety culture survey.

Corrective Action Program Effectiveness Observation	71152—Problem Identification and Resolution
Effectiveness of Problem Identification: Overall, the team found that the licensee was identifying and documenting problems at an appropriately low threshold. During the 2-year	

assessment period, the licensee initiated slightly more than 14,000 condition reports. However, the team did identify a few performance deficiencies that were administrative in nature that were not more-than-minor associated with problem identification. Specifically, during a review of 50 work orders, the team identified two examples where the licensee had documented issues in the work orders that were not captured in condition reports. In a third example, the team noted the licensee identified a condition that should have also been documented in a condition report, but failed to generate a condition report in a timely manner. Each of these issues had been adequately addressed prior to the team's identification through the work order process. The team did not consider these examples to be indicative of a programmatic issue within the area of problem identification.

**Effectiveness of Prioritization and Evaluation of Issues:** Overall, the team found that the licensee was appropriately classifying and prioritizing conditions in accordance with established procedures. Of the 14,000 condition reports written during the assessment period, approximately 40 percent were classified as adverse conditions and handled accordingly. The team found that, where the corrective action procedure would have allowed a condition to be classified or prioritized at a lower level, the licensee typically classified issues at the higher level and took more conservative actions in developing cause evaluations. While most of the condition reports that the team reviewed were appropriately characterized as "Adverse," the team identified a few examples where the condition reports were not classified correctly. For example, the team identified an example where the licensee had failed to classify a condition report associated with an NRC non-cited violation for a simulator fidelity issue as an adverse condition in accordance with their procedure. This error appeared to be caused by the timing of the finding because the issue was initially raised as a question which was appropriately documented as an "Other Issue" condition report and the licensee failed to upgrade or write a new condition report when it became clear that the issue represented a performance deficiency. In another example, the team found that the licensee had inappropriately classified a condition report as "Other Issue" to document the failure to implement an alternate method of shutting the equipment hatch because of an interference issue. Since the action to implement an alternate method of shutting the hatch was a corrective action for an adverse condition report, the condition report documenting the failure should have also been an adverse condition report. The handling of these condition reports as "Other Issues" did not adversely affect the corrective actions nor timeliness.

**Effectiveness of Corrective Actions:** Overall, the team concluded that the licensee identified effective corrective actions for the problems evaluated in the corrective action program. The licensee implemented these corrective actions in a timely manner, commensurate with their safety significance, and reviewed the effectiveness of the corrective actions appropriately. However, a Notice of Violation issued during the assessment period indicates that continued diligence by the licensee was necessary in the area of corrective actions. This Notice of Violation was issued for the licensee's failure to develop and implement adequate corrective actions associated for a failure previously identified by the NRC in 2014 to test engineered safety feature transformers load tap changer response times (05000483/2017007-01).

**Corrective Action Program Assessment:** Based on the samples reviewed, the team determined the licensee's corrective action program complied with regulatory requirements and self-imposed standards, and the licensee's implementation of the corrective action program adequately supported nuclear safety. The team found that management's oversight of the corrective action program process was effective. Corrective action program meetings

(screening, leadership, and corrective action review board) thoroughly reviewed each condition report, and demonstrated that the members were properly prepared and engaged with the process.

Operating Experience, Self-Assessments, and Audits Observation	71152—Problem Identification and Resolution
<p>Based on the samples reviewed, the team determined the licensee appropriately evaluated industry operating experience for its relevance to the facility. Operating experience information was incorporated into plant procedures and processes as appropriate.</p> <p>The team further determined the licensee appropriately evaluated industry-operating experience when performing root cause analysis and apparent cause evaluations. The licensee appropriately incorporated both internal and external operating experience into lessons learned for training and pre-job briefs.</p> <p>The team found that one of the strengths of the licensee’s corrective action program was associated with their willingness to be self-critical as evidenced in the thorough nature of their self-assessments and audits. The team found numerous examples of findings identified by the licensee and documented in the corrective action program including: overdue action items, trend for untimely updates to calculations, failure to perform a Part 21 evaluation for an Allen Bradley relay failure, and control building heating ventilation and air conditioning system pressure controllers being placed in manual without declaring the system to be inoperable. The NRC reviewed these issues and determined them to be not more-than-minor in significance.</p>	

Safety-Conscious Work Environment Observation	71152—Problem Identification and Resolution
<p>Based on interviews with plant staff and reviews of the latest safety culture survey results to assess the safety-conscious work environment, the team determined the licensee had established and maintained a healthy safety-conscious work environment. Employees appeared willing to raise nuclear safety concerns through at least one of the several means available. All of those interviewed had an adequate knowledge of the corrective action program process and would initiate a condition report, or work with someone who would do so on their behalf, if they knew of a safety concern.</p> <p>A potential vulnerability was identified during the interviews associated with the licensee’s corrective action program system database interface. The licensee had replaced their in-house developed system with an externally developed system in September 2016 which was the subject of many focus group interviews. The new system did not perform all of the functions of the in-house developed system and was generally disliked by front-line individuals. Most individuals expressed difficulty in searching the database. Some members of one work group indicated that they believed they were expected to search the database prior to initiating a condition report, making it difficult to initiate a condition report. These individuals indicated they had raised safety concerns, and would continue to do so, either through the condition reporting process or through their chain-of-command. The team found that while the expressed difficulties with the user interface did not appear to have impacted</p>	

the safety-conscious work environment, it represented an area where continued licensee management attention was warranted.

All plant personnel were aware of the Employee Concerns Program and most were willing to use it as an alternate avenue to raise concerns if required.

### **EXIT MEETINGS AND DEBRIEFS**

The inspectors verified no proprietary information was retained or documented in this report.

On April 12, 2018, the inspectors presented the biennial problem identification and resolution inspection results to Mr. T. Herrmann, Site Vice President, and other members of the licensee staff.



## DOCUMENTS REVIEWED

### 71152—Problem Identification and Resolution Biennial

#### Work Orders

16001349.915 13509339	17505255	11509170	14510038
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#### Miscellaneous Documents Number

#### Title

#### Revision Or Date

	Health Report Executive Summary – Cooling Water Systems	February 6, 2018
	System Health Report – Cooling Water Systems	
	Temporary Modification Log	
2004-01120	Essential Service Water Hydraulic Model	
AP17004	Nuclear Oversight Audit of Access Authorization	June 26, 2017
EF-123	Ultimate Heat Sink Thermal Performance Analysis Using Gothic	2
EF-126	Drift Limit for Ultimate Heat Sink Cooling Tower Drift Eliminators	0
MP 17-0012	Bypass Ultimate Heat Sink Fan Motor High Speed Thermal Overloads	0
P170.0026	Maintenance Rule Walkdown Report – Essential Service Water Pumphouse	July 31, 2013
PM 0825838		

#### Procedures (Number)

#### Title

#### Revision

APA-ZZ-00107	Review of Current Industry Operating Experience	021
APA-ZZ-00500	Corrective Action Program	068
APA-ZZ-00500 Appendix 2	Non-Conforming Materials Report	021
APA-ZZ-00500 Appendix 10	Trending Program	
APA-ZZ-00500 Appendix 11	Degraded and Non-conforming Condition Resolution	009
APA-ZZ-00500 Appendix 12	Significant Adverse Condition – ADCN-1	029
APA-ZZ-00500 Appendix 13	Adverse Condition – ADCN-2	030

Procedures (Number)	Title	Revision
APA-ZZ-00500 Appendix 14	Adverse Condition – ADCN-3	031
APA-ZZ-00500 Appendix 15	Adverse Condition – ADCN-4	025
APA-ZZ-00500 Appendix 16	Other Issue – OI-A	018
APA-ZZ-00500 Appendix 17	Screening Process Guidelines	035
APA-ZZ-00500 Appendix 19	Common Cause Evaluation	006
APA-ZZ-00500 Appendix 21	Other Issues – OI-B	024
APA-ZZ-00500 Appendix 22	Corrective Action Program Definitions	017
APA-ZZ-01400 Appendix A	Callaway Self-Assessment and Benchmarking Program	027
APA-ZZ-01400 Appendix E	Operating Experience	021
EDP-ZZ-04026	10 CFR Part 21 Evaluations	012
EDP-ZZ-06000	Vendor Equipment Technical Information Review Program	018
FDP-ZZ-02001	Distribution, Review, and Processing of NRC Generic Letters, Bulletins, Regulatory Issue Summaries, and License Renewal Interim Staff Guidance	015
LDP-ZZ-00500	Corrective Action Review Board	031
MTM-ZZ-QE001	Room Cooler Leak Location and Repair	006
ODP-ZZ-00001 Addendum 12	Operator Burdens and Workarounds	009

#### Condition Reports

201300989	201602427	201603473	201604936
201407444	201602454	201603522	201605178
201408380	201602455	201603581	201605289
201408399	201602456	201603598	201605488
201503391	201602475	201603640	201605499
201503621	201602658	201603819	201605506
201507752	201602811	201603844	201605517
201600287	201602825	201603910	201605592
201600448	201602855	201604242	201605700
201601916	201603297	201604282	201605725
201601918	201603312	201604299	201605917
201601936	201603321	201604301	201606075
201602417	201603472	201604473	201606132

Condition Reports

201606547	201700886	201704151	201706378
201606777	201700929	201704163	201706385
201606840	201700939	201704176	201706449
201606865	201700977	201704268	201706536
201606908	201701102	201704455	201706623
201606939	201701299	201704508	201706830
201607028	201701415	201704529	201706832
201607047	201701513	201704531	201706900
201607085	201701537	201704699	201707058
201607528	201701571	201704838	201707137
201607689	201701830	201704918	201707659
201607718	201701959	201704953	201707677
201607872	201702005	201705096	201800100
201607944	201702009	201705187	201800374
201608027	201702019	201705236	201800390
201608050	201702050	201705302	201800411
201608055	201702079	201705312	201800495
201608162	201702136	201705483	201800496
201608165	201702257	201705509	201800521
201608219	201702280	201705513	201800679
201608268	201702343	201705575	201800817
201608304	201702374	201705665	201800855
201608361	201702418	201705685	201800955
201608387	201702501	201705715	201801002
201608399	201702709	201705787	201801153
201608404	201702772	201705836	201801193
201608452	201702995	201705841	201801370
201608650	201703205	201705851	201801439
201608791	201703400	201705931	201801559
201608792	201703433	201705949	201801610*
201608838	201703472	201705956	201801631
201608883	201703566	201706020	201801640
201609035	201703572	201706052	201801740
201609187	201703582	201706093	201801837*
201609393	201703592	201706132	201801838*
201700095	201703700	201706233	201801847
201700108	201703962	201706244	
201700681	201703981	201706269	
201700855	201704049	201706354	

\*Issued as a result of inspection activities

**Information Request**  
**Biennial Problem Identification and Resolution Inspection Callaway Plant**  
**January 23, 2018**

**Inspection Report:** 05000483/2018010  
**On-site Inspection Dates:** Weeks of March 26 and April 9, 2018  
**Assessment Period:** March 25, 2016, through April 13, 2018

This inspection will cover the period from March 25, 2016, through the end of the onsite inspection. The scope of this request is information associated with activities during this inspection period unless otherwise specified. To the extent possible, the requested information should be provided electronically in word-searchable Adobe PDF (preferred) or Microsoft Office format. Any sensitive information should be provided in hard copy during the team's first week on site; do not provide any sensitive or proprietary information electronically.

Lists of documents ("summary lists") should be provided in Microsoft Excel or a similar sortable format. Please be prepared to provide any significant updates to this information during the team's first week of on-site inspection. As used in this request, "corrective action documents" refers to condition reports, notifications, action requests, cause evaluations, and/or other similar documents.

Please provide the following information no later than March 5, 2018:

1. Document Lists

Note: For these summary lists, please include the document/reference number, the document title, initiation date, current status, and long-text description of the issue.

- a. Summary list of all corrective action documents related to significant conditions adverse to quality that were opened, closed, or evaluated during the period
- b. Summary list of all corrective action documents related to conditions adverse to quality that were opened or closed during the period
- c. Summary lists of all corrective action documents that were upgraded or downgraded in priority/significance during the period (these may be limited to those downgraded from, or upgraded to, apparent-cause level or higher)
- d. Summary list of all corrective action documents initiated during the period that "roll up" multiple similar or related issues, or that identify a trend
- e. Summary lists of operator workarounds, operator burdens, temporary modifications, and control room deficiencies (1) currently open and (2) that were evaluated and/or closed during the period
- f. Summary list of safety system deficiencies that required prompt operability determinations (or other engineering evaluations) to provide reasonable assurance of operability
- g. Summary list of plant safety issues raised or addressed by the Employee Concerns Program (or equivalent) (sensitive information should be made available during the team's first week on site—do not provide electronically)

2. Full Documents with Attachments

Note: Please include a summary list or index if document titles are not descriptive.

- a. Root Cause Evaluations completed during the period; include a list of any planned or in progress
- b. Apparent Cause Evaluations completed during the period
- c. Quality Assurance audits performed during the period
- d. Audits/surveillances performed during the period on the Corrective Action Program, of individual corrective actions, or of cause evaluations
- e. Functional area self-assessments and non-NRC third-party assessments (e.g., peer assessments performed as part of routine or focused station self- and independent assessment activities; do not include INPO assessments) that were performed or completed during the period; include a list of those that are currently in progress
- f. Any assessments of the safety-conscious work environment
- g. Corrective action documents generated during the period associated with the following:
  - i. NRC findings and/or violations
  - ii. Licensee Event Reports issued by Callaway Plant
- h. Corrective action documents generated for the following, if they were determined to be applicable to Callaway Plant (for those that were evaluated but determined not to be applicable, provide a summary list):
  - i. NRC Information Notices, Bulletins, and Generic Letters issued or evaluated during the period
  - ii. Part 21 reports issued or evaluated during the period
  - iii. Vendor safety information letters (or equivalent) issued or evaluated during the period
  - iv. Other external events and/or Operating Experience evaluated for applicability during the period
- i. Corrective action documents generated for the following:
  - i. Emergency planning drills and tabletop exercises performed during the period
  - ii. Maintenance preventable functional failures that occurred or were evaluated during the period

- iii. Action items generated or addressed by offsite review committees during the period
- iv. Findings, violations, and comments/observations documented in the 2015 NRC PI&R inspection report

3. Logs and Reports

- a. Corrective action performance trending/tracking information generated during the period and broken down by functional organization (if this information is fully included in item 3.b, it need not be provided separately)
- b. Current system health reports, Management Review Meeting package, or similar information; provide past reports as necessary to include  $\geq 12$  months of metric/trending data
- c. Radiation protection event logs during the period
- d. Security event logs and security incidents during the period (sensitive information should be made available during the team's first week on site—do not provide electronically)
- e. List of training deficiencies, requests for training improvements, and simulator deficiencies for the period

Note: For items 3.c and 3.d, if there is no log or report maintained separate from the corrective action program, please provide a summary list of corrective action program items for the category described.

4. Procedures

Note: For these procedures, please include all revisions that were in effect at any time during the period.

- a. Corrective action program procedures, to include initiation and evaluation procedures, operability determination procedures, apparent and root cause evaluation/determination procedures, and any other procedures that implement the corrective action program
- b. Quality Assurance program procedures (specific audit procedures are not necessary)
- c. Employee Concerns Program (or equivalent) procedures
- d. Procedures that implement/maintain a Safety-Conscious Work Environment
- e. Conduct of Operations procedure (or equivalent) and any other procedures or policies governing control room conduct, operator burdens and workarounds, etc.

- f. Operating Experience (OE) program procedures and any other procedures or guidance documents that describe the site's use of OE information
5. Other
- a. List of risk-significant components and systems, ranked by risk worth
  - b. List of structures, systems, and components and/or functions that were in maintenance rule (a)(1) status at any time during the inspection period; include dates and results of expert panel reviews and dates of status changes
  - c. Organization charts for plant staff and long-term/permanent contractors
  - d. Electronic copies of the UFSAR (or equivalent), technical specifications, and technical specification bases, if available
  - e. Table showing the number of corrective action documents (or equivalent) initiated during each month of the inspection period, by screened significance
  - f. For each day the team is on site,
    - i. Planned work/maintenance schedule for the station
    - ii. Schedule of management or corrective action review meetings (e.g. operations focus meetings, condition report screening meetings, CARBs, MRMs, challenge meetings for cause evaluations, etc.)
    - iii. Agendas for these meetings

Note: The items listed in 5.f may be provided on a weekly or daily basis after the team arrives on site.

All requested documents should be provided electronically where possible. Regardless of whether they are uploaded to an internet-based file library (e.g., Certrec's IMS), please provide copies on CD or DVD. One copy of the CD or DVD should be provided to the resident inspector at Callaway Plant; and one additional copy should be provided to the team lead, to arrive no later than March 5, 2018:

U.S. NRC Region IV  
Attn: Harry Freeman  
1600 E. Lamar  
Arlington, TX 76011

**PAPERWORK REDUCTION ACT STATEMENT**

This request does not contain new or amended information collection requirements subject to the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). Existing information collection requirements were approved by the Office of Management and Budget, control number 3150-0011.

Document Request  
April 4, 2018

SYSTEM	JOB	TASK	JOB TYPE	COMPONENT ID	JOB DESCRIPTION
BB	16002347	550	CC	BBLV1311C	REPLACE NMD CARD DURING PERFORMANCE OF ISL-BB-L1311
BB	10007881	500	DC	BBHV8157A	Replace Valve BBHV8157A
BB	14006280	500	DC	BB8949D	REPAIR CHECK VALVE (BB8949D)
BB	16001493	500	DC	BBZS0455B	INVESTIGATE LIMIT SWITCH BBZS0455B
BB	16001542	500	DC	BBHIS8002A	INVESTIGATE no closed indication on BBHIS8002A for BBHV8002A
BB	16003335	500	OA	RBB01	PERFORM N-1 WALKDOWNS OF STUCK REACTOR STUD #18 Location:
BB	16004835	500	OA	BBFT0029HI	BBFT0029HI, QC AGING MANAGEMENT VT-3 INSPECTION
BB	16004843	500	OA	BBPI0001I	BBPI0001I, QC AGING MANAGEMENT VT-3 INSPECTION
BB	18001328	500	OA	TBB03	PERFORM RCS LEAKRATE PER OSP-BB-00009
BB	15005089	500	OM	BB-004-BCA	Perform thermal fatigue inspections in accordance with MRP-1
BB	05515129	500	PM	BBPCV0455A	DISASSEMBLE, INSPECT AND REASSEMBLE VALVE
BB	10502588	500	PM	BBT0411	Replace NR RCS Temperature Loop BBT0411 Printed Circuit Card
BB	10506356	500	PM	BBHV8031	Replace Elastomeric Parts in BBHV8031
BB	10507447	500	PM	BBHV8351CO	INSPECT/SERVICE LIMITORQUE OPERATOR BBHV8351C
BB	10507454	500	PM	BBHV8351CO	PERFORM MOV DIAGNOSTIC TEST ON BBHV8351C
BB	10507549	500	PM	BBHV8000AO	PERFORM MOV DIAGNOSTIC TEST ON BBHV8000AO
BB	14512862	500	PM	BB8010A	REPLACE BB8010A WITH PRETESTED SPARE
BB	14513786	500	PM	EBB01D	PERFORM UPPER INTERNALS INSPECTION - EBB01D
BB	15512294	500	PM	BBHS8000C	STROKE TEST BBHS8000C USING LOCAL HANDSWITCH
BB	15512354	500	PM	BBHV0013O	LIMITORQUE GREASE INSPECTIONS Rx BLDG 'A' TRAIN



SYSTEM	JOB	TASK	JOB TYPE	COMPONENT ID	JOB DESCRIPTION
KC	16001817	500	CC	KCXSH0405	INVESTIGATE Open Circuit Trouble Alarm for Zone 405 1:ZN33
KC	16002304	500	DC	KC274	INVESTIGATE KC274 INVERTER for FAILURE TROUBLE
KC	16004471	500	DC	KC273	INVESTIGATE KC273 INVERTER for FAILURE ALARM on KC008
KC	18000090	500	DC	KCXSH0219	REPLACE DUCT DETECTORS for ZONE KCXSH0219
KC	16005163	500	OA	TKC1003BV1	PERFORM AGING MANAGEMENT PROGRAM EXAMINATION OF TKC1003BV1
KC	14006468	500	OM	KCV0057	CLEAN / REWORK VALVE TO CORRECT SEAT LEAKAGE PROBLEM
KC	16507705	500	PM	KC008	INSPECT & CLEAN INVERTER KC008
KC	16512498	500	PM	KC	INSPECT FIRE EXTINGUISHERS
KC	18502118	500	PM	KC	OPERATE EMERGENCY EQUIPMENT VEHICLE AND FIRE PUMPER TRUCK
KC	17513591	500	RMT	KC	CONTROL ROOM EVACUATION EQUIPMENT CHECK
NF	16001549	500	DC	NF039C	REPLACE RELAY K1167
NF	14005287	500	OB	NF039A	Replace DV Transducers UV Power Supplies & all circuit cards
NF	15005150	500	OR	NF039BPSA1B	REPLACE & TEST 5VDC ATI POWER SUPPLY (SHOP WORK)
NF	12502664	500	PM	NFUQ5002A	REPLACE UV POWER SUPPLY: NFUQ5002A LSELS Channel 3 PANEL NF0
NF	12502665	500	PM	NFUQ5002B	REPLACE UV POWER SUPPLY: NFUQ5002B LSELS Channel 3 PANEL NF0
NF	12502666	500	PM	NFUQ5003A	REPLACE LSELS CHANNEL 4 UV POWER SUPPLY: NFUQ5003A IN NF039A
NF	13504946	500	PM	NFUQ5000B	REPLACE UV POWER SUPPLY NFUQ5000B LSELS CHANNEL 1 PANEL NF03
NF	13505448	500	PM	NFUQ5000A	REPLACE UV POWER SUPPLY NFUQ5000A LSELS CHANNEL 1 PANEL NF03
NF	13513995	500	PM	NFUQ5001A	REPLACE UV POWER SUPPLY NFUQ5001A LSELS CHANNEL 2 PANEL NF03
NF	16503067	500	PM	NF039B	SORENSEN POWER SUPPLY RIPPLE VOLTAGE MEASUREMENT.

SYSTEM	JOB	TASK	JOB TYPE	COMPONENT ID	JOB DESCRIPTION
SP	16001881	500	CC	SP056A	RETURN GTRE0060 TO SERVICE AFTER MONITOR DATABASE UNKNOWN IN
SP	17001940	500	CC	SP056A	SP056A LOSS OF RM11 SCREEN - IFIN INVESTIGATION
SP	16002085	500	DC	SP056A	RM-11 COMMUNICATION LOOP TROUBLESHOOTING
SP	16004143	500	DC	SP056A	INVESTIGATION OF COMMUNICATION ISSUES BETWEEN RM11 AND PLANT
SP	16001897	500	DL	SP056A	Investigate and repair RM-11C.
SP	17001223	500	OA	SP056A	RM-11 COMMUNICATION LOOP TROUBLESHOOTING
SP	17003162	500	OR	SP160B	REPAIR COMMUNICATION ISOLATION BOARD
SP	13504662	500	PM	SP01	COMPONENT REPLACEMENT AND TESTING FOR SP01
SP	15500479	500	PM	SP01	CLEAN/INSPECT INVERTER SP01
SP	16510532	500	PM	SP01	CLEAN/INSPECT INVERTER SP01

CALLAWAY PLANT - NRC BIENNIAL PROBLEM IDENTIFICATION AND RESOLUTION  
INSPECTION REPORT 05000483/2018010 – MAY 16, 2018

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