



10 CFR 50.71(e)  
10 CFR 50.4(b)(6)  
10 CFR 50.54(a)  
10 CFR 50.59  
10 CFR 54.37(b)  
10 CFR 71.106  
10 CFR 72.48(d)(2)

April 30, 2020  
LIC-20-0005

U. S. Nuclear Regulatory Commission  
Attn: Document Control Desk  
Washington, DC 20555

Fort Calhoun Station, Unit No. 1  
Renewed Facility Operating License No. DPR-40  
NRC Docket No. 50-285

Fort Calhoun Station  
Independent Spent Fuel Storage Installation  
NRC Docket No. 72-054

Omaha Public Power District - Fort Calhoun  
Quality Assurance Program Approval for Radioactive Material Packages  
NRC Docket No. 71-0256

Subject: 10 CFR 50.59 Report, Quality Assurance (QA) Program Changes, Technical Specification Basis Changes, 10 CFR 71.106 Quality Assurance Program Approval, Aging Management Review, Commitment Revisions, and Revision of Updated Safety Analysis Report (USAR) to the Decommissioning Safety Analysis Report (DSAR) for Fort Calhoun Station (FCS), Unit No. 1

Reference: 1. Letter from OPPD (M. J. Fisher) to NRC (Document Control Desk), 10 CFR 50.59 Report, Quality Assurance (QA) Program Changes, Technical Specification Basis Changes, 10 CFR 71.106 Quality Assurance Program Approval, Aging Management Review, Commitment Revisions, and Revision of Updated Safety Analysis Report Revision for Fort Calhoun Station (FCS), Unit No. 1, dated December 4, 2017 (LIC-17-0070)

In accordance with 10 CFR 50.59(d)(2), the Omaha Public Power District (OPPD) submits Attachment 1 as the report of changes, tests, and experiments performed pursuant to 10 CFR 50.59 for Fort Calhoun Station (FCS), Unit No. 1. Attachment 2 is provided to describe Quality Assurance (QA) Program changes as required by 10 CFR 50.54(a)(4)(i). Attachment 3 describes changes made to the quality assurance program approval for radioactive material packages. Attachment 4 contains a description of revised regulatory commitments that require Commission notification in accordance with NEI 99-04, "Guidelines for Managing NRC Commitment Changes." In accordance with FCS Technical Specification 5.20.d, Attachment 6 provides a brief summary of the Technical Specification Basis Changes (TSBCs) made since the previous submittal (Reference 1) and Attachment 8 provides a list of files on CD-ROM included in this submittal.

In accordance with 10 CFR 54.37(b), a review of structures, systems, and components (SSCs) newly identified that would have been subject to an aging management review or evaluation of time-limited aging analysis in accordance with 10 CFR 54.21 was performed. No new SSCs subject to an aging management review or evaluation of time-limited aging analyses in accordance with 10 CFR 54.21 were identified

In accordance with 10 CFR 72.48(d)(2) the Omaha Public Power District (OPPD) is submitting the summary report of changes, tests and experiments for the FCS Independent Spent Fuel Storage Installation (ISFSI) subject to evaluation in accordance with 10 CFR 72.48(c)(2). There was one changes, tests, or experiments that required an evaluation to be performed under 10 CFR 72.48 (Attachment 7).

This information covers the period of November 30, 2017 through February 29, 2020.


The DSAR is issued in electronic format. Pursuant to 10 CFR 50.71(e) and 10 CFR 50.4(b)(6), enclosed is one (1) original CD-ROM of the FCS DSAR made since the previous submittal (Reference 1) and includes changes made under the provisions of 10 CFR 50.59 but not previously submitted to the Commission. The CD-ROM also contains Revision 12 of the Quality Assurance Topical Report (NO-FC-10), incorporated by reference in the DSAR. In addition, the CD-ROM contains the pages of the Technical Specification Bases as updated following the DSAR revision. Attachment 8 contains a list of the files on the CD-ROM.

As required by 10 CFR 50.71(e)(2)(i), I certify that the information in this submittal accurately presents changes made since the previous submittal, necessary to reflect information and analyses submitted to the Commission or prepared pursuant to Commission requirements, and identifies changes made under the provisions of 10 CFR 50.59 but not previously submitted to the Commission.

No commitments to the NRC are made in this letter.

If you should have any questions, please contact Mr. Bradley H. Blome, Director - Licensing and Regulatory Assurance at (402) 533-6041.

Respectfully,



Mary J. Fisher

Vice President, Energy Production & Nuclear Decommissioning

MJF/cac

- Attachments:
1. Changes, Tests, and Experiments Performed Pursuant to 10 CFR 50.59
  2. Quality Assurance Program Changes
  3. 10 CFR 71.106, Quality Assurance Program Approval for Radioactive Material Package Changes
  4. Regulatory Commitments Revised in Accordance with NEI 99-04
  5. Information removed from the DSAR
  6. Summary of Technical Specification Basis Changes (TSBC)
  7. Changes, Tests, and Experiments Performed Pursuant to 10 CFR 72.48
  8. List of Files on CD-ROM

Enclosure: CD-ROM of DSAR Sections and Figures, QATR and Technical Specification Basis Pages

- c:
- S. A. Morris, NRC Regional Administrator, Region IV
  - J. D. Parrott, NRC Senior Project Manager (w/o closure)
  - C. D. Steely, NRC Senior Health Physicist, Region IV (w/o closure)

**Changes, Tests, and Experiments Performed  
Pursuant to 10 CFR 50.59**

Abbreviations and Acronyms:

AOP – Abnormal Operating Procedure	SIT – Safety Injection Tank
AR – Action Request	SM – Shift Manager
CCW – Component Cooling Water	SSC – Structures, Systems and Components
CD-ROM – Compact Disk Read-Only Memory	ST – Surveillance Test
CFR – Code of Federal Regulations	TM – Temporary Modification
CIV – Containment Isolation Valve	TPMP - Training Program Master Plan.
DG – Diesel Generator	TS – Technical Specification
DOC – Decommissioning Oversight Committee	TSBC – Technical Specification Basis Change
DSAR - Decommissioning Safety Analysis Report	UFSAR – Updated Final Safety Analysis Report
EA – Engineering Analysis	USAR – Updated Safety Analysis Report
EC – Engineering Change	
FCS – Fort Calhoun Station, Unit No. 1	
FSAR – Final Safety Analysis Report	
HSM – Horizontal Storage Module	
IOC – Interm Operability Criteria	
ISFSI – Independent Spent Fuel Storage Installation	
LCO – Limiting Conditions for Operation	
MSIV – Main Steam Isolation Valves	
NEI – Nuclear Energy Institute	
NLI - Nuclear Logistics Incorporated	
NRC – Nuclear Regulatory Commission	
OI – Operating Instruction	
OPPD – Omaha Public Power District	
PDTs – Permanently Defueled Technical Specifications	
PORC – Plant Operations Review Committee	
QA – Quality Assurance	
QATR - Quality Assurance Topical Report	
RCDT – Reactor Coolant Drain Tank	
RCS – Reactor Coolant System	
RHR – Residual Heat Removal	
RW – Raw Water	
SCR – Safety Review Committee (PORC)	
SER – Safety Evaluation Report	

Changes, Tests, and Experiments Performed Pursuant to 10 CFR 50.59

**2018 Evaluations**

Note - The 10 CFR 50.59 evaluations summarized below are, for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

Change Number	Activity Title	50.59 Evaluation Summary
EC 70053	Remove component cooling water (CCW) Standby Start Function	<p><b>Description of Activity:</b> This activity will remove the standby start function of all Component Cooling Water (CCW) pumps by physically removing the fuses that are associated with the standby start relays and contacts. This activity will also update the associated DSAR description, plant operating procedures, and maintenance procedures to reflect the removal of the standby start function. This activity will change the abnormal and alarm response procedures to control the CCW system startup similar to the normal startup controlled by OI-CC-1. The activity will also update the DSAR to reflect the modification and CCW heat exchanger flow requirements without the standby start function.</p> <p><b>Reason for Activity:</b> This activity is being performed because the standby start function is no longer required in the permanently defueled condition. It will also support future changes regarding the operation of the Raw Water RW/CCW Heat Exchangers which currently have requirements to maintain two in service heat exchangers in service to handle potential CCW pump starts.</p> <p><b>Effect of Activity:</b> The removal of the standby start function results in a manual action for operators to start one of two available standby CCW pump in accordance with plant procedures.</p> <p>This activity will also change the abnormal and alarm response procedures to control the CCW system startup similar to the normal startup controlled by OI-CC-1. This will include throttling the CCW pump discharge valve to limit the initial system pressure transient (water hammer). This method of controlling the system is already utilized by operations during normal CCW startups and will result in more precise control of the system.</p>



Changes, Tests, and Experiments Performed Pursuant to 10 CFR 50.59

**2018 Evaluations**

Note - The 10 CFR 50.59 evaluations summarized below are, for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

Change Number	Activity Title	50.59 Evaluation Summary
		<p>Summary of Conclusion for the Activity's 50.59 Review: The applicability determination that in addition to 10 CFR 50.59, this activity is controlled by 10 CFR 50.82 for termination of license, 10 CFR 50, Appendix B for plant documentation changes, and NOD-QP-16 for associated DSAR changes.</p> <p>The screening determined that the removal of the standby start function results in a potential adverse change to the CCW design function and how it is controlled. The evaluation determined that prior NRC approval is not required because:</p> <ul style="list-style-type: none"><li>• CCW pump motor standby start function is not credited in design basis accidents and is not required to mitigate design basis events</li><li>• The CCW system does not initiate any design basis accidents or design basis events</li><li>• Manual action for operations to start the CCW system is already required for all design basis events that results in a loss of offsite power</li><li>• A loss of offsite power resulting in operations manually starting a diesel generator, raw water pump, component cooling water pump, and spent fuel pool cooling pump bounds any accident of a different type that is applicable to the activity</li></ul>

Changes, Tests, and Experiments Performed Pursuant to 10 CFR 50.59

**2019 Evaluations**

Note - The 10 CFR 50.59 evaluations summarized below are for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

Change Number	Activity Title	50.59 Evaluation Summary
EC 70248	Updated Tornado Analysis and AOP-01 to Open South Stairwell of Intake Structure	<p>Description of Activity: This activity is to remove the tornado missile barrier (#4 of the Intake Structure per EA13-014, "Tornado Safe Shutdown Analysis") above the stairwell leading down to the circulation water bay in the Intake Structure. This activity includes changing AOP-1, "Acts of Nature" to add steps to isolate the Raw Water (RW) pump (AC-10A) and RW west header. By isolating the RW west header, the Component Cooling Water System (CCW) will be affected by isolating one CCW/RW heat exchanger (AC-1C). EA13-014 is updated to reflect that the tornado missile barrier is removed.</p> <p>Reason for Activity: The existing method for accessing the circulation bay is by using a scaffold stairway. This has been identified as a safety issue. By removing the tornado barrier, the access to the circulation bay by using the newly exposed existing stairway and is considered a safer path.</p> <p>Effect of Activity: By removing the tornado barrier, the RW pipe (West Header) is exposed to potential tornado missiles. The activity to change the procedure (AOP-01) is to mitigate the effects if a tornado missile damages the RW west header. This mitigation is only in effect during severe weather as dictated by AOP-1. The activities will have no impact on safety analysis described in the DSAR. With the RW west header isolated, there are still three (3) RW pumps, three (3) CCW pumps, and two (2) CCW/RW heat exchangers available as described in the DSAR. Therefore, there are no impacts to any safety analysis.</p>

Changes, Tests, and Experiments Performed Pursuant to 10 CFR 50.59

**2019 Evaluations**

Note - The 10 CFR 50.59 evaluations summarized below are for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

		<p>Summary of Conclusion for the Activity's 50.59 Review:</p> <p>The § 50.59 Screen concludes that the proposed activity has an adverse impact on a DSAR described functions or how any DSAR described functions for controlled. Therefore, the proposed activity requires the performance of a § 50.59 Evaluation. This conclusion is based on one condition where the activity adds a manual action in response to weather conditions and is considered adverse. There are no changes to any DSAR described design functions, how these functions are performed or controlled, or any design methodologies. Also the proposed activity does not involve any tests/experiments and does not require a changed to the Technical Specifications or the Facility Operating License. The § 50.59 evaluation resulted in the conclusion that NRC approval is not required.</p> <p>The activity is not controlled by the processes of the Applicability Review. The proposed activity was reviewed under a §50.59 Evaluation and the evaluation concluded that the proposed activity may be implemented without a License Amendment. Therefore, NRC prior approval is not required.</p>
--	--	--



**Quality Assurance Program Changes**

**Fort Calhoun Station, Unit No. 1  
Renewed Facility Operating License No. DPR-40  
NRC Docket No. 50-285**

**And**

**Fort Calhoun Station  
Independent Spent Fuel Storage Installation  
NRC Docket No. 72-054**

QA Program Change Number [Date of Change]	The Quality Assurance Topical Report (QATR) Revision Description
Revision 10 / 1/31/2018	<ul style="list-style-type: none"> <li>• Revises the organizational structure at OPPD and at FCS. The Energy Production and Nuclear Business units are being combined under one Vice President for Energy Production and Nuclear Decommissioning. The new VP will be the executive responsible for implementation of the Quality Assurance Program at FCS and the NOS Manager will report to this VP. A director position for RP and Chemistry is eliminated with these responsibilities retained by the new Decommissioning Plant Manager;</li> <li>• Changes USAR to DSAR throughout the document;</li> <li>• Updates M&amp;TE organizational description;</li> <li>• Updates wording to reflect separation from the Exelon Fleet;</li> <li>• Makes editorial corrections carried forward from the conversion of the QATR during Exelon integration.</li> </ul>
Revision 11 / 6/20/2018	<ul style="list-style-type: none"> <li>• Aligns the QATR to the remaining requirements associated with a site with a permanently defueled reactor in accordance with 10 CFR 50.82(a).</li> <li>• Aligns the requirements to those associated with the approved NRC facility Safety Evaluation Reports (SERs) as requested through the License Amendment Request (LAR) process for the issuance of the Site's permanently defueled License, Technical Specifications, Cyber Security, and Fire Protection requirements.</li> <li>• Updates organizational titles for realigned decommissioning organizational structure.</li> </ul>
Revision 12 / 1/30/2019	<ul style="list-style-type: none"> <li>• Changes in applicability due to reclassification of structures, systems, and components.</li> <li>• Implementation methodology details found in Revision 11 of the QATR are not included in Revision 12 of the QATR.</li> <li>• Streamlining organizational functions to accommodate changing and consolidating responsibilities.</li> <li>• Applies regulations applicable to a decommissioning facility.</li> <li>• Transition of the Plant Operations Review committee (PORC) to the Safety Review Committee (SRC).</li> <li>• Extensive editorial changes that eliminate redundancy, provide clarity, and improve readability.</li> </ul>

**10 CFR 71.106**  
**Quality Assurance Program Approval**  
**for Radioactive Material Package Changes**

QA Program Change Number [Date of change]	Revision Description
N/A	No changes have been made to the quality assurance program approval for radioactive material package changes since August 13, 2015 when NRC Form 311, Quality Assurance Program Approval for Radioactive Material Packages was approved (QA Program Approval No. 71-0256, Rev. No. 8). See NRC letter dated August 13, 2015 (NRC-15-075) (ML15231A598).

**Regulatory Commitments Revised in Accordance with NEI 99-04**

**Regulatory Commitments Revised in Accordance with NEI 99-04**

Commitment Number	Description
AR 00052784	This commitment tracked OPPD's commitment to develop and implement Lesson plan (SEAD-52) 480V Switchgear and NLI Circuit Breakers, task qualification card 220, Serve as System Expert for the Electrical Distribution System, and the course description that was incorporated into the curriculum outline section of the Engineering Training Program Master Plan (TPMP). The commitment is being deleted
AR 00053254	This commitment tracked OPPD's commitment to trending program that evaluates testing resistance measurements of the line to load side connections of applicable switchgear during preventative maintenance was developed. The commitment is being deleted
AR 00007983	This commitment tracked OPPD's commitment to revise procedure on loss of instrument air associated with violation 8727-B. AOP-17 was updated to correct the issue. The commitment is being deleted.
AR 00006644	This commitment tracked OPPD's commitment to update surveillance test ST-CRV-1-F.3 to take differential pressure readings between the control room and adjacent areas. The commitment is being deleted.
AR 00007980	This commitment tracked OPPD's commitment to perform prejob briefings and small group meetings for surveillance tests performed on a frequency less than or equal to quarterly. The commitment is being deleted.
AR 00004595	This commitment tracked OPPD's commitment to review all safety-related valve positions, positioning requirements and positive controls to assure that valves remain positioned (open or closed) in a manner to ensure the proper operation of engineered safety features. The commitment is being deleted
AR 00009361	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009362	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009366	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009371	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009368	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009382	This commitment tracked OPPD's commitment to Generic Letter 88-14 "INSTRUMENT AIR SUPPLY SYSTEM PROBLEM AFFECTING SAFETY RELATED EQUIPMENT" The commitment is being deleted

**Regulatory Commitments Revised in Accordance with NEI 99-04**

AR 00009358	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00008516	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009369	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009357	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009363	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00005213	This commitment tracked OPPD's commitment for procedures to verify correct performance of operating activities. The Fort Calhoun Station procedures presently require double verification of the proper line-up safety-related systems prior to plant startup, as required by the nature of the outage. The second verification is performed by an individual who has been specifically qualified on the system being verified; e.g., an auxiliary operator who has been signed off on his system qualification book for the given system. These measures ensure that all safety related systems are properly aligned for operation following a long term maintenance outage. The commitment is being deleted.
AR 00008515	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009359	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009370	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00009372	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted



**Regulatory Commitments Revised in Accordance with NEI 99-04**

AR 00012397	This commitment tracked OPPD's commitment to have procedures and installation of locking devices. While operating at 100 percent power, reactor coolant drain tank (RCDT) pump discharge test valve wd-1060 was used to obtain 20 RCDT samples between October 16, 1991, and November 18, 1991, during the investigation of abnormal increases in tank level. WD-1 060 is a 318 inch seal wired closed containment isolation valve (CIV) which taps off the RCDT pump discharge header between CIVs HCV-500a and HCV-500b. Opening of wc-1 060 violated containment integrity as required by technical specification 2.6.(1 ). << Resulted in violation 912601 & 9126-02 see IER-91-26 >> revise chemistry procedures cmp-2.1 and cmp-2.4 to ensure so-o-44 requirements for locked valves are properly implemented. developed a label for locked valves including fire protection to identify the purpose of the locking device. The commitment is being deleted
AR 00012185	This commitment tracked OPPD's commitment to have procedures and installation of locking devices. While operating at 100 percent power, reactor coolant drain tank (RCDT) pump discharge test valve wd-1060 was used to obtain 20 RCDT samples between October 16, 1991, and November 18, 1991, during the investigation of abnormal increases in tank level. WD-1 060 is a 318 inch seal wired closed containment isolation valve (CIV) which taps off the RCDT pump discharge header between CIVs HCV-500a and HCV-500b. Opening of wc-1 060 violated containment integrity as required by technical specification 2.6.(1 ). << Resulted in violation 912601 & 9126-02 see IER-91-26 >> revise chemistry procedures cmp-2.1 and cmp-2.4 to ensure so-o-44 requirements for locked valves are properly implemented. developed a label for locked valves including fire protection to identify the purpose of the locking device. The commitment is being deleted
AR 00060504	This commitment tracked OPPD's commitment to continue to inform NRC/NRR as to when the IOC is applied for determining operability. Omaha Public Power District (OPPD) submits the attached IOC, Revision 0, document for NRC review. The commitment is being deleted
AR 00010237	This commitment tracked OPPD's commitment to Service Water System Problems Affecting Safety-Related Equipment (Generic Letter 89-13). Implement and maintain an ongoing program of surveillance and control techniques for safety related heat exchangers. The commitment is being deleted
AR 00008514	This commitment tracked OPPD's commitment to Generic Letter 87-12 "LOSS OF RESIDUAL HEAT REMOVAL (RHR) WHILE THE REACTOR COOLANT SYSTEM (RCS) IS PARTIALLY FILLED (GENERIC LETTER 87-12) and GL 88-17 LOSS OF DECAY HEAT REMOVAL. The commitment is being deleted
AR 00014305	This commitment tracked OPPD's commitment to review revision to FCS GL-89-10 Program plan. Criteria 1,2,&3 determined to not be applicable to MSIV bypass valves, SIT outlet isolation valves. The commitment is being deleted

**Information Removed from the USAR**

Information Removed from the USAR

EC Number	Description
EC 69821	Remove applicable surveillance test for decommissioning that are removed under PDTS and DSAR
EC 70007	Revised DSAR 11.1 update and WD-571 abandonment

## **Summary of Technical Specification Basis Changes (TSBC)**

TSBC No. TS Page(s) [Date]	Description
18-001-0 1-19-2018	Amendment deletes TS 2.8.3(6) "Spent Fuel Cask Loading" and associated figure 2-11, "Limiting Burnup Criteria of Acceptable Storage in Spent Fuel Cask"; TS 3.2, Table 3-5, item 24, "Spent Fuel Cask Loading"; TS 4.3.1.3, Design Features associated with spent fuel casks; and portions of TS 3.2, TS 3-4, item 5, footnote (4) on boron concentration associated with cask loading. TS-2.8 Pages 14, 15, 28, 29; TS-3.2 Page 8, 14; and TS-4 Page 2
18-002-0 3-6-2018	Amendment changes title in section 2.8 Refueling from "refueling" to "fuel handling"; Section 5.20 Technical Specification (TS) Bases Control Program changes acronym "USAR" to "FSAR as updated"

LIC-20-0005  
Attachment 7  
Page 1

**Changes, Tests, and Experiments Performed  
Pursuant to 10 CFR 72.48**

Changes, Tests, and Experiments Performed Pursuant to 10 CFR 72.48

**2018 Evaluations**

Note - The 10 CFR72.48 evaluations summarized below are for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

Change Number	Activity Title	72.48 Evaluation Summary
EC 69797	Dry Cask Storage –TN NUHOMS ISFSI HSM Assembly	<p>Description of Activity: This activity implements compensatory measures and reviews impact on SSCs involved with East end wall removal activities on the FCS ISFSI pad to support final HSM array expansion at FCS under Licensing Review (LR 18-020). The compensatory measures are as follows:</p> <ol style="list-style-type: none"><li>1. End Wall (Missile): Installation of temporary tornado missile shields</li><li>2. End Wall (Radiation): Reinstall Endwall or complete HSM installation within 36 hours</li><li>3. Outer Vent Cover (OVC): Reinstall within 60 days for end wall removal within 28 hours</li><li>4. Staged HSM Shield Door: Reinstall missile shield if severe weather is forecasted</li></ol> <p>Per the NUHOMS UFSAR and NEI 96-07 Appendix B, Compensatory Measures are allowed when performing maintenance activities to compensate for degraded or non-conforming conditions caused by removal of plant barriers. The maintenance activity is implementing an approved modification (EC69797). The control of these compensatory measures is done under the FCS Plant Barrier Control program per CC-FC-201</p> <p>At the end of the end wall removal, the HSM array will be restored to the standard condition of HSM Installation Specification NUH -03-0218 Section C.1 .2. That is, there will be at least one complete empty HSM at the end of the array, and the upper vent covers of the loaded HSMs will be in place.</p>



Changes, Tests, and Experiments Performed Pursuant to 10 CFR 72.48

**2018 Evaluations**

Note - The 10 CFR72.48 evaluations summarized below are for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

		<p>The maintenance aspects of this activity are reviewed under LR 18-020.</p> <p>Reason for Activity: Array expansion at FCS is required to fully empty the FCS spent fuel pool following permanent shutdown. 30 HSMs are required to store the remaining fuel assemblies. An additional 2 HSMs are installed to allow for the option of storing GTCC onsite. The existing East end wall is required to be relocated to the far East end of the new array to due to basemat size constraints.</p> <p>Effect of Activity/72.212 Non-Impact Basis: Reference 18-020, which updates the 72.212 for endwall removal and overall array expansion under EC69797. The end wall activity has little impact to operations. The existing temperature monitoring system will remain in service. A slight increase in temperature in HSM-9 and HSM-10 may occur when the temporary missile vent shield is installed. However, the temperatures have been analyzed and will remain well below procedural and design bases limits. No changes are required to Operating procedures as a result of this activity. The use of compensatory measures will be controlled through the Operations Shift Manager under CC-FC-201. The activity also concludes that there is no change required for design bases or safety analysis. With the implementation of compensatory measures, radiation doses will remain within allowable limits and the loaded HSMs will be protected by tornado borne missiles.</p>
--	--	---

Changes, Tests, and Experiments Performed Pursuant to 10 CFR 72.48

**2018 Evaluations**

Note - The 10 CFR72.48 evaluations summarized below are for the most part, unedited summaries as approved by the PORC. As a result, the language may be in future tense.

		<p>Summary of Conclusion for the Activity's 72.48 Review:</p> <p>The activity concludes that no NRC permission is required to implement end wall removal activities. The activity does use compensatory measures, as specified in the NUHOMs UFSAR for end wall removal activities and in NEI 96-07 Appendix B guidance, to ensure removed radiation and missile barriers are restored in the event the time for radiological dose to the public could be exceeded or severe weather is forecasted. The manual actions and postulated credible failure modes were reviewed and determined under a 72.48 evaluation to not need any approval. The activity also concluded that partial vent reduction from the installation of a tornado missile shield does not impact the cooling functions of the loaded HSMs during normal and off-normal temperatures.</p>
--	--	--

### **List of Files on CD-ROM**

#	File Name	Size	Sensitivity Level	Location	Folder
001	Index.pdf	KB	Publicly Available	CD-ROM	1-DSAR
002	DSAR 01-01.pdf	40 KB	Publicly Available	CD-ROM	1-DSAR
003	DSAR 01-02.pdf	405 KB	Publicly Available	CD-ROM	1-DSAR
004	USAR 01-11.pdf	39 KB	Publicly Available	CD-ROM	1-DSAR
005	DSAR 02-01.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
006	DSAR 02-02.pdf	45 KB	Publicly Available	CD-ROM	1-DSAR
007	DSAR 02-03.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
008	DSAR 02-04.pdf	44 KB	Publicly Available	CD-ROM	1-DSAR
009	DSAR 02-05.pdf	431 KB	Publicly Available	CD-ROM	1-DSAR
010	DSAR 02-06.pdf	50 KB	Publicly Available	CD-ROM	1-DSAR
011	DSAR 02-07.pdf	109 KB	Publicly Available	CD-ROM	1-DSAR
012	DSAR 02-08.pdf	63 KB	Publicly Available	CD-ROM	1-DSAR
013	DSAR 02-09.pdf	59 KB	Publicly Available	CD-ROM	1-DSAR
014	DSAR 02-10.pdf	298 KB	Publicly Available	CD-ROM	1-DSAR
015	DSAR 02-11.pdf	283 KB	Publicly Available	CD-ROM	1-DSAR
016	DSAR 03-07.pdf	32 KB	Publicly Available	CD-ROM	1-DSAR
017	DSAR 03-10.pdf	17 KB	Publicly Available	CD-ROM	1-DSAR
018	DSAR 05-07.pdf	93 KB	Publicly Available	CD-ROM	1-DSAR
019	DSAR 05-08.pdf	41 KB	Publicly Available	CD-ROM	1-DSAR
020	DSAR 05-11.pdf	123 KB	Publicly Available	CD-ROM	1-DSAR
021	DSAR 05-12.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
022	DSAR 05-13.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
023	DSAR 07-01.pdf	35 KB	Publicly Available	CD-ROM	1-DSAR
024	DSAR 07-05.pdf	191 KB	Publicly Available	CD-ROM	1-DSAR
025	DSAR 07-06.pdf	190 KB	Publicly Available	CD-ROM	1-DSAR
026	DSAR 07-07.pdf	36 KB	Publicly Available	CD-ROM	1-DSAR
027	DSAR 08-01.pdf	44 KB	Publicly Available	CD-ROM	1-DSAR
028	DSAR 08-02.pdf	40 KB	Publicly Available	CD-ROM	1-DSAR
029	DSAR 08-03.pdf	68 KB	Publicly Available	CD-ROM	1-DSAR
030	DSAR 08-04.pdf	62 KB	Publicly Available	CD-ROM	1-DSAR
031	DSAR 08-05.pdf	71 KB	Publicly Available	CD-ROM	1-DSAR
032	DSAR 08-06.pdf	17 KB	Publicly Available	CD-ROM	1-DSAR
033	DSAR 08-07.pdf	33 KB	Publicly Available	CD-ROM	1-DSAR
034	DSAR 09-01.pdf	40 KB	Publicly Available	CD-ROM	1-DSAR
035	DSAR 09-05.pdf	67 KB	Publicly Available	CD-ROM	1-DSAR
036	DSAR 09-06.pdf	61 KB	Publicly Available	CD-ROM	1-USAR
037	USAR 09-07.pdf	183 KB	Publicly Available	CD-ROM	1-USAR
038	USAR 09-08.pdf	70 KB	Publicly Available	CD-ROM	1-USAR
039	USAR 09-09.pdf	39 KB	Publicly Available	CD-ROM	1-USAR
040	USAR 09-10.pdf	125 KB	Publicly Available	CD-ROM	1-USAR
041	USAR 09-11.pdf	80 KB	Publicly Available	CD-ROM	1-USAR
042	USAR 09-12.pdf	191 KB	Publicly Available	CD-ROM	1-USAR
043	DSAR 11-01.pdf	679 KB	Publicly Available	CD-ROM	1-DSAR
044	DSAR 11-02.pdf	395 KB	Publicly Available	CD-ROM	1-DSAR
045	DSAR 11-03.pdf	89 KB	Publicly Available	CD-ROM	1-DSAR
046	DSAR 11-04.pdf	38 KB	Publicly Available	CD-ROM	1-DSAR
047	DSAR 11-05.pdf	35 KB	Publicly Available	CD-ROM	1-DSAR
048	DSAR 12-01.pdf	38 KB	Publicly Available	CD-ROM	1-DSAR
049	DSAR 12-02.pdf	41 KB	Publicly Available	CD-ROM	1-DSAR
050	DSAR 12-03.pdf	40 KB	Publicly Available	CD-ROM	1-DSAR

#	File Name	Size	Sensitivity Level	Location	Folder
051	DSAR 12-04.pdf	34 KB	Publicly Available	CD-ROM	1-DSAR
052	DSAR 12-05.pdf	35 KB	Publicly Available	CD-ROM	1-DSAR
053	DSAR 12-06.pdf	33 KB	Publicly Available	CD-ROM	1-DSAR
054	DSAR 12-07.pdf	33 KB	Publicly Available	CD-ROM	1-DSAR
055	DSAR 14-01.pdf	588 KB	Publicly Available	CD-ROM	1-DSAR
056	DSAR 14-18.pdf	302 KB	Publicly Available	CD-ROM	1-DSAR
057	DSAR 14-20.pdf	297 KB	Publicly Available	CD-ROM	1-DSAR
058	DSAR 14-24.pdf	52 KB	Publicly Available	CD-ROM	1-DSAR
059	DSAR 15-01.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
060	DSAR 15-02.pdf	58 KB	Publicly Available	CD-ROM	1-DSAR
061	DSAR 15-04.pdf	72 KB	Publicly Available	CD-ROM	1-DSAR
062	DSAR Appendix A.pdf	18 KB	Publicly Available	CD-ROM	1-DSAR
063	DSAR Appendix B.pdf	28 KB	Publicly Available	CD-ROM	1-DSAR
064	DSAR Appendix C.pdf	6,777 KB	Publicly Available	CD-ROM	1-DSAR
065	DSAR Appendix F.pdf	276 KB	Publicly Available	CD-ROM	1-DSAR
066	DSAR Appendix G.pdf	85 KB	Publicly Available	CD-ROM	1-DSAR
067	DSAR Appendix N.pdf	84 KB	Publicly Available	CD-ROM	1-DSAR
068	DSAR Figure Section-01.pdf	5,760 KB	Publicly Available	CD-ROM	1-DSAR
069	DSAR Figure Section-02.pdf	1,905 KB	Publicly Available	CD-ROM	1-DSAR
070	DSAR Figure Section-03.pdf	33 KB	Publicly Available	CD-ROM	1-DSAR
071	DSAR Figure Section-07.pdf	97 KB	Publicly Available	CD-ROM	1-DSAR
072	DSAR Figure Section-08.pdf	633 KB	Publicly Available	CD-ROM	1-DSAR
073	DSAR Figure Section-09.pdf	3,350 KB	Publicly Available	CD-ROM	1-DSAR
074	DSAR Figure Section-11.pdf	25 KB	Publicly Available	CD-ROM	1-DSAR
075	DSAR Figure Section-12.pdf	61 KB	Publicly Available	CD-ROM	1-DSAR
076	DSAR Figure Section-14.pdf	21 KB	Publicly Available	CD-ROM	1-DSAR
077	DSAR Figures Appendix-F.pdf	2,343 KB	Publicly Available	CD-ROM	1-DSAR
078	NO-FC-10, Quality Assurance Topical Report (QATR), Revision 9	504 KB	Publicly Available	CD-ROM	2-QATR
079	Technical Specification Basis Pages	1,391 KB	Publicly Available	CD-ROM	3-TSBC