

RS-22-052

10 CFR 50.71(e)(4)  
10 CFR 50.59(d)(2)  
10 CFR 72.48(d)(2)  
10 CFR 54.37(b)

April 13, 2022

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555LaSalle County Station, Units 1 and 2  
Renewed Facility Operating License Nos. NPF-11 and NPF-18  
NRC Docket Nos. 50-373, 50-374, and 72-70Subject: LaSalle County Station Updated Final Safety Analysis Report (UFSAR), Revision 25  
and Fire Protection Report (FPR), Revision 10

In accordance with the requirements of 10 CFR 50.71, "Maintenance of records, making of reports," paragraph (e)(4), Constellation Energy Generation, LLC (CEG) submits Revision 25 to the Updated Final Safety Analysis Report (UFSAR) for LaSalle County Station (LSCS), Revision 10 to the Fire Protection Report (FPR), and summaries of evaluations conducted pursuant to 10 CFR 50.59, "Changes, tests, and experiments," 10 CFR 72.48, "Changes, tests, and experiments," and 10 CFR 54.37(b) "Additional records and recordkeeping requirements."

The UFSAR is being submitted on Optical Storage Media (OSM) in its entirety, including documents incorporated by reference (e.g., Technical Requirements Manual (TRM) and Technical Specifications Bases (TSB)). All UFSAR pages changed as a result of this update are clearly delineated with "REV. 25, APRIL 2022" in the page footer.

One OSM is included in this submission. The OSM labeled, "Constellation – LaSalle County Station UFSAR REV 25, APRIL 2022," contains the following components:

- 001 LAS UFSAR REV 25.pdf, 677 megabytes (MB)
- 002 LAS FPR REV 10.pdf, 15.2 MB
- 003 LAS TRM.pdf, 4.37 MB
- 004 LAS TSB.pdf, 2.43 MB

A053  
NM5526  
NRR  
NMS S

Attachment A provides a brief summary of the changes incorporated into UFSAR, Revision 25.

Attachment B provides a brief summary of the changes incorporated into the FPR, Revision 10.

Attachment C provides the summary report pursuant to 50.59.

Attachment D provides the summary report pursuant to 72.48.

Attachment E provides the 54.37(b) Aging Management Review Summary.

Attachment F contains the directory path, filename, and size of each individual file.

As required by 10 CFR 50.71(e)(2)(i), I, Director - Licensing, certify that to the best of my knowledge, the information contained in the enclosures and attachments to this letter accurately reflect information and analyses submitted to the NRC or prepared pursuant to NRC requirements, and changes made under the provisions of 10 CFR 50.59 and 10 CFR 72.48.

There are no commitments in this letter. Should you have any questions concerning this submittal, please contact Amy Hambly at (630) 657-2808.

Respectfully,

**Gullott, David M.**

Digitally signed by Gullott, David

M.

Date: 2022.04.13 10:30:16 -05'00'

David M. Gullott  
Director - Licensing  
Constellation Energy Generation, LLC

Enclosure: OSM – Constellation, LaSalle County Station – UFSAR Rev. 25, FPR Rev. 10

Attachments:

Attachment A, "LaSalle County Station UFSAR Revision 25 Change Summary Report"  
Attachment B, "LaSalle County Station FPR Revision 10 Change Summary Report"  
Attachment C, "LaSalle County Station 10 CFR 50.59 Evaluation Summary Report"  
Attachment D, "LaSalle County Station 10 CFR 72.48 Evaluation Summary Report"  
Attachment E, "LaSalle County Station 10 CFR 54.37(b) Aging Management Review Summary"  
Attachment F, "OSM Directory Structure"

cc: Regional Administrator – NRC Region III  
NRC Senior Resident Inspector – LaSalle County Station  
NRC Project Manager, NRR – LaSalle County Station

## ATTACHMENT A

### LaSalle County Station UFSAR Revision 25 Change Summary Report

#### **LUCR-0431, Adopt ANSI/ANS-3.1-2014**

Revised Sections 13.1 and 13.2 to indicate changing training and qualification standard from ANSI N18.1-1971 to ANSI/ANS-3.1-2014.

#### **LUCR-0433, Fuel receipt and handling of the GNF3 bundles**

Updated UFSAR sections in Chapter 9 related to fuel receipt and handling of GNF3 bundles.

#### **LUCR-0434, Introduction of new GNF3 fuel**

Updated UFSAR sections in Chapters 3, 4, 6, and 15 related to support GNF3 fuel introduction.

#### **LUCR-0436, Correction Calculation Number (Reference 8) in Section 9.1.5**

Revised UFSAR Section 9.1.5 (References) reference number 8 to indicate Calculation L-003636 (instead of L-003628), Revision 0, "ANP-3008(P), "LaSalle Unit 1 and Unit 2 New Fuel Storage Vault Criticality Safety Analysis for GNF2 Fuel", August 29, 2011.

#### **LUCR-0437, Unit 2 - L2C19 fuel cycle update**

Updated Chapters 4, 5, 6, and 15 based on new revisions of cycle-specific documents, and for consistency with the cycle 19 reload requirements, GNF3 NFI, and discharging GNF3 LUAs.

#### **LUCR-0438, Revised CAVEX35 to include UFSAR changes due to revised calculations**

Revised CAVEX35 calculations in accordance with EC 625822 revision 1. Updated for the impacted calculations (L-003067, L-003068, and L-004135) due to a revised Alternate Source Term to support the increased Core Average Exposure Implementation.

#### **LUCR-0440, Unit 2 Drywell Fire Detector Abandonment in Zone 2-16/2-16P**

Revised text in Sections 9.5.1.2.2 and 9.5.1.2.3; Figure 9.5-1 Sheets 10, 14, and 18 to reflect abandoning Unit 2 primary and secondary containment fire detection system in Zone 2-16/2-16P.

#### **LUCR-0442, SRSS load combinations for reactor shroud**

Revised UFSAR Section 3.9.2.6.1 "Analysis Methods Under LOCA Loadings" text and Table 3.9-16 to describe references to NEDO-22133 (July 1982), NEDC-30272 (Sept 1983), and site calculation L-003909 regarding SRSS of load combinations applied to core shroud supports.

#### **LUCR-0444, Correct Figure 7.7-1 Wide Range Lower Limit value**

Updated Figure 7.7-1 to correct typographical error on the Wide Range Lower Limit from -160 inch to -150 inches (IR 4413336).

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### LaSalle County Station UFSAR Revision 25 Change Summary Report

#### **LUCR-0445, Appendix P Revision for BWR Vessel Internals License Renewal Commitment**

UFSAR Appendix P, Table A.5-1 page P.5-2 and Appendix P, Section A.2.1.9, page P.2-4: Revised BWR Vessel Internals LR commitment to incorporate NRC approved BWRVIP-25, Rev. 1A option for evaluating core plate bolting in lieu of inspection.

#### **LUCR-0446, Remove outdated references in Section 3.5.1.5 related to turbine missiles**

Revised UFSAR pages 3.5-12 and 3.5-13 to remove outdated references related to turbine missiles.

#### **LUCR-0447, Incorporate NRC-authorized license amendment to Tech Specs regarding UHS**

Incorporated license amendment for Units 1 and 2 Technical Specifications 3.7.3 Ultimate Heat Sink into UFSAR Sections 9.2 and 10.4 and Figures 9.2-2 and 9.2-3; and to add new Figure 9.2-8 diurnal curve.

#### **LUCR-0449, Remove GNF2 Proprietary Information**

Updated Sections 3.9, 4.1, 4.2, 4.3, table 4.2-4, and Figure 4.1-2 to remove extraneous and proprietary details relating to GNF2 fuel design.

#### **LUCR-0450, Incorporate NRC-authorized license amendment to Tech Specs regarding Control Rod Drop Analysis**

Incorporated license amendment for Units 1 and 2 Technical Specifications into UFSAR Sections 4.3, 7.7, 15.4, and Tables 15.4-2 and 15.4-5. This allows for greater flexibility in rod control operations during various stages of reactor power operation.

## ATTACHMENT B

### LaSalle County Station FPR Revision 10 Change Summary Report

FDRP	Description
LF2020-001	LF2020-001 revises the Fire Protection Report (FPR) to correct an error in descriptions of smoke detectors. FPR Table H.3-2 Sheet 8 of 22, Sheet 9 of 22 and Sheet 14 of 22 are revised where the detectors are described as "photo-thermal" detectors when they are photo-electric smoke detectors.
LF2020-003	LF2020-003 revises the FPR to change deviations 26-3 and 26-5 in the LaSalle NFPA Code Deviation Summary Matrix to semi-annual in support of EC 632356.
LF2020-005	LF2020-005 revises the FPR to change deviations 13A-4 and 12A-27 in the LaSalle NFPA Code Deviation Summary Matrix to 18 months in support of EC 633244.
LF2021-001	LF2021-001 revises the FPR to make corrections to the Fire Protection Report (FPR) due to issues found in the 2020 FP FASA. The change implements corrections, recommendations and makes consistency changes with the fire protection procedures. The changes also implement the alternate shutdown cooling that is already contained in the LaSalle UFSAR. Associated with AT 04311669.
LF2021-002	LF2021-002 revises the FPR for modification EC 633526 for U2 Drywell Fire Detector Abandonment Zone 2-16 / 2-16P in accordance with LS-AA-128 screening and Regulatory Guide 1.189 Rev. 3 requiring detection only in non-inerted containments. LaSalle's containments (U1/2) are inerted.

## ATTACHMENT C

### LaSalle County Station 10 CFR 50.59 Evaluation Summary Report

#### **L19-177, Revision 1, Core Average Exposure (CAVEX) Increase Implementation**

Evaluation L19-177 Revision 0 was previously described in the 2020 biennial summary submittal. However, this evaluation required revision in 2021 to correct an erroneous statement regarding accident analysis being affected as well as some editorial items. The conclusion of the evaluation remained unchanged.

This activity increased the design basis End-of-Cycle (EOC) Core Average Exposure (CAVEX) for both units to 35,000 MWd/ST for decay heat and 41,000 MWd/ST for radiation, to allow better utilization of nuclear fuels and to improve fuel economy. The purpose of increasing the design basis CAVEX was to allow better utilization of nuclear fuels and improve fuel economy. The increase in CAVEX provides the core designer flexibility to use fewer new fuel bundles (or lower enrichments) to achieve the desired operating cycle length.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

There was no hardware change to any of the plant systems, and plant operations remained unaffected. The fuel rods will continue to be operated below their mechanical and thermal design limits. The activity did not adversely affect the design or safety function of any plant system or components.

#### **L20-150, Upgrade LaSalle Unit 2 Main Generator Auto Voltage Regulator (AVR)**

The proposed activity replaced the existing GE Alterrex main generator automatic voltage regulator (AVR) with a new Asea Brown Boveri (ABB) digital AVR, Model Unitrol 600 Medium, which performs the same critical functions in the overall excitation system as the existing AVR. In place of the single-channel design of the existing AVR, the replacement AVR uses a two-channel design to improve reliability. The existing AVR excitation system is a closed feedback system (self-excited) with the output of the alternator-exciter being used to supply an AC input back to the AVR, which then converts it to DC for power to the exciter field. The new AVR has two independent 480 Vac power feed to support the dual-channel design to enhance reliability. One of the 480 Vac power feed will supply the one power channel, while second 480 Vac is connected to the second channel of the AVR.

The new AVR also includes a power system stabilizer (PSS) function to enhance grid stability by providing an excitation control terminal (ECT) touch-screen panel at the AVR for local control and monitoring. New 480 Vac power sources are required for this modification. The new AVR is being placed in the same location as the existing AVR. The existing two 125V DC power supplies are re-used to provide the two channels protective and control interface functions. The new AVR is installed in the same location as the existing AVR.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The new AVR is designed to operate at the same ratings as the existing AVR to ensure it is compatible with the existing Main Generator excitation system. There is no impact on the design basis or safety analyses described in the UFSAR.

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### LaSalle County Station 10 CFR 50.59 Evaluation Summary Report

#### **L20-67, Unit 2 MSIV Weir Internals Retrofit Modification (EC 627195)**

The activity replaced the existing Unit 2 MSIV 2B21-F022A/B/C/D and 2B21-F028A/B/C/D internal components with new bonnet, stem, and poppet assembly that includes a stabilized nose guidance poppet, stem, and cover. Each MSIV is a 26-inch globe valve, having a Y patterns body with cylindrical main disc moving along a centerline 45 degrees upward from the axis of the horizontal main steam inlet line. Stabilization is accomplished by back-seating poppet on cover when fully open, similar to 2B33-F067 valves. This design has proven at other facilities to improve LLRT results, stem alignment, and reduce wear and vibration. In addition, design analyses and procedures are revised to reflect the new components.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The design change was determined to have no adverse effect on the operation of the plant. There is no change to the design bases or safety analyses of the MSIV system functional design, or any change to the design bases of the controls for the MSIVs in the UFSAR. The activity does not alter the required response times specified in the UFSAR safety analyses, and therefore, it does not impact any UFSAR described safety analysis.

#### **L20-104, Addition of Criticality Safety Analysis Supporting SFP Storage of GNF3 Fuel (EC 629256)**

The proposed activity is a subset of introducing the new nuclear fuel type GNF3 to both units for powering future reload cycles. The activity reviews the augmentation of the plant design basis to add the criticality safety analysis (CSA) required to demonstrate that GNF3 nuclear fuel can be safely stored on site in either the Unit 1 or Unit 2 spent fuel pool (SFP) under normal, off-normal, or in accident conditions. The activity does not include an update to the criticality safety analysis or design basis for the storage of fresh fuel in the shared Unit 1 and Unit 2 new fuel vault (NFV). Other aspects of the introduction of GNF3 new fuel such as fuel handling and component compatibility, seismic impact, fuel handling accident dose impacts criticality during handling on the refuel floor, and storage in shipping containers on the refueling floor and not part of this review scope and will be addressed through the new fuel introduction EC 629257 or via the Fuel Handling EC however, separately with the EC from the CSA work for the SFPs.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The departure from a method of evaluation that was identified in the GNF3 CSA was acceptable from both the viewpoint of (1) change to any element of an analysis methodology that yields results that are non-conservative or not essentially the same as the result from the analysis of record, and (2) the use of new or different methods of evaluation that are not approved by the NRC for the intended application. For (1), the change to the element of analysis methodology involved in this work was acceptable since it produces results that are the same as that described in the UFSAR, and (2) the update made to the code versions used in the analysis do not constitute the use of new or different methods of evaluation that have not been previously approved by the NRC for the intended purpose.

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#### **L20-135, Unit 1 MSIV Weir Internals Retrofit Modification (EC 627194)**

The activity replaced the existing Unit 1 MSIV 1B21-F022A/B/C/D and 1B21-F028A/B/C/D internal components with new bonnet, stem, and poppet assembly that includes a stabilized nose guidance poppet, stem, and cover. Each MSIV is a 26-inch globe valve, having a Y patterns body with cylindrical main disc moving along a centerline 45 degrees upward from the axis of the horizontal main steam inlet line. Stabilization is accomplished by back-seating poppet on cover when fully open, similar to 1B33-F067 valves. This design has proven at other facilities to improve LLRT results, stem alignment, and reduce wear and vibration. In addition, the stem leak-off manual isolation valves 1E31-F004A1/2/3/4 will be closed and the control switches for the solenoid valves 1E31-F005A1/2/3/4 placed in the "closed" position. These manual isolation valves are associated with the inboard MSIVs that isolate the associated packing leak-off lines that direct packing leakage to the Drywell Equipment Drain Sump System (DWEDS). The closed outboard MSIV stem leak-off manual valves 1B21-F027A/B/C/D and associated capped lines will be removed entirely. In addition, design analyses and procedures are revised to reflect the new components.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The design change was determined to have no adverse effect on any UFSAR described design function, how these design functions are performed or controlled. The change will not affect how components are utilized, operated, or controlled. In addition, no change to the Technical Specifications or Facility Operating License is required. The proposed activity does involve an alternative evaluation methodology used in establishing the design bases. The evaluation of the change in method of evaluation concluded that the proposed activity may be implemented without obtaining a license amendment.

#### **L21-04, Alternate 1B Reactor Recirculation Seal Staging Path (EC 633318)**

The proposed activity redirects the RR seal staging flow in a manner that bypasses any blockage in the current line. This will be accomplished by directing the 1RR21BB-0.5" line through the drain line on the instrument rack located near column F-10 in the reactor building general access area on 710' and routing through temporary hoses and tubes to the pump side flange of the 1RE005A check valve on the 1RE63AA-1\_1/2" located in the DWEDS pump room in the reactor building 710'. This allows the staging flow to be re-directed to DWEDS sump through the gravity drain system. The activity utilizes the pressure instrument line going through penetration I-27, outside of containment, at the instrument rack, and downstream of the excess flow check valve 1B33-F317B. The activity would also utilize the drain valve (needle valves). From there, flow goes past the 1FE-RE005 so it can be quantified and from there it does to DWEDS.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

A 50.59 screening was prepared, and it was determined that the proposed activity will adversely affect some of the UFSAR described design functions. Since the activity has some adverse issues, a 50.59 evaluation will be required.



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#### **L21-08, GNF3 Impact on the Alternate Source Term Core Inventory, AST LOCA, FHA, and CRDA (EC 629257)**

EC 629257 will support operation and use of the GNF3 fuel type on a full-core scale. Previous operation of the GNF3 bundle was limited to the Lead Use/Test Assembly program. The GNF3 fuel bundle has mechanical, chemical, and neutronic characteristics that require reanalysis in many areas, however the scope of this 50.59 is limited to the impacts of Alternative Source Term (AST) dose changes. For non-AST considerations please see 50.59 Evaluation L21-10, "GNF3 New Fuel Transition for Operation and Irradiation".

GNF3 allows for a higher loading of uranium per bundle, yielding a larger potential radionuclide inventory available for release under accident conditions. A new source term was calculated assuming a higher total core weight; this was then percolated into the downstream AST dose calculations that assume a release of radionuclides from the fuel, namely the Control Rod Drop Accident (CRDA), Fuel Handling Accident (FHA), and Loss of Coolant Accident (LOCA). The LOCA scenario for High Energy Line Break (HELB) / Steam Line Break - Outside Containment (SLB-OC, a.k.a. MSLO, a.k.a. STMO, a.k.a. MSLB) is not re-evaluated for dose, as the GNF3 LOCA report [005N5629] concludes that there is no potential for fuel failure in that scenario. With no fuel failure the only activity released is from the coolant, which is unaffected by the fuel type.

The CRDA, FHA, and LOCA doses at the Exclusion Area Boundary (EAB), Low Population Zone (LPZ), and Control Room (CR) have been re-calculated to support GNF3 introduction and operation.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The total effective dose equivalent (TEDE) results for the dose-significant scenarios have increased slightly at select locations of interest. These increases are no more than minimal and therefore can be implemented under the 50.59 process and do not require an amendment to LaSalle's license.

#### **L21-24, Upgrade LaSalle Unit 1 Main Generator Auto Voltage Regulator (EC 630051)**

The proposed activity replaces the existing GE Alterrex main generator automatic voltage regulator (AVR) with a new Asea Brown Boveri (ABB) digital AVR, Model Unitrol 6000 Medium, which performs the same critical functions in the overall excitation system as the existing AVR. In place of the single-channel analog design of the existing AVR, the replacement AVR uses a two-channel digital design to improve reliability. The existing AVR excitation system is a closed feedback system (self-excited) with the output of the alternator-exciter being used to supply an AC input back to the AVR, which then converts it to DC for power to the exciter field. The new AVR uses dual channels of control and power output to the exciter field, including two independent 480 Vac power feeds introduced to support the dual-channel design to enhance reliability. One of the 480 Vac power feeds will supply the one power channel, while the second 480 Vac will supply the second channel for excitation power. The new AVR also includes a power system stabilizer (PSS) to enhance grid system stability. The new design modifies the main control room (MCR) controls, adds additional new indication required for monitoring and provides an excitation control terminal (ECT)

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touchscreen panel at the AVR for local control and monitoring. New 480 Vac power sources are required for this modification. The existing two 125V DC power supplies will be re-used to provide the two channels protective and control interface functions. The new AVR will be placed in the same location as the existing AVR.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

Failures in the AVR system could result in a turbine trip and challenges to the offsite power system. The replacement AVR system includes digital hardware and software, and significant changes to the human-machine interface (HMI). Since there is a potential to adversely affect UFSAR-described design functions, these aspects of the proposed activity were "screened in" for further assessment under the 50.59 Evaluation process.

Like the existing AVR, failures in the replacement AVR could result in a turbine trip and challenges to the offsite power system. The failure modes and effects of the replacement AVR are bounded by those of the existing AVR. The replacement AVR is a state-of-the art system widely used in the industry and is provided by a vendor with considerable experience. The replacement AVR incorporates a dual-channel design in place of the single-channel design of the existing AVR, and additional sources of power have been provided by the station to support the dual-channel design. The operator interface with the AVR system has been simplified, and existing station practices ensure that the operators are familiar with the replacement system and with the required interface with the system.

The improvements in reliability provide assurance that there is no more than a minimal increase in the frequency of occurrence of an accident or in the likelihood of a malfunction previously evaluated in the UFSAR. Previous analyses of events which could result from an AVR malfunction remain bounding; therefore, the radiological consequences of accidents or malfunctions are not affected. The AVR system does not interface with any other control systems, so there is no potential for a common-cause failure affecting multiple plant systems that could create the possibility for an accident or malfunction not previously evaluated.

The proposed activity does not affect a design basis limit for a fission product barrier. Supporting analyses/evaluations for this activity have been performed in a manner consistent with standard industry practices and consistent with the evaluation requirements / methodologies described in the UFSAR. This activity does not involve a test or experiment not described in the UFSAR. The proposed activity does not affect the Technical Specifications or the Facility Operating License.

Based on the 50.59 Screening and Evaluation identified below including the completed plant system analyses and the Fire Protection Review along with this activity's EC as revised in planned Revision 001; which includes plant-transmission system analyses along with final relay settings and remaining parameter settings for installation with transmission system concurrence (Ref: ATI 04384167-19) and final vendor documents along with the remaining Manufacturer's test and evaluation documents along with plant EMI evaluation (Ref: ATI 04384167-18), all with acceptable results; may be implemented per plant procedures without obtaining a License Amendment.

A planned EC revision following installation; including as-commissioned parameters with settings along with related final calculations with acceptable results and final transmission system interface settings concurrence; is included in this 50.59 Review.

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#### **L21-37, Unit 2 Reactor Recirculation Pump Motor Tertiary Oil Reservoir (EC 633618)**

This modification installed an Oil Refilling System for the "A" and "B" Reactor Recirculation Upper and lower Motor Bearing. Each system includes a 20 - gallon oil tank, a metering pump, the piping and wiring necessary to run the pump and transport the oil to the filling port on both bearing reservoirs. The pumps will be controlled by new local control switches mounted as seismic II/I. If the Low Oil Level annunciator comes in, the pump will be operated at a known flow rate, allowing operators to fill the reservoir to the desired level and keep track of the remaining oil available. The lines will contain a solenoid operated valve that will be tied to a power source that can be controlled from outside of the drywell. If the Low Oil Level annunciator comes in, the respective pump will be operated and it will fill the desired reservoir at a known flow rate, allowing operators to fill the reservoir to the desired level and keep track of the remaining oil available.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

UFSAR described design functions related to lighting circuits providing power are adversely affected due to potential for a fault in the penetration related to the cable for the power source. The activity does require procedure changes, but there are no procedure changes which adversely affect how UFSAR-described SSC design functions are performed or controlled. None of the procedure changes will require operator manual actions to mitigate an accident and there are no procedure changes which adversely affect how UFSAR-described SSC design functions re performed or controlled. The proposed change does not affect any UFSAR described evaluation methodologies or result in result in operation of equipment outside of design conditions or descriptions in the UFSAR. The Technical Specifications and Operating License are not changed by this activity. However, there is a change to the Technical Requirement Manual (TRM) bases for section 3.8.a. The 50.59 evaluation determined that prior NRC approval is not required.

#### **L21-91, Unit 1 Reactor Recirculation Pump Motor Tertiary Oil Reservoir (EC 633845)**

This modification installed an Oil Refilling System for the "A" and "B" Reactor Recirculation Upper and lower Motor Bearing. Each system includes a 20 - gallon oil tank, a metering pump, the piping and wiring necessary to run the pump and transport the oil to the filling port on both bearing reservoirs. The pumps will be controlled by new local control switches mounted as seismic II/I. If the Low Oil Level annunciator comes in, the pump will be operated at a known flow rate, allowing operators to fill the reservoir to the desired level and keep track of the remaining oil available. The lines will contain a solenoid operated valve that will be tied to a power source that can be controlled from outside of the drywell. If the Low Oil Level annunciator comes in, the respective pump will be operated and it will fill the desired reservoir at a known flow rate, allowing operators to fill the reservoir to the desired level and keep track of the remaining oil available.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

UFSAR described design functions related to lighting circuits providing power are adversely affected due to potential for a fault in the penetration related to the cable for the power source. The activity does require procedure changes, but there are no procedure changes which

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adversely affect how UFSAR-described SSC design functions are performed or controlled. None of the procedure changes will require operator manual actions to mitigate an accident and there are no procedure changes which adversely affect how UFSAR-described SSC design functions re performed or controlled. The proposed change does not affect any UFSAR described evaluation methodologies or result in result in operation of equipment outside of design conditions or descriptions in the UFSAR. The Technical Specifications and Operating License are not changed by this activity. However, there is a change to the Technical Requirement Manual (TRM) bases for section 3.8.a. The 50.59 evaluation determined that prior NRC approval is not required.

#### **L21-98, Procedure LEP-VP-101 for Defeating 2A/2C Low Chill Water Temperature Trip**

LEP-VP-101 Attachment 9 installs jumpers around temperature switches 2TSL-VP910A (2A VP Chiller) and 2TS-VP211 (2C VP Chiller) to preclude spurious VP compressor Trips. VP Chillers 2A and 2C have temperature switches on the chillers outlet that will trip the chillers on low chilled water temperature. The function of the temperature switch is to prevent potentially freezing up the output of the chillers. An Operator special log will be established as a part of the temporary change to monitor the operating VP chillers every 8 hours to ensure that the chill water outlet temperature stays above 37F as recommended by the vendor and to shut down a chiller if the temperature challenges these limits. When more than one VP chiller is in operation, it may be necessary to shut down one chiller to increase loading to the other operating chiller to raise the chill water outlet temperature to normal limits.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The activity that is being evaluated is the use of operator action to shut down the operating VP chiller in place of the automatic trip function of the chiller outlet temperature switch. The use of manual operator action to shut down an operating chiller does not introduce the possibility of a change in the frequency of an accident because the failure of a VP chiller is not an initiator of any accident and no new failure modes are being introduced by the operator action. While the loss of drywell cooling can result in a plant transient such as a scram from high drywell pressure, the use of operator action to shut down the VP chiller when chill water temperature is trending too low will reduce the probability of a plant transient. The activity also does not result in a more than minimal increase in the likelihood of occurrence of a malfunction of an SSC important to safety previously evaluated in the UFSAR, consequences of an accident previously evaluated in the UFSAR, possibility of an accident of a different type that previously evaluated in the UFSAR, possibility for a malfunction of an SSC important to safety with a different results than previously evaluated in the UFSAR, impact to a containment pressure design basis limit for fission product barriers due to low heat load, not a departure from a method of evaluation described in the UFSAR used in establishing the design basis or in the safety analyses, or involve a change to technical specifications or facility operating license.

#### **L21-100, Alternate Anchor Evaluation Methodology for CMTR Values (EC 634628)**

Design analyses 195B and 161I are being revised to eliminate the use of certified material test reports (CMTRs) to and replace them with allowable stresses from the Code of record. In

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addition, design analysis 1611 is being revised to evaluate the column anchorage using the net area of the anchor rods in lieu of the gross area. As identified in Issue Report (IR) 4070065, Certified Material Test Reports (CMTRs) were used in Calculations 195B and 1611 for reinforcement yield strengths; however, the calculations were revised to eliminate the use of the CMTRs and replace them with allowable stresses from the Code of Record.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

No UFSAR described design functions are adversely affected as all SSCs remain fully qualified. The activity does not require any procedure changes, so there are no procedure changes which adversely affect how UFSAR-described SSC design functions are performed or controlled. Revisions to design analyses 195B and 1611 are done in accordance with approved station methodologies. However, the revision to design analysis 1611 utilizing Appendix B of ACI 349-01 constitutes alternative evaluation methodology and is evaluated in 50.59 Evaluation L21-100.

The proposed change does not result in operation of equipment outside of design conditions or descriptions in the UFSAR. There are no physical plant changes, thus the activity cannot and does not involve a test or experiment. The Technical Specifications and Operating License are not changed by this activity. Therefore, since the activity involves alternative evaluation methodology per Screening Question 3, a 50.59 Evaluation was performed, which concluded that prior NRC approval is not required.

#### **L22-013, Manual Operator Action to Secure RHR Pump**

Residual Heat Removal (RHR) operational and response procedures are being revised to provide guidance to prevent inadvertent draining of the reactor vessel during the use of Shutdown Cooling. This change established manual operator actions and controls to prevent draining the reactor vessel to the suppression pool if the RHR Minimum Flow Valve were to automatically open due to low system flow.

#### **Summary of Conclusion for the Activity's 50.59 Review:**

The proposed activity does not change an SSC, but does take manual control of an automatic action of an SSC (automatic opening of RHR pump min flow valve). This change is conservative and eliminates the risk of draining the reactor vessel to the suppression pool during startup, operation, and shutdown of the RHR system in Shutdown Cooling mode. Once adequate flow is established, the breaker for the Minimum Flow Valve is turned off, disabling the function to automatically open upon low pump flow. Operators will rely on flow indication and annunciator alarms to identify a low flow condition and manually secure the pump. The 50.59 Evaluation concluded that prior NRC approval is not required.

**ATTACHMENT D**

**LaSalle County Station  
10 CFR 72.48 Evaluation Summary Report**

There were no 10 CFR 72.48 evaluations performed for LaSalle County Station during this reporting period.

## **ATTACHMENT E**

### **LaSalle County Station 10 CFR 54.37(b) Aging Management Review Summary**

In accordance with 10 CFR 54.37(b) and the guidance specified in Regulatory Issue Summary 2007-16, Revision 1, "Implementation of the Requirements of the 10 CFR 54.37(b) for Holders of Renewed Licenses," the UFSAR update required by 10 CFR 50.71 must include any Structures, Systems or Components (SSCs) newly identified that would have been subject to an aging management review or evaluation of time-limited aging analyses in accordance with 10 CFR 54.21. This UFSAR update must describe how the effects of aging will be managed such that the intended function(s) in 10 CFR 54.4(b) will be effectively maintained during the period of extended operation.

The 10 CFR 54.37(b) review of changes to the plant Current Licensing Basis covered the period of December 27, 2019 to December 4, 2021. The review included:

- Engineering Changes that were installed or completed since the last UFSAR update,
- UFSAR pending change descriptions and revised text, and
- NRC Interim Staff Guidelines (ISGs) related to license renewal, and

No "newly identified" SSCs were identified that require aging management or evaluation of TLAA's in accordance with the License Renewal Rule. Therefore, there are no associated updates required to the LaSalle UFSAR and Aging Management Programs.

## ATTACHMENT F

### LaSalle County Station OSM Directory Structure

Directory Path	File Name	Size
001 LAS UFSAR REV 25	000 List of Effective Pages.pdf	691 KB
001 LAS UFSAR REV 25	001 Chap 01 Introduction.pdf	340 KB
001 LAS UFSAR REV 25	002 Chap 02 Site Characteristics.pdf	77877 KB
001 LAS UFSAR REV 25	003 Chap 03 Design of Struct Comp, Equip.pdf	43341 KB
001 LAS UFSAR REV 25	004 Chap 04 Reactor.pdf	6812 KB
001 LAS UFSAR REV 25	005 Chap 05 Reactor Coolant.pdf	9056 KB
001 LAS UFSAR REV 25	006 Chap 06 Eng Safety Features.pdf	27871 KB
001 LAS UFSAR REV 25	007 Chap 07 Instr and Control Sys.pdf	7682 KB
001 LAS UFSAR REV 25	008 Chap 08 Electric Power.pdf	3877 KB
001 LAS UFSAR REV 25	009 Chap 09 Auxiliary Systems.pdf	1207 KB
001 LAS UFSAR REV 25	010 Chap 09 Figures Part 1 of 7.pdf	2322 KB
001 LAS UFSAR REV 25	011 Chap 09 Figures Part 2 of 7.pdf	89647 KB
001 LAS UFSAR REV 25	012 Chap 09 Figures Part 3 of 7.pdf	90380 KB
001 LAS UFSAR REV 25	013 Chap 09 Figures Part 4 of 7.pdf	79298 KB
001 LAS UFSAR REV 25	014 Chap 09 Figures Part 5 of 7.pdf	70405 KB
001 LAS UFSAR REV 25	015 Chap 09 Figures Part 6 of 7.pdf	88351 KB
001 LAS UFSAR REV 25	016 Chap 09 Figures Part 7 of 7.pdf	62019 KB
001 LAS UFSAR REV 25	017 Chap 10 Steam and Power Conv.pdf	1177 KB
001 LAS UFSAR REV 25	018 Chap 11 Radioactive Waste Mgmt.pdf	1171 KB
001 LAS UFSAR REV 25	019 Chap 12 Radiation Protection.pdf	10930 KB
001 LAS UFSAR REV 25	020 Chap 13 Conduct of Operations.pdf	468 KB
001 LAS UFSAR REV 25	021 Chap 14 Initial Test Program.pdf	41 KB
001 LAS UFSAR REV 25	022 Chap 15 Accident Analysis.pdf	6677 KB
001 LAS UFSAR REV 25	023 Chap 16 Technical Specifications.pdf	35 KB
001 LAS UFSAR REV 25	024 Chap 17 Quality Assurance.pdf	43 KB
001 LAS UFSAR REV 25	025 Appendices.pdf	11682 KB
002 LAS FPR REV 10	001 LAS FPR.pdf	15580 KB
003 LAS TRM	001 LAS TRM.pdf	4477 KB
004 LAS TSB	001 LAS TSB.pdf	2493 KB