UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION III
2443 WARRENVILLE ROAD, SUITE 210
LISLE, ILLINOIS 60532-4352

April 18, 2022

Mr. David P. Rhoades
Senior Vice President
Constellation Energy Generation, LLC
President and Chief Nuclear Officer (CNO)
Constellation Nuclear
4300 Winfield Road
Warrenville, IL 60555

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2 - INFORMATION REQUEST FOR AN NRC TRIENNIAL BASELINE DESIGN BASES ASSURANCE INSPECTION (TEAM): INSPECTION REPORT 05000373/2022011; 05000374/2022011

Dear Mr. Rhoades:

On September 19, 2022, the U.S. Nuclear Regulatory Commission (NRC) will begin a triennial baseline Design Bases Assurance Inspection (Team) at LaSalle County Station Units 1 and 2. This inspection will be performed in accordance with NRC Baseline Inspection Procedure 71111.21M.

The Design Bases Assurance Inspection focuses on the design, maintenance, and operation of risk significant components with low margin, or associated with an accident scenario, or a specific system. The inspection also monitors the implementation of modifications to structures, systems, and components as modifications to one system may also affect the design bases and functioning of interfacing systems as well as introduce the potential for common cause failures. The components and modifications to be reviewed during this baseline inspection will be identified as part of the preparation for the inspection and finalized during the in-office preparation week that occurs prior to the first onsite inspection week. In addition, operating experience issues will also be selected for review. The inspection team may request scenarios to be performed on the simulator. This request would require support from your simulator staff to validate scenarios, simulator time, and a crew to perform the actions which would most likely occur during the second onsite week. The team will work closely with your staff early on during the inspection process to ensure this activity can be accomplished with minimal impact.

The inspection will include 2 weeks onsite. The inspection team will consist of six NRC inspectors who will focus on engineering/maintenance/operations of the selected components and modifications. The current inspection schedule is as follows:

- Preparation week: September 12, 2022
- Onsite weeks: September 19 and October 3, 2022

Experience with previous baseline design/modification inspections of similar depth and length has shown that this type of inspection is extremely resource intensive, both for the NRC inspectors and the licensee staff. In order to minimize the inspection impact on the site and to ensure a productive inspection for both parties, we have enclosed a request for information needed for the inspection.

It is important that all of these documents are up-to-date and complete in order to minimize the number of additional documents requested during the preparation and/or the onsite portions of the inspection. Insofar as possible, this information should be provided electronically to the lead inspector. The information request has been divided into four groups:

- The first group lists information necessary for our initial inspection scoping activities. This information should be provided to the lead inspector no later than June 19, 2022. The lead inspector will communicate the initial selected set of samples no later than July 24, 2022.

- The second group of documents requested is those items needed to support our in-office preparation activities. This set of documents should be provided to the lead inspector at the Regional Office no later than September 5, 2022. During the in-office preparation activities, the team may identify additional information needed to support the inspection.

- The third group includes the additional information above as well as plant specific reference material. This information should be available to the team onsite on September 19, 2022.

- The last group includes supporting information to be provided throughout the inspection. Specifically, corrective action documents and questions developed during the inspection are requested to be provided as the documents are generated.

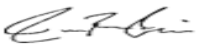
In addition, the enclosure includes information and requests addressing inspection logistics.

The lead inspector for this inspection is Jamie Benjamin. If there are any questions about the inspection or the material requested in the enclosure, please contact the lead inspector at 630-829-9747 or via e-mail at Jamie.Benjamin@nrc.gov.

This letter 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. The NRC may not conduct or sponsor, and a person is not required to respond to, a request for information or an information collection requirement unless the requesting document displays a currently valid Office of Management and Budget Control Number.

This letter and its enclosure 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,



Signed by Benjamin, Jamie
on 04/18/22

Jamie Benjamin, Senior Reactor Engineer
Engineering Branch 2
Division of Reactor Safety

Docket Nos. 50–373; 50–374
License Nos. NPF–11; NPF–18

Enclosure:
Design Bases Assurance Inspection
Document Request

cc: Distribution via LISTSERV®

Letter to David P. Rhoades from Jamie Benjamin dated April 18, 2022.

SUBJECT: LASALLE COUNTY STATION, UNITS 1 AND 2 - INFORMATION REQUEST FOR AN NRC TRIENNIAL BASELINE DESIGN BASES ASSURANCE INSPECTION (TEAM): INSPECTION REPORT 05000373/2022011; 05000374/2022011

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**DESIGN BASES ASSURANCE INSPECTION (TEAMS)**
**REQUEST FOR INFORMATION**

## I. ADMINISTRATIVE INSPECTION INFORMATION

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|---|---|
| Inspection Report Number: | 05000373/2022011; 05000374/2022011 |
| Onsite Inspection Dates: | September 19–23, 2022; October 3–7, 2022 |
| Inspection Procedure: | IP 71111.21M, “Design Bases Assurance Inspection (Team)” |
| Lead Inspector: | Jamie Benjamin, Senior Reactor Inspector, RIII/DRS/EB2<br>630-829-9747<br>Jamie.Benjamin@nrc.gov |

## II. LOGISTICS

Email the following inspection logistics to the lead inspector by September 12, 2022, or sooner:

1. Inspection room name/number, directions from the mail access facility, and phone number;
2. Interview room name/number;
3. Response team contact information (names and phone numbers) and team roles (e.g., management sponsor, lead, inspector counterpart);
4. Any site access/badging actions needed for each inspector;
5. Any dosimetry actions needed for each inspector;
6. Entrance meeting time (after 10:00 a.m. Central Time on September 19, 2022) and location;
7. Confirmation that the team will have access to a licensee computer with a nearby printer;
8. Confirmation that the team will have Wi-Fi access;
9. Cafeteria location and hours;
10. Current management and engineering organizational chart; and
11. Any potential resource conflicts during the inspection (e.g., emergency drills and all-staff meetings).

## III. INFORMATION REQUEST

Contact the lead inspector as soon as possible if you have any questions regarding this information request. Provide the information electronically in "pdf" files, Excel, or other searchable formats, preferably on some portable electronic media (e.g., CD-ROM, DVD). The files should contain descriptive names, and be indexed and hyperlinked to facilitate ease of use. Information in "lists" should contain enough information to be easily understood by someone who has knowledge of light water reactor technology.

### 1. Information Requested for Selection of Components/Modifications

The following information is requested by June 19, 2022, or sooner, to facilitate the initial sample selection.

1.1. Risk-ranking of top 250 components from your site specific probabilistic safety analysis (PSA) sorted by Risk-Achievement Worth (RAW). Include values for Birnbaum Importance, Risk-Reduction Worth, and Fussell-Veseley (as applicable). Provide any basic event mapping used to develop the ranking of components. (Share with Senior Reactor Analyst (SRA) for if needed.)

1.2. Risk-ranking of top 100 containment-related components (i.e., Large Early Release Frequency (LERF)) from your site specific PSA sorted by RAW. See examples in Inspection Manual Chapter 0609, Appendix H, Table 4.1, "Containment-Related SSCs Considered for LERF Implications." Provide any basic event mapping used to develop the ranking of components. (Share with SRA for if needed.)

1.3. Provide a list of the top 200 cut-sets from your PSA. Provide the descriptions of the basic events in the list of cut-sets. (Share with SRA for if needed.)

1.4. Provide a list of the top 100 cut-sets for each initiator modeled in the PSA that contributes more than 5 percent to the baseline plant core damage frequency. (Share with SRA for if needed.)

1.5. Copies of PSA "system notebooks," Human Error Reliability Analysis Notebook, and latest PSA summary document.

1.6. If you have an External Events or Fire PSA Model, provide the information requested in Items 1 and 2 for external events and fire. Provide narrative description of each coded event (including fire, flood zone description).

1.7. Provide copies of the emergency operating procedures and all abnormal operating procedures.

1.8. Electronic copy of the site Individual Plant Examination of External Events, if available. (Share with SRAs to determine if needed.)

1.9. Provide the in-service testing program (IST) document identifying the in-scope valves and pumps, and the associated IST program requirements for each component (e.g., IST valve table identifying category, active/passive function).

1.10. List of high risk Maintenance Rule systems/components based on engineering or expert panel judgment (i.e., those systems/components not identified high risk in the PSA).

1.11. Structures, systems, and components (SSCs) in the Maintenance Rule (a)(1) category for the last 3 years.

1.12. A list of operating experience evaluations for the last 3 years.

1.13. Information of any common cause failure of components experienced in the last 5 years at your facility.

1.14. List of Root Cause Evaluations associated with component failures or design issues initiated/completed in the last 5 years.

1.15. List of open operability evaluations.

1.16. List of "permanent plant modifications" to SSCs that are field work complete. For the purpose of this inspection, permanent plant modifications include permanent:

1.16.1 Plant changes, design changes, set point changes, completed in the last 5 years;

1.16.2 Equivalency evaluations, suitability analyses, and commercial grade dedications completed in the last 3 years;

1.16.3 Procedure changes for Emergency Operating Procedures (EOPs), Abnormal Operating Procedures (AOPs), surveillances, and test procedures in the last 3 years; and

1.16.4 Calculation changes that have been issued for use in the last 3 years.

Note: Items 1.16.1. through 1.16.4. should be provided as separate, individual lists and each list should contain the number of each document, title, revision/date, and the affected system.

1.17 List of all time critical and/or risk significant operator actions. Identify those actions that do not have job performance measures.

1.18 Copies of procedures addressing the following: modifications, design changes, set point changes, equivalency evaluations or suitability analyses, commercial grade dedications, and post-modification testing.

1.19 A list of corrective action documents (open and closed) in the last 3 years that address permanent plant modifications issues, concerns, or processes. These documents should also include the corrective action documents associated with the modification implementation.

1.20 Electronic copies of Updated Final Safety Analysis Report, Technical Specifications, Technical Specifications Bases, and Technical Requirements Manual.

1.21 Electronic copies of simplified plant drawings (if available). Note: these may be uncontrolled documents such as big notes, training diagrams, etc.

**2. Information Requested (for the approximate seven selected components and seven selected modifications) to be Available by September 5, 2022**

This information should be separated for each selected component or modification, especially if provided electronically (e.g., folder with component or modification name that includes calculations, condition reports, maintenance history, etc.).

2.1 List of condition reports (corrective action documents) associated with each of the selected components for the last 6 years.

2.2 The maintenance history (corrective, preventive, and elective) associated with each of the selected components for the last 10 years. Identify frequency of preventive maintenance activities.

2.3 Aging Management Program documents applicable to each selected component.

2.4 Copies of calculations associated with each of the selected components, excluding data files.

2.5 Provide an all-inclusive list of calculation revisions in effect associated with each of the selected components. Include document number, title, and revision number.

2.6 Electronic copies of electrical drawings (ac and dc) and key diagrams for selected components.

2.7 Electronic copy of Piping and Instrumentation Drawings (P&IDs) (if available) of selected components.

2.8 System Health Reports, System Descriptions, Design Basis Documents, and/or Training Lesson Plans associated with each of the selected components.

2.9 A list of modifications, including equivalency evaluations and setpoint changes, associated with each of the selected components. This list should include a descriptive paragraph on the purpose of the modification. Please ensure this list only includes design completed (not canceled) modifications.

2.10 Copies of operability evaluations (open/closed for last 3 years) associated with each of the selected components and plans for restoring quality as applicable.

2.11 Copies of selected operator work-around evaluations associated with each of the selected components and plans for resolution, if applicable.

2.12 Copies of any open temporary modifications associated with each of the selected components, if applicable.

2.13 Trend data on the selected electrical/mechanical components' performance for last 3 years (for example, pumps' performance including in-service testing, other vibration monitoring, oil sample results, etc., for valves: stroke time and leak rate results, diagnostic trend data, etc.).

2.14 Provide copies of the normal operating and alarm response procedures associated with the selected components.

2.15 Procedures addressing time critical and/or risk significant operator actions for selected components.

2.16 Completed tests and surveillances for each selected component performed during the last 3 years. For those tests and surveillances performed at a periodicity of greater than 3 years, provide the latest two performed. Include the associated acceptance criteria basis calculations.

2.17 For each of the selected modifications, copies of the modification package, engineering changes, 50.59 screening and evaluation (if applicable), calculations, post-modification test packages, corrective action documents, design drawings, preventive maintenance requirements and normal and alarm response procedures.

2.18 Corrective Action Program procedures, including the operability/functionality determination procedure.

2.19 Quality Assurance Program document/procedure.

2.20 A copy of any internal/external self-assessments and associated corrective action documents generated in preparation for the inspection.

2.21 A copy of engineering/operations related audits completed in the last 2 years.

**3. Additional Information to be Provided on September 19, 2022, Onsite (for final selected components and modifications)**

3.1 During the in-office preparation activities, the team will be making final selections and may identify additional information needed to support the inspection. The team inspectors will request this information throughout the week of September 12, 2022 as needed.

3.2 Schedule of any testing/maintenance activities to be conducted on the selected components during the two onsite inspection weeks.

**4. Information Requested to be Provided Throughout the Inspection**

4.1 Any corrective action documents generated as a result of the team's questions during this inspection as the documents are generated.

4.2 List of questions and/or document requests submitted by the team and their status (e.g., open, closed) sorted by inspector. Provide daily by 2:30 p.m. to each inspector. It is recommended to provide the team leader with a master list sorted by inspector and each inspector with a list containing only the items originated by that inspector.

4.3 If available in hardcopy form, one complete set of P&IDs and simplified drawings (e.g., training schematics). If any of these documents is not available in hardcopy form, contact the lead inspector.

4.4 Please ensure that other supporting documents for the selected items have been located and are readily retrievable as the inspection team will likely be requesting these documents during the inspection. Examples of supporting documents are:

4.4.1 Individual Plant Examination/Probabilistic Risk Assessment report;

4.4.2 Procurement documents for components and modifications selected (verify retrievable);

4.4.3 Plant procedures (normal, abnormal, emergency, surveillance, etc.);

4.4.4 Vendor manuals;

4.4.5 Historical revisions of the Final Safety Analysis Report; and

4.4.6 Copy of electrical drawings, key diagrams and isometrics (paper copies).

If you have questions regarding the information requested, please contact the lead inspector.