



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE RD, STE 102
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

February 6, 2025

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: CALVERT CLIFFS NUCLEAR POWER PLANT, UNITS 1 AND 2 –
INFORMATION REQUEST FOR QUADRENNIAL BASELINE
COMPREHENSIVE ENGINEERING TEAM INSPECTION; NOTIFICATION TO
PERFORM INSPECTION 05000317/2025011 AND 05000318/2025011

Dear David Rhoades:

The purpose of this letter is to notify you that the U.S. Nuclear Regulatory Commission (NRC) Region I staff will conduct a Comprehensive Engineering Team Inspection (CETI) at Calvert Cliffs Nuclear Power Plant, Units 1 and 2. Kevin Mangan, a Senior Reactor Inspector from the NRC's Region I Office, will lead the inspection team. The inspection will be conducted in accordance with Inspection Procedure (IP) 71111.21M, "Comprehensive Engineering Team Inspection (CETI)," dated January 1, 2023 (ADAMS Accession No. ML19084A030). This inspection combines elements of the Design Basis Assurance Inspection (Teams), the Heat Exchanger/Sink Performance inspection (IP 71111.07T), and the Evaluations of Changes, Tests and Experiments inspection (IP 71111.17).

The inspection will evaluate the capability of risk-significant/low-margin components to function as designed to support proper system operation. The inspection will also include a review of selected modifications, operating experience, and as applicable, operator actions.

On February 3, 2025, a NRC team leader confirmed arrangements for an information-gathering site visit and the two-week onsite inspection with Travis Lefton, Calvert Cliffs Principal Regulatory Engineer. The schedule is as follows:

- Information-gathering visit: March 31 – April 3, 2025
- Onsite weeks: Weeks of June 9, 2025 and June 23, 2025

The purpose of the information-gathering visit is to meet with members of your staff to identify risk-significant components, modifications, operator actions, and operating experience items. Information and documentation needed to support the inspection will also be identified. David Werkheiser, a Region I Senior Risk Analyst, will support Kevin Mangan during the information-gathering visit to review probabilistic risk assessment data and identify components to be examined during the inspection.

Experience with previous baseline design/modification inspections of similar depth and length has shown this type of inspection is 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.

Ensuring these documents are up-to-date and complete will support the more efficient conduct of the inspection. Insofar as possible, this information should be provided electronically to the lead inspector. The information request has been divided into two groups:

- The first group lists information necessary for our initial inspection scoping activities. This information should be provided to the lead inspector by March 27, 2025, the lead inspector will communicate the selected set of components, modifications, 50.59 screenings, and operating experience samples.
- The second group of documents requested is those items needed to support our in-office preparation activities. This set of documents, specific to the selected components and modifications, should be provided to the lead inspector at the Regional Office no later than May 30, 2025. During the in-office preparation activities, the team may identify additional information needed to support the inspection, and those items will be communicated directly to Travis Lefton.

If there are any questions about the inspection or the material requested in the enclosure, please contact the lead inspector at (610) 337-5234 or via email at kam1@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 Title 10 of the *Code of Federal Regulations*, Part 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Erin Carfang, Chief
Engineering Branch 1
Division of Operating Reactor Safety

Docket Nos. 05000317 and 05000318
License Nos. DPR-53 and DPR-69

Enclosure:
Document Request for Comprehensive
Engineering Team Inspection

cc w/encl: Distribution via ListServ

SUBJECT: CALVERT CLIFFS NUCLEAR POWER STATION, UNITS 1 AND 2 – INFORMATION REQUEST FOR QUADRENNIAL BASELINE COMPREHENSIVE ENGINEERING TEAM INSPECTION; NOTIFICATION TO PERFORM INSPECTION 05000317/2025011 AND 05000318/2025011 DATED FEBRUARY 6, 2025

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DOCUMENT NAME: [https://usnrc.sharepoint.com/teams/Region-I-EB1/Documents/Inspections/CETI/CalvertCliffs/2025 CC CETI Request for Information Letter.docx](https://usnrc.sharepoint.com/teams/Region-I-EB1/Documents/Inspections/CETI/CalvertCliffs/2025%20CC%20CETI%20Request%20for%20Information%20Letter.docx)
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DOCUMENT REQUEST FOR COMPEHENSIVE ENGINEERING TEAM INSPECTION

Onsite Inspection Dates: June 9, 2025 through June 13, 2025; and
June 23, 2025 through June 27, 2025

Inspection Procedure: Inspection Procedure 71111.21M, Comprehensive Engineering
Team Inspection (CETI)

Lead Inspector: Kevin Mangan, Senior Reactor Inspector
(610) 337-5234
Kam1@nrc.gov

Inspection Report: 05000317/2025011 and 05000318/2025011

I. Information Requested for Sample Selection Process

The following information is requested by March 27, 2024, to facilitate inspection preparation. Feel free to contact the lead inspector as soon as possible if you have any questions regarding this information request. Please provide the information electronically in "PDF" files, Word, Excel, or other searchable format. 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. The site probabilistic risk analysis (PRA) "System Notebook" and latest PRA Summary Document.
2. Risk-ranking of top 250 basic events sorted by Risk Achievement Worth (≥ 1.3). Include values for Risk Reduction Worth, Birnbaum Importance, and Fussell-Vesely (as applicable). Please provide in an Excel spreadsheet or other sortable format, and include an understandable definition of the coded basic events.
3. Risk-ranking of top 100 components from site specific PRA sorted by Large Early Release Frequency. Provide any basic event mapping used to develop the ranking of components.
4. List of the top 200 cut-sets from your PRA. Provide the descriptions of the basic events in the list of cut-sets.
5. List of the top 200 cut-sets for each initiator modeled in the PRA that contributes more than 5 percent to the baseline plant core damage frequency.
6. If you have an External Events or Fire PRA Model, provide the information requested in Items 1 and 2 for external events and fire. Provide narrative description of each coded event, including fire and flood zone description.
7. List of time-critical and/or risk-significant operator actions.
8. List of emergency and abnormal operating procedures.

Enclosure

DOCUMENT REQUEST FOR COMPREHENSIVE ENGINEERING TEAM INSPECTION

9. If available, any pre-existing evaluation or list of components and associated calculations with low design margins (e.g., pumps closest to the design limit for flow or pressure, diesel generator close to design required output, heat exchangers close to rated design heat removal).
10. If applicable, copy of any self-assessments and/or Quality Assurance assessments of low-margin structures, systems, and components (SSCs), completed in the last three years.
11. List of available design margins in both the open and closed direction for valves in the motor-operated valve and air-operated valve programs. Identify the safety-related direction and the basis for how the margin was determined.
12. The age and capacity of the safety-related DC batteries.
13. The In-Service Testing Program (IST) Basis 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).
14. SSCs in the Maintenance Rule (a)(1) category in the last three years.
15. List of Root Cause Evaluations associated with SSCs failures or design issues initiated/completed in the last four years.
16. List of formal operability evaluations in the last four years.
17. List of current operator work arounds/burdens.
18. List of “permanent plant modifications” to SSCs that are field work complete in the last three years. For the purpose of this inspection, permanent plant modifications include permanent: plant changes, design changes, set point changes, equivalency evaluations, suitability analyses, and commercial grade dedications. The list should contain the number of each document, title (sufficient to understand the purpose of the modification), revision/date, and the affected system.
19. List of calculation changes that have been issued for use in the last three years.
20. Programmatic Procedures:
 - Corrective Action Program Procedure
 - Permanent Plant Modifications and Design Changes
 - In-Service Testing
 - Setpoint Changes
 - Commercial Grade Dedication
 - Post-Maintenance Testing
 - 50.69 Screening/Program
 - Maintenance Rule
21. List of corrective action documents (open and closed) in the last three years associated

DOCUMENT REQUEST FOR COMPREHENSIVE ENGINEERING TEAM INSPECTION

with permanent plant modifications issues, concerns, or processes.

22. Any internal/external self-assessments and associated corrective action documents generated in preparation for this inspection.
23. Corrective Action Program documents (e.g., condition reports) associated with inspection findings from the last performance of NRC Inspection Procedure 71111.21M (CETI/DBAI).
24. One line safety-related electrical drawings (AC and DC), and Piping and Instrumentation Drawings of emergency core cooling systems, ultimate heat sink, and auxiliary feedwater system.
25. List of 50.59 Evaluations and Screenings performed since January 2021.
26. Equipment Listings (preferably in Excel Spreadsheet format, if available)
 - If implemented, listing of 50.69 RISC 1, 2 and 3 components
 - Listing of equipment classified under the Conduct of Equipment Reliability Manual showing the Tier level
 - Listing of equipment classified under the Maintenance Rule showing HSS/LSS classifications

II. Information Requested to Be Available by May 30, 2025, following sample selection

This information should be separated for each selected component and modification, especially if provided electronically (e.g., a folder for each component and modification named after the component or modification that includes the information requested below). Items 1 through 11 are associated with the selected components and Item 12 is for the selected modifications.

1. List of corrective action documents associated with each selected component for the last four years.
2. Maintenance history (e.g., corrective, preventive, and elective) associated with each selected component for the last six years. Identify frequency of preventive maintenance activities.
3. Aging Management Program documents applicable to each selected component.
4. List of calculations associated with each selected component, excluding data files. Pipe stress calculations are excluded from this request.
5. System Health Report (last completed) and Design Basis Document associated with each selected component.
6. Access to or copy of vendor manual(s) for each selected component.
7. List of open temporary modifications associated with each selected component, if applicable.

DOCUMENT REQUEST FOR COMPREHENSIVE ENGINEERING TEAM INSPECTION

8. Trend data/graphs on the selected components' performance for the last three years (e.g., pump performance including IST, other vibration monitoring, oil sample results).
9. List of normal operating and alarm response procedures associated with each selected component.
10. Last completed tests and surveillances for each selected component performed during the last three years. For those tests and surveillances performed at a periodicity of greater than three years, provide the latest test performed.
11. Schedule of surveillance testing of selected components that occur during the onsite inspection weeks.
12. For each selected modification, copies of associated documents such as modification package, engineering changes, 50.59 screening or evaluation, relevant calculations, post-modification test packages, associated corrective action documents, design drawings, and new/revised preventive maintenance requirements.
13. A copy of the evaluation or screening document for each of the selected 50.59 evaluation/screens. A copy of the modification package if the evaluation/screen pertains to a modification.