



**UNITED STATES  
NUCLEAR REGULATORY COMMISSION**

REGION I  
475 ALLENDALE RD, STE 102  
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

September 13, 2022

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: R.E. GINNA NUCLEAR POWER PLANT – BIENNIAL PROBLEM  
IDENTIFICATION AND RESOLUTION INSPECTION REPORT  
05000244/2022010**

Dear David Rhoades:

On August 12, 2022, the U.S. Nuclear Regulatory Commission (NRC) completed a problem identification and resolution inspection at your R.E. Ginna Nuclear Power Plant, LLC and discussed the results of this inspection with Daren Blankenship, Site Vice President, and other members of your staff. The results of this inspection are documented in the enclosed report.

The NRC inspection team reviewed the station's problem identification and resolution program and the station's implementation of the program to evaluate its effectiveness in identifying, prioritizing, evaluating, and correcting problems, and to confirm that the station was complying with NRC regulations and licensee standards for problem identification and resolution programs. Based on the samples reviewed, the team determined that your staff's performance in each of these areas adequately supported nuclear safety.

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

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

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

This letter, its enclosure, and your response (if any) will be made available for public inspection and copying at <http://www.nrc.gov/reading-rm/adams.html> and at the NRC Public Document Room in accordance with Title 10 of the *Code of Federal Regulations* 2.390, "Public Inspections, Exemptions, Requests for Withholding."

Sincerely,

Erin E. Carfang, Chief  
Projects Branch 1  
Division of Operating Reactor Safety

Docket No. 05000244  
License No. DPR-18

Enclosure:  
As stated

cc w/ encl: Distribution via LISTSERV

SUBJECT: R.E. GINNA NUCLEAR POWER PLANT – BIENNIAL PROBLEM IDENTIFICATION AND RESOLUTION INSPECTION REPORT 05000244/2022010 DATED SEPTEMBER 13, 2022

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

Docket Number: 05000244

License Number: DPR-18

Report Number: 05000244/2022010

Enterprise Identifier: I-2022-010-0015

Licensee: Constellation Energy Generation, LLC

Facility: R.E. Ginna Nuclear Power Plant

Location: Ontario, New York

Inspection Dates: July 25, 2022 to August 12, 2022

Inspectors: J. England, Resident Inspector  
N. Floyd, Senior Reactor Inspector  
D. Kern, Senior Reactor Inspector  
C. Swisher, Resident Inspector

Approved By: Erin E. Carfang, Chief  
Reactor Projects Branch 1  
Division of Operating Reactor Safety

Enclosure

## **SUMMARY**

The U.S. Nuclear Regulatory Commission (NRC) continued monitoring the licensee's performance by conducting a biennial problem identification and resolution inspection at R.E. Ginna Nuclear Power Plant, in accordance with the Reactor Oversight Process. The Reactor Oversight Process is the NRC's program for overseeing the safe operation of commercial nuclear power reactors. Refer to <https://www.nrc.gov/reactors/operating/oversight.html> for more information.

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

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

### **Additional Tracking Items**

None.

## INSPECTION SCOPES

Inspections were conducted using the appropriate portions of the inspection procedures (IPs) in effect at the beginning of the inspection unless otherwise noted. Currently approved IPs with their attached revision histories are located on the public website at <http://www.nrc.gov/reading-rm/doc-collections/insp-manual/inspection-procedure/index.html>. Samples were declared complete when the IP requirements most appropriate to the inspection activity were met consistent with Inspection Manual Chapter (IMC) 2515, "Light-Water Reactor Inspection Program - Operations Phase." The inspectors reviewed selected procedures and records, observed activities, and interviewed personnel to assess licensee performance and compliance with Commission rules and regulations, license conditions, site procedures, and standards.

## OTHER ACTIVITIES – BASELINE

### 71152B - Problem Identification and Resolution

#### Biennial Team Inspection (IP Section 03.04) (1 Sample)

- (1) The inspectors performed a biennial assessment of the effectiveness of the licensee's problem identification and resolution program, use of operating experience, self-assessments and audits, and safety-conscious work environment.
  - Problem Identification and Resolution Effectiveness: The inspectors assessed the effectiveness of the licensee's problem identification and resolution program in identifying, prioritizing, evaluating, and correcting problems. The inspectors also conducted a five-year review of the 480 volts alternating current (VAC) electrical system and the residual heat removal system.
  - Operating Experience: The inspectors assessed the effectiveness of the licensee's processes for use of operating experience.
  - Self-Assessments and Audits: The inspectors assessed the effectiveness of the licensee's identification and correction of problems identified through audits and self-assessments.
  - Safety-Conscious Work Environment: The inspectors assessed the effectiveness of the station's programs to establish and maintain a safety-conscious work environment.

## INSPECTION RESULTS

Assessment	71152B
<p><b>Problem Identification and Resolution Effectiveness:</b> The team determined that the problem identification and resolution program (referred to as the corrective action program in the licensee's procedures) for R.E. Ginna Nuclear Power Plant (Ginna) was generally effective and adequately supported nuclear safety and security.</p> <p><b>Problem Identification:</b> The team determined that, in general, the licensee identified issues and entered them into the corrective action program at a low threshold. However, the team identified one observation regarding plant conditions that were not previously captured in</p>	

Ginna's corrective action program. This observation is documented below.

**Problem Prioritization and Evaluation:** Based on the samples reviewed, the team determined that the licensee appropriately prioritized and evaluated issues commensurate with the safety significance of the identified problem. In most cases, the licensee appropriately screened condition reports for operability and reportability, categorized condition reports by significance, and assigned actions to the appropriate department for evaluation and resolution.

**Corrective Actions:** The team determined that, in general, the overall corrective action program performance related to resolving problems was effective. In most cases, the licensee implemented corrective actions to resolve problems in a timely manner. However, the team identified one observation regarding the extent of condition actions not performed at the earliest opportunity. This observation is documented below.

Assessment

71152B

**Operating Experience:** The team determined that the licensee appropriately evaluated industry operating experience for its relevance to Ginna. In most cases, the licensee appropriately incorporated both internal and external operating experience into plant procedures and processes, as well as lessons learned for training and pre-job briefs.

Assessment

71152B

**Self-Assessments and Audits:** The team reviewed a sample of self-assessments and audits to assess whether the licensee was identifying and addressing performance trends. The team determined that the licensee had an effective self-assessment and audit process at Ginna.

Assessment

71152B

**Safety-Conscious Work Environment:** The team interviewed approximately 25 individuals. The purpose of these interviews was to evaluate the willingness of licensee staff to raise nuclear safety issues; to evaluate the perceived effectiveness of the corrective action program at resolving identified problems; and to evaluate the licensee's safety-conscious work environment. The personnel interviewed were randomly selected by the team from the Operations, Engineering, Maintenance, Security, Chemistry, Radiation Protection, and Emergency Preparedness work groups. The team also interviewed licensee staff during the discussion of technical issues as part of the corrective action program review. To supplement these discussions, the team interviewed the Employee Concerns Program (ECP) representative to assess her perception of the plant employees' willingness to raise nuclear safety concerns. The team also reviewed the ECP case log and select case files. All individuals interviewed indicated that they would raise safety concerns.

All individuals felt that their management was receptive to receiving safety concerns and generally addressed them promptly, commensurate with the significance of the concern. Interviewees indicated they were adequately trained and proficient on initiating condition reports. All interviewees were aware of Constellation's ECP, stated they would use the program if necessary, and expressed confidence that their confidentiality would be maintained if they brought issues to the ECP. When asked whether there have been any instances where individuals experienced retaliation or other negative reaction for raising safety concerns, all individuals interviewed stated that they had neither experienced nor heard of an instance of retaliation at the site. The team determined that the processes in

place to mitigate potential safety-conscious work environment issues were adequately implemented.

Observation: Extent of Condition Actions Not Performed at Earliest Opportunity | 71152B

The team identified an observation regarding two examples where extent of condition actions were not performed at the earliest opportunity. Specifically, the licensee generated action tracking items (denoted as ACITs in the licensee’s corrective action program) to perform extent of condition actions for identified issues. These actions had varying due dates and were either deferred or not performed. Examples included:

- Issue Report (IR) 04336478 documented an issue with motor control center MCC-D missing internal seismic brackets. MCC-D houses circuit breakers for multiple safety-related systems. The licensee generated extent of condition actions to perform inspections on other electrical buses to verify whether a similar condition existed; however, the seismic mounting verification inspections of 480 VAC Buses 16, 17 & 18 were not performed. These buses contain electrical components for multiple safety-related systems. The original issue was identified in 2014. Work orders to perform the inspections were cancelled during past maintenance activities. The licensee captured the team’s observation in IR 04514477 and scheduled the extent of condition actions as part of future planned maintenance.
- IR 04282792 documented a bound hand control valve HCV-487B on the controller board for AOV-4298 in the turbine-driven auxiliary feedwater system. The licensee generated an extent of condition action to perform visual inspections for similar degradation with hand controllers for other systems; however, the inspections have been deferred for the five remaining hand controllers installed in multiple safety-related systems. The original issue was identified in 2019. The remaining inspections are scheduled for 2023 and 2024.

The licensee determined that the component and associated systems remained operable for both issues captured in the two examples. The extent of condition actions were assignments to improve performance and not to correct a known problem. Licensee procedure PI-AA-125, Correct Action Program, differentiates ACITs from formal corrective actions in that ACITs are not actions to correct conditions adverse to quality. This procedure does not require or provide guidance on the timeliness of ACIT completion and allows the extension of due dates with no formal documentation. The team determined there was no performance deficiency associated with the extent of condition actions; however, the team observed that these actions could have been performed at an earlier opportunity and would provide insights for similar conditions.

Observation: Plant Conditions Not Previously Identified by Licensee Staff | 71152B

The team identified an observation regarding plant conditions that were not previously captured in Ginna’s corrective action program. Specifically, the team performed walkdowns of accessible plant areas and observed a variety of adverse conditions that should have been identified and evaluated by the licensee. Example of conditions included:

- IR 04513538, long-standing operator aid tag not removed from sub-basement room
- IR 04513715, ‘B’ residual heat removal pump missing a shaft guard
- IR 04515954, evidence of moisture on bottom of electrical panel door in the ‘B’ battery room
- IR 04516103, corrosion in a fire water piping flange located in the auxiliary building
- IR 04516127, motor operated valve actuator leaking grease



- IR 04516131, incorrect revision of a procedure staged in the auxiliary building
- IR 04516296, electrohydraulic fluid inappropriately stored in the turbine building

The team determined that the licensee's failure to promptly identify, evaluate, and correct the adverse conditions was a performance deficiency. The team reviewed the conditions on an individual basis and determined each issue to be of minor significance in accordance with Appendix B of NRC Inspection Manual Chapter IMC 0612. The licensee staff promptly entered each issue into their corrective action program.

## **EXIT MEETINGS AND DEBRIEFS**

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

- On August 12, 2022, the inspectors presented the biennial problem identification and resolution inspection results to Daren Blankenship, Site Vice President, and other members of the licensee staff.

**DOCUMENTS REVIEWED**

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
71152B	Corrective Action Documents	4113127		
		4187909		
		4195963		
		4230759		
		4239042		
		4242696		
		4253986		
		4255421		
		4258517		
		4266529		
		4323014		
		4328832		
		4331247		
		4331392		
		4332855		
		4332980		
		4332999		
		4333162		
		4335290		
		4335570		
		4336478		
		4337682		
		4338509		
		4339004		
		4340054		
		4340290		
		4341722		
		4344224		
4346987				
4347683				
4347791				

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		4349484		
		4351801		
		4354540		
		4357265		
		4358006		
		4358711		
		4358842		
		4358902		
		4362936		
		4363124		
		4363597		
		4363728		
		4366987		
		4371341		
		4377943		
		4378218		
		4378335		
		4380679		
		4387962		
		4388834		
		4403107		
		4407857		
		4409639		
		4419964		
		4421357		
		4422720		
		4423071		
		4429487		
		4430256		
		4450520		
		4450598		
		4451289		
		4452400		

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		4453282		
		4453546		
		4453874		
		4459261		
		4466775		
		4473589		
		4473666		
		4473740		
		4477204		
		4493870		
		4494170		
		4496056		
		4498195		
	Corrective Action Documents Resulting from Inspection	4512348		
		4513554		
		4514636		
		4514946		
		4515131		
		4515934		
		4516374		
		4516569		
	4516573			
	Procedures	ER-AA-520	Instrument Performance Trending	Revision 5
		OP-AA-108-115	Operability Determinations (CM-1)	Revision 24
		PI-AA-115	Operating Experience Program	Revision 5
		PI-AA-120	Issue Identification and Screening Process	Revision 12
		PI-AA-125-1001	Root Cause Analysis Manual	Revision 6
		PI-AA-125-1003	Corrective Action Program Evaluation Manual	Revision 7
		PI-AA-125-1006	Investigations Techniques Manual	Revision 6
	Self-Assessments	4173930-32	Focused Area Self-Assessment, Fleet Inservice Testing (IST) Program	01/01/2021
4373188		Clearance and Tagging Self-Assessment	11/17/2020	
4378874-06-02		Rad Worker Performance	12/31/2021	

Inspection Procedure	Type	Designation	Description or Title	Revision or Date
		4384059-02	Operations Training Comprehensive Self-Assessment	09/03/2021
		4394225	GINNA In-Storage Maintenance (ISM) Program Assessment	09/07/2021
		NOSA-GIN-20-04	Chemistry Audit Report	04/08/2020
		NOSA-GIN-20-05	Engineering Programs Audit Report	07/15/2020
		NOSA-GIN-20-09	External Event and Emergency Operations Audit Report	08/21/2020
		NOSA-GIN-21-06	Radiation Protection Audit Report	11/12/2021
		NOSA-GIN-22-01	Maintenance Audit Report	02/09/2022
	Work Orders	C90685795		
		C91580104		
		C91640025		
		C91640026		
		C93273024		
		C93273024		
		C93658888		
		C93666534		
		C93711260		
		C93724145		
		C93747008		
		C93747483		
		C93757273		
		C93759668		
		C93759887		
		C93760195		
		C93760398		
		C93761200		
		C93763892		
		C93769757		
C93771361				
C93774129				
C93774882				
C93789284				