



An AEP Company

BOUNDLESS ENERGY™

Indiana Michigan Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
indianamichiganpower.com

October 29, 2025

AEP-NRC-2025-40
10 CFR 50.73

Docket Nos.: 50-315

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Unit 1
LICENSEE EVENT REPORT 315/2025-002-00
Supplemental Diesel Generators (SDGs) Unavailable Resulting In
Emergency Diesel Generators (EDGs) Inoperable Greater Than
Allowed By Technical Specification

In accordance with 10 CFR 50.73, Licensee Event Report (LER) System, Indiana Michigan Power Company, the licensee for Donald C. Cook Nuclear Plant Unit 1, is submitting as an enclosure to this letter the following report:

LER 315/2025-002-00: Supplemental Diesel Generators (SDGs) Unavailable Resulting In
Emergency Diesel Generators (EDGs) Inoperable Greater Than Allowed By Technical
Specification

There are no commitments contained in this submittal.

Should you have any questions, please contact Mr. Michael K. Scarpello, Regulatory Affairs Director, at (269) 466-2649.

Sincerely,

A handwritten signature in blue ink, appearing to read "Scott A. Dailey".

Scott A. Dailey
Site Vice President

OAF/sjh

Enclosure: Licensee Event Report 315/2025-002-00: Supplemental Diesel Generators (SDGs)
Unavailable Resulting In Emergency Diesel Generators (EDGs) Inoperable Greater
Than Allowed By Technical Specification

c: EGLE – RMD/RPS
J. B. Giessner – NRC Region III
NRC Resident Inspector
N. Quilico – MPSC
R. M. Sistevaris – AEP Ft. Wayne
S. P. Wall, NRC Washington D.C.
A. J. Williamson – AEP Ft. Wayne

Enclosure to AEP-NRC-2025-40

Licensee Event Report 315/2025-002-00: Supplemental Diesel Generators (SDGs)
Unavailable Resulting In Emergency Diesel Generators (EDGs) Inoperable Greater Than
Allowed By Technical Specification



LICENSEE EVENT REPORT (LER)

(See Page 2 for required number of digits/characters for each block)

(See NUREG-1022, R.3 for instruction and guidance for completing this form
<http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1022/r3/>)

Estimated burden per response to comply with this mandatory collection request: 80 hours. Reported lessons learned are incorporated into the licensing process and fed back to industry. Send comments regarding burden estimate to the FOIA, Library, and Information Collections Branch (T-6 A10M), U. S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by email to Infocollections.Resource@nrc.gov, and the OMB reviewer at: OMB Office of Information and Regulatory Affairs, (3150-0104), Attn: Desk Officer for the Nuclear Regulatory Commission, 725 17th Street NW, Washington, DC 20503. The NRC may not conduct or sponsor, and a person is not required to respond to, a collection of information unless the document requesting or requiring the collection displays a currently valid OMB control number.

1. Facility Name

Donald C. Cook Nuclear Plant Unit 1

☒ 050☐ 052

2. Docket Number

315

3. Page

1 OF 3

4. Title

Supplemental Diesel Generators (DG) Unavailable Resulting in Emergency DGs Inoperable Greater Than Allowed by TS

5. Event Date

Month	Day	Year	Year	Sequential Number	Revision No.	Month	Day	Year	Facility Name	☐ 050	Docket Number
09	03	2025	2025	- 002 -	00	10	29	2025	Facility Name	☐ 052	Docket Number

9. Operating Mode

1

10. Power Level

100

11. This Report is Submitted Pursuant to the Requirements of 10 CFR §: (Check all that apply)

☒ 10 CFR Part 20	☐ 20.2203(a)(2)(vi)	☒ 10 CFR Part 50	☐ 50.73(a)(2)(ii)(A)	☐ 50.73(a)(2)(viii)(A)	☐ 73.1200(a)
☐ 20.2201(b)	☐ 20.2203(a)(3)(i)	☐ 50.36(c)(1)(i)(A)	☐ 50.73(a)(2)(ii)(B)	☐ 50.73(a)(2)(viii)(B)	☐ 73.1200(b)
☐ 20.2201(d)	☐ 20.2203(a)(3)(ii)	☐ 50.36(c)(1)(ii)(A)	☐ 50.73(a)(2)(iii)	☐ 50.73(a)(2)(ix)(A)	☐ 73.1200(c)
☐ 20.2203(a)(1)	☐ 20.2203(a)(4)	☐ 50.36(c)(2)	☐ 50.73(a)(2)(iv)(A)	☐ 50.73(a)(2)(x)	☐ 73.1200(d)
☐ 20.2203(a)(2)(i)	☒ 10 CFR Part 21	☐ 50.46(a)(3)(ii)	☐ 50.73(a)(2)(v)(A)	☒ 10 CFR Part 73	☐ 73.1200(e)
☐ 20.2203(a)(2)(ii)	☐ 21.2(c)	☐ 50.69(g)	☐ 50.73(a)(2)(v)(B)	☐ 73.77(a)(1)	☐ 73.1200(f)
☐ 20.2203(a)(2)(iii)		☐ 50.73(a)(2)(i)(A)	☐ 50.73(a)(2)(v)(C)	☐ 73.77(a)(2)(i)	☐ 73.1200(g)
☐ 20.2203(a)(2)(iv)		☒ 50.73(a)(2)(i)(B)	☐ 50.73(a)(2)(v)(D)	☐ 73.77(a)(2)(ii)	☐ 73.1200(h)
☐ 20.2203(a)(2)(v)		☐ 50.73(a)(2)(i)(C)	☐ 50.73(a)(2)(vii)		
☐ OTHER (Specify here, in abstract, or NRC 366A).					

12. Licensee Contact for this LER

Licensee Contact

Michael K. Scarpello, Regulatory Affairs Director

Phone Number (Include area code)

(269) 466-2649

13. Complete One Line for each Component Failure Described in this Report

Cause	System	Component	Manufacturer	Reportable to IRIS	Cause	System	Component	Manufacturer	Reportable to IRIS

14. Supplemental Report Expected

☒ No ☐ Yes (If yes, complete 15. Expected Submission Date)

15. Expected Submission Date

Month	Day	Year

16. Abstract (Limit to 1326 spaces, i.e., approximately 13 single-spaced typewritten lines)

On September 3, 2025, with Unit 1 in Mode 1 at 100% power, it was identified that the calculation for the required fuel oil volume for both Supplemental Diesel Generators (SDG1)[DG] and (SDG2)[DG] had been revised to account for vortexing in the fuel oil tanks [TK]. This revision resulted in a higher required minimum fuel oil volume to support 24 hours of SDG operation at 55% load. As a result, the SDGs are considered unavailable whenever their associated fuel oil tank level falls below the revised minimum fuel oil volume of 3450 gallons.

During review of the SDG fuel oil tank levels for the previous three years two instances were identified where the volume was less than 3450 gallons while being credited for entry into the Technical Specification Action Statement (TSAS) 3.8.1.B.5 which requires restoration of the required Emergency Diesel Generator (EDG)[DG] to OPERABLE status within 14 days.

The direct cause was a failure to include consideration for unusable volume due to vortexing in the calculation for SDG minimum fuel oil volume calculation. The Technical Requirements Manual has been revised with the updated minimum fuel oil volume for both SDGs. The identified condition is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a Condition Prohibited by Technical Specifications.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

(See NUREG-1022, R.3 for instruction and guidance for completing this form
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1. FACILITY NAME		2. DOCKET NUMBER		3. LER NUMBER		
Donald C. Cook Nuclear Plant Unit 1		00315		YEAR	SEQUENTIAL NUMBER	REV NO.
☒ 050 ☐ 052				2025	- 002	- 00

NARRATIVE**EVENT DESCRIPTION:**

On September 3, 2025, with Unit 1 in Mode 1 at 100% power, it was identified that the calculation for the required fuel oil volume for both Supplemental Diesel Generators (SDG1)[DG] and (SDG2)[DG] had been revised to account for vortexing in the fuel oil tanks [TK]. This revision resulted in a higher required minimum fuel oil volume to support 24 hours of SDG operation at 55% load. As a result, the SDGs are considered unavailable whenever their associated fuel oil tank level falls below the revised minimum fuel oil volume of 3450 gallons.

Unit 1 Limiting Condition of Operation 3.8.1 requires two EDGs capable of supplying the onsite Class 1E power distribution subsystem(s) to be OPERABLE in MODE 1. If one EDG becomes inoperable and either SDG is unavailable then the Completion Time is 72 hours to restore both SDGs to available status or restore the required EDG to Operable. With this COMPLETION TIME not met the affected Unit is required to be in MODE 3 in 6 hours, in MODE 5 in 36 hours.

During a review of the SDG fuel oil tank levels for the previous three years two instances were identified where the volume was less than 3450 gallons while being credited for entry into Technical Specification Action Statement (TSAS) 3.8.1.B.5 which requires restoration of the required Emergency Diesel Generator (EDG)[DG] to OPERABLE status within 14 days.

In the period from February 26, 2023, at 01:00 to March 2, 2023, at 20:18, totaling 115.3 hours, the 1 CD EDG was INOPERABLE for maintenance. At the same period of time SDG1 fuel oil tank level was 3327 gallons and SDG2 fuel oil tank level was 3326 gallons resulting in unavailability with these volumes of fuel oil. It was determined that at the lowest noted fuel oil volume, an SDG would operate for 23.24 hours.

From June 8, 2025, at 00:01 until June 12, 2025, at 23:57, totaling 120.0 hours, the 1 AB EDG was INOPERABLE for maintenance. At the same period of time SDG1 fuel oil tank level was 3392 gallons and SDG2 fuel oil tank level was 3380 gallons resulting in unavailability with these volumes of fuel oil. It was determined that at the lowest noted fuel oil volume, an SDG would operate for 23.46 hours.

The SDGs were unavailable when TSAS 3.8.1.B.5 was entered on both occurrences and therefore the identified condition is reportable in accordance with 10 CFR 50.73(a)(2)(i)(B) as a Condition prohibited by Technical Specifications.

COMPONENT

1-OME-150-AB
1-OME-150-CD
12-OME-250-SDG1
12-OME-250-SDG2

CAUSE OF THE EVENT

The direct cause is the calculation did not account for vortexing. Revising the calculation to account for vortexing resulted in more fuel required in each SDG fuel oil tank than the unrevised TRM value of 2200 gallons.

As a result the SDGs were unavailable any time their associated fuel oil volume was less than the revised value of 3450 gallons.

**LICENSEE EVENT REPORT (LER)
CONTINUATION SHEET**

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1. FACILITY NAME

Donald C. Cook Nuclear Plant Unit 1



050



052

2. DOCKET NUMBER

00315

3. LER NUMBER

YEAR

2025

SEQUENTIAL
NUMBER

002

REV
NO.

00

NARRATIVE**NUCLEAR SAFETY**

A probabilistic risk assessment (PRA) was performed to estimate the impact, of the two occurrences where an EDG was inoperable longer than allowed by Technical Specification due to SDG unavailability, on Core Damage Frequency (CDF) and Large Early Release Frequency (LERF).

The evaluation performed resulted in an estimated change of CDF and LERF that is within the bounds for "Very Low Safety Significance" as described within NRC Inspection Manual Chapter 0609.

INDUSTRIAL SAFETY

There was no actual or potential industrial safety hazard resulting from this event.

RADIOLOGICAL SAFETY

There was no actual or potential radiological safety hazard resulting from this event.

CORRECTIVE ACTIONS**CORRECTIVE ACTIONS TAKEN**

Site procedures were revised to ensure minimum fuel oil tank level is maintained greater than or equal to 3450 gallons for each SDG.

The TRM for both units were revised to specify each SDG fuel oil tank contains greater than or equal to 3450 gallons of fuel oil.

PLANNED CORRECTIVE ACTIONS

None

PREVIOUS SIMILAR EVENTS

Review of Licensee Event Reports for the past five years found no events due to similar causes.