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

June 4, 2018

AEP-NRC-2018-38
10 CFR 50.73

Docket No.: 50-316

U. S. Nuclear Regulatory Commission
ATTN: Document Control Desk
11555 Rockville Pike
Rockville, MD 20852

Donald C. Cook Nuclear Plant Unit 2
LICENSEE EVENT REPORT 316/2018-001-00
Valid Actuation of the Unit 2 CD Emergency Diesel Generator During Testing

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 2, is submitting as an enclosure to this letter the following report:

LER 316/2018-001-00: Valid Actuation of the Unit 2 CD Emergency Diesel Generator During Testing

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,

Q/ Shane Lies
Site Vice President

MPH/ml

Enclosure: Licensee Event Report 316/2018-001-00: Valid Actuation of the Unit 2 CD
Emergency Diesel Generator During Testing

JEZZ
NRR

c: R. J. Ancona – MPSC
A.W. Dietrich, NRC Washington DC
MDEQ – RMD/RPS
NRC Resident Inspector
K. S. West, NRC Region III
A. J. Williamson – AEP Ft. Wayne

Enclosure to AEP-NRC-2018-38

Licensee Event Report 316/2018-001-00

Valid Actuation of the Unit 2 CD Emergency Diesel Generator During Testing



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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

| | | |
|--|-------------------------------------|--------------------------|
| 1. FACILITY NAME Donald C. Cook Nuclear Plant Unit 2 | 2. DOCKET NUMBER 05000316 | 3. PAGE 1 OF 3 |
|--|-------------------------------------|--------------------------|

4. TITLE
Valid Actuation of the Unit 2 CD Emergency Diesel Generator During Testing

| 5. EVENT DATE | | | 6. LER NUMBER | | | 7. REPORT DATE | | | 8. OTHER FACILITIES INVOLVED | |
|---------------|-----|------|---------------|-------------------|---------|----------------|-----|------|------------------------------|-------------------------------|
| MONTH | DAY | YEAR | YEAR | SEQUENTIAL NUMBER | REV NO. | MONTH | DAY | YEAR | FACILITY NAME | DOCKET NUMBER |
| 04 | 13 | 2018 | 2018 | 001 | 00 | 06 | 04 | 2018 | FACILITY NAME | DOCKET NUMBER 05000 |
| | | | | | | | | | FACILITY NAME | DOCKET NUMBER 05000 |

| | | | | |
|--------------------------------------|--|---|--|---|
| 9. OPERATING MODE Defueled | 11. THIS REPORT IS SUBMITTED PURSUANT TO THE REQUIREMENTS OF 10 CFR §: (Check all that apply) | | | |
| | <input type="checkbox"/> 20.2201(b) | <input type="checkbox"/> 20.2203(a)(3)(i) | <input type="checkbox"/> 50.73(a)(2)(ii)(A) | <input type="checkbox"/> 50.73(a)(2)(viii)(A) |
| | <input type="checkbox"/> 20.2201(d) | <input type="checkbox"/> 20.2203(a)(3)(ii) | <input type="checkbox"/> 50.73(a)(2)(ii)(B) | <input type="checkbox"/> 50.73(a)(2)(viii)(B) |
| | <input type="checkbox"/> 20.2203(a)(1) | <input type="checkbox"/> 20.2203(a)(4) | <input type="checkbox"/> 50.73(a)(2)(iii) | <input type="checkbox"/> 50.73(a)(2)(ix)(A) |
| | <input type="checkbox"/> 20.2203(a)(2)(i) | <input type="checkbox"/> 50.36(c)(1)(i)(A) | <input checked="" type="checkbox"/> 50.73(a)(2)(iv)(A) | <input type="checkbox"/> 50.73(a)(2)(x) |
| 10. POWER LEVEL 0 | <input type="checkbox"/> 20.2203(a)(2)(ii) | <input type="checkbox"/> 50.36(c)(1)(ii)(A) | <input type="checkbox"/> 50.73(a)(2)(v)(A) | <input type="checkbox"/> 73.71(a)(4) |
| | <input type="checkbox"/> 20.2203(a)(2)(iii) | <input type="checkbox"/> 50.36(c)(2) | <input type="checkbox"/> 50.73(a)(2)(v)(B) | <input type="checkbox"/> 73.71(a)(5) |
| | <input type="checkbox"/> 20.2203(a)(2)(iv) | <input type="checkbox"/> 50.46(a)(3)(ii) | <input type="checkbox"/> 50.73(a)(2)(v)(C) | <input type="checkbox"/> 73.77(a)(1) |
| | <input type="checkbox"/> 20.2203(a)(2)(v) | <input type="checkbox"/> 50.73(a)(2)(i)(A) | <input type="checkbox"/> 50.73(a)(2)(v)(D) | <input type="checkbox"/> 73.77(a)(2)(i) |
| | <input type="checkbox"/> 20.2203(a)(2)(vi) | <input type="checkbox"/> 50.73(a)(2)(i)(B) | <input type="checkbox"/> 50.73(a)(2)(vii) | <input type="checkbox"/> 73.77(a)(2)(ii) |
| | | <input type="checkbox"/> 50.73(a)(2)(i)(C) | <input type="checkbox"/> OTHER | Specify in Abstract below or in NRC Form 366A |

12. LICENSEE CONTACT FOR THIS LER

| | |
|--|---|
| LICENSEE CONTACT Michael K. Scarpello, Regulatory Affairs Director | TELEPHONE 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 EPIX | CAUSE | SYSTEM | COMPONENT | MANUFACTURER | REPORTABLE TO EPIX |
|-------|--------|-----------|--------------|--------------------|-------|--------|-----------|--------------|--------------------|
| | | | | | | | | | |

| | | | | |
|--|-------------------------------------|-------|-----|------|
| 14. SUPPLEMENTAL REPORT EXPECTED <input type="checkbox"/> YES (If yes, complete 15. EXPECTED SUBMISSION DATE) <input checked="" type="checkbox"/> NO | 15. EXPECTED SUBMISSION DATE | MONTH | DAY | YEAR |
| | | | | |

ABSTRACT (Limit to 1400 spaces, i.e., approximately 14 single-spaced typewritten lines)

On April 13, 2018, with Unit 2 defueled, at approximately 1555 Eastern Daylight Time (EDT), during performance of procedure 12-EHP-4030-056-218 (Automatic Operation of Auxiliary Feedwater Pumps), the Unit 2 CD Emergency Diesel Generator (EDG) automatically started unexpectedly and loaded to 4kV Safeguards bus T21C when test switches were closed before the technician performing the surveillance recognized that he had mistakenly skipped a page that would have prevented the CD EDG from starting.

The South Spent Fuel Pit (SFP) Cooling Train lost power due to the expected load shed, and was restarted on the Unit 2 CD EDG at 1614 EDT. The North SFP Cooling Train remained in-service for the duration of the event. There was no observable change in Spent Fuel Pool Temperature.

The valid actuation of the Unit 2 CD EDG is reportable pursuant to 10CFR50.73 (a)(2)(iv)(A) as an event or condition that resulted in the manual or automatic actuation of Emergency AC Electrical Power Systems, including Emergency Diesel Generators (EDGs).



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

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 Information Services Branch (T-2 F43), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by e-mail to Infocollects.Resource@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOF-10202, (3150-0104), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

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|-------------------------------------|------------------|---------------|-------------------|---------|
| Donald C. Cook Nuclear Plant Unit 2 | 05000316 | YEAR | SEQUENTIAL NUMBER | REV NO. |
| | | 2018 | - 001 | - 00 |

NARRATIVE

INTRODUCTION

On April 13, 2018, with Unit 2 defueled, at approximately 1555 Eastern Daylight Time (EDT), during performance of procedure 12-EHP-4030-056-218 (Automatic Operation of Auxiliary Feedwater Pumps), the Unit 2 CD Emergency Diesel Generator (EDG) [EK][DG] automatically started unexpectedly and loaded to 4kV Safeguards bus T21C [EA][BU] when test switches were closed before the technician performing the surveillance recognized that a page had been mistakenly skipped that would have prevented the CD EDG from starting.

EVENT DESCRIPTION

Procedure steps within 12-EHP-4030-056-218, provide instruction to manually actuate and hold relays 2-5x5-T21D (4KV BUS T21D MASTER LOAD SHEDDING RELAY #5) and 2-5x2-T21C (4KV BUS T21 MASTER LOAD SHEDDING RELAY #2). These relays are held closed while various valve positions are verified. Once valve positions are verified, these relays are released. Valve positions are then verified again followed by steps to remove blocks from the test switches. However, the procedure steps that direct releasing the relays were inadvertently skipped. As a result, when the test switches were closed, the load shedding relays were still closed resulting in the unexpected start of 2 CD EDG. All associated equipment and auxiliaries responded as expected.

The South Spent Fuel Pit (SFP) Cooling Pump [P] lost power due to the expected load shed, and was restarted on the Unit 2 CD EDG at 1614 EDT. The North SFP Cooling Pump remained in-service for the duration of the event. There was no observable change in Spent Fuel Pool Temperature.

COMPONENT

2-OME-150-CD (Unit 2 CD EDG)

ASSESSMENT OF SAFETY CONSEQUENCES

NUCLEAR SAFETY

The North SFP Cooling Pump remained in-service, and Spent Fuel Pool Temperature remained unchanged for the duration of the event. The South SFP Cooling Train was re-established within 19 minutes of the event. Due to maintaining SFP cooling throughout the duration of this event, and the timely restoration of the South SFP Cooling Train, there was no nuclear safety significance to this event.

INDUSTRIAL SAFETY

There was no actual or potential industrial safety hazard resulting from the 2 CD EDG Auto Start.

RADIOLOGICAL SAFETY

There was no actual or potential radiological safety hazard resulting from the 2 CD EDG Auto Start.



**LICENSEE EVENT REPORT (LER)
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CAUSE OF EVENT

The cause for this event is personnel error. The procedure reader did not adequately follow an approved procedure by skipping a page of the procedure that included steps that would have directed the performer to release the relays, prior to closing the test switches.

CORRECTIVE ACTIONS

Completed Corrective Actions

A mandatory meeting was held for Supervisors/Managers to address human performance. A briefing occurred with the work group involved in this event to discuss the human performance elements and to commit themselves to more thorough procedure use and adherence and place keeping.

Planned Corrective Actions

A procedure enhancement to 12-EHP-4030-056-218 has been requested to include CAUTIONS prior to sections where inadvertent equipment actuations could occur as a result of skipping steps.

PREVIOUS SIMILAR EVENTS

LERs for CNP Unit 1 and Unit 2 were reviewed for the previous three years; no similar events were found.