

American Electric Power
Cook Nuclear Plant
One Cook Place
Bridgman, MI 49106
616 465 5301



C0799-07

Docket Nos.: 50-315
50-316

U.S. Nuclear Regulatory Commission
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Washington, DC 20555-0001

Donald C. Cook Nuclear Plant Units 1 and 2
1998 ANNUAL OPERATING REPORT

Technical Specifications 6.9.1.5 of the Donald C. Cook Nuclear Plant requires that an annual report be submitted to address personnel exposure, steam generator in-service inspection results, challenges to power-operated relief and safety valves, and information regarding any instances when the I-131 specific activity limit was exceeded. Consistent with these requirements, a copy of the 1998 annual operating report is attached (attachment 1).

In accordance with the requirements of 10 CFR 50.59(b)(2), the brief description of changes, tests and experiments including a summary of the safety evaluations, normally submitted with this annual operating report, will instead be provided as part of the FSAR updates required by 10 CFR 50.71(e).

The NRC staff has been notified that this transmittal was delayed due to an administrative issue in the Licensing Department. This condition has been entered into our corrective action program.

Attachment 2 identifies those actions committed to by Indiana Michigan Power Company in this submittal.

Sincerely,

A handwritten signature in black ink, appearing to read "R. P. Powers", is written over a horizontal line.

R. P. Powers
Vice President

/mjj

Attachments

c: A. C. Bakken, III
James E. Dyer, w/attachments
MDEQ - DW & RPD
NRC Resident Inspector, w/attachments
R. Whale w/attachments

bc: T. P. Beilman, w/attachments
J. J. Euto
FOLIO, w/attachments
G. P. Arent/J. Burford/M. J. Gumms
M. W. Rencheck/D. J. Garner
J. F. Stang, Jr., NRC Washington, DC, w/attachments

1998 Annual Operating Report

1.0 INTRODUCTIONPlant Description

Indiana Michigan Power Company is the licensee of the Donald C. Cook Nuclear Plant. The plant is located north of Bridgman, Michigan. The plant consists of two nuclear units, each employing a Westinghouse pressurized water reactor nuclear steam supply system. Each reactor unit employs an ice condenser reactor containment system. The American Electric Power Service Corporation was the architect-engineer and constructor.

Units 1 and 2 reactor licensed power levels are 3250 Mwt and 3411 Mwt, respectively. The main condenser cooling method is open cycle using Lake Michigan water as the cooling source for each unit.

Both units remained shutdown the entire 1998 calendar year to resolve design basis concerns identified during a NRC Architect and Engineering inspection.

2.0 PERSONNEL RADIATION EXPOSURE SUMMARY

The Regulatory Guide 1.16 Report (Page 2 of this attachment) provides a summary of the number of station, utility, and contractor/other personnel receiving exposures greater than 100 millirem (mr) in 1998. This estimated dose is based on electric dosimetry and reported in accordance with Regulatory Guide 1.16. The total record dose, as measured by thermoluminescent dosimetry for all personnel, was 104.630 rem.

The values shown in the individual categories (routine maintenance, etc.) represent the number of people who received greater than 100 mr in that particular category. The grand total figure represents the total number of people who received 100 mr, whether in one of the categories or multiple categories. A specific person could receive dose in two or more categories and still would be counted in the grand total. The summation of the totals in the individual categories would not necessarily equal the grand total.

Reg Guide 1.16 Report
INDIANA MICHIGAN POWER / COOK NUCLEAR PLANT
Prepared for Year 1998

Number of Personnel and Man-Rem By Work and Job Function

| | Number of Personnel > 100 mrem | | | Total Man-Rem | | |
|---|--------------------------------|----------------------|---------------------------|----------------------|----------------------|---------------------------|
| | Station Employees | Utility Employees | Contractors and Others | Station Employees | Utility Employees | Contractors and Others |
| Reactor Operation & Surveillance | | | | | | |
| -Maintenance | 1 | 0 | 0 | 0.312 | 0.000 | 0.048 |
| -Operations | 8 | 0 | 0 | 4.065 | 0.040 | 0.069 |
| -Health Physics | 0 | 0 | 0 | 0.033 | 0.000 | 0.007 |
| -Supervisory | 0 | 0 | 0 | 0.005 | 0.000 | 0.007 |
| -Engineering | 0 | 0 | 0 | 0.041 | 0.000 | 0.007 |
| Routine Maintenance | | | | | | |
| -Maintenance | 11 | 0 | 155 | 6.117 | 0.022 | 57.793 |
| -Operations | 0 | 1 | 2 | 1.273 | 0.178 | 1.712 |
| -Health Physics | 26 | 0 | 3 | 6.784 | 0.002 | 1.092 |
| -Supervisory | 1 | 0 | 0 | 0.121 | 0.000 | 0.116 |
| -Engineering | 2 | 0 | 2 | 1.289 | 0.069 | 2.361 |
| Inservice Inspection | | | | | | |
| -Maintenance | 0 | 0 | 15 | 0.026 | 0.000 | 3.616 |
| -Operations | 0 | 0 | 0 | 0.247 | 0.000 | 0.019 |
| -Health Physics | 0 | 0 | 0 | 0.022 | 0.000 | 0.006 |
| -Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Engineering | 0 | 0 | 0 | 0.028 | 0.000 | 0.002 |
| Special Maintenance | | | | | | |
| -Maintenance | 0 | 0 | 49 | 0.814 | 0.030 | 24.559 |
| -Operations | 0 | 0 | 2 | 0.335 | 0.001 | 0.529 |
| -Health Physics | 0 | 0 | 0 | 0.277 | 0.001 | 0.083 |
| -Supervisory | 0 | 0 | 0 | 0.015 | 0.000 | 0.042 |
| -Engineering | 0 | 0 | 0 | 0.144 | 0.017 | 0.720 |
| Waste Processing | | | | | | |
| -Maintenance | 0 | 0 | 0 | 0.001 | 0.000 | 0.045 |
| -Operations | 0 | 0 | 1 | 0.011 | 0.000 | 0.204 |
| -Health Physics | 9 | 0 | 0 | 2.253 | 0.000 | 0.265 |
| -Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Engineering | 0 | 0 | 0 | 0.017 | 0.000 | 0.054 |
| Refueling | | | | | | |
| -Maintenance | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Operations | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Health Physics | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| -Engineering | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| Totals | | | | | | |
| -Maintenance | 13 | 0 | 212 | 7.269 | 0.052 | 86.061 |
| -Operations | 16 | 1 | 5 | 5.931 | 0.219 | 2.534 |
| -Health Physics | 36 | 0 | 3 | 9.368 | 0.002 | 1.452 |
| -Supervisory | 1 | 0 | 0 | 0.140 | 0.001 | 0.165 |
| -Engineering | 2 | 0 | 2 | 1.520 | 0.086 | 3.144 |
| Grand Totals | | | | | | |
| | 68 | 1 | 222 | 24.228 | 0.360 | 93.356 |

3.0 STEAM GENERATOR INSPECTIONS

During 1998, there were no Steam Generator tube in-service inspections performed on either Unit 1 or Unit 2.

4.0 CHALLENGES TO PRESSURIZER POWER OPERATED RELIEF VALVES (PORVs) AND SAFETY VALVES

During 1998, there were no challenges on either Unit 1 or Unit 2 to the pressurizer PORVs, or the pressurizer safety valves.

5.0 REACTOR COOLANT SPECIFIC ACTIVITY

During 1998, there were no instances on either Unit 1 or Unit 2 in which the reactor coolant dose equivalent I-131 specific activity exceeded the limits of Technical Specification 3.4.8 (greater than or equal to 1 $\mu\text{Ci/g}$). Compliance was determined by routine gamma spectrometry analysis of reactor coolant per procedure 12-THP 6020 INS.026, "Gamma Spectroscopy System."

COMMITMENTS

The following table identifies those actions committed to by Indiana Michigan Power Company (I&M) in this submittal. Other actions discussed in the submittal represent intended or planned actions by I&M. They are described to the Nuclear Regulatory Commission (NRC) for the NRC's information and are not regulatory commitments.

| Commitment | Date |
|---|-----------|
| In accordance with the requirements of 10 CFR 50.59(b)(2), the brief description of changes, tests and experiments including a summary of the safety evaluations, normally submitted with this annual operating report, will instead be provided as part of the FSAR updates required by 10 CFR 50.71(e). | 7/22/1999 |