



THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

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VICE PRESIDENT
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Serving The Best Location in the Nation
PERRY NUCLEAR POWER PLANT

February 28, 1990
PY-CEI/NRR-1129 L

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington D.C. 20555

Perry Nuclear Power Plant
Docket No. 50-440
1989 Annual Report

Dear Sir:

Attached is the 1989 Annual Report for Perry Unit 1. This report is submitted in accordance with Technical Specifications 6.9.1.4 and 6.9.1.5 and fulfills ongoing commitments associated with License Commitment 17 of USAR Appendix 1B.

If there are any questions, please feel free to call.

Very truly yours,

Al Kaplan
Vice President
Nuclear Group

Enclosure

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CLEVELAND ELECTRIC ILLUMINATING COMPANY

PERRY NUCLEAR POWER PLANT

JANUARY 1 - DECEMBER 31, 1989

ANNUAL REPORT

DOCKET NUMBER: 50-440

LICENSE NUMBER: NPF-58

Submitted By:

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Plant Technical Director

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General Manager of Operations

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I. Occupational Radiation Summary Report

Enclosed in this section is the 1989 Annual Occupational Exposure Summary Report required by Technical Specification 6.9.1.5.a of Appendix A to the Perry Unit 1 Operating License. The dose assignments to various duty functions provided herein were obtained from pocket dosimeter measurements recorded in Radiation Work Permit (RWP) documents. Thermoluminescent dosimeter (TLD) measurements for 1989 are provided under a separate report in accordance with 10 CFR 20.407. The following work categories were grouped as indicated below:

STATION - Operations Department, Technical Department, and Nuclear Support Department

UTILITY - Nuclear Engineering Department and Quality Assurance Department

OTHER - Contractor, Consultant, Centerior, Davis-Besse, Eastern District, and other support personnel.

FERRY NUCLEAR POWER PLANT - Unit 1
1989 ANNUAL EXPOSURE REPORT
REGULATORY GUIDE 1.16 APPENDIX A SUMMARY

| WORK CATEGORY | JOB CATEGORY | # OF PERSONS > 100 MREM | | | TOTAL MAN-REM | | |
|-----------------------------|----------------|-------------------------|---------|-------|---------------|---------|---------|
| | | STATION | UTILITY | OTHER | STATION | UTILITY | OTHER |
| Reactor Oper & Surveillance | Maintenance | 130 | 4 | 225 | 10.400 | 0.520 | 5.909 |
| | Operations | 79 | 1 | 5 | 28.410 | 0.000 | 0.745 |
| | Health Physics | 48 | 0 | 172 | 22.514 | 0.000 | 57.464 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 27 | 22 | 41 | 1.024 | 0.500 | 0.933 |
| Routine Maintenance | Maintenance | 151 | 6 | 741 | 10.377 | 0.197 | 38.583 |
| | Operations | 74 | 1 | 7 | 9.496 | 0.295 | 0.635 |
| | Health Physics | 45 | 0 | 186 | 2.559 | 0.000 | 19.604 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 28 | 25 | 62 | 3.462 | 2.670 | 3.306 |
| Inservice Inspection | Maintenance | 100 | 2 | 592 | 4.780 | 0.070 | 66.124 |
| | Operations | 46 | 1 | 4 | 0.645 | 0.015 | 0.070 |
| | Health Physics | 18 | 0 | 102 | 0.360 | 0.000 | 2.637 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 22 | 23 | 65 | 3.220 | 1.850 | 18.950 |
| Special Maintenance | Maintenance | 151 | 6 | 768 | 43.489 | 1.540 | 368.653 |
| | Operations | 70 | 1 | 10 | 5.461 | 0.025 | 2.625 |
| | Health Physics | 47 | 0 | 187 | 10.322 | 0.000 | 20.849 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 28 | 25 | 52 | 3.238 | 5.596 | 9.267 |
| Waste Processing | Maintenance | 45 | 0 | 216 | 0.680 | 0.000 | 11.098 |
| | Operations | 22 | 0 | 3 | 2.220 | 0.000 | 1.380 |
| | Health Physics | 32 | 0 | 123 | 3.470 | 0.000 | 7.533 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 0 | 5 | 3 | 0.000 | 0.045 | 0.000 |
| Refueling | Maintenance | 70 | 2 | 402 | 2.600 | 0.015 | 37.588 |
| | Operations | 35 | 1 | 4 | 0.480 | 0.000 | 2.825 |
| | Health Physics | 20 | 0 | 91 | 0.570 | 0.000 | 7.565 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 15 | 11 | 23 | 1.260 | 0.520 | 0.770 |
| Totals | Maintenance | 647 | 20 | 2944 | 72.335 | 2.342 | 527.965 |
| | Operations | 326 | 5 | 33 | 46.715 | 0.335 | 8.280 |
| | Health Physics | 210 | 0 | 861 | 39.795 | 0.000 | 115.652 |
| | Supervisory | 0 | 0 | 0 | 0.000 | 0.000 | 0.000 |
| | Engineering | 120 | 111 | 246 | 12.204 | 11.181 | 33.226 |
| Grand Totals | | 1303 | 136 | 4084 | 171.049 | 13.858 | 685.123 |

II. Safety/Relief Valve Challenges

The attached report includes all challenges made to the Safety/Relief Valves (SRVs) at the Perry Nuclear Power Plant in 1989. This information is submitted in accordance with Technical Specification 6.9.1.5.b of Appendix A to Operating License NPF-58 for Perry Nuclear Power Plant Unit 1. All nineteen safety/relief valves were replaced during the first refuel outage (February 22, through August 5, 1989). Following SRV replacement, all nineteen SRVs were stroked twice for initial operability in accordance with Technical Specification 4.0.5. Events subsequent to July 28, 1989, on the attached list were planned, manual actuations made to reseal the valves to minimize weepage. These actuations were performed in accordance with the surveillance test instruction, SVI-B21-T2005, "SRV Exercise Test."

Included as a SRV "challenge" are the following actions/events:

- 1- the SRV being physically operated by the manual control switches in the control room.
- 2- the SRV automatically lifts per design pressure limit when installed in the plant.

1989 PERRY UNIT 1
SAFETY/RELIEF VALVE ACTUATION EVENTS

| <u>VALVE</u> | <u>DATE</u> | <u>TIME</u> |
|--------------|-------------|-------------|
| 1B21-F041A | 7-28-89 | 0927 |
| | | 1043 |
| 1B21-F041B | 7-28-89 | 0928 |
| | | 1044 |
| 1B21-F041C | 7-28-89 | 0929 |
| | | 1045 |
| 1B21-F041D | 7-28-89 | 0930 |
| | | 1046 |
| 1B21-F041E | 7-28-89 | 0931 |
| | | 1047 |
| 1B21-F041F | 7-28-89 | 0932 |
| | | 1048 |
| 1B21-F041G | 7-28-90 | 0933 |
| | | 1049 |
| 1B21-F041K | 7-28-89 | 0934 |
| | | 1050 |
| 1B21-F047D | 7-28-89 | 0937 |
| | | 1040 |
| 1B21-F047F | 7-28-89 | 0938 |
| | | 1039 |
| 1B21-F047G | 7-28-89 | 0939 |
| | | 1038 |
| 1B21-F047H | 7-28-89 | 0940 |
| | | 1037 |
| 1B21-F051A | 7-28-89 | 0941 |
| | | 1036 |
| 1B21-F047B | 7-28-89 | 0935 |
| | | 1042 |
| 1B21-F047C | 7-28-89 | 0936 |
| | | 1041 |
| 1B21-F051B | 7-28-89 | 0942 |
| | | 1035 |
| 1B21-F051C | 7-28-89 | 0943 |
| | | 1034 |
| 1B21-F051D | 7-28-89 | 0944 |
| | | 1033 |
| 1B21-F051G | 7-28-89 | 0945 |
| | | 1032 |
| 1B21-F051G | 7-31-89 | 0516 |
| 1B21-F047D | 7-31-89 | 0512 |
| 1B21-F041G | 7-31-89 | 0514 |
| | | 0807 |
| 1B32-F041A | 7-31-89 | 0519 |
| 1B21-F041F | 8-09-89 | 1709 |
| 1B21-F051G | 8-09-89 | 1706 |

III. Reactor Coolant System Specific Activity Analysis

During 1989 there were no occurrences in which Technical Specification 3.4.5, "Specific Activity," Limiting Condition for Operation was exceeded. This information is submitted in accordance with Technical Specification 6.9.1.5 c.

IV. Silicone Sealant Inspections

In accordance with commitments made in response to License Commitment 17 of USAR Appendix 1B (reference letter PY-CEI/NRR-0703L, dated August 27, 1987 from Murray R. Edelman) the following summary report is provided. During Perry Unit 1 first refueling outage (February 22-August 5, 1989) duct specimens were placed in an environmentally representative horizontal pipe chase in the Intermediate Building, 585' elevation. The duct specimens were leak tested, with acceptable results*. An engineering walkdown of representative portions of the Annulus Exhaust Gas Treatment (M15), Control Room HVAC (M25) and Fuel Handling Building Ventilation (M40) systems was conducted and the exposed exterior silicone sealant was inspected, also with acceptable results.

- * These duct specimens were already aged to 40 years prior to their placement into the plant, therefore the ongoing leak tests only determine how long the sealant is good for past the 40 years qualified life, and to provide a means for recognizing degradation as it occurs. Since the sealant is already qualified for 40 years, failure of these test specimens during any future testing will not invalidate the results of the qualification report.