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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of)
)
THE CLEVELAND ELECTRIC)
ILLUMINATING COMPANY, ET AL.)
)
(Perry Nuclear Power Plant,)
Units 1 and 2))

Docket Nos. 50-440
50-441

AFFIDAVIT OF WILLIAM R. KANDA, JR.

_____)
County of Lake)
) ss:
State of Ohio)
_____)

I, William R. Kanda, Jr., being duly sworn, state as follows:

1. I am currently employed by The Cleveland Electric Illuminating Company ("CEI") as a General Supervising Engineer of the Perry Nuclear Power Plant ("Perry") Technical Department. My responsibilities include the overall supervision of the engineers providing technical support to Plant Operations. I am also responsible for the direction of the Instrument and Control Group at Perry. I provide the overall coordination for

the investigation and resolution of plant events, such as the fire which occurred at Reactor Building No. 1 on May 5, 1985. I am a graduate of the University of Detroit, from which I obtained a B.S. degree in Electrical Engineering in 1972. I also hold a M.S. degree in Managerial Economics from Case Western Reserve University. I have been employed by CEI since 1973 and have been assigned to Perry since 1976. I have personal knowledge of the matters set forth herein and believe them to be true and correct.

2. On the morning of May 5, 1985, fast-speed, preoperational testing of the Unit 1, B-33 recirculation pumps was being conducted. Two-by-fours and plywood had been laid down to protect the reactor vessel mirror insulation during testing. This testing had been proceeding for a number of days, causing the reactor vessel wall to reach temperatures approaching 500°F. As a result of exposure to the high temperatures over a prolonged period of time, the two-by-fours and plywood spontaneously ignited near the top of the reactor vessel.

3. The fire was reported to the Perry Control Alarm Station at 2:05 a.m. The fire brigade was notified immediately and Reactor Building No. 1 was evacuated by security personnel.

4. Initially, dry chemicals were applied in an attempt to extinguish the fire. However, because of the intense heat, the two-by-fours and plywood continued to re-ignite. At 2:30

a.m., it became apparent that the Perry Township Fire Department should be called because of the re-ignition problem. The Fire Department arrived at the site in five minutes. By 5:00 a.m. the fire was extinguished by using a combination of water and dry chemicals. There were no injuries and damage to equipment was minor.

5. The NRC resident inspector was notified at 7:00 a.m. Within twenty-four hours of the fire, Perry inspection teams were assembled by Nuclear Construction to investigate the impact of the fire on: a) piping supports; b) electrical equipment and cables; c) instrumentation, impulse lines and supports; d) mechanical components; and e) the area between the bioshield and reactor pressure vessel. Twenty-five Nonconformance Reports (covering safety-related items), and five Deficiency Reports (covering non-safety-related items), were generated as a result of this investigation. Reports were written for any item that was charred or might have been adversely affected by the heat generated during the fire. Necessary corrective action is being taken by Nuclear Construction Engineering for each of the items identified by the inspection. Those items not already closed out will be closed out prior to fuel load.

6. All piping supports within the fire area were inspected by the piping contracts administrator, reactor building manager, senior civil/structural engineer, and operations and

construction quality control personnel. As a result of this inspection, seventeen snubbers (which act as "shock absorbers" for the piping) have been replaced as a precautionary measure, although no significant damage was apparent, due to the possibility of corrosion from the dry chemicals applied during the fire. All of the snubbers will be replaced prior to fuel load. Eight spring cans in the area of the fire were also the subject of a Nonconformance Report by this task group. These cans have been replaced and the Report closed out.

7. Each electrical device and cable within the fire zone was inspected by a team of senior electrical engineers and quality control personnel for possible fire and/or heat damage. Three Deficiency Reports and one Nonconformance Report were developed, covering each piece of equipment potentially affected by the fire. Corrective action, as necessary, is being taken in every case. All Reports have been dispositioned by Nuclear Construction Engineering and will be closed out by fuel load.

8. Inspection of instrumentation, impulse lines and supports in the fire zone by a team of Instrument and Control personnel indicated that damage was minimal. Temperature elements in the fire zone are being removed and recalibrated, with replacements being made, as necessary. Seven snubbers were replaced, as a precaution against corrosion, although none of them showed signs of damage. Damage to a radiation monitor in

the fire zone was assessed by a Deviation Report. The monitor has been recalibrated and the Report closed out.

9. A construction inspection team consisting of mechanical and welding engineers, quality control inspectors, and a coatings engineer inspected mechanical items in the fire zone. Eleven Nonconformance Reports were generated as a result of their investigation. Necessary repair work for piping has been completed. Mirror insulation panels affected by the fire are being replaced. Remaining items have been dispositioned by Nuclear Construction Engineering and will be closed out prior to fuel load.

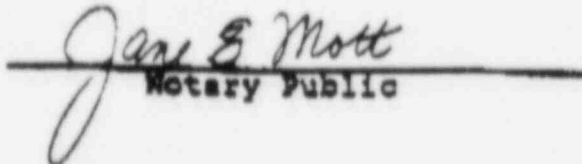
10. The space between the bioshield and reactor pressure vessel was inspected by a construction inspection team of mechanical and welding engineers and a quality control inspector. Dry chemical residue, charcoal particles, and some water were evident. No problems were anticipated with the small quantities of water and chemical residue found. The area will be wiped down with de-mineralized water to remove the chemical residue.

11. An investigation was conducted by a fire protection specialist, compliance engineer, and two system engineers to analyze the cause of the fire and to evaluate actions taken to extinguish it. As a result of their investigation of the incident, a series of recommendations were made to improve Perry's response in such a situation. Recommendations included

suggested areas of improvement in radio communications, the placement and maintenance of fire-fighting equipment, as well as suggestions for modifications in the administration and coordination of fire-fighting personnel. Some of the recommendations generated as a result of this investigation have already been implemented at Perry. Others are still being evaluated. All of the recommendations will be dispositioned prior to fuel load.


William R. Kande, Jr.

Subscribed and sworn to before me this 19 day of July, 1985.


Notary Public

My commission expires:
JANE E. MOTT
Notary Public, State of Ohio
My Commission Expires February 20, 1990
(Recorded in Lake County)