

09/01/82

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

CLEVELAND ELECTRIC ILLUMINATING
COMPANY, ET AL.

(Perry Nuclear Power Plant,
Units 1 and 2)

}
}
}
}
} Docket Nos. 50-440 OL
50-441 OL

NRC STAFF SUPPLEMENTAL ANSWER TO THIRD SET OF INTERROGATORIES
TO STAFF BY THE OHIO CITIZENS FOR RESPONSIBLE ENERGY

The following are the NRC Staff's supplemental voluntary answers in response to the third set of interrogatories by the Intervenor Ohio Citizens for Responsible Energy (OCRE).^{1/}

Interrogatory 3-6

Does the NRC require training of reactor operators on responding to SDV pipe breaks? If so, describe such training requirements.

Response

NRC does not have specific requirements for training licensed operators on responding to scram discharge volume pipe breaks; however, the applicant is expected to train licensed operators on this topic as part of LOCA training. NRC can ask questions on response to scram discharge volume pipe breaks during oral and/or written examinations for Reactor Operators and Senior Reactor Operators.

1/ Ohio Citizens for Responsible Energy Third Set of Interrogatories to NRC Staff, dated April 29, 1982.

DESIGNATED ORIGINAL

Certified By Moore
DS07

Interrogatory 3-12

Has the Staff required any changes in the metallurgy of the SDV system for PNPP? If so, describe in detail.

Response

No.

Interrogatory 3-13

Will the Applicants be required to perform a fatigue analysis on the Perry SDV system? If so, explain the extent of such requirements.

Response

The ASME Code does not require fatigue analysis of SDV piping which is Class 2 piping; fatigue analysis is only required for Class 1 piping. We will not require Applicant to perform a fatigue analysis.

Interrogatory 3-15

Has the Staff established any surveillance requirements on the SDV system at PNPP? If so, produce those requirements.

Response

Yes, the NRC has requirements for the preservice and inservice inspection of the scram discharge volume system in 10 C.F.R. Part 50, Section 50.55a(g) by referencing the requirements of Section XI of the ASME Boiler and Pressure Vessel Code. As reported in Sections 5.2.5 and 6.6 of NUREG-0887, the applicant has not submitted the document entitled "PSI Program Plan: Control Rod Drive Hydraulic System" for review. However, the applicant has made a commitment in a letter dated August 20, 1982 to provide this document before October 15, 1982. The Inservice Inspection Program will be submitted after licensing as reported in the Perry SER Section 5.2.5.

During our review of the Preservice and Inservice Inspection Programs, the NRC staff intends to require that the applicant perform the inspections required by the provisions of 10 C.F.R. Part 50, Section 50.55a(g).

Interrogatory 3-16

Relevant to 3-15 above, will any surveillance include radiography? If so, please elaborate.

Response

Radiography is not specifically required by Section XI of the ASME Code, which defines the extent, method, and frequency of examination.

In the scram system piping, all of the Control Rod Drive mechanism lines are exempt from volumetric and surface examination techniques during preservice and inservice inspection by Section XI exclusion criteria because these lines are less than one-inch in diameter. Based on the applicant's response to FSAR Question 410.9 dated May 7, 1982, the welds in the SDV header and associated piping are classified as ASME Code Class 2; the welds are then required to be inspected by surface examination techniques (assuming that the design nominal wall thickness is $\frac{1}{2}$ inch or less) or volumetric techniques (radiography or ultrasonic testing) if they are thicker than $\frac{1}{2}$ inch. The NRC staff will evaluate the actual preservice inspections that will be performed after the applicant submits the document entitled "PSI Program Plan: Control Rod Drive Hydraulic System."

Interrogatory 3-17

Has the Staff accepted the recommendations of C. Michelson of the NRC AEOD that operability of the hi-level scram be independent of the SDV venting or draining requirements? (See 8/1/80 letter from Michelson to H. Denton, Office of NRR, NRC.)

Response

Yes. The Staff's requirements for the hi-level scram instrumentation independence from the vent and drain lines are outlined in the "BWR Scram Discharge System Safety Evaluation," dated December 1, 1980. The Staff's evaluation of the Perry design concerning this area is provided in the Safety Evaluation Report dated May 1982 (Section 4.6).

Interrogatory 3-19

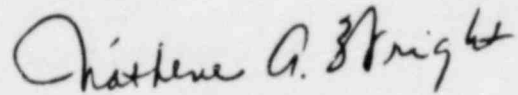
In the Staff's opinion, did the suspected act of vandalism described in PNO-81-109 cause any irreparable harm to the SDV system that could lead to scram failure or to a pipe break in the SDV piping?

Response

The suspected act of vandalism described in PNO-81-109 was contamination of the scram discharge volume piping. The contamination of the scram discharge volume piping was accomplished by cutting the spool cover and depositing approximately one handful of iron filings within the piping. The spool has been recleaned and re-sealed with a tamper indicating seal. In the Staff's opinion, the suspected act of vandalism described in PNO-81-109 did not cause any irreparable harm to the SDV

system that could lead to scram failure or to a pipe break in the SDV piping.

Respectfully submitted,

A handwritten signature in cursive script that reads "Nathene A. Wright". The signature is written in dark ink and is positioned above the typed name.

Nathene A. Wright
Counsel for NRC Staff

Dated at Bethesda, Maryland
this 1st day of September 1982

09/01/82

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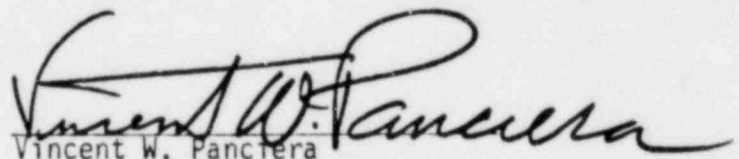
In the Matter of	}	
CLEVELAND ELECTRIC ILLUMINATING COMPANY, <u>ET AL.</u>		Docket Nos. 50-440 OL 50-441 OL
(Perry Nuclear Power Plant, Units 1 and 2)		

AFFIDAVIT OF VINCENT W. PANCIERA

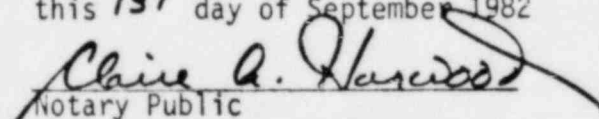
My name is Vincent W. Panciera. I am Section Leader in the Auxiliary Systems Branch, Division of Systems Integration, Office of Nuclear Reactor Regulation.

The responses to Ohio Citizens for Responsible Energy (OCRE) Interrogatories to the Nuclear Regulatory Commission Staff (Third Set) numbers 3-17 and 3-19 dated April 29, 1982 were prepared under my direction and supervision. These answers are true and accurate to the best of my knowledge and belief.

Respectfully submitted,


Vincent W. Panciera

Sworn and subscribed before me
this 1st day of September 1982


Notary Public

My commission expires: July 1, 1986

09/01/82

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AFFIDAVIT OF MARTIN R. HUM


My name is Martin R. Hum. I am Senior Materials Engineer in the Materials Engineering Branch, Division of Engineering, Office of Nuclear Reactor Regulation.

I am primarily responsible for providing the responses to number 3-15 and 3-16 to Ohio Citizens for Responsible Energy (OCRE) Interrogatories to the Nuclear Regulatory Commission Staff (Third Set) dated April 29, 1982. These answers are true and accurate to the best of my knowledge and belief.

Respectfully submitted,


Martin R. Hum

Sworn and subscribed before me
this 1st day of September 1982


Notary Public

My commission expires: 7/1/86

0 / /82

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(Perry Nuclear Power Plant,)	
Units 1 and 2))	

AFFIDAVIT OF JOHN STEFANO

My name is John Stefano. I am a Project Manager for Perry Nuclear Power Plant, Licensing Branch #2, Division of Licensing, Office of Nuclear Reactor Regulation.

I am primarily responsible for providing the responses to number 3-12 to Ohio Citizens for Responsible Energy (OCRE) Interrogatories to the Nuclear Regulatory Commission Staff (Third Set) dated April 29, 1982. This answer is true and accurate to the best of my knowledge and belief.

Respectfully submitted,

John Stefano

Sworn and subscribed before me
this day of September 1982

Notary Public

My commission expires:_____

09/01/82

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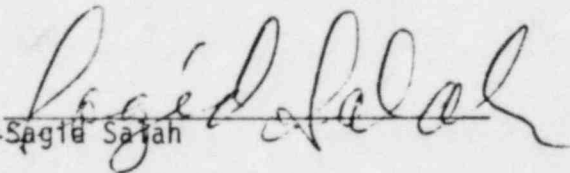
}
Docket Nos. 50-440 OL
50-441 OL

AFFIDAVIT OF SAGID SALAH

My name is Sagid Salah. I am a Nuclear Engineer in the Operator Licensing Branch, Division of Human Factors Safety, Office of Nuclear Reactor Regulation.

I am primarily responsible for providing the responses to number 3-6 to Ohio Citizens for Responsible Energy (OCRE) Interrogatories to the Nuclear Regulatory Commission Staff (Third Set) dated April 29, 1982. This answer is true and accurate to the best of my knowledge and belief.

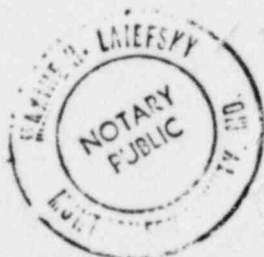
Respectfully submitted,


Sagid Salah

Sworn and subscribed before me
this \ day of September 1982


Notary Public

My commission expires: 7/1/86



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AFFIDAVIT OF DAVID TERAQ

My name is David Terao. I am a Mechanical Engineer in the Mechanical Engineering Branch, Division of Engineering, Office of Nuclear Reactor Regulation.

I am primarily responsible for providing the responses to number 13 to Ohio Citizens for Responsible Energy (OCRE) Interrogatories to the Nuclear Regulatory Commission Staff (Third Set) dated April 29, 1982. This answer is true and accurate to the best of my knowledge and belief.

Respectfully submitted,

David Terao

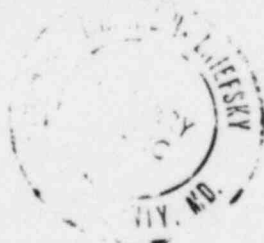
David Terao

Sworn and subscribed before me
this 1 day of September 1982

[Signature]

Notary Public

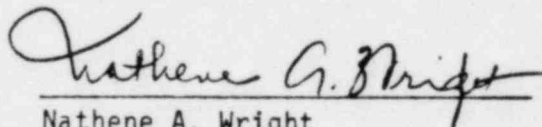
My commission expires: 7/1/86



*Atomic Safety and Licensing Board
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Atomic Safety and Licensing Appeal
Board Panel
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

*Docketing and Service Section
Office of the Secretary
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



Nathene A. Wright
Counsel for NRC Staff