

ATTACHMENT 2 TO AEP:NRC:0856J

PROPOSED CHANGES TO THE
DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2
TECHNICAL SPECIFICATIONS

8510160167 851011
PDR ADOCK 05000315
P PDR

THE UNIVERSITY OF CHICAGO

DEPARTMENT OF CHEMISTRY

RECEIVED JAN 10 1964

BY THE DEPARTMENT OF CHEMISTRY

TABLE 3.3-11
POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure	2
2. Reactor Coolant Outlet Temperature - T _{HOT} (Wide Range)	2
3. Reactor Coolant Inlet Temperature - T _{COLD} (Wide Range)	2
4. Reactor Coolant Pressure - Wide Range	2
5. Pressurizer Water Level	2
6. Steam Line Pressure	2/Steam Generator
7. Steam Generator Water Level - Narrow Range	1/Steam Generator
8. Refueling Water Storage Tank Water Level	2
9. Boric Acid Tank Solution Level	1
10. Auxiliary Feedwater Flow Rate	1/Steam Generator*
11. Reactor Coolant System Subcooling Margin Monitor	1**
12. PORV Position Indicator - Limit Switches***	1/Valve
13. PORV Block Valve Position Indicator - Limit Switches	1/Valve
14. Safety Valve Position Indicator - Acoustic Monitor	1/Valve
15. Incore Thermocouples (Core Exit Thermocouples)	2/Core Quadrant
16. Reactor Coolant Inventory Tracking System (Reactor Vessel Level Indication)	One Train (3 channels/Train)

* Steam Generator Water Level Channels can be used as a substitute for the corresponding auxiliary feedwater flow rate channel instrument.

** PRODAC 250 subcooling margin readout can be used as a substitute for the subcooling monitor instrument.

*** Acoustic monitoring of PORV position (1 channel per three valves - headered discharge) can be used as a substitute for the PORV Indicator - Limit Switches instruments.

D. C. COOK - UNIT 1

3/4 3-55

Amendment No.

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U.S. DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

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WASHINGTON, D.C.

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TABLE 4.3-7

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL</u>	<u>CHANNEL</u>
	<u>CHECK</u>	<u>CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - T_{HOT} (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T_{COLD} (Wide Range)	M	R
4. Reactor Coolant Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Line Pressure	M	R
7. Steam Generator Water Level - Narrow Range	M	R
8. RWST Water Level	M	R
9. Boric Acid Tank Solution Level	M	R
10. Auxiliary Feedwater Flow Rate	M	R
11. Reactor Coolant System Subcooling Margin Monitor	M	R
12. PORV Position Indicator - Limit Switches	M	R
13. PORV Block Valve Position Indicator - Limit Switches	M	R
14. Safety Valve Position Indicator - Acoustic Monitor	M	R
15. Incore Thermocouples (Core Exit Thermocouples)	M	R(1)
16. Reactor Coolant Inventory Tracking System (Reactor Vessel Level Indication)	M(2)	R(3)

(1) Partial range channel calibration for sensor to be performed below P-12 in MODE 3.

(2) With one train of Reactor Vessel Level Indication inoperable, Subcooling Margin Indication and Core Exit Thermocouples may be used to perform a CHANNEL CHECK to verify the remaining Reactor Vessel Indication train OPERABLE.

(3) Completion of channel calibration for sensors to be performed below P-12 in MODE 3.

TABLE 3.3-10
POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure	2
2. Reactor Coolant Outlet Temperature - T _{HOT} (Wide Range)	2
3. Reactor Coolant Inlet Temperature - T _{COLD} (Wide Range)	2
4. Reactor Coolant Pressure - Wide Range	2
5. Pressurizer Water Level	2
6. Steam Line Pressure	2/Steam Generator
7. Steam Generator Water Level - Narrow Range	1/Steam Generator
8. Refueling Water Storage Tank Water Level	2
9. Boric Acid Tank Solution Level	1
10. Auxiliary Feedwater Flow Rate	1/Steam Generator*
11. Reactor Coolant System Subcooling Margin Monitor	1**
12. PORV Position Indicator - Limit Switches***	1/Valve
13. PORV Block Valve Position Indicator - Limit Switches	1/Valve
14. Safety Valve Position Indicator - Acoustic Monitor	1/Valve
15. Incore Thermocouples (Core Exit Thermocouples)	2/Core Quadrant
16. Reactor Coolant Inventory Tracking System (Reactor Vessel Level Indication)	One Train (3 channels/Train)

* Steam Generator Water Level Channels can be used as a substitute for the corresponding auxiliary feedwater flow rate channel instrument.

** PRODAC 250 subcooling margin readout can be used as a substitute for the subcooling monitor instrument.

*** Acoustic monitoring of PORV position (1 channel per three valves - headered discharge) can be used as a substitute for the PORV Indicator - Limit Switches instruments.

TABLE 4.3-10

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL</u>	<u>CHANNEL</u>
	<u>CHECK</u>	<u>CALIBRATION</u>
1. Containment Pressure	M	R
2. Reactor Coolant Outlet Temperature - T_{HOT} (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T_{COLD} (Wide Range)	M	R
4. Reactor Coolant Pressure - Wide Range	M	R
5. Pressurizer Water Level	M	R
6. Steam Line Pressure	M	R
7. Steam Generator Water Level - Narrow Range	M	R
8. RWST Water Level	M	R
9. Boric Acid Tank Solution Level	M	R
10. Auxiliary Feedwater Flow Rate	M	R
11. Reactor Coolant System Subcooling Margin Monitor	M	R
12. PORV Position Indicator - Limit Switches	M	R
13. PORV Block Valve Position Indicator - Limit Switches	M	R
14. Safety Valve Position Indicator - Acoustic Monitor	M	R
15. Incore Thermocouples (Core Exit Thermocouples)	M	R(1)
16. Reactor Coolant Inventory Tracking System (Reactor Vessel Level Indication)	M(2)	R(3)

(1) Partial range channel calibration for sensor to be performed below P-12 in MODE 3.

(2) With one train of Reactor Vessel Level Indication inoperable, Subcooling Margin Indication and Core Exit Thermocouples may be used to perform a CHANNEL CHECK to verify the remaining Reactor Vessel Indication train OPERABLE.

(3) Completion of channel calibration for sensors to be performed below P-12 in MODE 3.

1. The first part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Army.

2. The second part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Navy.

3. The third part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Air Force.

4. The fourth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the State.

5. The fifth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Treasury.

6. The sixth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Justice.

7. The seventh part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Education.

8. The eighth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Health and Human Services.

9. The ninth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Veterans Affairs.

10. The tenth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Social Security Administration.

11. The eleventh part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Federal Reserve.

12. The twelfth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Federal Reserve.

13. The thirteenth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Federal Reserve.

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19. The nineteenth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Federal Reserve.

20. The twentieth part of the document is a letter from the Secretary of the Department of the Interior to the Secretary of the Department of the Federal Reserve.

ATTACHMENT 3 TO AEP:NRC:0856J

INFORMATION PROVIDED BY WESTINGHOUSE ELECTRIC CORPORATION

REGARDING PROPOSED CHANGES TO THE

DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2

TECHNICAL SPECIFICATIONS

THE
FEDERAL BUREAU OF INVESTIGATION
UNITED STATES DEPARTMENT OF JUSTICE
WASHINGTON, D. C. 20535

Westinghouse
Electric Corporation

Water Reactor
Divisions

NUCLEAR OPS. DIVISION

Date AUG 14 '85
Recd:

Resp. Person: A. Auvil Att.

cc: J.C. Jeffrey / R.L. Shoberg
S. Mar.
C. Miles

Clerk: C. Medley

Box 355
Pittsburgh Pennsylvania 15230-0355

AEP-85-783

August 12, 1985

NS-OPLS-OPL-85-367

Mr. M. P. Alexich, Vice President
and Director Nuclear Operations
American Electric Power Service Corporation
One Riverside Plaza
Columbus, Ohio 43216

Attention: Mr. A. B. Auvil

AMERICAN ELECTRIC POWER SERVICE CORPORATION
D. C. COOK UNIT 1&2
REACTOR VESSEL LEVEL INSTRUMENTATION SYSTEM (RVLIS)

Dear Mr. Alexich:

The attached document provides the information requested during the July 25, 1985 conference call and noted in your letter AWS-237, dated July 31, 1985.

Please call with any comments or questions.

Very truly yours,

Asim C. Suda

A. P. Suda, Manager
Great Lakes Area
Projects Department

LVT/lsv

cc: M. P. Alexich
J. G. Feinstein
V. VanderBurg
J. Markowsky
S. H. Steinhart
D. R. Hafer
J. R. Jensen
R. W. Jurgensen
W. G. Smith
B. Svensson
M. J. Parvin, W

Attachment I

Per the request of A. B. Auvil to A. P. Suda in letter AWS-237, dated July 31, 1985, information on several licensing concerns pertaining to finding an acceptable manner to perform required periodic RVLIS channel checks is included.

1. The minimum number of channels operable should be those RVLIS indications corresponding to one train, i.e., upper plenum, narrow range and dynamic head.
2. Should the plant lose both trains of RVLIS, the plant should adopt an action statement time period consistent with the other plant post accident monitoring time requirements.
3. Based upon guidance provided by the NRC on other PAMS channels, the plant must restore at least one channel within thirty days or go to a hot shutdown condition within twelve hours should the number of RVLIS channels fail to meet the minimum channels operable.
4. The surveillance requirement on the RVLIS system should be monthly.
5. Since it is not feasible to perturb the RVLIS channels to verify their operation, comparison of one train to the other provides an adequate surveillance check. This technique should be used even for the channels that are offscale.
6. Should the monthly surveillance check time period be performed with one train of RVLIS inoperable, the plant can use diverse instrumentation to verify that the remaining RVLIS train is operable.
7. The diverse variables that can be utilized to provide an interim verification of proper RVLIS operation include core exit thermocouple indication and core subcooling margin. As stated in NUREG-0737, section II.F.2, these three indications collectively provide an indication to the operator of a postulated inadequate core cooling situation.
8. The accuracy of the RVLIS system during normal operation with all RCP's running is ± 2.5 percent of span for the dynamic head indication.

For those readings on scale during surveillance testing (dynamic head indications), the criteria that should be used in determining if the system is functioning properly is that corresponding channels of each RVLIS train should agree within 4 percent of span. A deviation greater than 4 percent of span would indicate that one or both of the corresponding channels are not functioning within specifications.

For those readings offscale (i.e., narrow range channel offscale high and upper plenum channel offscale low with reactor coolant pumps running) during surveillance testing, the only comparison necessary is to verify that the corresponding channels for each train are indeed offscale. The offscale reading need not meet the 4 percent deviation requirement.

Glen Lang

Attached for your information are recommended technical specification modified tables to reflect the above stated guidance. These include Table 3.3-11, "Post-Accident Monitoring Instrumentation," and Table 4.3-7, "Post Accident Monitoring Instrumentation Surveillance Reuquirements."

TABLE 3.3-11

POST-ACCIDENT MONITORING INSTRUMENTATION

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure	2
2. Reactor Coolant Outlet Temperature - T_{HOT} (Wide Range)	2
3. Reactor Coolant Inlet Temperature - T_{COLD} (Wide Range)	2
4. Reactor Coolant Pressure - Wide Range	2
5. Pressurizer Water Level	2
6. Steam Line Pressure	2/Steam Generator
7. Steam Generator Water Level - Narrow Range	1/Steam Generator
8. Refueling Water Storage Tank Water Level	2
9. Boric Acid Tank Solution Level	1
10. Auxiliary Feedwater Flow Rate	1/Steam Generator*
11. Reactor Coolant System Subcooling Margin Monitor	1**
12. PORV Position Indicator - Limit Switches***	1/Valve
13. PORV Block Valve Position Indicator - Limit Switches	1/Valve
14. Safety Valve Position Indicator - Acoustic Monitor	1/Valve
15. Reactor Vessel Level Indication	1 Train (3 channels/train)
*Steam Generator Water Level Channels can be used as a substitute for the corresponding auxiliary feedwater flow rate channel instrument.	
**PRODAC 250 subcooling margin readout can be used as a substitute for the subcooling monitor instrument.	
***Acoustic monitoring of PORV position (1 channel per three valves - headered discharge) can be used as a substitute for the PORV Position Indicator - Limit Switches instruments.	

D.C. COOK - UNIT 1

3/4 3-55

Amendment No. 55

TABLE 4.3-7

POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

<u>INSTRUMENT</u>	<u>CHANNEL CHECK</u>	<u>CHANNEL CALIBRATION</u>
1. Containment Pressure	H	R
2. Reactor Coolant Outlet Temperature - T_{HOT} (Wide Range)	H	R
3. Reactor Coolant Inlet Temperature - T_{COLD} (Wide Range)	H	R
4. Reactor Coolant Pressure - Wide Range	H	R
5. Pressurizer Water Level	H	R
6. Steam Line Pressure	H	R
7. Steam Generator Water Level - Narrow Range	H	R
8. RWT Water Level	H	R
9. Boric Acid Tank Solution Level	H	R
10. Auxiliary Feedwater Flow Rate	H	R
11. Reactor Coolant System Subcooling Margin Monitor	H	R
12. PORV Position Indicator - Limit Switches	H	R
13. PORV Block Valve Position Indicator - Limit Switches	H	R
14. Safety Valve Position Indicator - Acoustic Monitor	H	R
15. Reactor Vessel Level Indication	H ⁽¹⁾	R

(1) Subcooling Margin Indication and Core Exit Thermocouples may be substituted for the purpose of CHANNEL CHECK for the OPERABLE channel of Reactor Vessel Level Indication.

