

Attachment 5 to AEP:NRC:0856T

Revised Pages for the  
Donald C. Cook Nuclear Plant Unit Nos. 1 and 2  
Technical Specifications

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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)
17. Containment Sump Level	1****
18. Containment Water Level	2****

- \* 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.
- \*\*\*\* The requirements for these instruments will become effective after the level transmitters are modified or replaced and become operational. The schedule for modification or replacement of the transmitters is described in the Bases.

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 <sub>HOT</sub> (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (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)
17. Containment Sump Level**	M	R
18. Containment Water Level**	M	R

- (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.

\* The provisions of Specification 4.0.6 are applicable.

\*\* The requirements for these instruments will become effective after the level transmitters are modified or replaced and become operational. The schedule for modification or replacement of the transmitters is described in the Bases.

D. C. COOK - UNIT 1..

3/4 3-56

Amendment No.

## INSTRUMENTATION

### BASES

#### 3/4.3.3.7 FIRE DETECTION INSTRUMENTATION

OPERABILITY of the fire detection instrumentation ensures that adequate warning capability is available for the prompt detection of fires. This capability is required in order to detect and locate fires in their early stages. Prompt detection of fires will reduce the potential for damage to safety related equipment and is an integral element in the overall facility fire protection program.

In the event that a portion of the fire detection instrumentation is inoperable, the establishment of frequent fire patrols in the affected areas is required to provide detection capability until the inoperable instrumentation is restored to OPERABILITY. Use of containment temperature monitoring is allowed once per hour if containment fire detection is inoperable.

#### 3/4.3.3.8 POST-ACCIDENT INSTRUMENTATION

The OPERABILITY of the post-accident instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident.

The containment water level and containment sump level transmitters will be modified or replaced and OPERABLE by the end of the refueling outage scheduled to begin in February 1989.

TABLE 3.3-10  
POST-ACCIDENT MONITORING INSTRUMENTATION

D. C. COOK - UNIT 2

3/4 3-46

Amendment No.

<u>INSTRUMENT</u>	<u>MINIMUM CHANNELS OPERABLE</u>
1. Containment Pressure	2
2. Reactor Coolant Outlet Temperature - T <sub>HOT</sub> (Wide Range)	2
3. Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (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)
17. Containment Sump Level	1****
18. Containment Water Level	2****

- \* 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.
- \*\*\*\* The requirements for these instruments will become effective after the level transmitters are modified or replaced and become operational. The schedule for modification or replacement of the transmitters is described in the Bases.

TABLE 4.3-10  
POST-ACCIDENT MONITORING INSTRUMENTATION SURVEILLANCE REQUIREMENTS

D. C. COOK - UNIT 2

3/4 3-47

Amendment No.

<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 <sub>HOT</sub> (Wide Range)	M	R
3. Reactor Coolant Inlet Temperature - T <sub>COLD</sub> (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)
17. Containment Sump Level*	M	R
18. Containment Water Level*	M	R

(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.

\* The requirements for these instruments will become effective after the level transmitters are modified or replaced and become operational. The schedule for modification or replacement of the transmitters is described in the Bases.

### 3/4.3 INSTRUMENTATION

#### BASES

#### 3/4.3.3 MONITORING INSTRUMENTATION

##### 3/4.3.3.1 RADIATION MONITORING INSTRUMENTATION

The OPERABILITY of the radiation monitoring channels ensures that 1) the radiation levels are continually measured in the areas served by the individual channels and 2) the alarm or automatic action is initiated when the radiation level trip setpoint is exceeded.

##### 3/4.3.3.2 MOVABLE INCORE DETECTORS

The OPERABILITY of the movable incore detectors with the specified minimum complement of equipment ensures that the measurements obtained from use of this system accurately represent the spatial neutron flux distribution of the reactor core. The OPERABILITY of this system is demonstrated by irradiating each detector used and normalizing its respective output.

##### 3/4.3.3.3 SEISMIC INSTRUMENTATION

The OPERABILITY of the seismic instrumentation ensures that sufficient capability is available to promptly determine the magnitude of a seismic event and evaluate the response of those features important to safety. This capability is required to permit comparison of the measured response to that used in the design basis for the facility.

##### 3/4.3.3.4 METEOROLOGICAL INSTRUMENTATION

The OPERABILITY of the meteorological instrumentation ensures that sufficient meteorological data is available for estimating potential radiation doses to the public as a result of routine or accidental release of radioactive materials to the atmosphere. This capability is required to evaluate the need for initiating protective measures to protect the health and safety of the public.

##### 3/4.3.3.5 REMOTE SHUTDOWN INSTRUMENTATION

The OPERABILITY of the remote shutdown instrumentation ensures that sufficient capability is available to permit shutdown and maintenance of HOT STANDBY of the facility from locations outside of the control room. This capability is required in the event control room habitability is lost and is consistent with General Design Criteria 19 of 10 CFR 50.

##### 3/4.3.3.6 POST-ACCIDENT INSTRUMENTATION

The OPERABILITY of the post-accident instrumentation ensures that sufficient information is available on selected plant parameters to monitor and assess these variables during and following an accident.

The containment water level and containment sump level transmitters will be modified or replaced and OPERABLE by the end of the outage currently scheduled to begin in May 1988.