

ATTACHMENT 2 TO AEP:NRC:0960A

PROPOSED CHANGES TO THE

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

TECHNICAL SPECIFICATIONS

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## PLANT SYSTEMS

### SPRAY AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

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3.7.9.2 The spray and/or sprinkler systems located in the areas shown in Table 3.7-5 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE:

#### ACTION:

- a. With one or more of the above required spray and/or sprinkler systems inoperable, within one hour ensure that backup fire suppression equipment is available for those areas\* in which redundant safe shutdown systems or components could be damaged and establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.9.2 Each of the above required spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

- a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- \* For the reactor coolant pumps preaction sprinklers inside the containment, a closed circuit television located in the lower containment, with periodic monitoring (and hourly logging) of the CCTV screen, shall be an acceptable substitute to an hourly fire watch patrol.

## PLANT SYSTEMS

### LOW PRESSURE CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.3 The low pressure CO<sub>2</sub> systems located in the areas shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the low pressure CO<sub>2</sub> protected areas is required to be OPERABLE.

#### ACTION:

- a. With one or more of the above required low pressure CO<sub>2</sub> systems isolated for personnel protection, to permit entry for routine tours, maintenance, construction or surveillance testing, verify the operability of the fire detection system as per Specifications 4.3.3.7.1 and 4.3.3.7.2 in the affected area(s) and establish a Roving Fire Watch Patrol (as defined in the Bases Section) in those areas affected by the isolated CO<sub>2</sub> system(s). In the event that the Roving Fire Watch Patrol cannot be maintained in the affected areas, then personnel must be evacuated and the CO<sub>2</sub> system returned to its normal condition.
- b. With one or more of the above required low pressure CO<sub>2</sub> systems inoperable, within one hour ensure that backup fire suppression equipment is available for those areas in which redundant safe shutdown systems or components could be damaged and establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the CO<sub>2</sub> storage tank level to be greater than or equal to 50% and pressure to be greater than or equal to 285 psig, and
- b. At least once per 18 months by verifying:
  1. The system valves, associated ventilation dampers and self closing fire doors actuate manually and automatically, upon receipt of a simulated actuation signal, and
  2. Flow from each nozzle during a "Puff Test".

## PLANT SYSTEMS

### HALON SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.9.4 The Halon system located in the Unit 1 Control Room Cable Spreading Area shall be OPERABLE.

APPLICABILITY: Whenever equipment in the Halon protected areas is required to be OPERABLE.

#### ACTION:

- a. With the above required Halon system inoperable, within 1 hour verify that the fire detection system and the backup CO<sub>2</sub> fire suppression system are OPERABLE; otherwise, establish an hourly fire watch patrol and ensure that backup fire suppression equipment is available for the Control Room Cable Spreading Area. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.9.4 The above Halon system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying each Halon storage tank to be greater than or equal to 95% of full charge weight and to be greater than or equal to 90% of full charge pressure.
- b. At least once per 18 months by:
  1. Verifying the system, including associated ventilation dampers, actuates manually and automatically to a simulated test signal.
  2. Performance of an air flow test or CO<sub>2</sub> puff test through headers and nozzles to assure no blockage.

## PLANT SYSTEMS

### 3/4.7.10 FIRE RATED ASSEMBLIES

#### LIMITING CONDITION FOR OPERATION

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3.7.10 All fire rated assemblies (walls, floor/ceilings, cable tray enclosures) separating safety related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire dampers, cable and piping penetration seals, and ventilation seals) shall be OPERABLE.

APPLICABILITY: At all times.

#### ACTION:

- a. With one or more of the above required fire rated assemblies and/or sealing devices inoperable, within one hour restore the inoperable assemblies and/or sealing devices to OPERABLE status or establish an hourly fire watch on at least one side of the inoperable assemblies and/or sealing devices or verify the OPERABILITY of fire detectors per Specifications 4.3.3.7.1 and 4.3.3.7.2 on at least one side of the inoperable assemblies and/or sealing devices. Restore the inoperable fire rated assemblies and sealing devices to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperable fire rated assemblies and/or sealing devices and the plans and schedule for restoring the fire rated assemblies and/or sealing devices to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.10.1 At least once per 18 months the above required fire rated assemblies and penetration sealing devices shall be verified OPERABLE by:

- a. Performing a visual inspection of the exposed surfaces of each fire rated assembly.
- b. Performing a visual inspection of each fire damper and associated hardware.

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\* Except fire doors on Turbine Driven Auxiliary Feedwater Pump and Hallway enclosures which cannot be locked closed for HELB considerations.

## PLANT SYSTEMS

### BASES

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#### 3/4.7.9 Cont.

Because of the inaccessibility of the lower containment to personnel during operation due to ALARA radiation exposure concerns, the use of one or more CCTVs in the lower containment, to monitor for fire and smoke, is an acceptable substitute to an hourly fire watch, if the fire suppression system becomes inoperable.

. All hourly fire watch patrols are performed at intervals of sixty minutes plus or minus fifteen minutes.

#### 3/4.7.10 FIRE RATED ASSEMBLIES

The OPERABILITY of the fire barriers and barrier penetrations ensure that fire damage will be limited. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment. The fire barriers, fire barrier penetrations for conduits, cable trays and piping, fire dampers, and fire doors are periodically inspected to verify their OPERABILITY. The ventilation seals are seals around ventilation duct work penetrating fire barriers.

For the purpose of determining the appropriate remedial ACTION, an OPERABLE fire rated assembly and/or sealing device is one that is capable of performing its intended safety function.

## PLANT SYSTEMS

### SPRAY AND/OR SPRINKLER SYSTEMS

#### LIMITING CONDITION FOR OPERATION

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3.7.9.2 The spray and/or sprinkler systems located in the areas shown in Table 3.7-5 shall be OPERABLE:

APPLICABILITY: Whenever equipment in the spray/sprinkler protected areas is required to be OPERABLE:

#### ACTION:

- a. With one or more of the above required spray and/or sprinkler systems inoperable, within one hour ensure that backup fire suppression equipment is available for those areas\* in which redundant safe shutdown systems or components could be damaged and establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.9.2 Each of the above required spray and/or sprinkler systems shall be demonstrated to be OPERABLE:

- a. At least once per 12 months by cycling each testable valve in the flow path through at least one complete cycle of full travel.
- \* For the reactor coolant pumps preaction sprinklers inside the containment, a closed circuit television located in the lower containment, with periodic monitoring (and hourly logging) of the CCTV screen, shall be an acceptable substitute to an hourly fire watch patrol.

## PLANT SYSTEMS

### LOW PRESSURE CO<sub>2</sub> SYSTEMS

#### LIMITING CONDITION FOR OPERATION

3.7.9.3 The low pressure CO<sub>2</sub> systems located in the areas shown in Table 3.7-6 shall be OPERABLE.

APPLICABILITY: Whenever equipment in the low pressure CO<sub>2</sub> protected areas is required to be OPERABLE.

#### ACTION:

- a. With one or more of the above required low pressure CO<sub>2</sub> systems isolated for personnel protection, to permit entry for routine tours, maintenance, construction or surveillance testing, verify the operability of the fire detection system as per Specifications 4.3.3.8.1 and 4.3.3.8.2 in the affected area(s) and establish a Roving Fire Watch Patrol (as defined in the Bases Section) in those areas affected by the isolated CO<sub>2</sub> system(s). In the event that the Roving Fire Watch Patrol cannot be maintained in the affected areas, then personnel must be evacuated and the CO<sub>2</sub> system returned to its normal condition.
- b. With one or more of the above required low pressure CO<sub>2</sub> systems inoperable, within one hour ensure that backup fire suppression equipment is available for those areas in which redundant safe shutdown systems or components could be damaged and establish an hourly fire watch patrol. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- c. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

4.7.9.3 Each of the above required low pressure CO<sub>2</sub> systems shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying the CO<sub>2</sub> storage tank level to be greater than or equal to 50% and pressure to be greater than or equal to 285 psig, and
- b. At least once per 18 months by verifying:
  1. The system valves, associated ventilation dampers and self closing fire doors actuate manually and automatically, upon receipt of a simulated actuation signal, and
  2. Flow from each nozzle during a "Puff Test".



## PLANT SYSTEMS

### HALON SYSTEM

#### LIMITING CONDITION FOR OPERATION

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3.7.9.4 The Halon system located in the Unit 2 Control Room Cable Spreading Area shall be OPERABLE.

APPLICABILITY: Whenever equipment in the Halon protected areas is required to be OPERABLE.

#### ACTION:

- a. With the above required Halon system inoperable, within 1 hour verify that the fire detection system and the backup CO<sub>2</sub> fire suppression system are OPERABLE; otherwise, establish an hourly fire watch patrol and ensure that backup fire suppression equipment is available for the Control Room Cable Spreading Area. Restore the system to OPERABLE status within 14 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperability and the plans and schedule for restoring the system to OPERABLE status.
- b. The provisions of Specification 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

---

4.7.9.4 The above Halon system shall be demonstrated OPERABLE:

- a. At least once per 6 months by verifying each Halon storage tank to be greater than or equal to 95% of full charge weight and to be greater than or equal to 90% of full charge pressure.
- b. At least once per 18 months by:
  1. Verifying the system, including associated ventilation dampers, actuates manually and automatically to a simulated test signal.
  2. Performance of an air flow test or CO<sub>2</sub> puff test through headers and nozzles to assure no blockage.

## PLANT SYSTEMS

### 3/4.7.10 FIRE RATED ASSEMBLIES

#### LIMITING CONDITION FOR OPERATION

---

3.7.10 All fire rated assemblies (walls, floor/ceilings, cable tray enclosures) separating safety related fire areas or separating portions of redundant systems important to safe shutdown within a fire area and all sealing devices in fire rated assembly penetrations (fire doors, fire dampers, cable and piping penetration seals, and ventilation seals) shall be OPERABLE.

APPLICABILITY: At all times.

ACTION:

- a. With one or more of the above required fire rated assemblies and/or sealing devices inoperable, within one hour restore the inoperable assemblies and/or sealing devices to OPERABLE status or establish an hourly fire watch on at least one side of the inoperable assemblies and/or sealing devices or verify the OPERABILITY of fire detectors per Specifications 4.3.3.8.1 and 4.3.3.8.2 on at least one side of the inoperable assemblies and/or sealing devices. Restore the inoperable fire rated assemblies and sealing devices to OPERABLE status within 7 days or, in lieu of any other report required by Specification 6.9.1, prepare and submit a Special Report to the Commission pursuant to Specification 6.9.2 within the next 30 days outlining the action taken, the cause of the inoperable fire rated assemblies and/or sealing devices and the plans and schedule for restoring the fire rated assemblies and/or sealing devices to OPERABLE status.
- b. The provisions of Specifications 3.0.3 and 3.0.4 are not applicable.

#### SURVEILLANCE REQUIREMENTS

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4.7.10.1 At least once per 18 months the above required fire rated assemblies and penetration sealing devices shall be verified OPERABLE by:

- a. Performing a visual inspection of the exposed surfaces of each fire rated assembly.
- b. Performing a visual inspection of each fire damper and associated hardware.

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PLANT SYSTEMS  
BASES

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other tasks (e.g., an operator on tour) provided that such personnel fulfilled the above stated requirements. As a minimum, each area affected by an isolated low pressure CO<sub>2</sub> system must be visited every twenty-five (25) to thirty-five (35) minutes by the Roving Fire Watch Patrol. Such measures will provide the necessary level of fire protection while affording necessary provisions for personnel safety.

In the event that portions of the fire suppression systems are inoperable, alternate backup fire fighting equipment is required to be made available in the affected areas until the inoperable equipment is restored to service. When the inoperable fire-fighting equipment is intended for use as a backup means of fire suppression, a longer period of time is allowed to provide an alternate means of fire fighting than if the inoperable equipment is the primary means of fire suppression.

The surveillance requirements provide assurance that the minimum OPERABILITY requirements of the fire suppression systems are met. An allowance is made for ensuring a sufficient volume of Halon and CO<sub>2</sub> in the storage tanks by verifying either the weight, level, or pressure of the tanks.

In the event the fire suppression water system becomes inoperable, immediate corrective measures must be taken since this system provides the major fire suppression capability of the plant. The requirement for a twenty-four hour report to the Commission provides for prompt evaluation of the acceptability of the corrective measures to provide adequate fire suppression capability for the continued protection of the nuclear plant.

Because of the inaccessibility of the lower containment to personnel during operation due to ALARA radiation exposure concerns, the use of one or more CCTVS in the lower containment to monitor for fire and smoke, is an acceptable substitute to an hourly fire watch, if the fire suppression system becomes inoperable.

All hourly fire watch patrols are performed at intervals of sixty minutes plus or minus fifteen minutes.

3/4.7.10 FIRE RATED ASSEMBLIES

The OPERABILITY of the fire barriers and barrier penetrations ensure that fire damage will be limited. These design features minimize the possibility of a single fire involving more than one fire area prior to detection and extinguishment. The fire barriers, fire barrier penetrations for conduits, cable trays and piping, fire dampers, and fire doors are periodically inspected to verify their OPERABILITY. The ventilation seals are seals around ventilation duct work penetrating fire barriers.

For the purpose of determining the appropriate remedial ACTION, an OPERABLE fire rated assembly/sealing device is one that is capable of performing its intended safety function.

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