



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

NIAGARA MOHAWK POWER CORPORATION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 55
License No. NPF-69

1. The Nuclear Regulatory Commission (the Commission) has found that:
 - A. The application for amendment by Niagara Mohawk Power Corporation (the licensee) dated December 14, 1993, complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act) and the Commission's rules and regulations set forth in 10 CFR Chapter 1;
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance (i) that the activities authorized by this amendment can be conducted without endangering the health and safety of the public, and (ii) that such activities will be conducted in compliance with the Commission's regulations;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public; and
 - E. The issuance of this amendment is in accordance with 10 CFR Part 51 of the Commission's regulations and all applicable requirements have been satisfied.
2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the attachment to this license amendment, and paragraph 2.C.(2) of Facility Operating License No. NPF-69 is hereby amended to read as follows:

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(2) Technical Specifications and Environmental Protection Plan

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, both of which are attached hereto, as revised through Amendment No. 55 are hereby incorporated into this license. Niagara Mohawk Power Corporation shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of the date of its issuance to be implemented within 30 days.

FOR THE NUCLEAR REGULATORY COMMISSION



Robert A. Capra, Director
Project Directorate I-1
Division of Reactor Projects - I/II
Office of Nuclear Reactor Regulation

Attachment:
Changes to the Technical
Specifications

Date of Issuance: March 2, 1994



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ATTACHMENT TO LICENSE AMENDMENT

AMENDMENT NO. 55 TO FACILITY OPERATING LICENSE NO. NPF-69

DOCKET NO. 50-410

Revise Appendix A as follows:

Remove Pages

3/4 8-14
3/4 8-15
3/4 8-19
3/4 8-28
B3/4 6-5
B3/4 8-3

Insert Pages

3/4 8-14
3/4 8-15
3/4 8-19
3/4 8-28
B3/4 6-5
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ELECTRICAL POWER SYSTEMS

3/4.8.2 DC SOURCES

DC SOURCES' - OPERATING

LIMITING CONDITIONS FOR OPERATION

3.8.2.1 As a minimum, the following DC electrical power sources shall be OPERABLE:

- a. Division I, consisting of:
 - 1. 125-volt battery 2BYS*BAT 2A and
 - 2. One 125-volt full-capacity charger
- b. Division II, consisting of:
 - 1. 125-volt battery 2BYS*BAT 2B and
 - 2. One 125-volt full-capacity charger
- c. Division III, consisting of:
 - 1. 125-volt battery 2BYS*BAT 2C and
 - 2. One 125-volt full-capacity charger

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

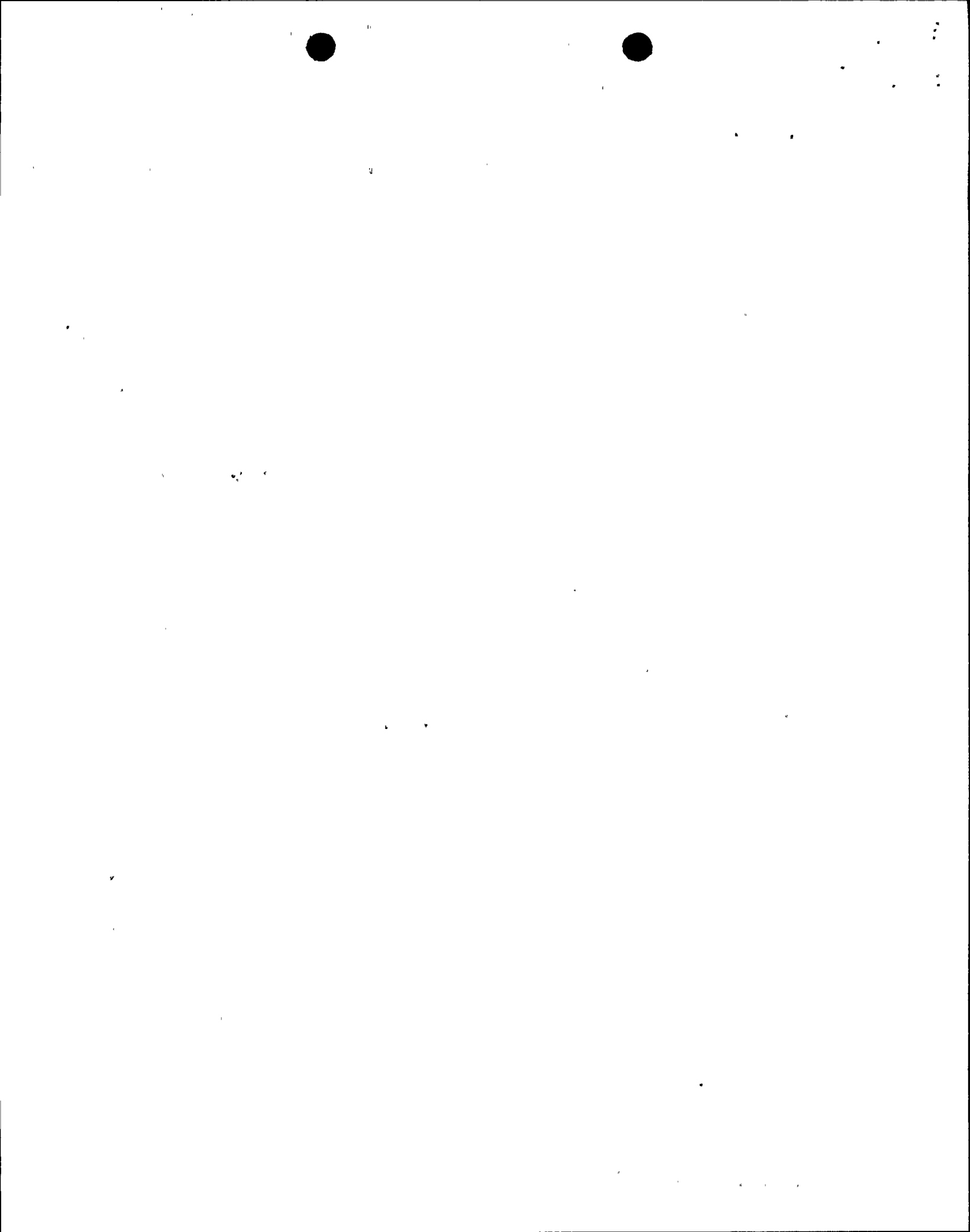
ACTION:

- a. With either Division I or Division II battery and/or charger of the above required DC electrical power sources inoperable, restore the inoperable division DC electrical power source(s) to OPERABLE status within 2 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.
- b. With Division III battery and/or charger of the above required DC electrical power sources inoperable, declare the HPCS system inoperable and take the ACTION required by Specification 3.5.1.

SURVEILLANCE REQUIREMENTS

4.8.2.1 Each of the above required 125-volt batteries and chargers shall be demonstrated OPERABLE:

- a. At least once per 7 days by verifying that:
 - 1. The parameters in Table 4.8.2.1-1 meet the Category A limits, and
 - 2. Total battery terminal voltage is greater than or equal to 130 volts on float charge.



ELECTRICAL POWER SYSTEMS

DC SOURCES

DC SOURCES - OPERATING

SURVEILLANCE REQUIREMENTS

4.8.2.1 (Continued)

- b. At least once per 92 days and within 7 days after a battery discharge with battery terminal voltage below 107 volts, or battery overcharge with battery terminal voltage above 142 volts, by verifying that:
1. The parameters in Table 4.8.2.1-1 meet the Category B limits.
 2. There is no visible corrosion at either terminals or connectors, or the resistance of the associated cell-to-cell and terminal connection is less than or equal to 120% of the resistance readings taken during initial installation, and
 3. The average electrolyte temperature of one out of five connected cells is above 65°F.
- c. At least once per 18 months by verifying that:
1. The cells, cell plates, and battery racks show no visual indication of physical damage or abnormal deterioration,
 2. The cell-to-cell and terminal connections are clean, tight, free of corrosion,
 3. The resistance of each cell-to-cell and terminal connection is less than or equal to 120% of the resistance readings taken during initial installation,* and
 4. The battery charger will supply:
 1. For Divisions I and II, at least 300 amperes at a minimum of 130 volts for at least 4 hours.
 2. For Division III, at least 40 amperes at a minimum of 130 volts for at least 4 hours.
- d. At least once per 18 months, during shutdown, by verifying that either:
1. The battery capacity is adequate to supply and maintain in OPERABLE status all of the actual emergency loads for 2 hours for Divisions I and II, and 2 hours for Division III when the battery is subjected to a battery service test, or
 2. The battery capacity is adequate to supply a dummy load of the following profile while maintaining the battery terminal voltage greater than or equal to 105 volts for Division I and II and 112.5 volts for Division III:

* In accordance with IEEE 450-1980.



ELECTRICAL POWER SYSTEMS

DC SOURCES

DC SOURCES - SHUTDOWN

LIMITING CONDITIONS FOR OPERATION

3.8.2.2 As a minimum, Division I or Division II, and, when the HPCS system is required to be OPERABLE, Division III, of the DC electrical power sources shall be OPERABLE with:

- a. Division I consisting of:
 - 1. 125-volt battery 2BYS*BAT 2A and
 - 2. One 125-volt full capacity charger.

- b. Division II consisting of:
 - 1. 125-volt battery 2BYS*BAT 2B and
 - 2. One 125-volt full capacity charger.

- c. Division III consisting of:
 - 1. 125-volt battery 2BYS*BAT 2C and
 - 2. One 125-volt full capacity charger.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5, and *.

ACTION:

- a. With less than the Division I and/or Division II battery and/or charger of the above required DC electrical power sources OPERABLE, suspend CORE ALTERATIONS, handling of irradiated fuel in the secondary containment and operations with a potential for draining the reactor vessel.

- b. With Division III battery and/or charger of the above required DC electrical power sources inoperable, declare the HPCS system inoperable and take the ACTION required by Specifications 3.5.2 and 3.5.3.

- c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

4.8.2.2 At least the above required battery and charger shall be demonstrated OPERABLE per Surveillance Requirement 4.8.2.1.

* When handling irradiated fuel in the secondary containment.



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ELECTRICAL POWER SYSTEMS

ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

PRIMARY CONTAINMENT PENETRATION CONDUCTOR OVERCURRENT PROTECTIVE DEVICES

LIMITING CONDITIONS FOR OPERATION

3.8.4.2 All primary containment penetration conductor overcurrent protective devices* shall be OPERABLE.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2, and 3.

ACTION:

- a. With one or more of the primary containment penetration conductor overcurrent protective devices* inoperable, declare the affected system or component inoperable and apply the appropriate ACTION statement for the affected system and:
 - 1. For 13.8-kV circuit breakers, deenergize the 13.8-kV circuits by tripping the associated redundant circuit breaker(s) within 72 hours and verify the redundant circuit breaker(s) to be tripped at least once every 7 days thereafter.
 - 2. For 600 volt MCC circuit breakers, remove the inoperable circuit breaker(s) from service by opening the breaker within 72 hours and verify the inoperable breaker(s) to be in the open position at least once every 7 days thereafter.

Otherwise, be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

- b. The provisions of Specification 3.0.4 are not applicable to overcurrent devices in 13.8-kV circuits which have their redundant circuit breakers tripped or to 600-volt circuits which have the inoperable circuit breaker disconnected.

SURVEILLANCE REQUIREMENTS

4.8.4.2 Each of the primary containment penetration conductor overcurrent protective devices* shall be demonstrated OPERABLE:

- a. At least once per 18 months:
 - 1. By verifying that the medium voltage 13.8-kV circuit breakers are OPERABLE by selecting, on a rotating basis, at least 10% of the circuit breakers and performing:

* Excluded from this specification are those penetration assemblies that are capable of withstanding the maximum current available because of an electrical fault inside containment.



CONTAINMENT SYSTEMS

BASES

PRIMARY CONTAINMENT

PRIMARY CONTAINMENT ISOLATION VALVES

3/4.6.3 (Continued)

GDC 54 through 57 of Appendix A to 10 CFR 50. Measurement of the closure time of automatic containment isolation valves is performed for the purpose of demonstrating PRIMARY CONTAINMENT INTEGRITY and system OPERABILITY (Specification 3/4.6.1).

The list of primary containment isolation valves is contained in procedure NIP-DES-04 and revisions will be processed in accordance with Section 6.0, Administrative Controls.

The maximum isolation times for primary containment automatic isolation valves are either the analytical times used in the accident analysis as described in the FSAR; or times derived by applying margins to the vendor test data obtained in accordance with industry codes and standards. For non-analytical automatic primary containment isolation valves, the maximum isolation time is derived as follows:

- 1) Valves with full stroke times less than or equal to 10 seconds, maximum isolation time approximately equals the vendor tested closure time multiplied by 2.0.
- 2) Valves with full stroke time greater than 10 seconds, maximum isolation time approximately equals the vendor tested closure time multiplied by 1.5. Valve closing times do not include isolation instrumentation response times.

Valve closing times do not include isolation instrumentation response times. The opening of locked or sealed closed containment isolation valves on an intermittent basis under administrative control includes the following considerations: (1) stationing an operator, who is in constant communication with control room, at the valve controls, (2) instructing this operator to close these valves in an accident situation, and (3) assuring that environmental conditions will not preclude access to close the valves and that this action will prevent the release of radioactivity outside the containment.

3/4.6.4 SUPPRESSION CHAMBER - DRYWELL VACUUM BREAKERS

Vacuum relief breakers are provided to equalize the pressure between the suppression chamber and drywell. This system will maintain the structural integrity of the primary containment under conditions of large differential pressures.

The vacuum breakers between the suppression chamber and the drywell must not be inoperable in the open position since this would allow bypassing of the suppression pool in case of an accident. There are four pairs of valves to provide redundancy so that operation may continue for up to 72 hours with no more than one pair of vacuum breakers inoperable in the closed position.



BASES

AC SOURCES, DC SOURCES, AND ONSITE POWER DISTRIBUTION SYSTEMS

3/4.8.1-3 (Continued)

below the manufacturer's full-charge specific gravity or a battery charger current that had stabilized at a low value, is characteristic of a charged cell with adequate capacity. The normal limits for each connected cell for float voltage and specific gravity, greater than 2.13 volts and not more than 0.020 below the manufacturer's full-charge specific gravity with an average specific gravity of all the connected cells not more than 0.010 below the manufacturer's full-charge specific gravity, ensures the OPERABILITY and capability of the battery.

Operation with a battery cell's parameter outside the normal limit but within the allowable value specified in Table 4.8.2.1-1 is permitted for up to 7 days. During this 7-day period: (1) the allowable values for electrolyte level ensures no physical damage to the plates with an adequate electron transfer capability; (2) the allowable value for the average specific gravity of all the cells, not more than 0.020 below the manufacturer's recommended full-charge specific gravity ensures that the decrease in rating will be less than the safety margin provided in sizing; (3) the allowable value for an individual cell's specific gravity, ensures that an individual cell's specific gravity will not be more than 0.040 below the manufacturer's full-charge specific gravity and that the overall capability of the battery will be maintained within an acceptable limit; and (4) the allowable value for an individual cell's float voltage, greater than 2.07 volts, ensures the battery's capability to perform its design function.

3/4.8.4 ELECTRICAL EQUIPMENT PROTECTIVE DEVICES

Primary containment electrical penetrations and penetration conductors are protected by either de-energizing circuits not required during reactor operation or demonstrating the OPERABILITY of primary and backup overcurrent protection circuit breakers by periodic surveillance. The list of primary containment AC circuits required to be deenergized is contained in administrative procedure NIP-DES-04 and revisions will be processed in accordance with Section 6.0, Administrative Controls.

The Surveillance Requirements applicable to lower voltage circuit breakers provides assurance of breaker reliability by testing at least one representative sample of each manufacturer's brand of circuit breaker. Each manufacturer's molded case and metal case circuit breakers are grouped into representative samples which are then tested on a rotating basis to ensure that all breakers are tested. If a wide variety exists within any manufacturer's brand of circuit breakers, it is necessary to divide that manufacturer's breakers into groups and treat each group as a separate type of breaker for surveillance purposes.

The emergency lighting system overcurrent protective devices ensure that a failure of the non-Class 1E portion of the circuit will not affect the operation of the remaining portions of the Class 1E circuits that are necessary for safe shutdown. The list of these overcurrent protective devices is contained in administrative procedure NIP-DES-04 and revisions will be processed in accordance with Section 6.0, Administrative Controls.

