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

June 9, 1987

Docket No.: 50-440

Mr. Murray R. Edelman, Senior Vice President
Nuclear Group
The Cleveland Electric Illuminating
Company
P.O. Box 5000
Cleveland, Ohio 44101

Dear Mr. Edelman:

SUBJECT: LICENSE AMENDMENT RELATED TO DRYWELL TEMPERATURE INSTRUMENTS, AUTOMATIC DEPRESSURIZATION SYSTEM INSTRUMENT AIR ALARM SETPOINT AND OTHERS (TAC NOS. 64270-64273)

RE: Perry Nuclear Power Plant, Unit No. 1

The Commission has issued the enclosed Amendment No. 6 to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. This amendment consists of changes to the Technical Specifications (TSs) in response to your application dated December 15, 1986, as amended February 10, 1987.

This amendment:

(1) Changes the reference to specification 3.7.9.1 in Definition 1.18, Fuel Handling Building (FHB) Integrity, to the correct referenced specification 3.7.7.1.

(2) Changes Table 3.8.4.1-1 to correctly identify the overcurrent protection device for circuit 1R25-B522X as OR25-S153-CB13 rather than 1R25-S153-CB13.

(3) Removes the words ". . . the Managers, Perry Plant Departments, approval for ". . . from specification 6.5.3.1.e which previously included the requirement that "Pursuant to 10 CFR 50.59, NRC approval of items involving unreviewed safety questions shall be obtained prior to the Managers, Perry Plant Departments, approval for implementation."

(4) Reflects that the number and locations of the instruments used to determine the drywell average air temperature have been increased from 6 to 17 when performing surveillance required by specification 4.6.2.6.

(5) Modifies the surveillance requirement of surveillance TS 4.5.1.e.2.c for the instrument air system low pressure alarm associated with the automatic depressurization system. It also deletes an obsolete footnote pertaining to the old high pressure alarm system.

(6) Modifies the opening setpoint surveillance requirement of specification 4.6.5.1.b.3 for the containment vacuum breaker isolation valve to allow for sensor loop inaccuracies and instrument drift between calibrations.

(7) Allows use of Unit 2 divisional batteries in specification 3.8.2.2 as alternative DC power sources for use in shutting down Unit 1.

Your December 15, 1986, application also requested an administrative change relating to corporate and staff organization charts. This request has been denied as discussed in our enclosed Safety Evaluation.

A copy of our Notice of Denial is also enclosed. A Notice of Issuance will be included in the Commission's next biweekly Federal Register Notice.

Sincerely,

Martin J. Virgilio

Martin J. Virgilio, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Enclosures:
1. Amendment No. 6 to License No. NPF-58
2. Safety Evaluation
3. Notice of Denial

cc w/enclosures:
See next page

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Sincerely,

/S/

Martin J. Virgilio, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

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

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

AMENDMENT TO FACILITY OPERATING LICENSE

Amendment No. 6
License No. NPF-58

1. The Nuclear Regulatory Commission (the Commission) has found that:

   A. The application for amendment by Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) dated December 15, 1986, as amended February 10, 1987, 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 I;

   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-58 is hereby amended to read as follows:

Technical Specifications

The Technical Specifications contained in Appendix A and the Environmental Protection Plan contained in Appendix B, as revised through Amendment No. 6 are hereby incorporated into this license. Cleveland Electric Illuminating Company shall operate the facility in accordance with the Technical Specifications and the Environmental Protection Plan.

3. This license amendment is effective as of its date of issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Martin J. Virgilio

Martin J. Virgilio, Acting Director
Project Directorate III-1
Division of Reactor Projects - III, IV, V
& Special Projects

Attachment:
Changes to the Technical
Specifications

Date of Issuance: June 9, 1987

ATTACHMENT TO LICENSE AMENDMENT NO. 6

FACILITY OPERATING LICENSE NO. NPF-58

DOCKET NO. 50-440

Replace the following pages of the Appendix "A" Technical Specifications with the attached pages. The revised pages are identified by Amendment number and contain vertical lines indicating the area of change. Overleaf page(s) provided to maintain document completeness.

Remove	Insert
1-4	1-4
3/4 5-5	3/4 5-5
3/4 6-21	3/4 6-21
3/4 6-41	3/4 6-41
3/4 8-16	3/4 8-16
3/4 8-24	3/4 8-24
6-15	6-15

DRYWELL INTEGRITY (continued)

f. The suppression pool is in compliance with the requirements of Specification 3.6.3.1.

g. The sealing mechanism associated with each drywell penetration; e.g., welds, bellows or O-rings, is OPERABLE.

$\bar{E}$-AVERAGE DISINTEGRATION ENERGY

1.12 $\bar{E}$ shall be the average, weighted in proportion to the concentration of each radionuclide in the reactor coolant at the time of sampling, of the sum of the average beta and gamma energies per disintegration, in MeV, for isotopes, with half lives greater than 15 minutes, making up at least 95% of the total non-iodine activity in the coolant.

EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME

1.13 The EMERGENCY CORE COOLING SYSTEM (ECCS) RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its ECCS actuation setpoint at the channel sensor until the ECCS equipment is capable of performing its safety function, i.e., the valves travel to their required positions, pump discharge pressures reach their required values, etc. Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME

1.14 The END-OF-CYCLE RECIRCULATION PUMP TRIP SYSTEM RESPONSE TIME shall be that time interval to complete suppression of the electric arc between the fully open contacts of the recirculation pump circuit breaker from initial movement of the associated:

a. Turbine stop valves, and
b. Turbine control valves.

The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

FRACTION OF LIMITING POWER DENSITY

1.15 The FRACTION OF LIMITING POWER DENSITY (FLPD) shall be the LHGR existing at a given location divided by the specified LHGR limit for that bundle type.

FRACTION OF RATED THERMAL POWER

1.16 The FRACTION OF RATED THERMAL POWER (FRTP) shall be the measured THERMAL POWER divided by the RATED THERMAL POWER.

FREQUENCY NOTATION

1.17 The FREQUENCY NOTATION specified for the performance of Surveillance Requirements shall correspond to the intervals defined in Table 1.1.

FUEL HANDLING BUILDING INTEGRITY

1.18 FUEL HANDLING BUILDING (FHB) INTEGRITY shall exist when:

a. The doors in each access to the 620 foot elevation of the FHB are closed, except for normal entry and exit.

b. The FHB railroad track door is closed.

c. The fuel handling area floor hatches are in place.

d. The FHB ventilation system is in compliance with Specification 3.7.7.1.

e. The shield blocks are installed adjacent to the Shield Building.

GASEOUS RADWASTE TREATMENT (OFFGAS) SYSTEM

1.19 The GASEOUS RADWASTE TREATMENT (OFFGAS) SYSTEM is the system designed and installed to reduce radioactive gaseous effluents by collecting primary coolant system offgasses from the main condenser evacuation system and providing for delay or holdup for the purpose of reducing the total radioactivity prior to release to the environment.

IDENTIFIED LEAKAGE

1.20 IDENTIFIED LEAKAGE shall be:

a. Leakage into collection systems, such as pump seal or valve packing leaks, that is captured and conducted to a sump or collecting tank, or

b. Leakage into the drywell atmosphere from sources that are both specifically located and known either not to interfere with the operation of the leakage detection systems or not to be PRESSURE BOUNDARY LEAKAGE.

ISOLATION SYSTEM RESPONSE TIME

1.21 The ISOLATION SYSTEM RESPONSE TIME shall be that time interval from when the monitored parameter exceeds its isolation actuation setpoint at the channel sensor until the isolation valves travel to their required positions. Times shall include diesel generator starting and sequence loading delays where applicable. The response time may be measured by any series of sequential, overlapping or total steps such that the entire response time is measured.

e. For the ADS by:

1. At least once per 31 days, performing a CHANNEL FUNCTIONAL TEST of the safety related instrument air system low pressure alarm system.

2. At least once per 18 months:

   a) Performing a system functional test which includes simulated automatic actuation of the system throughout its emergency operating sequence, but excluding actual valve actuation.

   b) Manually** opening each ADS valve when the reactor steam dome pressure is greater than or equal to 100 psig* and observing that either:

      1) The control valve or bypass valve position responds accordingly, or

      2) There is a corresponding change in the measured steam flow, or

      3) The safety relief valve discharge pressure switch indicates the valve is open.

   c) Performing a CHANNEL CALIBRATION of the safety related instrument air system low pressure alarm system and verifying an alarm setpoint of $\geq$ 155 psig with an allowable value of $\geq$ 151.9 psig on decreasing pressure.

*The provisions of Specification 4.0.4 are not applicable provided the surveillance is performed within 12 hours after reactor steam pressure is adequate to perform the test.

**ADS solenoid energization shall be used alternating between ADS Division 1 and ADS Division 2.

3/4 5.2 ECCS - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.5.2 At least two of the following shall be OPERABLE:

a. The low pressure core spray (LPCS) system with a flow path capable of taking suction from the suppression pool and transferring the water through the spray sparger to the reactor vessel.

b. Low pressure coolant injection (LPCI) subsystem "A" of the RHR system with a flow path capable of taking suction from the suppression pool and transferring the water to the reactor vessel.

c. Low pressure coolant injection (LPCI) subsystem "B" of the RHR system with a flow path capable of taking suction from the suppression pool and transferring the water to the reactor vessel.

d. Low pressure coolant injection (LPCI) subsystem "C" of the RHR system with a flow path capable of taking suction from the suppression pool and transferring the water to the reactor vessel.

e. The high pressure core spray (HPCS) system with a flow path capable of taking suction from one of the following water sources and transferring the water through the spray sparger to the reactor vessel:

   1. From the suppression pool, or

   2. When the suppression pool level is less than the level required by Specification 3.5.3.b, from the condensate storage tank containing at least 150,000 available gallons of water, equivalent to a level of 47% (220,000 gallons of water).

APPLICABILITY: OPERATIONAL CONDITION 4 and 5*.

ACTION:

a. With one of the above required subsystems/systems inoperable, restore at least two subsystems/systems to OPERABLE status within 4 hours or suspend all operations that have a potential for draining the reactor vessel.

b. With both of the above required subsystems/systems inoperable, suspend CORE ALTERATIONS and all operations that have a potential for draining the reactor vessel. Restore at least one subsystem/system to OPERABLE status within 4 hours or establish PRIMARY CONTAINMENT INTEGRITY within the next 8 hours.

c. With an ECCS discharge line "keep filled" pressure alarm instrumentation channel associated with an above required ECCS system inoperable, perform surveillance 4.5.1.a.1 at least once per 24 hours.

---

*The ECCS is not required to be OPERABLE provided that the reactor vessel head is removed, the cavity is flooded, the steam dryer storage/reactor well gate is removed, and water level in these upper containment pools is maintained within the limits of Specification 3.9.8 and 3.9.9.

CONTAINMENT SYSTEMS

DRYWELL AVERAGE AIR TEMPERATURE

LIMITING CONDITION FOR OPERATION

3.6.2.6 Drywell average air temperature shall not exceed 135°F.

APPLICABILITY: OPERATONAL CONDITIONS 1, 2 and 3.

ACTION:

With the drywell average air temperature greater than 135°F, reduce the average air temperature to within the limit within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

SURVEILLANCE REQUIREMENTS

4.6.2.6 The drywell average air temperature shall be the arithmetical average* of the temperatures at the following elevations# and shall be determined to be within the limit at least once per 24 hours:

	Elevation	Azimuth
a.	653'-8"	315°, 220°, 135°, 34°
b.	634'-0" - 640'-0"	340°, 308°, 215°, 145°, 30°, 20°
c.	604'-6" - 609'-8"	310°, 308°, 253°, 212°, 150°, 140°, 80°

*At least one reading from each elevation for an arithmetical average.

#The temperature at each elevation shall be the arithmetical average of the temperatures obtained from all available instruments at that elevation.

3/4.6.3 DEPRESSURIZATION SYSTEMS

SUPPRESSION POOL

LIMITING CONDITION FOR OPERATION

3.6.3.1 The suppression pool shall be OPERABLE with the pool water:

a. Volume between 115,612 ft^3 and 118,548 ft^3 equivalent to a level between 18'0" and 18'6", and a

b. Maximum average temperature of 90°F except that the maximum average temperature may be permitted to increase to:

1. 105°F during testing which adds heat to the suppression pool.

2. 110°F with THERMAL POWER less than or equal to 1% of RATED THERMAL POWER.

3. 120°F with the main steam line isolation valves closed following a scram.

APPLICABILITY: OPERATIONAL CONDITIONS 1, 2 and 3.

ACTION:

a. With the suppression pool water level outside the above limits, restore the water level to within the limits within 1 hour or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. With the suppression pool average water temperature greater than 90°F, restore the average temperature to less than or equal to 90°F within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours, except, as permitted above:

1. With the suppression pool average water temperature greater than 105°F during testing which adds heat to the suppression pool, stop all testing which adds heat to the suppression pool and restore the average temperature to less than 90°F within 24 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

2. With the suppression pool average water temperature greater than:

a) 90°F for more than 24 hours and THERMAL POWER greater than 1% of RATED THERMAL POWER, be in at least HOT SHUTDOWN within 12 hours and in COLD SHUTDOWN within the next 24 hours.

b) 110°F, place the reactor mode switch in the Shutdown position and operate at least one residual heat removal loop in the suppression pool cooling mode.

4.6.5.1 Each containment vacuum breaker shall be:

a. Verified closed at least once per 24 hours.

b. Demonstrated OPERABLE:

1. At least once per 31 days by:

a) Cycling the vacuum breaker and isolation valve through at least one complete cycle of full travel.

b) Verifying the position indicator OPERABLE by observing expected valve movement during the cycling test.

2. At least once per 18 months by:

a) Verifying the pressure differential required to begin to open the vacuum breaker, from the closed position, to be $\leq$ 0.1 psid and to be fully open to be $\leq$ 0.2 psid (outside containment to containment), and

b) Verifying the position indicator OPERABLE by performance of a CHANNEL CALIBRATION .

3. By verifying the OPERABILITY of the vacuum breaker isolation valve differential pressure actuation instrumentation with the opening allowable value of $\geq$ 0.052 psid and $\leq$ 0.160 psid (containment to out ide containment) by performance of a:

a) CHANNEL CHECK at least once per 24 hours,

b) CHANNEL FUNCTIONAL TEST at least once per 31 days, and

c) CHANNEL CALIBRATION at least once per 18 months.

CONTAINMENT HUMIDITY CONTROL

LIMITING CONDITION FOR OPERATION

3.6.5.2 Containment average temperature and relative humidity shall be maintained above the curve shown in Figure 3.6.5.2-1.

APPLICABILITY: Whenever PRIMARY CONTAINMENT INTEGRITY is required for Specifications 3.6.1.1.1 and 3.6.1.1.2.

ACTION:

With the containment average temperature/relative humidity not within the limits for acceptable operation as shown in Figure 3.6.5.2-1:

a. In OPERATIONAL CONDITION 1, 2 or 3, restore the average temperature/relative humidity to within the limits for acceptable operation as shown in Figure 3.6.5.2-1 within 8 hours or be in at least HOT SHUTDOWN within the next 12 hours and in COLD SHUTDOWN within the following 24 hours.

b. At all other times, either:

    1. Maintain an unobstructed opening(s) in the containment that equals or exceeds the flow area provided by two open vacuum breakers, or

    2. Deactivate the containment spray by closing at least one valve in each containment spray supply header and deenergizing the power supply to its motor operator.

SURVEILLANCE REQUIREMENTS

4.6.5.2 Containment average temperature/relative humidity shall be verified to be within the limits for acceptable operation curve shown in Figure 3.6.5.2-1 at least once every 24 hours.

TABLE 4.8.2.1-1

BATTERY SURVEILLANCE REQUIREMENTS

	CATEGORY A(1)	CATEGORY B(2)	
Parameter	Limits for each designated pilot cell	Limits for each connected cell	Allowable(3) value for each connected cell
Electrolyte Level	>Minimum level indication mark, and ≤ ¼" above maximum level indication mark	>Minimum level indication mark, and ≤ ¼" above maximum level indication mark	Above top of plates, and not overflowing
Float Voltage	≥ 2.13 volts	≥ 2.13 volts(c)	> 2.07 volts
Specific Gravity(a)	≥ 1.200(b)* ≥ 1.195(b)**	≥ 1.195(b)* ≥ 1.190(b)**	Not more than .020 below the average of all connected cells
		Average of all connected cells ≥ 1.205(b)* ≥ 1.200(b)**	Average of all connected cells ≥ 1.195(b)* ≥ 1.190(b)**

(a) Corrected for electrolyte temperature and level.
(b) Or battery charging current is less than 2 amperes when on float charge.
(c) May be corrected for average electrolyte temperature.
(1) For any Category A parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that within 24 hours all the Category B measurements are taken and found to be within their allowable values, and provided all Category A and B parameter(s) are restored to within limits within the next 6 days.
(2) For any Category B parameter(s) outside the limit(s) shown, the battery may be considered OPERABLE provided that the Category B parameters are within their allowable values and provided the Category B parameter(s) are restored to within limits within 7 days.
(3) Any Category B parameter not within its allowable value indicates an inoperable battery.

*Division 1 and Division 2 battery.

**Division 3 battery.

D.C. SOURCES - SHUTDOWN

LIMITING CONDITION FOR OPERATION

3.8.2.2 As a minimum, Division 1 or Division 2, and, when the HPCS system is required to be OPERABLE, Division 3, of the D.C. electrical power sources shall be OPERABLE with:

a. Division 1 consisting of:
   1. 125 volt battery 1R42-S002 or 2R42-S002.
   2. 125 volt full capacity charger 1R42-S006 or 0R42-S007.

b. Division 2 consisting of:
   1. 125 volt battery 1R42-S003 or 2R42-S003.
   2. 125 volt full capacity charger 1R42-S008 or 0R42-S009.

c. Division 3 consisting of:
   1. 125 volt battery 1E22-S005 or 2E22-S005.
   2. 125 volt full capacity charger 1E22-S006 or 0R42-S011.

APPLICABILITY: OPERATIONAL CONDITIONS 4, 5 and *.

ACTION:

a. With the Unit 1 and Unit 2 Division 1 batteries and/or both chargers of the above required Division 1 D.C. electrical power sources and the Unit 1 and Unit 2 Division 2 batteries and/or both chargers of the above required Division 2 D.C. electrical power sources inoperable, suspend CORE ALTERATIONS, handling of irradiated fuel in the fuel handling building or primary containment and operations with a potential for draining the reactor vessel.

b. With the Unit 1 and Unit 2 Division 3 batteries and/or both chargers of the above required D.C. electrical power sources inoperable, declare the HPCS system inoperable and take the ACTION required by Specification 3.5.2 and 3.5.3.

c. The provisions of Specification 3.0.3 are not applicable.

SURVEILLANCE REQUIREMENTS

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

*When handling irradiated fuel in the Fuel Handling Building or primary containment.

TABLE 3.8.4.1-1

CONTAINMENT PENETRATION CONDUCTOR
OVERCURRENT PROTECTIVE DEVICES

13.8 KV LOAD	OVERCURRENT PROTECTION	
	Primary	Secondary
1B33-C001A	L1106	1R22-S012
1B33-C001B	L1205	1R22-S013
120V LOAD OR CIRCUIT		
1B21-B760XB	1R25-S043-CB20	NA*
1B21-B756XB	1R25-S043-CB18	NA*
1B21-B758XB	1R25-S043-CB19	NA*
1B21-B754XB	1R25-S043-CB17	NA*
1B21-B752XB	1R25-S047-CB11	NA*
1B33-B1X (Sp. Htr.)	1R25-S093-CB7	NA*
1B33-B3X (Sp. Htr.)	1R25-S093-CB8	NA*
1B33-B5X (Sp. Htr.)	1R25-S097-CB5	NA*
1B33-B7X (Sp. Htr.)	1R25-S097-CB6	NA*
1B33-B9X (Sp. Htr.)	1R25-S093-CB9	NA*
1B33-B11X (Sp. Htr.)	1R25-S093-CB10	NA*
1B33-B13X (Sp. Htr.)	1R25-S097-CB7	NA*
1B33-B15X (Sp. Htr.)	1R25-S097-CB8	NA*
1C11-C1X	NA*	1H13-P653-CB1
1C41-B9XB (Sp. Htr)	1R25-S043-CB21	NA*
1E51-B3XB	1R25-S043-CB24	NA*
1E51-B1XB	1R25-S043-CB23	NA*
1F42-B3X (Sp. Htr.)	1R25-S097-CB3	NA*

*Protected by fuse.

TABLE 3.8.4.1-1 (Continued)

120V LOAD OR CIRCUIT	OVERCURRENT PROTECTION	
	Primary	Secondary
1G41-B1X	1R25-S077-CB1	NA*
1R25-B516X	0R25-S054-CB7	NA*
1R25-B517X	0R25-S054-CB13	NA*
1R25-B245X	1R25-S057-CB12	NA*
1P56-B1060X	1R25-S053-CB34	NA*
1P57-B3XB	1R25-S043-CB15	NA*
1R25-B522X	0R25-S153-CB13	NA*
1R25-B515X	1R25-S053-CB25	NA*
1M16-B7XB	1R25-S047-CB1	NA*
1M16-B9XB	1R25-S047-CB3	NA*
1M16-B17XB	1R25-S047-CB5	NA*
1M16-B19XB	1R25-S047-CB6	NA*
1E12-B3XB	1R25-S047-CB7	NA*
1E12-B7XB	1R25-S047-CB8	NA*
1E12-B11XB	1R25-S047-CB9	NA*
1E12-B15XB	1R25-S047-CB10	NA*

*Protected by fuse.

ACTIVITIES (Continued)

d. Sections responsible for reviews, including cross-disciplinary reviews, performed in accordance with Specifications 6.5.3.1a., and 6.5.3.1c., shall be designated in writing by PORC and approved by the appropriate Manager, Perry Plant Department. The individual(s) performing the review shall meet or exceed the qualification requirements of appropriate section(s) of ANSI N18.1-1971;

e. Each review shall include a determination pursuant to 10 CFR 50.59 of whether or not the potential for an unreviewed safety question exists. If such a potential does exist, a safety evaluation per 10 CFR 50.59 to determine whether or not an unreviewed safety question is involved shall be performed. Pursuant to 10 CFR 50.59, NRC approval of items involving unreviewed safety questions shall be obtained prior to implementation; and

f. The Plant Security Plan and Emergency Plan, and implementing instructions, shall be reviewed at least once per 12 months. Recommended changes to the implementing instructions shall be approved by the Manager, Perry Plant Technical Department. Recommended changes to the Plans shall be reviewed pursuant to the requirements of Specifications 6.5.1.6 and 6.5.2.7 and approved by the Manager, Perry Plant Technical Department. NRC approval shall be obtained as appropriate.

6.6 REPORTABLE EVENT ACTION

6.6.1 The following actions shall be taken for REPORTABLE EVENTS:

a. The Commission shall be notified pursuant to the requirements of Section 50.72 to 10 CFR Part 50, and a report submitted pursuant to the requirements of Section 50.73 to 10 CFR Part 50, and

b. Each REPORTABLE EVENT shall be reviewed by the PORC and the results of the review submitted to the NSRC and the Vice President - Nuclear Group.

6.7 SAFETY LIMIT VIOLATION

6.7.1 The following actions shall be taken in the event a Safety Limit is violated:

a. The NRC Operations Center shall be notified by telephone as soon as possible and in all cases within 1 hour. The Vice President - Nuclear Group and the NSRC shall be notified within 24 hours.

b. A Safety Limit Violation Report shall be prepared. The report shall be reviewed by the PORC. This report shall describe (1) applicable circumstances preceding the violation, (2) effects of the violation upon unit components, systems, or structures, and (3) corrective action taken to prevent recurrence.

c. The Safety Limit Violation Report shall be submitted to the Commission, the NSRC, and the Vice President - Nuclear Group within 30 days of the violation.

d. Critical operation of the unit shall not be resumed until authorized by the Commission.

6.8 PROCEDURES/INSTRUCTIONS AND PROGRAMS

6.8.1 Written procedures/instructions shall be established, implemented, and maintained covering the activities referenced below:

a. The applicable procedures recommended in Appendix A of Regulatory Guide 1.33, Revision 2, February 1978.

b. The applicable procedures required to implement the requirements of NUREG-0737 and supplements thereto.

c. Security Plan implementation.

d. Emergency Plan implementation.

e. PROCESS CONTROL PROGRAM implementation.

f. OFFSITE DOSE CALCULATION MANUAL implementation.

g. Radiological Environmental Monitoring Program implementation.

h. Fire Protection Program implementation.

6.8.2 Each administrative procedure of Specification 6.8.1, and changes thereto, shall be reviewed by the PORC and shall be approved by the Managers, Perry Plant Departments, prior to implementation. All procedures/instructions shall be reviewed periodically as set forth in administrative procedures.

6.8.3 The following programs shall be established, implemented, and maintained:

a. Primary Coolant Sources Outside Containment

A program to reduce leakage from those portions of systems outside containment that could contain highly radioactive fluids during a serious transient or accident to as low as practical levels. The systems include the HPCS, CS, RHR, RCIC, LPCS, feedwater leakage control system, and post-accident sampling systems. The program shall include the following:

1. Preventive maintenance and periodic visual inspection requirements, and

2. Integrated leak test requirements for each system at refueling cycle intervals or less.

b. In-Plant Radiation Monitoring

A program which will ensure the capability to accurately determine the airborne iodine concentration in vital areas under accident conditions. This program shall include the following:

1. Training of personnel,

2. Procedures for monitoring, and

3. Provisions for maintenance of sampling and analysis equipment.

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

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

SUPPORTING AMENDMENT NO. 6 TO FACILITY OPERATING LICENSE NO. NPF-58

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

PERRY NUCLEAR POWER PLANT, UNIT NO. 1

DOCKET NO. 50-440

1.0 INTRODUCTION

By letter dated December 15, 1986, as amended February 10, 1987, Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company, and Toledo Edison Company (the licensees) requested an amendment to Facility Operating License No. NPF-58 for the Perry Nuclear Power Plant, Unit No. 1. The proposed amendment would make several editorial changes and corrections, and make two administrative changes, the first, to remove organization charts from the Technical Specifications (TSs) and instead incorporate them by reference from the FSAR, and the second, to delete the requirement that NRC approval of items involving unreviewed safety questions shall be obtained prior to licensee internal approval for implementation. The proposed amendment would also make several technical changes to the TSs: using Unit 2 divisional batteries as an alternate DC power source for Unit 1 shutdown, increasing the number and changing the location of drywell average air temperature instruments, changing the automatic depressurization system instrument air low pressure alarm setpoint, deleting an obsolete footnote, and changing the containment vacuum breaker isolation valve opening setpoint.

2.0 EVALUATION

The proposed change in Definition 1.18, Fuel Handling Building (FHB) Integrity regarding the correct reference to specification 3.7.7.1 vice 3.7.9.1 and the proposed change in Table 3.8.4.1-1 are administrative corrections of typographical errors and are, therefore, acceptable.

The proposed use of Unit 2 divisional batteries as an alternate DC power source for shutting down Unit 1 was specifically approved in section 16.2.15 of September 1986 Supplement No. 10 to the Safety Evaluation Report related to the operation of the Perry Nuclear Power Plant. The staff, therefore, finds this change to be acceptable.

The licensee has proposed to delete the organization charts that are presently included as Figures 6.2.1-1 and 6.2.2-1 and references to those figures in TSs 6.2.1 and 6.2.2. A related change would also revise the wording of TS 6.1.1. These revisions would simply reference the organization charts and text in Chapter 13 of the Perry FSAR. The staff is considering, as part of the generic Technical Specification Improvement Program, revising the Administrative Controls, including the possibility of deleting the organization charts from Section 6. The staff has not completed its work in this area. Therefore, since 10 CFR 50.36(c)(5) requires that the TSs contain provisions relating to the organization of the licensee, the organization charts shall remain in the Perry TSs and the licensee's proposed changes are unacceptable.

The licensee has proposed to delete the requirement, in TS 6.5.3.1.e., that NRC approval of items involving unreviewed safety questions shall be obtained prior to approval by Perry department managers. The deletion is acceptable because NRC regulations do not include such a requirement; 10 CFR 50.59 requires NRC approval prior to implementation, not prior to approvals by licensee internal organizations.

The licensee has proposed changes to the number and location of drywell temperature instrumentation as contained on TS page 3/4 6-21. Perry Nuclear Plant TS 3.6.2.6 requires the drywell average air temperature to be below 135°F. This temperature is used as the initial drywell temperature value for design basis loss of coolant accident (LOCA) calculations that demonstrate the peak drywell temperature will not exceed a design peak temperature of 330°F. Current TS surveillance Section 4.6.2.6 lists six instrument locations, two per elevation at three different elevations. The requested change would increase the total number of instrument locations from 6 to 17.

The proposed 17 instrument locations are located on three different elevations; four at elevation 653'-8", six at elevations from 634'-0" to 640'-0", and seven at elevations from 604'-6" to 609"-8". The proposed TS (3/4.6.2.6) states that the drywell average air temperature shall be the arithmetical average of the measured temperatures at the above specified three elevations. At least one reading from each elevation is to be used for an arithmetical average. The temperature at each elevation shall be the arithmetical average of the temperatures obtained from all available instruments at that elevation. These provisions would provide adequate assurance that the final value will represent an average containment temperature without placing undue weight on values from the lower elevations because of the relatively large number of instruments placed there. Moreover, additional instrumentation means a better representation of the drywell. Therefore, the proposed change is acceptable.

The licensee has proposed to change the surveillance requirement for the opening setpoint of the containment vacuum breaker isolation valve. Originally the TS read:

"4.6.5.1 Each containment vacuum breaker shall be:

b. Demonstrated OPERABLE:

3. By verifying the OPERABILITY of the vacuum breaker isolation valve differential pressure actuation instrumentation with the opening setpoint of greater than or equal to 0.0 psid and less than or equal to 0.112 psid (containment to outside containment) by performance of a . . . ."

The original proposed modification to the TS was to change the words "opening setpoint . . . 0.112 psid" to:

> "opening setpoint of greater than or equal to 0.100 psid with an allowable value of greater than or equal to 0.052 psid"

The staff reviewed the proposed modification and was concerned that there was no upper limit on the opening setpoint of the valve. The staff concern was primarily with the fact that the proposed modification could potentially allow the outboard containment isolation valve to be in the open position while there was a high positive containment pressure present.

As a result of the staff concern, the licensee (letter of February 10, 1987) revised the proposed modification to read:

> "opening allowable value of greater than or equal to 0.052 psid and less than or equal to 0.160 psid"

The net effect of this revision is to shift the range of differential pressures under which the valve opens upwards about 0.05 psi. The licensee has stated that this shift is necessary to be in agreement with the assumptions used in the accident analysis presented in Chapter 6 of the Perry FSAR. This shift also maintains the margin necessary for instrument drift and other system inaccuracies.

The staff agrees with the licensee's rationale for shifting the opening range of pressures to slightly higher values. The lower value is the value used in the accident analysis to calculate offsite doses. The upper value was selected to account for instrument drift. Also, the use of the agreed upon modification will not result in the potential for increased offsite releases from all other accidents because the valve closure due to positive pressure will remain unchanged. The staff therefore concludes that the proposed change is acceptable.

The licensee has proposed to modify the surveillance requirement for the low pressure alarm setpoint for the Automatic Depressurization System (ADS) air supply. Technical Specification 4.5.1.e.2.c presently requires that a channel calibration be performed on the safety-related instrument air system low pressure alarm system and verifying an alarm trip setpoint of greater than or equal to 155 psig on decreasing pressure. The licensee has proposed to modify the acceptance criteria by adding an allowable value of greater than or equal to 151.9 psig to the surveillance requirement acceptance criteria such that the proposed surveillance requirement would be to verify an alarm trip setpoint of greater than or equal to 155 psig with an allowable value of greater than or equal to 151.9 psig on decreasing pressure. The licensee provided additional information related to their request by teleconference with the staff on May 19, 1987. The licensee stated that the total instrument inaccuracy for the low pressure alarm setpoint was 1.6 psig. Further, the licensee stated that line losses in the instrument air lines would be less than .27 psig. Thus, an allowable value of greater than or equal to 151.9 psig on decreasing pressure using conservative assumptions with respect to instrument inaccuracy and line losses still yields an instrument air pressure greater than the 150 psig assumed in the Final Safety Analysis Report for operation of the ADS.

The licensee also proposed to delete a footnote on the alarm setpoint of the safety-related instrument air system. The footnote was required only while the low pressure alarm system was being installed. Following completion of the installation of the low pressure alarm system, the footnote is no longer required and no longer has applicability to the safety-related instrument air system alarm setpoint.

Based on the above, the staff finds the licensee's proposed changes with respect to Technical Specification 4.5.1.e.2.c to be acceptable.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves a change to a requirement with respect to the installation or use of a facility component located within the restricted area as defined in 10 CFR Part 20 and/or changes to surveillance requirements. The staff has determined that the amendment involves no significant increase in the amounts, and no significant change in the types of any effluents that may be released offsite and that there is no significant increase in individual or cumulative occupational radiation exposure. The Commission has previously issued a proposed finding that this amendment involves no significant hazards consideration and there has been no public comment on such finding. Accordingly, this amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(9). This amendment also involves changes in recordkeeping, reporting or administrative procedures or requirements. Accordingly, with respect to these items, the amendments meet the eligibility criteria for categorical exclusion set forth in 10 CFR §51.22(c)(10). Pursuant to 10 CFR §51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The staff has concluded, based on the considerations discussed above, that: (1) there is reasonable assurance that the health and safety of the public will not be endangered by operation in the proposed manner, and (2) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and the security nor to the health and safety of the public.

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Dated: June 9, 1987

U.S. NUCLEAR REGULATORY COMMISSION

CLEVELAND ELECTRIC ILLUMINATING COMPANY, ET AL.

DOCKET NO. 50-440

NOTICE OF DENIAL OF AMENDMENT TO FACILITY OPERATING LICENSE AND OPPORTUNITY FOR A HEARING

The U.S. Nuclear Regulatory Commission (the Commission) has denied in part a request by the licensees for amendment to Facility Operating License No. NPF-58, issued to Cleveland Electric Illuminating Company, Duquesne Light Company, Ohio Edison Company, Pennsylvania Power Company and Toledo Edison Company (the licensees), for operation of the Perry Nuclear Power Plant, Unit No. 1 (the facility) located in Lake County, Ohio.

The amendment, as proposed by the licensees, would consist of the following changes to the Technical Specifications (Appendix A to Facility Operating License No. NPF-58):

(1) Reference to specification 3.7.9.1 in Definition 1.18, Fuel Handling Building (FHB) Integrity, would be changed to specification 3.7.7.1. This will correct a typographical error.

(2) Table 3.8.4.1-1 would be changed to correctly identify the overcurrent protection device for circuit 1R25-B522X as OR25-S153-CB13 rather than 1R25-S153-CB13.

(3) Charts of The Cleveland Electric Illuminating Company's corporate and unit organizations, Figures 6.2.1-1 and 6.2.2-1, would be deleted and references to them would be changed to indicate their locations in the Perry Final Safety Analysis Report (FSAR).

(4) The words ". . . the Managers, Perry Plant Departments, approval for . . ." would be removed from specification 6.5.3.1.e which presently includes the requirement that "Pursuant to 10 CFR 50.59, NRC approval of items involving unreviewed safety questions shall be obtained prior to the Managers, Perry Plant Departments, approval for implementation."

(5) The number and locations of the instruments used to determine the drywell average air temperature would be increased from 6 to 17 in order to obtain a more representative average air temperature when the surveillance required by specification 4.6.2.6 is performed.

(6) An allowable value of greater than or equal to 151.9 psig would be added to specification 4.5.1.e.2.c for surveillance of the automatic depressurization system (ADS). This specification requires, at least once per 18 months, performance of a channel calibration of the safety-related instrument air system low pressure alarm system and verifying an alarm setpoint of greater than or equal to 155 psig on decreasing pressure. In addition, this proposed change would delete an obsolete footnote pertaining to the high pressure alarm system which was replaced by the low pressure alarm system.

(7) Surveillance requirement 4.6.5.1.b.3 presently specifies that the opening setpoint for the containment vacuum breaker isolation valve shall be greater than or equal to 0.0 psid and less than or equal to 0.112 psid (containment to outside containment). The amendment would substitute 0.052 for 0.0 and 0.160 for 0.112 as the bounds for this setpoint.

(8) This change would identify the Unit 2 divisional batteries in Specification 3.8.2.2 as alternative DC power sources for use in shutting down Unit 1.

The licensee's application for the amendment was dated December 15, 1986, as amended February 10, 1987. Notice of consideration of issuance of the amendment was published in the FEDERAL REGISTER on March 12, 1987 (52 FR 7678).

The portion of the application which proposed deleting Figures 6.2.1-1 and 6.2.2-1 (corporate and unit organization charts) was denied. 10 CFR Section 50.36(c)(5) requires that the Technical Specifications contain provisions relating to the organization of the licensee. Since the Commission's effort as part of the generic Technical Specification Improvement Program to allow deletion of certain administrative controls is incomplete, this request is viewed as premature by the Commission and is denied.

The licensees were notified of the Commission's denial of this request by letter dated June 9, 1987. All other changes requested by the licensees' application have been approved by Amendment No. 6. Notice of issuance of Amendment No. 6 will be published in the Commission's regular biweekly FEDERAL REGISTER Notice.

By July 20, 1987, the licensees may demand a hearing with respect to the denial described above and any person whose interest may be affected by this proceeding may file a written petition for leave to intervene.

A request for a hearing or petition for leave to intervene must be filed with the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, Attention: Docketing and Service Branch, or may be delivered to the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., by the above date.

A copy of the petition should also be sent to the General Counsel-Bethesda, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, and to Jay Silberg, Esq., Shaw, Pittman, Potts & Trowbridge, 2300 N Street, N.W., Washington, D.C. 20037, attorney for the licensees.

For further details with respect to this action, see (1) the application for amendment dated December 15, 1986, as amended February 10, 1987, and (2) the Commission's Safety Evaluation issued with Amendment No. 6 to NPF-58 dated June 9, 1987, which are available for public inspection at the Commission's Public Document Room, 1717 H Street, N.W., Washington, D.C., and at the Perry Public Library, 3753 Main Street, Perry, Ohio 44081. A copy of item (2) may be obtained upon request addressed to the U.S. Nuclear

Regulatory Commission, Washington, D.C. 20555, Attention: Division of Reactor Projects - III, IV, V & Special Projects.

Dated at Bethesda, Maryland this 9th day of June, 1987.

FOR THE NUCLEAR REGULATORY COMMISSION

Timothy G. Colburn

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