

UNITED STATES
NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT
WASHINGTON, D.C. 20555

SSINS No.: 6870
Accessions No.:
7910250510

December 31, 1979

IE Information Notice No. 79-35

CONTROL OF MAINTENANCE AND ESSENTIAL EQUIPMENT

Description of Circumstances:

Enclosed is a copy of a recent enforcement action against Duguesne Light Company. A copy of this action is being forwarded to all utilities with a power reactor operating license or a construction permit. This is being done to apprise you of a serious condition which revealed an apparent weakness in facility control of maintenance and essential equipment.

You should review your existing procedures and control for independent verification of operability of redundant counterpart equipment when an essential component, subsystem, or system is determined inoperable. Operability is defined as follows:

A system, subsystem, train, component or device shall be OPERABLE or have OPERABILITY when it is capable of performing its specified function(s). Implicit in this definition shall be the assumption that all necessary attendant instrumentation, controls, normal and emergency electrical power sources, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related support function(s).

If you have any questions regarding this matter, please contact the Director of the NRC Regional Office in which your facilities are located. No written response to this IE Information Notice is required.

Enclosure:

Letter to Duguesne Light Company
from V. Stello, Jr., dtd. 12/5/79
w/Appendicies A, B and C

IE Information Notice No. 79-35
December 31, 1979

Enclosure

RECENTLY ISSUED
IE INFORMATION NOTICES

Information Notice No.	Subject	Date Issued	Issued To
79-35	Control of Maintenance and Essential Equipment	12/31/79	All holders of power reactor OLs and CPs.
79-34	Inadequate Design of Safety-Related Heat Exchangers	12/27/79	All holders of power reactor OLs and CPs
79-33	Improper Closure of Primary Containment Equipment Access Hatches	12/21/79	All holders of power reactor OLs and CPs
79-32	Separation of Electrical Cables for HPCI and ADS	12/21/79	All power reactor facilities holding OLs and CPs
79-31	Use of Incorrect Amplified Response Spectra (ARS)	12/13/79	All power reactor facilities holding OLs and CPs
79-30	Reporting of Defects and Noncompliances, 10 CFR Part 21	12/6/79	All power reactor facilities holding OLs and CPs and vendors inspected by LCVIP
79-29	Loss of NonSafety-Related Reactor Coolant System Instrumentation During Operation	11/16/79	All power reactor facilities holding OLs or CPs
79-28	Overloading of Structural Elements Due to Pipe Support Loads	11/16/79	All power reactor facilities with an OL or CP
79-27	Steam Generator Tube Ruptures At Two PWR Facilities	11/16/79	All power reactor facilities holding OLs and CPs
79-12A	Attempted Damage To New Fuel Assemblies	11/9/79	All Fuel Facilities, research reactors, and power reactors with an OL or CP
79-26	Breach of Containment Integrity	11/5/79	All power reactor facilities holding OLs and CPs
79-25	Reactor Trips At Turkey Point Units 3 And 4	10/1/79	All power facilities with an OL or a CP
79-24	Overpressurization Of Containment Of A PWR Plant After A Main Steam Line Break	10/1/79	All power reactor facilities with a CP

Docket No. 50-334

December 5, 1979

Duquesne Light Company
ATTN: Mr. Stanley G. Schaeffer
President
435 Sixth Avenue
Pittsburgh, Pennsylvania 15219

Gentlemen:

On November 27, 1979, the Beaver Valley Power Station, Unit 1, was operated for about two (2) hours in a condition which exceeded the Limiting Conditions for Operation.

This matter was brought to the attention of our inspector at your facility in a timely fashion, and your subsequent action to correct the condition was expeditious. Nevertheless, this condition rendered a part of the emergency core cooling system (ECCS) unavailable for automatic start and injection of coolant into the reactor coolant system (RCS) if the need had occurred concurrent with the loss of offsite power (the design basis). This unavailability of ECCS constitutes a serious matter which reveals an apparent weakness in your control of maintenance and essential equipment. Therefore, we propose to impose a civil penalty for the item of noncompliance set forth in Appendix A to this letter in the amount of \$5,000. Appendix B is a Notice of Proposed Imposition of Civil Penalties. You are required to respond to this letter and in preparing your response, you should follow the instructions in Appendices A and B.

In addition to the civil penalty, we are issuing the enclosed Order (Appendix C) effective immediately. This Order requires that your administrative control of licensed activities involving operating and maintenance of safety equipment verifies availability of all required equipment when a counterpart is removed from an operable status. This Order further requires that you formally review and report your actions to prevent recurrence. It also requires that you meet publicly on January 25, 1980, with the Director, Office of Inspection and Enforcement, at a location near the Beaver Valley Power Station, to discuss your evaluation of this condition and your corrective actions to prevent recurrence. We will inform you of the location and time of the meeting.

In accordance with Section 2.790 of the NRC's "Rules of Practice", Part 2, Title 10, Code of Federal Regulations, a copy of this letter and its enclosures will be placed in the Commission's Public Document Room.

Sincerely,

Victor Stello, Jr.
Director
Office of Inspection
and Enforcement

Enclosure:

1. Appendix A, Notice of Violation
2. Appendix B, Notice of Proposed
Imposition of Civil Penalties
3. Appendix C, Order Modifying License

cc: C. N. Dunn, Vice President, Operations Division
F. Bissert, Technical Assistant Nuclear
R. Washabaugh, QA Manager
J. Werling, Station Superintendent
G. Moore, General Superintendent,
J. J. Carey, Nuclear Technical Assistant
R. Martin, Nuclear Engineer

APPENDIX A

NOTICE OF VIOLATION

Duquesne Light Company
Pittsburgh, Pennsylvania 15219

Docket No. 50-334
License No. DPR 66

This refers to the inspection conducted by the NRC Resident Inspector at the Beaver Valley Power Station, Unit 1, of activities authorized by NRC License No. DPR 66.

During the inspection conducted on November 27, 1979, the following item of noncompliance was identified.

Technical Specification 3.5.2 states that with the plant in Mode 1 (Power Operation), two separate and independent ECCS subsystems shall be operable, and further states in section 3.5.2.c that each subsystem shall include an operable flow path capable of taking suction from the refueling water storage tank upon initiation of a safety injection signal.

Technical Specification 1.6 defines "operable" to include the assumption that all necessary attendant instrumentation, controls, electric power, cooling or seal water, lubrication or other auxiliary equipment that are required for the system, subsystem, train, component or device to perform its function(s) are also capable of performing their related safety function(s).

Contrary to the above, on November 27, 1979, from approximately 8:30 a.m. to 10:30 a.m., maintenance activities rendered both ECCS subsystems inoperable in that a) refueling water storage tank isolation valve MOV-CH-115D was closed and incapable of automatic opening in response to a safety injection signal, and b) refueling water storage tank isolation valve MOV-CH-115B, in the redundant subsystem, was closed, had no emergency power available, and thus was incapable of automatic opening in response to a safety injection signal if there had been a condition of loss of offsite power.

This violation had the potential for causing or contributing to an occurrence related to health and safety (Civil Penalty \$5,000).

APPENDIX B

NOTICE OF PROPOSED IMPOSITION OF CIVIL PENALTIES

Duquesne Light Company
Pittsburgh, Pennsylvania 15219

Docket No. 50-334
License No. DPR-66

This office has considered the enforcement options available to the NRC including administrative actions in the form of written notices of violation, civil monetary penalties, and orders pertaining to the modification, suspension or revocation of a license. Based on these considerations, we propose to impose civil penalties pursuant to Section 234 of the Atomic Energy Act of 1954, as amended, (42 USC 2282), and to 10 CFR 2.205 in the cumulative amount of Five Thousand Dollars (\$5,000) for the specific items of noncompliance set forth in Appendix A to the cover letter. In proposing to impose civil penalties pursuant to this section of the Act and in fixing the proposed amount of the penalties, the factors identified in the Statements of Consideration published in the Federal Register with the rule-making action which adopted 10 CFR 2.205 (36 FR 16894) August 26, 1971, and the "Criteria for Determining Enforcement Action," which was sent to NRC licensees on December 31, 1974, have been taken into account.

Duquesne Light Company may, within twenty (20) days of the receipt of this notice pay the civil penalties in the cumulative amount of Five Thousand Dollars (\$5,000) or may protest the imposition of the civil penalties in whole or in part by a written answer. Should Duquesne Light Company fail to answer within the time specified, this office will issue an order imposing the civil penalties in the amount proposed above. Should Duquesne Light Company elect to file an answer protesting the civil penalties, such an answer may (a) deny the items of noncompliance listed in the Notice of Violation in whole or in part, (b) demonstrate extenuating circumstances, (c) show error in the Notice of Violation, (d) show other reasons why the penalties should not be imposed. In addition, to protesting the civil penalties in whole or in part, such answer may request remission or mitigation of the penalties.

Any written answer in accordance with 10 CFR 2.205 should be set forth separately from the statement or explanation in reply pursuant to 2.201, but may incorporate by specific reference (e.g., giving page and paragraph numbers) to avoid repetition.

Duquesne Light Company's attention is directed to the other provisions of 10 CFR 2.205 regarding, in particular, failure to answer and ensuing orders; answer, consideration by this office, and ensuing orders; requests for hearings, hearings and ensuing orders; compromise, and collection.

Upon failure to pay any civil penalty due which has been subsequently determined in accordance with the applicable provisions of 10 CFR 2.205, the matter may be referred to the Attorney General, and the penalty, unless compromised, remitted, or mitigated, may be collected by civil action pursuant to Section 234.c of the Atomic Energy Act of 1954, as amended (42 USC 2282).

APPENDIX C

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of)

DUQUESNE LIGHT COMPANY)
(Beaver Valley Power Station, Unit 1))

Docket No. 50-334

ORDER MODIFYING LICENSE
EFFECTIVE IMMEDIATELY

I

The Duquesne Light Company (the "licensee") is the holder of Operating License DPR-66 (the "license") which authorizes operation of the Beaver Valley Power Station, Unit 1, at steady state reactor core power levels not in excess of 2652 megawatts thermal (rated power). The license was issued on January 30, 1976. The facility consists of a pressurized light water moderated and cooled reactor (PWR), located at the licensee's site in Beaver County, Pennsylvania, on the southern shore of the Ohio River.

II

On November 27, 1979, from about 6:30 AM to 1:20 PM while the reactor was operating at about 30% of rated power, Emergency Diesel Generator (EDG) 1 was out of service for routine maintenance. This EDG supplies emergency power to suction valve, MOV-CH-115B, in the line from the refueling water storage tank (RWST) to the High Pressure Safety Injection System (HPSIS) pumps. In addition to the EDG being out of service, resulting in loss of one Emergency Core Cooling System (ECCS) flow path, as described above, the redundant suction valve, MOV-CH-115D, was removed from service for maintenance which resulted in loss of the redundant ECCS flow path from the RWST from 8:30 a.m. to 10:30 a.m. During this time the facility was operated in noncompliance with the Limiting Condition for Operation specified in Technical Specification 3.5.2.c. This condition resulted from inadequate control of maintenance activities and its

occurrence suggests that the licensee has not adopted appropriate controls to assure that maintenance activities do not defeat required safety features. This in turn undermines the basis for determining that there is reasonable assurance that redundant safety features will function under design basis conditions. In view of the significance to safety of adequate controls to assure that maintenance activities do not defeat required safety features, I have determined that the public health, safety, or interest requires, effective immediately, modification of License No. DPR-66 as stated in Part III of this Order.

III

Accordingly, pursuant to the Atomic Energy Act of 1954, as amended, and the Commission's regulations in 10 CFR Parts 2 and 50, License DPR-66 is modified as follows:

- (1) Administrative Procedures shall be adopted and implemented to require redundant independent verification of the operability of the remaining engineered safety features whenever any safety system, or subpart thereof, is intentionally removed from service.
- (2) A detailed review of existing procedures and controls shall be performed to assure that limiting conditions for operation are not defeated by maintenance or other activities.
- (3) A report of the administrative procedures required by paragraph (1) above and the detailed review required by paragraph (2) above shall be submitted by January 11, 1980, to the Director of NRC's Region I office.

- (4) The licensee shall meet with the Director, Office of Inspection and Enforcement, on or before January 25, 1980, in a meeting open to the public in the vicinity of the Beaver Valley site to describe how the above requirements will be implemented. The Director, Region I, will inform the licensee at least one week in advance of the specific time and location of the meeting.

IV

The licensee, or any other person who has an interest affected by this Order, may, within twenty-five days of the date of this Order, request a hearing. A request for a hearing shall be addressed to the Director, Office of Inspection and Enforcement, U.S.N.R.C., Washington, D.C. 20555. If a hearing is requested by the licensee or an interested person, the Commission will issue an Order designating the time and place of hearing. Such a request for hearing SHALL NOT STAY THE IMMEDIATE EFFECTIVENESS OF THIS ORDER.

Resumption of operation on terms consistent with this Order is not stayed by the pendency of any proceeding on this Order. In the event that a need for further enforcement action becomes apparent, either in the course of any proceeding on this Order or at any other time, the Director will take appropriate action.

V

In the event the licensee or any other interested person requests a hearing as provided above and a hearing is held, the issues to be considered at such a hearing shall be:

- (1) whether the facts set forth in Part II of this Order are correct;
and,
- (2) whether this Order should be sustained.

FOR THE NUCLEAR REGULATORY COMMISSION

Victor Stello, Jr.
Director
Office of Inspection and
Enforcement

Dated at Bethesda, Maryland
this 5th day of December, 1979.