

APPENDIX A

NOTICE OF VIOLATION

Duquesne Light Company
Beaver Valley Power Station, Unit 2

Docket No. 50-412
License No. CPPR-105

As a result of the Construction Team Inspection conducted on March 18-29, 1985, and in accordance with the NRC Enforcement Policy (10 CFR 2, Appendix C) published in the Federal register Notice on March 8, 1984 (49 FR 8583), the following violations were identified:

- A. 10 CFR 50, Appendix B, Criterion V states in part that "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings...."

- (1) Duquesne Light Company Site Quality Control Manual Procedure No. 4.4 titled "Nonconformance and Disposition Reports," paragraph 5.3.3 states "Work on a particular activity shall be discontinued upon the issuance of an N&D if continued work could cause damage, prevent further inspections, or prevent remedial action."

Contrary to the above, the inspector witnessed the continuation of a bulk cable pull consisting of twenty three (23) cables (2HCSAOC606, 2QSSAOC003, 2RSSAOC011,...). This pull included seven (7) cables that were kinked and one (1) which had three (3) longitudinal cuts in the jacket. These eight (8) cables were identified as nonconforming by Site Quality Control on March 22, 1985 and later pulled on March 25, 1985. This continued work could have caused damage to or prevented remedial action for these cables.

- (2) The Electrical Installation Specification, 2BVS-931, section 3.2.1.14 states, "The minimum bending radii shall not be less than the bending radius given in cable specifications for each table."

Contrary to the above, two instances of minimum bending radius violations were identified by the inspectors as follows:

- Cables 2FPWAOK600 and 2FPWAOK601 located in junction box 2JB*5012 were in violation of their minimum bend radius criteria of less than 2.1 inches. The measured value was approximately 1.0 inch.
- Cable 2SISBPH301, which powers safety injection pump 2SIS*P21B was coiled and hanging overhead by a rope, creating a minimum bend radius violation of less than the specified eleven (11) inches. The measured value was approximately ten inches.

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- (3) The Electrical Installation Specification, 2BVS-931, Page 3-35 lines 8 and 9 states in part that, "all cables installed in trays shall be protected against mechanical damage."

Contrary to the above, cables were damaged in cable raceway No. 2TC138P. These cables were not protected from mechanical damage as evidenced by cables exiting the raceway at support no. QC93 were in contact with the sharp edge of the raceway siderail causing an indentation in the cable cover to 50% of its thickness.

The above are collectively a severity IV violation (Supplement II).

- B. 10 CFR 50, Appendix B, Criterion XVII states in part that, "sufficient records shall be maintained to furnish evidence of activities affecting quality... Records shall be identifiable and retrievable."

The Duquesne Light Company Quality Assurance Manual Section 17.3 states in part that "... records are required to be maintained for the life of a particular item" and in Section 17.4.2 it states in part that "... the Architect Engineer/Construction shall develop and maintain a Records Management System which will ... store records in a readily identifiable and easily retrievable manner ..."

Contrary to the above records were not maintained or retrievable to furnish evidence that calculations to support pulling of electrical cable, an activity affecting quality, properly considered sidewall pressure.

This is a severity IV violation (Supplement II).

- C. 10 CFR 50, Appendix B, Criterion V states in part that, "Activities affecting quality shall be prescribed by documented ... procedures ... and shall be accomplished in accordance with these ... procedures..."

- (1) Procedure 2BVSM-83 Section 4, requires that corrections/errors, changes/additions be crossed with a line, initialed and dated by person making notation.

Contrary to the above, engineering documents in the document review group were found with corrections and deletions that were not properly initialed and dated. In addition, corrections and deletions were made by QC personnel on vendor documentation without the date or initials of the person making the notation.

- (2) Procurement specification 2BVS-636, Page 2-6 lines 38-43 requires that "seller submit a certificate of compliance which will be stamped and signed by a Registered Professional Engineer with the statement "that he has seen and reviewed the adequacy of the method for establishing that the seismic design requirements have been met.

Contrary to the above, a vendor test report was accepted based on the vendor Professional Engineer statement that the test results "... appear to conform to seismic requirements."

- (3) Procedure TP-2 Section 4.3 for Qualification and Certification states "the Director or Assistant Director/QC shall certify inspection/testing personnel by his signature."

Contrary to the above, two QC inspectors were certified by an individual other than the Director or Assistant Director/QC.

- (4) Procedure 2BVSM-202, Section 5.26.6 requires the Responsible Engineer using an approval stamp to initial and date use of the stamp on engineering documents.

Contrary to the above, the Responsible Engineer used an approval stamp on SDDF documents without the date and initials of the person authorized to use the stamp.

The above are collectively a severity level V violation (Supplement II).

Pursuant to the provisions of 10 CFR 2.201, Duquesne Light Company is hereby required to submit to this office within thirty days of the date of the letter which transmitted this Notice, a written statement or explanation in reply, including: (1) the corrective steps which have been taken and the results achieved; (2) corrective steps which will be taken to avoid further violations; and (3) the date when full compliance will be achieved. Where good cause is shown, consideration will be given to extending this response time.

Appendix B

Significant Observations

Duquesne Light Company
Beaver Valley Power Station, Unit No. 2

Docket No. 50-412
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As a result of the Construction Team Inspection Conducted on March 18-29, 1985 observations were made regarding weaknesses and strengths in your construction program. A weakness is a matter that if left uncorrected could lead to problems and/or noncompliance. A program strength is an approach to design, construction, or project management controls that is innovative, exceeds requirements and or is especially effective in accomplishing objectives.

A. The following areas are considered to be weaknesses in your program.

- (1) Duquesne Light Company (DLC) Project Management and the DLC Nuclear construction Division have undergone frequent changes during the past year. This is related to changes in the project from a construction-only phase to a construction-startup phase. Evidences of this are:

- DLC organizational changes in the past year have resulted in three different individuals handling the duties of NCD Project Manager (Section 3.3.1).
- The DLC Nuclear Construction Division Procedures Manual requires substantial revisions in the areas of Section 1.0, Management; Section 5.0, Construction; and Section 7.0, Project Control (Section 3.3.1).

- (2) Significant overall progress has been made in improving the interface between engineering and construction within the last year. However, there is evidence of lingering problems in the engineering construction interface for electrical construction activities. These include:

- A cable pull violation resulting from interface difficulties between engineering, construction and quality control (Section 7.3.2.1).
- During the inspection, S&W engineering personnel could not demonstrate that cable sidewall pressure was included in cable pull calculations. For a period of 30 days following the inspection S&W engineering personnel could not demonstrate that cable sidewall pressure was satisfactorily considered for all installed cable (Section 7.3.2.4).

- During the inspection S&W engineering personnel could not establish torquing requirements for bolted connections when terminating 4160 volt power cables to the load side of the circuit breaker stabs. Inconsistencies exist between electrical installation specification 2BVS-931, the cable terminating field construction procedure FCP-432, the inspection procedure IP85.2, and the Sargent Electric Company (SECO) drawings concerning the tightening of hardware (Section 7.3.2.3).

B. The following observations are considered to be strengths in your program.

- (1) The N5 program to assure that specified plant components meet the requirements of ASME Section III is a comprehensive program. Computer reports of N5 data provide for the status of relevant attributes to establish code requirements are met and components are installed and inspected to latest drawings. Identified problems are described and tracked until resolved (Section 6.3.4.8).
- (2) The SECO Measuring and Test Equipment issues station was found to provide a comprehensive and effective program for the control of SECO measuring and test equipment (Section 5.3.5).
- (3) The engineering audit EA-319 was found to be exceptionally technical in nature and scope. It involved S&W engineering specialists from several Divisions/Departments in addition to S&W Engineering Assurance personnel thus providing additional scope and technical depth. The audit responses were required to be thorough as evidenced by the depth of response, evaluation and followup actions. (Section 4.2.4.2)