

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

In the Matter of

) Docket No. 50-334

DUQUESNE LIGHT COMPANY -)

OHIO EDISON COMPANY)

PENNSYLVANIA POWER COMPANY)

(Beaver Valley Power Station)
Unit No. 1))

EXEMPTION

I.

The Duquesne Light Company, Ohio Edison Company and Pennsylvania Power Company (the licensees), are the holder of Facility Operating License No. DPR-66 (the license) which authorizes operation of the Beaver Valley Power Station, Unit No. 1. The license provides, among other things, that it is subject to all rules, regulations and Orders of the Nuclear Regulatory Commission (the Commission) now and hereafter in effect.

The facility comprises a pressurized water reactor at the licensee's site located at Beaver County, Pennsylvania.

II.

By letter dated July 14, 1983, Duquesne Light Company applied for an amendment to Operating License DPR-66 to change certain provisions of the Technical Specifications. Among these requested changes, one change would require an exemption from the Commission's regulation, described as follows:

Section III.D.2(b)(ii) of Appendix J, 10 CFR 50, states that "Air locks opened during periods when containment integrity is not required by the plant Technical Specifications shall be tested at the end of such periods at not less than Pa".

Duquesne Light Company has requested that the Beaver Valley Unit No. 1 Technical Specification 4.6.1.3 be changed to required an overall air lock leak rate test at Pa (38.3 psig) to be performed only "Upon completion of maintenance which has been performed on the air lock that could affect the air lock sealing capability". This requested Technical Specification change would constitute a deviation from the subject regulation.

Containment integrity is not required whenever the plant is in cold shutdown (Mode 5) or refueling (Mode 6). If an airlock is opened during Modes 5 and 6, Appendix J nevertheless requires that an overall air lock leakage test at not less than Pa be conducted prior to plant startup (i.e., entering Mode 4).

Airlocks typically do not have the capability to be pressurized internally to Pa and remain leaktight, without the installation of holding devices (strongbacks) or mechanical adjustment of the operating mechanisms of the inner doors. This is because the inner doors are designed to be seated with the application of pressure on the containment side of the door. During air lock testing, the test pressure exerted on the air lock side of the inner door causes the door to unseat. The use of strongbacks or mechanical adjustment of the door prevents the unseating of the inner door, allowing the test to proceed. The installation of strongback or performance of mechanical adjustments, however, is time-consuming (often taking several hours), may result in additional radiation exposure of operating personnel, and may cause

degradation of the operating mechanism of the inner door with consequent loss of reliability of the air lock. In addition, when conditions require frequent openings over a short period of time, testing at Pa after each opening becomes impractical (tests often take from 8 hours to several days), accelerates degradation of mechanical equipment, and increases personnel exposure to radiation.

Paragraph III.D.2(b)(i) requires that air locks be tested at Pa at 6-month intervals. Paragraph III.D.2(b)(iii) provides that air locks opened during periods when containment integrity is required, their seals must be tested within 3 days after opening. If both types of tests are current and no maintenance has been performed on the air lock, there should be no reason to expect the air lock to leak excessively just because it has been opened in Mode 5 or 6. Consequently, when no maintenance has been performed on an air lock, the tests prescribed by Paragraph III.D.2(b)(i) and III.D.2(b)(iii) should be sufficient; whenever maintenance has been performed on an airlock, the requirements of Paragraph III.D.2(b)(ii) must still be applicable.

III.

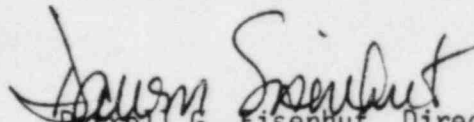
Accordingly, the Commission has determined that, pursuant to 10 CFR 50.12, an exemption is authorized by law and will not endanger life or property or the common defense and security and is otherwise in the public interest and hereby grants an exemption with respect to the requirements of 10 CFR 50, Appendix J, Section III.D.2(b)(ii):

The Beaver Valley Unit 1 Technical Specifications may be amended to require overall air lock leak test at Pa prior to establishing containment integrity and upon completion of air lock maintenance that could affect the air lock sealing capability.

Pursuant to 10 CFR 51.32, the Commission has determined that the issuance of the Exemption will have no significant impact on the environment (49 FR 32134).

This Exemption is effective upon issuance.

FOR THE NUCLEAR REGULATORY COMMISSION


Barrett G. Eisenhut, Director
for Operating Reactors
Division of Licensing

Dated at Bethesda, Maryland
this 19th day of November, 1984