

UNITED STATES OF AMERICA  
NUCLEAR REGULATORY COMMISSIONOFFICE OF NUCLEAR REACTOR REGULATION  
Harold R. Denton, Director

In the Matter of

PHILADELPHIA ELECTRIC COMPANY  
(Limerick Generating Station,  
Unit 1)}  
}  
}  
}Docket No. 50-352  
(10 CFR 2.206)DIRECTOR'S DECISION UNDER 10 CFR 2.206INTRODUCTION

On July 26, 1985, Robert L. Anthony on behalf of himself and Friends of the Earth filed with the Commission an "appeal" seeking Commission revocation of certain exemptions from NRC regulations issued by the NRC staff to the Philadelphia Electric Company (PECo or the licensee) for the Limerick Generating Station, Unit 1. Mr. Anthony also appealed the NRC staff's determination, as set forth in the staff's environmental assessment report dated June 27, 1985, that an environmental impact statement was not required for these actions and that the actions will not have a significant effect on the quality of the human environment. The Commission, by Order dated August 8, 1985, noted that NRC regulations do not provide for an appeal from the issuance of exemptions and referred the matter to the Director of Nuclear Reactor Regulation for appropriate action. By letter dated August 30, 1985 to Mr. Anthony, I acknowledged receipt of the Petition and informed him that it would be reviewed. The staff has treated Mr. Anthony's "appeal" as a request for action pursuant to 10 CFR 2.206.

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On August 8, 1985 Mr. Frank R. Romano, on behalf of himself and Air and Water Pollution Patrol (AWPP), filed a document with the Atomic Safety and Licensing Appeal Board which also addresses the same subjects as Mr. Anthony's July 26, 1985 letter. By Order dated August 12, 1985 the Appeal Board referred Mr. Romano's comments to the Office of Nuclear Reactor Regulation for appropriate action. In my acknowledgement letter to Mr. Anthony of August 30, 1985, I also noted that I would consider Mr. Romano's comments when responding to these matters. A notice was published in the Federal Register stating that Mr. Anthony's and Mr. Romano's requests were under consideration. See 50 Federal Register 36934 (September 10, 1985). My decision in this matter follows.

#### DISCUSSION

Petitioners seek the revocation of eight specific exemptions from NRC regulations that were granted with the issuance of the operating license<sup>1</sup> for the Limerick Generating Station, Unit 1. Petitioners also disagree that the NRC staff's environmental assessment<sup>2</sup> of the effects of these exemptions is sufficient and seek to have the NRC staff prepare an environmental impact statement on these issues.

The eight exemptions have previously been addressed at length in submittals by the licensee, by the NRC staff in the Safety Evaluation Report

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1 The initial operating license (License No. NPF-27) for Limerick Unit 1, restricted to five percent of rated power, was issued on October 26, 1984. The current full power operating license (License No. NPF-39), which supercedes the previously issued license, was issued on August 8, 1985.

2 Letter, Walter R. Butler, NRC, to E. G. Bauer, Jr., PECO, "Notice of Preparation of Environmental Assessment", dated June 27, 1985 and

(SER) and Supplements (SSERs) thereto, and in the NRC staff's environmental assessment mentioned above. All but one of them were addressed in a previous Director's Decision<sup>3</sup> pursuant to 10 CFR 2.206 in response to a Petition by Mr. Anthony and others. A summary of the exemptions is provided below:

- A. An exemption from General Design Criterion (GDC) 61 for the standby gas treatment system would allow a delay until the first refueling outage for installation of the portion of the system serving the refueling floor area. The principal basis for the exemption was an absence of irradiated fuel in the refueling zone area prior to the first refueling and the demonstrated leak tight integrity of the Unit 1 secondary containment zone which interfaces with the refueling zone.
- B. Further provisions for automatic containment isolation of the hydrogen recombiner lines, the reactor enclosure cooling water lines and the drywell chilled water lines are allowed to be completed prior to completion of the first refueling outage. This exemption from GDC 56 was based principally on the limited time of its effectiveness and the already existing features of the designs which provide isolation of these lines.
- C. An exemption from the requirements of GDC 19 for the remote shutdown system would allow reliance on manual actions in accordance with established procedures to control three pumps in the redundant (backup) train of remote shutdown system equipment until completion.

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subsequent publication in the Federal Register, 50 Fed. Reg. 27288 (July 2, 1985).

3 Director's Decision Under 10 CFR 2.206, DD-85-11, 22 NRC 149, 153-58 (July 29, 1985). The Commission did not overturn the Director's Decision.

of the first refueling outage. This exemption was based principally on the currently existing features of the design, which provide an interim alternate means of using both trains of the remote shutdown equipment if required, and the low probability of demand for use of the remote shutdown systems during the period of the exemption.

- D. The exemption from Appendix J for the containment airlock testing allows substitution of an airlock door seal test for an airlock chamber pressure test while the reactor is in a shutdown or refueling mode. The exemption was based principally on the adequacy of other testing required by Appendix J and the Unit 1 Technical Specifications which will ensure adequate containment leaktight integrity when required.
- E. Exemptions from Appendix J for the main steam isolation valve (MSIV) leakage testing allow the test to be conducted on the specific Unit 1 MSIV design in a manner which produces meaningful data. The exemption was based principally on facilitating a meaningful test and on the conclusion that the consequences of MSIV leakage at rates verified by testing in this manner have been acceptably analyzed and bounded in the Unit 1 safety analyses.
- F. The exemption from Appendix J for the traversing incore probe guide tube shear valves allows reliance upon surveillance provisions in lieu of in-place testing of the explosively actuated shear valves. The exemption was based principally on the adequacy of the surveillance measures as included in the Unit 1 Technical Specifications to provide assurance of containment isolability when required.
- G. The exemption from Appendix J for the residual heat removal system relief valves allows the initial local leak rate test on seven

valves to be delayed until the first refueling outage. The principal bases for the exemption were several features of the design which provided reasonable assurance against undue valve leakage during the period of the exemption.

- H. The exemption from 10 CFR 50.44 for containment inerting allows the initial inerting of the containment to be postponed from six months after initial criticality until a later milestone associated with the progress of the initial power ascension test program (PATP). The bases for the exemption were the provision of improved safety measures for personnel entering the containment during the PATP and maintenance of the same degree of protection against combustible gas inside containment as otherwise required by 10 CFR 50.44.

#### Petitioners' Challenge to the Bases for the Exemptions

Petitioners raise two central issues, the adequacy of the technical basis for the exemptions and whether an environmental impact statement should have been prepared for the issuance of the exemptions. As noted above the exemptions were previously addressed in the licensee's submittals and the staff's SER, SSER's, environmental impact appraisals and the earlier 10 CFR 2.206 decision on this subject. I shall respond here to the brief comments of the Petitioners on these issues.

#### Routine Releases

Mr. Anthony states that the impact from routine releases due to these exemptions has been overlooked, and he makes reference to other documents<sup>4</sup> in

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4 Robert L. Anthony, "Petition by Anthony/FOE to Reopen the Record on the Basis of New Information in Phila. Elec. Co.'s Semi-Annual Effluent Release Report, Feb. 1985", April 30, 1985 before the Atomic Safety and Licensing Board; Robert L. Anthony, "Anthony/FOE Brief in Support of Our Appeal of 6/7/85 from ASLB Mem. Order of 6/4/84", July 2, 1985 before the Atomic Safety and Licensing Appeal Board. The Licensing Board denied the April 30th petition in a Memorandum and Order dated June 4, 1985. The Board's action was followed by the filing of an appeal and the supporting July 2, 1985 brief by Mr. Anthony. The Appeal Board has not yet rendered a decision on the appeal.



support of this allegation. The features of the plant design and operation which are the subject of these exemptions are provided to mitigate the consequences of accidents. These features, as addressed by the exemption, are not employed in the day-to-day operation of the plant to control routine releases of effluents. No further basis for this allegation, other than reference to the two documents cited in footnote 4, is provided. The other documents which Mr. Anthony references, were submitted to the Licensing Board and the Appeal Board and addressed the licensee's semi-annual effluent release report and the offsite dose calculation manual, including the method used to calculate doses at the site boundaries. None of these matters bears any cognizable significance to the subject of the eight exemptions, and Mr. Anthony provides no information to connect them. In the absence of a specific factual basis, I need take no further action with respect to Mr. Anthony's claims concerning routine releases.<sup>5</sup> The matters raised in Mr. Anthony's April 30th and July 2nd filings are still before the Appeal Board for its consideration and, therefore, no further action by me pursuant to 10 CFR 2.206 is appropriate on these matters.<sup>6</sup> Accordingly I will not consider this issue further.

5 Philadelphia Electric Company (Limerick Generating Station, Unit 1 and 2), DD-82-13, 16 NRC 2115, 2121 (1982) and cases there cited; also DD-85-11, 22 NRC 149, 154 (1985).

6 General Public Utilities Nuclear Corp. (Three Mile Island Station, Units 1 and 2; Oyster Creek Nuclear Generating Station), CLI-85-4, 21 NRC 561 (1985); Pacific Gas and Electric Company (Diablo Canyon Nuclear Power Plant Units 1 & 2, CLI-81-6, 12 NRC 443, 444 (1981)). In all events the NRC staff has responded on May 28 and August 16, 1985 to the substance of Mr. Anthony's filings in the operating license proceeding and concluded that they fail to raise any significant safety issue.

### Effect of Exemptions on Accident Analyses

Mr. Anthony makes several brief assertions regarding the effect of the exemptions on accident analyses. He argues that, with respect to the standby gas treatment system (SGTS), a path is left open for the escape of radioactivity. However, this argument does not reflect the true circumstances of the situation, namely that there will be no irradiated fuel in the refueling area during the period of the exemption. Thus, the exemption permits no increased risk to the public of radioactive release which would require mitigation by the SGTS.

Mr. Anthony also asserts that waiting until the first refueling outage to install the redundant isolation valves in the hydrogen recombiner lines that penetrate the primary containment would also contribute to the risk of leakage to the refueling floor. This suggestion that the isolation provisions are inadequate for these lines during the period of the exemption does not recognize the basis for the staff's conclusions as presented in Supplement 1 to the Safety Evaluation Report (SSER). SSER No. 1 included a discussion of the capability of the existing single isolation valve in each line, the closed nature of the recombiner and its piping outside the containment boundary, the pressure and temperature rating of the recombiner system components, and other aspects of the design which support granting the exemption until the first refueling outage. Mr. Anthony provides no further information beyond a mere assertion that the recombiner system, in its present design configuration, could contribute to leakage to the refueling floor. For the reasons discussed above there would be no increased risk and thus, I see no basis to withdraw the exemption.

The Petition also makes several brief unsupported assertions that the use of the interim measures to control equipment in the redundant train of remote shutdown equipment and the containment airlock testing provisions are not

allowed by NRC regulations. The bases reviewed by the NRC staff for the applicable exemptions are discussed at length in the SER and in SSER No. 3.<sup>7</sup> Mr. Anthony provides no information regarding those bases to support his assertions and provides no information regarding why the requirements of the NRC regulations in 10 CFR 50.12, which provides for the granting of exemptions, have not been met in these instances. In the absence of any specific factual basis for these assertions, they will not be considered further.<sup>8</sup>

#### Basis for the Environmental Assessment

Both petitioners assert that there was no basis for issuing the exemptions on the assumption of no environmental harm and that NRC must revoke the exemptions and require an environmental impact statement.

NRC regulations in 10 CFR Part 51 specify the nature of the environmental review, if any, that must be conducted for a given licensing or regulatory action. Under 10 CFR 51.21 all licensing and regulatory actions subject to Part 51 require an environmental assessment, except those specifically identified in 10 CFR 51.20(b) as requiring an environmental impact statement and those identified in 10 CFR 51.22(c) as categorical exclusions. The requested exemptions for the Limerick plant do not fall within the criteria for a required environmental impact statement under 10 CFR 51.20(b) and are not explicitly included under the categorical exclusions in 10 CFR 51.22(c). Therefore, an environmental assessment of the exemptions was prepared to determine whether to prepare an environmental impact statement or to find no significant environmental impact.

In assessing the appropriate action for the eight subject exemptions, I note that the characteristics of these actions are consistent with those

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<sup>7</sup> See also DD-85-11, *supra*, 22 NRC at 154-57.

<sup>8</sup> Philadelphia Electric Company (Limerick Generating Station, Unit 1 and 2), DD-82-13, 16 NRC 2115, 2121 (1982) and cases cited therein.



characteristics of categorical exclusions for which no further environmental evaluation would be necessary. For example, all of the eight exemptions are expected to affect portions of the plant only within the restricted area, as defined in 10 CFR Part 20, to involve no significant hazards consideration, to involve no significant change in effluent releases offsite and to involve no significant change in occupational radiation exposure. See 10 CFR 51.22(c)(9). Apart from Mr. Anthony's assertion (rebutted above) that certain exemptions increase the risk of accidental releases, neither petitioner provides support for their disagreement with the staff's conclusions that the exemptions will have no significant impact on the human environment and that an environmental impact statement was not required.

Mr. Anthony also asserts that alternatives were not considered but provides no information regarding what alternatives he believes should have been considered. Contrary to the assertion, alternatives to granting the exemption were considered. Relief from the specific requirements of the regulations was granted in each case in conjunction with the finding that other features of the plant design or administrative actions would exist or would be required which would compensate substantially for the relief granted by the exemption. This approach provides a comparable level of protection of the public health and safety and results in an insignificant difference in the environmental impacts such that granting of the exemptions under 10 CFR 50.12 and the decision not to prepare an environmental impact statement under Part 51 were appropriate.

As noted in the environmental assessment, the principal alternative would have been to deny the exemptions which, given the comparable protection provided by the exemptions, would not have resulted in a significantly greater level of safety over the life of the plant and would not have resulted in a significant reduction in environmental impacts. Denial of the exemptions

would have contributed to delays in completion and final readiness testing of systems according to the licensee's assessment, would have resulted in some unnecessary testing requirements and would have increased the hazard to personnel entering the containment during the startup test program. As noted in the environmental assessment, denial of the exemptions would have resulted in reduced operational flexibility and unwarranted delays in power ascension in view of the negligible environmental impacts engendered by the exemptions. Under 10 CFR 50.12, the Commission may give appropriate consideration to the effect on the public interest of any delay from not granting an exemption, including power needs and delay costs to the applicant and to the consumer. In sum, the discussion in the environmental assessment of the exemptions was appropriate to the circumstances, and no more detailed examination or balancing of alternatives was required.<sup>9</sup>

In his request Mr. Romano briefly mentions, without any particular nexus to the exemptions at issue, "several issues previously raised and decided before the Licensing Board concerning asbestos and vinyl chloride contamination of the Schuylkill River. This issue has been raised before the Licensing Board and was discussed by the Board in the operating license proceeding."<sup>10</sup> No further action on my part with respect to this issue is appropriate here.<sup>11</sup>

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9 See Duke Power Company (Amendment to Materials License No. SNM-1773, ALAB-651, 14 NRC 307, 317 (1981); Virginia Electric & Power Company (North Anna Power Station, Units 1 & 2), ALAB-584, 11 NRC 451, 457 (1980).

10 Philadelphia Electric Company (Limerick Generating Station Units 1 and 2) Atomic Safety and Licensing Board, "Memorandum and Order Rejecting Late Filed Contentions from FOE and AWPP, Denying AWPP's Second Request for Reconsideration of Asbestos Contention, Denying AWPP's Motion to Add a PVC Contention and Commenting on an Invalid Inference in Del-Aware's May 17, 1984 Filing," August 24, 1984.

11 General Public Utilities Corp. (Therree Mile Island Station Units 1 and 2; Oyster Creek Nuclear Generating Station), CLI-85-4, 21 NRC 561 (1985).

CONCLUSION

With respect to the bases for and the environmental evaluation of eight specific exemptions issued with the operating license for the Limerick Generating Station, Unit 1, the petitioners have not identified any information which warrants a change in the staff's previous conclusions regarding these matters. Accordingly, the petitioners' requests for action, which have been treated by the staff pursuant to 10 CFR 2.206, are denied. As provided in 10 CFR 2.206(c), a copy of this decision will be filed with the Secretary for the Commission's review.



Darrell G. Eisenhut, Acting Director  
Office of Nuclear Reactor Regulation

Dated at Bethesda, Maryland  
this 21 st day of January 1986