

OCT 17 1984

Docket No. 50-387/388

Mr. Norman W. Curtis
Vice President
Engineering and Construction-Nuclear
Pennsylvania Power & Light Company
2 North Ninth Street
Allentown, Pennsylvania 18101

Dear Mr. Curtis:

SUBJECT: RESOLUTION OF BWR SCRAM DISCHARGE VOLUME (SDV) PIPE BREAK,
NUREG-0803

In conjunction with the BWR Owner's Group (BWROG), an acceptable generic approach to resolution of the concerns identified in NUREG-0803 has been developed. This approach involves a reexamination of the postulated break in the scram discharge piping against current SRP licensing criteria, a reevaluation of the fracture mechanics properties of the piping both deterministically and probabilistically and the establishment of periodic visual pipe integrity verification based on the results of the fracture mechanics evaluation. Specifically, this approach has led to a generic resolution on the basis of the following findings:

1. The Mechanical Engineering Branch (MEB) has concluded that there is reasonable assurance that the stress levels in the SDV piping system will not cause a through-wall leakage crack in accordance with the criteria of SRP Section 3.6.2.
2. The findings by the Materials Engineering Branch (MTEB) support the above conclusion. Specifically, after review of the BWROG deterministic fracture mechanics submittals, MTEB has concluded that even with the staff postulated through-wall flaw in the piping system, it would not propagate into a break under the indicated loads, and the bounding values for leak rates, loading conditions, and material properties identified by the BWROG are reasonable. MTEB has also found that the above non-break determination by deterministic fracture mechanics analysis is supported by the probabilistic fracture mechanics evaluations.

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3. The Auxiliary Systems Branch (ASB) has concluded that the leakage from the flaw postulated by the staff in the system is low enough (≤ 3.5 gpm; ≤ 5.3 gpm even conservatively assuming 400 scram cycles for the 40-year plant life time) such that a harsh environment will not result, thus precluding the need for environmentally qualifying equipment exposed to the leak environment. The Equipment Qualification Branch (EQB) concurs with the above conclusion. ASB has also concluded that the periodic leak inspections (required by Section XI of the ASME Code for Class 1 and Class 2 piping) and the additional periodic post-scram reset walkdown recommended by the BWROG provide adequate leak detection capability for the system. ASB has further concluded that the normal operating procedures for BWRs and applicable generic emergency procedure guidelines (EPGs) for secondary containment provide adequate guidance for mitigating the consequences of leakage resulting from the staff postulated flaw in the SDV piping system.

In summary, the staff finds the above approach and conclusions provide sufficient defense-in-depth to preclude the SDV pipe break and its resulting consequences as postulated in NUREG-0803.

In order to resolve the plant specific concerns, PP&L is requested to provide written verification that 1) the leak rates, loading conditions and material properties for the SDV piping systems at Susquehanna Units 1 and 2 and bounded by the limiting values for these parameters identified by the BWROG, 2) Susquehanna Units 1 and 2 comply with the BWROG recommendations for leak detection capability, 3) Susquehanna Units 1 and 2 comply with the applicable generic secondary containment EPGs, and 4) provide assurance that the expected radiation fields and contact exposure levels at the SDV piping systems in Susquehanna Units 1 and 2 will not impair the performance of routine tests, inspections and post-scram reset walkdowns.

If you have any questions regarding the matter please contact R. Perch, Project Manager.

Sincerely,

Original signed by

A. Schwencer, Chief
Licensing Branch No. 2
Division of Licensing

cc: See next page

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1. The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that this is crucial for the company's financial health and for providing reliable information to stakeholders.

2. The second part of the document outlines the specific procedures for recording transactions. It details the steps from identifying a transaction to entering it into the accounting system, ensuring that all necessary details are captured.

3. The third part of the document addresses the role of the accounting department in monitoring and controlling the company's resources. It discusses how accurate records enable the company to identify areas of inefficiency and to take corrective action.

4. The fourth part of the document discusses the importance of internal controls in preventing fraud and errors. It highlights the need for a strong internal control system to ensure the integrity of the company's financial reporting.

5. The fifth part of the document discusses the role of the accounting department in providing financial information to management. It explains how this information is used to make strategic decisions and to evaluate the company's performance.

6. The sixth part of the document discusses the importance of transparency and accountability in financial reporting. It emphasizes that the company's financial statements should be prepared in accordance with generally accepted accounting principles (GAAP) and should be audited by an independent firm.

7. The seventh part of the document discusses the role of the accounting department in ensuring compliance with applicable laws and regulations. It highlights the need for the company to stay up-to-date on changes in the regulatory environment and to implement appropriate controls to ensure compliance.

8. The eighth part of the document discusses the importance of communication and collaboration between the accounting department and other departments in the company. It emphasizes that the accounting department needs to have a good understanding of the company's operations in order to provide accurate financial information.

9. The ninth part of the document discusses the role of the accounting department in providing financial information to external stakeholders. It explains how this information is used by investors, creditors, and other interested parties to make decisions about the company.

10. The tenth part of the document discusses the importance of the accounting department in providing financial information to the public. It emphasizes that the company's financial statements should be prepared in a clear and concise manner that is easy for the public to understand.

11. The eleventh part of the document discusses the role of the accounting department in providing financial information to the government. It explains how this information is used by the government to monitor the company's tax compliance and to provide information to other government agencies.

12. The twelfth part of the document discusses the importance of the accounting department in providing financial information to the media. It emphasizes that the company's financial statements should be prepared in a way that is consistent with the information provided to other stakeholders.

13. The thirteenth part of the document discusses the role of the accounting department in providing financial information to the company's employees. It explains how this information is used to determine the company's profitability and to provide information to employees about the company's financial health.

14. The fourteenth part of the document discusses the importance of the accounting department in providing financial information to the company's customers. It emphasizes that the company's financial statements should be prepared in a way that is consistent with the information provided to other stakeholders.

15. The fifteenth part of the document discusses the role of the accounting department in providing financial information to the company's suppliers. It explains how this information is used to determine the company's creditworthiness and to provide information to suppliers about the company's financial health.

SUSQUEHANNA

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