

February 3, 1984

Docket No. 50-454

Commonwealth Edison Company  
ATTN: Mr. Cordell Reed  
Vice President  
Post Office Box 767  
Chicago, IL 60690

Gentlemen:

This refers to the meeting held in Glen Ellyn, Illinois on January 27, 1984, to discuss the status and results of the reinspection program being conducted at the Byron Station in response to an NRC concern regarding the certification of Quality Control inspectors. During the meeting we agreed to provide the NRC staff's questions and comments regarding the results and conclusions of the Byron reinspection program described in your letter to this office dated January 12, 1984. We understand that your reinspection program is still in progress and that you intend to submit a revised report which addresses this effort and the comments we provided during the meeting. Although our review is continuing, the following are the staff's questions and comments to date:

1. The data should be presented in a clear, concise, and accurate manner and in terms that a layperson can understand.
2. The data should be reviewed to determine if the various tables are accurate and compatible, e.g. tables 3.1 and 4.7 relating to the numbers of Pittsburgh testing personnel in the program.
3. Provide results of the Hatfield computerized data base established to reconcile weld travelers to hangers. (Page 19 of report).
4. Elaborate on how Appendix C sample sizes were obtained for evaluating design limit compliance and how the sample selected bounds all of the remainder of the items in that category.
5. On table D.4, items JC-27 and JC-28 S&L, resolution as written is unacceptable, e.g. in order to determine acceptability of a weld it would be necessary to determine extent of lack of penetration. (It is our understanding that these items were actually lack of fusion; this should be clarified).

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6. With regard to Item 5 above, for all welds having lack of fusion and lack of penetration, was the defect completely removed in order to assess how much of the weld remained upon completion of the repair? Did the weld quality and adequacy determination consider the stress intensification resulting from the notches created by various defects, i.e., undercut, overlap, etc.?
7. In order to address the issue raised during the January 27, 1984 meeting regarding the amount of loading seen on degraded welds, provide your analyses to assure that the welds with the lowest factor of safety comply with the applicable codes and the design basis. For example, one method would be to perform a detailed engineering evaluation of fifty welds from the entire population of discrepant welds with the lowest factor of safety. Another method would be to select the worst weld in each category and the weld with the lowest factor of safety in each category. Then perform a detailed engineering evaluation to determine if the worst weld would meet the design intent for the weld with the lowest factor of safety.
8. Provide a summary regarding the number and type of code (ASME, and AWS) rejectable items found during the reinspection for each contractor. Further, with regard to the number of rejectable ASME Code items, please explain how you are going to assure that the items that have not been repaired are acceptable. This includes both items that have and have not been reinspected.
9. Provide your evaluation with regard to the acceptability of past inspections involving nonrecreatable attributes and inaccessible work performed by the inspectors whose accessible work was reinspected in accordance with the program. Your evaluation should consider the results of the reinspections performed to date as well as available information obtained from past QA/QC audits, surveillances and inspections involving this activity.
10. Make available at the site data describing those welds which have lack of penetration, lack of fusion or cracks. The data should include the initial QC inspector and welder's name.
11. Based on the results of the reinspection program, provide your evaluation of the quality of the work inspected by inspectors whose work was not reinspected as part of this program. Your evaluation should also include available information from QA/QC audits, surveillances and inspections involving this activity.
12. Based on the results of the reinspection program and available information from QA/QC audits, surveillances and inspections, what conclusions can be drawn relative to the appropriateness of the acceptance criteria of 90% for subject attributes and 95% for objective attributes.

Even though this office has not received the final report on the Byron reinspection program, our inspection efforts to assess its implementation will continue.

If you have any questions concerning our comments and questions or our inspection findings relative to this matter, please contact this office.

Sincerely,

**"Original Signed by R. L. Spessard"**

R. L. Spessard, Director  
Division of Engineering

- cc: D. L. Farrar, Director  
of Nuclear Licensing
- V. I. Schlosser, Project Manager
- Gunner Sorensen, Site Project  
Superintendent
- R. E. Querio, Station  
Superintendent
- DMB/Document Control Desk (RIDS)
- Resident Inspector, RIII Byron
- Resident Inspector, RIII  
Braidwood
- Phyllis Dunton, Attorney  
General's Office, Environmental  
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- Ms. Jane M. Whicher
- Diane Chavez, DAARE/SAFE

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