



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

September 22, 1994

Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. William T. Russell, Director

Subject: Additional Information Regarding Application for Amendment to Facility
Operating License:

Byron Station Units 1 and 2
(NPF-37/66; NRC Docket Nos. 50-454/455)

"Steam Generator Interim Plugging Criteria"

- References:
1. August 1, 1994, letter from J. A. Bauer to W. T. Russell transmitting Byron Station's request for a license amendment to implement an Interim Plugging Criteria.
 2. September 7, 1994, letter from J. A. Bauer to W. T. Russell transmitting a supplement to Byron Station's request for a license amendment to implement an Interim Plugging Criteria.
 3. September 17, 1994, letter from D. M. Saccomando to W. T. Russell transmitting a supplement to Byron Station's request for a license amendment to implement an Interim Plugging Criteria.
 4. September 16, 1994, teleconference between NRC Staff and Byron Station Staff regarding questions and issues related to Byron Station IPC submittal/supplements.

Dear Mr. Russell:

In references 1 and 2, ComEd submitted and supplemented a request to amend the Byron Station license to implement a voltage-based Interim Plugging Criteria (IPC) for Unit 1. The Reference 3 supplement further limited IPC applicability to Unit 1, Cycle 7.

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During the reference teleconference on September 16, 1994, the NRC asked for confirmation and/or clarification of a number of issues related to the Byron submittal and supplements requesting IPC. ComEd agreed to provide written responses for the following items:

Item 1 - NRC requested clarification as to which database is to be used in the evaluation of Byron steam generator inspection data.

Response 1 - ComEd will use the same database documented in the August 18, 1994, SER for Braidwood Station. In addition, the Braidwood tube pull results will be added to the database for the evaluation of B1R06 results.

Item 2 - NRC asked for clarification regarding the methodology that will be used for the Byron leakage calculation.

Response 2 - ComEd will use the EPRI conditional leakrate correlation in the Byron evaluation.

Item 3 - NRC asked what ComEd's plans are to address the possibility of Primary Water Stress Corrosion Cracking (PWSCC) in dented support plate locations.

Response 3 - During normal bobbin coil analysis, the standard practice, as stated in the Byron/Braidwood Guidelines, is to employ a "no minimum voltage" threshold for reporting flaws. Subsequently, the analysts identify very small indications, including those cause by PWSCC, which are dispositioned by ComEd engineering. Typically, the disposition process involves previous history reviews and application of other inspection techniques, such as RPC, to help characterize the indication. Since a dent could potentially mask a small flaw, it may be difficult to identify small flaws with the bobbin coil technique. For this reason, Byron has reduced the reporting threshold for dents from a peak-to-peak voltage of 5.0 volts to 2.5 volts in conjunction with an RPC inspection program.

Byron is employing an RPC inspection program that addresses dented support plate locations with emphasis on detecting flaws originating at either the OD or the ID of the tube. Byron will repair all tubes identified with dents greater than 2.5 volts that contain a flaw of any type, whether it is ODSCC or PWSCC.

The inspection program involves inspecting all dents at TSPs that exceed 5.0 volts peak-to-peak with RPC. RPC inspections will also be performed on a sample of dented support plates that are between 2.5 - 5.0 volts peak-to-peak. If any flaw is detected in the sample, originating at either the OD or ID, the RPC scope will be expanded. All tubes with dents that are greater than or equal to 2.5 volts peak-to-peak and that contain RPC confirmed flaws will be repaired. This criteria applies to flaws originating at either the OD or ID. The dent interference discussion included in Section A.3.5 of the VC Summer Appendix A Guidelines has been incorporated into the Byron Inspection Guidelines. The discussion was altered to account for 5.0 volt dents with 1.0 volt flaws instead of 8.0 volt dents with 1.5 volt flaws. This is consistent with the Catawba Appendix A guidelines.

The analysts evaluating Byron's data have been briefed on the potential of PWSCC at support plates and were instructed to report such occurrences to the Byron Engineering staff. The data analyst training program will be revised to formally address this issue.

Item 4 - NRC requested that ComEd commit to providing all requested inspection data within 90 days following startup.

Response 4 - ComEd will supply all data specified in the Draft Generic Letter within 90 days following startup from B1R06.

Item 5 - NRC requested that ComEd commit to supply Byron Unit 1 tube pull results within 90 days following startup.

Response 5 - ComEd will supply the Byron tube pull results within 90 days following startup from B1R06.

Item 6 - NRC requested clarification of the probe size to be used in Byron steam generator inspections for IPC application.

Response 6 - ComEd will use only 0.610" diameter probes in the inspection of Byron steam generators for IPC application during B1R06.

Item 7 - NRC requested confirmation of ComEd's commitment to pull six intersections of tubes during B1R06.

Response 7 - ComEd will pull six intersections of tubes during B1R06.

Item 8 - NRC requested that ComEd identify and justify content contained in the VC Summer Appendix A guidelines which does not appear in the Byron inspection guidelines. Specifically, NRC questioned how analysts will determine whether an indication lies within the tube support plate during the Byron inspection.

Response 8 - The Byron/Braidwood Inspection guidelines have been revised to include instructions on determining the confinement of an indication within a tube support plate. These instructions are consistent with Section A.3.7 of the VC Summer Appendix A Guidelines.

For each indication at a support plate, the data analyst will assess the location of the crack tips and determine if the indication is confined within the support plate edges using the bobbin coil data. Any indication that extends beyond the support plate edge will be reported to the Lead Analyst for further evaluation. The site engineering representative will also be notified. Dispositioning of indications that extend beyond the support will include additional inspection with RPC to further characterize the flaw.

The data analysts have been trained on the changes to the Byron Guideline. The importance of determining support plate confinement has been emphasized to each analyst.

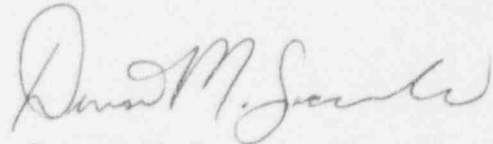
A detailed discussion of the guideline content differences will be submitted by September 30, 1994, as agreed upon in the September 16, 1994, telephone conference.

In Reference 2, item 6 of the Table, "Differences Between Draft Generic Letter and Original Byron IPC Submittal," stated that a review would be conducted to determine if Control Room dose due to a Main Steam Line Break (MSLB) is bounded by another analysis. From this review, ComEd has concluded that the Control Room dose as a result of a MSLB with the maximum allowed steam generator tube leakage is bounded by the existing analysis of Control Room dose due to a loss of coolant accident for Byron Station. Therefore, the maximum allowed leakrate will continue to be determined based on offsite dose due to MSLB leakage.

September 22, 1994

Please address any comments or questions regarding this matter to this office.

Sincerely,

A handwritten signature in cursive script, appearing to read "Denise M. Saccomando".

Denise M. Saccomando
Nuclear Licensing Administrator

cc: G. Dick, Byron Project Manager - NRR
H. Peterson, Senior Resident Inspector - Byron
B. Clayton, Branch Chief - Region III
Office of Nuclear Facility Safety - IDNS