



Commonwealth Edison
1400 Opus Place
Downers Grove, Illinois 60515

March 18, 1994

U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attn: Document Control Desk

Subject: Byron Nuclear Power Station Units 1 and 2 Response to
Notice of Violation Inspection Report 50-454/94002;
50-455/94002
NRC Docket Nos. 50-454 and 50-455

Reference: G. C. Wright letter to K. Graesser dated February 18, 1994
transmitting NRC Inspection Report 50-454/94002;
50-455/94002

Enclosed is Commonwealth Edison Company's (CECo) response to the Notice of Violation (NOV) which was transmitted with the referenced letter and Inspection Report. The NOV cited a Severity Level IV violation requiring a written response. CECo's response to the NOV is provided in Attachment A. Additionally, the NRC requested that CECo's response include an evaluation of line management and quality verification oversight activities. This evaluation is provided in Attachment B. It was also requested that CECo provide a written response to an inspection follow-up item (IFI 93002-02). This response is provided in Attachment C.

If your staff has any questions or comments concerning this letter, please refer them to JoEllen Burns, Regulatory Performance Administrator, at (708)663-7285.

Sincerely,

M. J. Raughter
for D.L. Farrar

Nuclear Regulatory Services Manager

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Attachment

cc: J. B. Martin, NRC Regional Administrator - RIII
George Dick, Project Manager - NRR
H. Peterson, Senior Resident Inspector, Byron

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ATTACHMENT A
RESPONSE TO NOTICE OF VIOLATION
INSPECTION REPORTS 50-454/94002(DRS); 50-455/94002(DRS)

Summary of Notice of Violation, Dated February 18, 1994:

Technical Specification 4.0.5.a states "...inservice testing of ASME Code Class 1, 2, and 3 pumps and valves shall be performed in accordance with Section XI of the ASME Boiler and Pressure Vessel Code..." ASME Section XI, IWV-1100, "Scope," states valves required to perform a specific function in shutting down the reactor to a cold shutdown condition or mitigating the consequences of an accident should be included in the inservice test program.

Contrary to the above, as of January 21, 1994, the following valves that have a specific safety function in shutting down the reactor to a cold shutdown condition or mitigating the consequences of an accident, were not included in the inservice test program, Revision 11, dated February 27, 1992.

- a. Component Cooling Water (CCW) loop isolation valves, 1/2CC9415, that are normally open with a safety function in the closed direction to isolate non-essential loads and non-code class piping during an accident.
- b. CCW manual valves, 1/2CC9459B and 1/2CC9467B, that have a safety function to align the common CCW heat exchanger to the unit undergoing post-LOCA recovery.

This is a Severity Level IV violation

Reason for the Violation:

Originally, Byron's "Scope" was evaluated per an NRR SER dated September 15, 1988 (pages 3-6 of the Technical Evaluation Report) and following the discussion and resolution of the unresolved items on the request for additional information (RAI), was determined to be acceptable. Since that time, new regulatory requirements, new revisions of the code, and/or new interpretations of the code have necessitated a new scope review process. Byron/Braidwood have jointly been working on a scope review in recent months. This new scope review, however, was not yet completed. The valves in question had been identified as possible additions to the IST program, but final decisions had not been determined. The scope review has been based on the OM-10 criteria, which Byron will update to for their ten year update, due in 1995.

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During the inspection, Byron presented a significant amount of information which supported why the 1/2CC9415 valves were borderline for inclusion in the program. Due to the fact that the valve was listed as 'active' in the UFSAR table, along with the fact that the new OM-10 code criteria for "Scope" includes the phrase "...in maintaining the cold shutdown condition..." while Byron's present code requirements (ASME, Section XI, IWV-1100, 1983 Edition) does not, Byron agreed to add these valves to the program at this time in preparation for the ten year update. For similar reasons, it was felt that the Component Cooling Water manual valves would fall under the new OM-10 scope. The inspectors felt that these valves were in violation under the current Byron Code (ASME Section XI, IWV, 1983 Edition).

Corrective Steps taken and Results Achieved:

The 1/2CC9415, 1/2CC9459B and 1/2CC9467B valves have all been added to the IST Valve Program, Revision 12, which was recently sent to NRR. The 1/2CC9415 valves have been tested per the MOV program, and the 1/2CC9459B and 1/2CC99467B valves get exercised a minimum of once every U-2 Cold Shutdown to align the U-0 pump and U-0 heat exchanger to the U-2 side. For reasons justified in Revision 12 of the IST Valve Program, the 1/2CC9415 valves will be tested during Cold Shutdowns when all RCPs are off and the manual CC valves will be tested at each U-2 Cold Shutdown. Byron's next two refueling outages are scheduled for the Fall of 1994 (U-1) and the Spring of 1995 (U-2). If no forced shutdowns are experienced, IST testing of these valves will be completed by May 1, 1995. Nuclear Tracking System (NTS) items have been generated to track the completion of the necessary IST procedures to test these valves.

Corrective Steps that will be taken to Avoid Further Violations:

Byron has taken steps with Braidwood to avoid further violations in the area of scope. The overall scope review for pumps and valves will be completed by June 30, 1994. By September 14, 1994, a revised program will be submitted to update the program. Also, a basis document will be developed after the scope review to establish the basis for IST program inclusion/exclusion of individual pumps and valves. Additional testing requirements will be tracked via Nuclear Tracking System (NTS) items.

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Date when Full Compliance will be Achieved:

In reference to the specific valves associated with this violation, they have already been incorporated in the IST Valve Program, Revision 12. In addition, these valves have been tested in the past per the MOV program (1/2CC9415) or during CC re-alignments for U-2 outages (1/2CC9459B, 1/2CC9467B). IST testing of these valves will begin when the plant is in the required conditions. The 1/2CC9415 valves will be tested during Cold Shutdowns when all RCPs are off and the manual CC valves will be tested at each U-2 Cold Shutdown. Due to the frequencies of the testing involved, however, initial IST testing of these valves for Byron may not be completed until May 1, 1995.

In reference to the larger question of total IST Pump and Valve scope, pumps and valves found (during the scope review) requiring inclusion in the program will be tested within 90 days of determination if it is a quarterly test and at the next opportunity if it is a cold shutdown or refueling outage frequency test. A total scope update will be included in a program submittal by September 14, 1994. Initial testing for Byron will be completed by May 1, 1995. However, if a new test clearly falls under the new OM-6 or OM-10 codes, but not under Byron's current code, Byron reserves the right to defer that testing until the ten year update code officially takes affect.

ATTACHMENT B
EVALUATION OF LINE MANAGEMENT AND QUALITY VERIFICATION
OVERSIGHT ACTIVITIES

Evaluation of Line Management:

The current IST Coordinator took over the Pump and Valve Programs on December 13, 1993. He was a System Engineer in the Primary Group prior to becoming the IST Coordinator, which has helped him in transitioning to the IST Coordinator Position. Support from his counterparts at other stations and the corporate IST Coordinator have been beneficial and will continue to be utilized. However, to continue to build his knowledge in this area, he will be attending various Section XI training and/or new code requirement training, along with visiting at least two other sites to review their IST programs.

In addition, an advisor has been assigned to the IST Coordinator. This position will be maintained until 01/01/95 or at least until additional plant trips and training are complete, whichever is last. The advisor joined CECO in mid-December, 1993. He has approximately 30 years of technical experience, the last 20 of those in the Nuclear Power Plant Field. Some of his IST experience includes assisting Zion station in writing/reviewing the 3rd interval Inservice Test Program Submittal while serving there as a staff augmentation contractor. He reviewed Zion's total list of ASME components for applicability, testing requirements, test procedure inclusion, and compliance. The Performance Monitoring Group Leader has had ASME Section XI training and will visit other sites with the new IST Coordinator to develop an understanding of how other sites organize and manage their programs. The Group Leader has 16 years experience working for CECO and currently maintains his SRO License. He has a very good understanding of Plant Operation/Equipment.

The System Engineering Department Head, has had ASME Section XI training, and has previously held the position of IST/ISI Group Leader. He has also been licensed as an SRO and has a very good understanding of Plant Operations. His expertise in the ISI/IST area, at his level, has been very beneficial in addressing IST concerns.

Evaluation of Quality Verification Oversight Activities:

On-Site Quality Verification (SQV) reviews are primarily focused on performance based program implementation. The adequacy of these observations were reviewed during the inspection and were found to be consistent with the inspection team observations. Typically, reviews of program adequacy are in the areas that are required to be audited in the technical specifications or the Code of Federal Regulations. The IST program did not require a program audit, therefore the SQV reviews were primarily in the program implementation arena.

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(Continued)

SQV self-assessment efforts have indicated that program adequacy reviews of areas beyond those specified in technical specifications and the CFR's are warranted. As a result, two additional program audits have been scheduled to be conducted in 1994, one of these is in the Engineering Support area. Future SQV reviews and audits will provide more balance between program adequacy and implementation.

Actions taken by SQV related directly to the violation finding will be a review of the effectiveness of corrective actions taken by the station for this violation. The review will be done after the stations actions are complete and should be accomplished by 12/31/94.

ATTACHMENT C
RESPONSE TO FOLLOWUP ITEM 93002-02
INSPECTION REPORTS 50-454/94002(DRS); 50-455/94002(DRS)

Followup Item (454/455/93002-02):

CCW system manual valves 1/2CC9458, 1/2CC9459A, and 1/2CC9467A (normally open) were identified in UFSAR Table 5.4-18 with a potential safety function to close to separate the CCW system into redundant subsystems to meet single failure analysis in the event of a pipe break. It was unclear if credit was taken for this function in the safety analysis. This will be considered an inspection followup item (454/455/93002-02) pending licensee resolution of this issue and review by the inspectors.

Response:

Byron Site Engineering Department is currently evaluating these valves to determine their safety function and the correct disposition of them. This evaluation will be completed by June 1, 1994. An NTS item has been generated to track this investigation.