



Commonwealth Edison
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December 30, 1983

Mr. James G. Keppler
Regional Administrator
U.S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Byron Generating Sta. Unit 1
I&E Inspection Report No. 50-454/83-47
NRC Docket No. 50-454/83-47

References (a): November 19, 1983 letter from J. F. Streeter
to Cordell Reed

(b): December 19, 1983 letter from D. L. Farrar
to J. G. Keppler

Dear Mr. Keppler:

This letter completes Commonwealth Edison's response to the Notice of Violation issued in Reference (a). Responses to three of the four items of noncompliance were provided in Reference (b). The response to Violation 1 is provided in Attachment A to this letter.

As indicated in Attachment A, this violation was apparently issued because of a misunderstanding of our FSAR commitments regarding the qualifications of personnel involved in directing the preoperational and startup test programs. To the inspector, the FSAR appeared to contain a commitment for one year's experience for personnel assigned to the position of System Test Engineer. Actually, the FSAR and the documents it references indicate that this is the minimum experience level requirement for the Technical Staff Supervisor, who directs the preoperational test program.

The qualifications and minimum experience level for a System Test Engineer are established in other documents. Those requirements have proven to be effective in assuring that preoperational tests are conducted properly.

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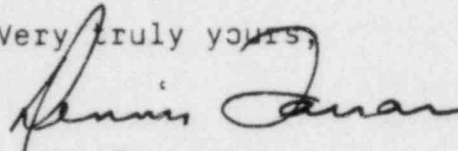
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Our qualification program for System Test Engineers has been reviewed with NRR personnel and found acceptable. The FSAR will be revised to explicitly address STE qualifications.

Inasmuch as the FSAR does not presently address STE qualifications, no noncompliance is involved. Accordingly, it is requested that Violation 1 be withdrawn.

We would be pleased to discuss this matter further. Please direct questions to this office.

Very truly yours,

A handwritten signature in dark ink, appearing to read "D. L. Farrar", written in a cursive style.

D. L. Farrar
Director of Nuclear Licensing

Attachment

7896N

Attachment A

Response to Notice of Violation

Violation 1

1. 10 CFR 50, Appendix B, Criterion V states in part, "Activities affecting quality shall be prescribed by documented instructions, procedures, or drawings, of a type appropriate to the circumstances and shall be accomplished in accordance with these instructions, procedures, or drawings."

Commonwealth Edison Company's response to question 423.2 of the Byron/Braidwood FSAR describes the minimum qualification requirements for personnel that "supervise or direct the conduct of individual preoperational tests" in the following manner:

"For each of the tasks listed above at least one individual performing that task will meet the following qualification requirements:

1.

- a. Bachelor of Science degree (or equivalent) in the Sciences or Engineering or 4 years of related technical experience (power plant or task related); and
- b. 1 year of nuclear power plant experience".

The Byron Startup Manual states in part 2.4.4.6.5, "The System Test Engineers shall...Conduct Pre-op and Startup Tests" and in part 4.7.3.1, "The System Test Engineer directs the test."

Contrary to the above, the licensee failed to prescribe appropriate instructions for qualifications in that a Byron Administrative Procedure was issued and in use which specified lesser requirements than the FSAR in that, Byron Administrative Procedure BAP 500-4, Rev. 0, "Technical Personnel Qualifications", only requires the following for personnel that write and perform preoperational tests:

"1. Two years experience.

or

2. High school graduation and one and one half years experience.

or

3. Equivalency of two years college completion, or continuing college level work leading to an associated degree and six months experience.

or

4. Four year college graduation and three months experience."

Examination of 6 personnel files showed that 3 individuals were certified as qualified test engineers in accordance with BAP 500-4 and performed as test engineers directing tests without meeting the requirements described in the FSAR.

Response

The response to FSAR question 423.2 indicates the minimum qualifications of personnel who supervise or direct the conduct of tests. It also indicates that the personnel who perform test functions are identified by title in FSAR chapter 17. Resumes for these personnel are provided in FSAR chapter 13.

FSAR chapter 17 references the Commonwealth Edison Company QA topical report, CE-1-A, "Quality Assurance Program for Nuclear Stations." This report and the Quality Procedures which it references assign responsibility to the Technical Staff Supervisor to conduct the preoperational tests. His resume is provided in FSAR Attachment 13A. In practice, the Technical Staff Supervisor supervises Group Leaders, who, in turn, supervise System Test Engineers. The response to FSAR question 423.2, however, does not contain any commitments regarding the minimum qualifications of Group Leaders or System Test Engineers.

Administrative procedures specify the minimum qualifications for Group Leaders and System Test Engineers. BAP-500-4 requires that the System Test Engineers meet the following training requirements.

- a. Two Years Experience,

or

- b. High school graduation and one and one half years of experience,

or

- c. Equivalency of two years college completion, or continuing college level work leading to an associate degree and six months experience.

or

- d. Four year college graduation and three months experience.

They also all must pass a test on the provisions of the "Byron Startup Manual" pertaining to testing activities.

All of the Group Leaders meet the following requirement:

- a. Bachelor of Science degree (or equivalent) in the Sciences or Engineering or 4 years of related technical experience (power plant or task related); and
- b. 1 year of nuclear power plant experience.

The effectiveness of these minimum qualification requirements has been reviewed by I&E and found acceptable. Inspection Report 50-454/80-23 examined the Byron pre-operational test organization, test program administration and the coordination of the conduct of testing as well as methods to assure that test personnel were knowledgeable of test procedures. The inspectors determined that the above areas were addressed adequately. Inspection Report 50-454/81-06 reviewed the licensee commitment to keep written records of training for pre-op ad test personnel. The report states that the licensee has formalized his training program requirements into a procedure. In report 50-454/82-02, the inspector witnessed test performance and determined that personnel possessed adequate knowledge of the system and test procedure and the conduct of testing was satisfactory. In report 50-454/82-21 the inspector observed the pre-operational test program in order to ascertain that administrative controls had been implemented. During that inspection, responsibilities of key test personnel were reviewed and found adequate.

In addition to these inspection reports, the Station has a formal procedure approved in September 1982 for the qualification of test personnel and in response to an inquiry by NRC inspectors issued a technical staff memorandum in August 1982 stating that Group Leaders are responsible to ensure that STE's who direct pre-op tests (1) have previously conducted a system demonstration or a pre-operational test or (2) have acceptable testing experience as determined by the TSS or (3) have the test monitored continuously by the Group Leader, a pre-op coordinator, or someone who qualifies under (1) above.

The qualifications of testing personnel have been reviewed by NRR also. The response to FSAR question 423.2 was reviewed and accepted in preparation of the Byron SER. Recently our training and qualification practices have been reviewed again by NRR and found satisfactory.

The Byron program for qualification of testing personnel have been in place since March 1981 when preoperational testing began. Many improvements have been made to the program. The existing FSAR commitments, however, do not delineate the minimum requirements for System Test Engineer. These requirements have been reviewed and found acceptable. They will be added to the FSAR at the earliest opportunity.

On the basis of the information presented here we conclude that no violation of NRC requirements is involved. It is requested that this Violation be withdrawn.

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