

ESSEX  
105137

*Handwritten signature*

DUKE POWER COMPANY  
POWER BUILDING  
422 SOUTH CHURCH STREET, CHARLOTTE, N. C.

A. C. THIES  
VICE PRESIDENT  
PRODUCTION AND OPERATION

P. O. Box 2179  
28201

May 13, 1971

Mr. John G. Davis, Director  
U. S. Atomic Energy Commission  
Division of Compliance  
Region II - Suite 818  
230 Peachtree Street, Northwest  
Atlanta, Georgia 30303

Dear Mr. Davis:

The following are our responses to your letter of April 14, 1971 questioning items which apparently do not conform with statements in the Oconee Nuclear Station Final Safety Analysis Report or with Appendix B to 10CFR50, "Quality Assurance Program for Nuclear Power Plants."

1. Permissible Cable Tray Fill - Final Safety Analysis Report, Section 8.2.2.13

Original cable tray requirements were based on estimated quantities and cable types foreseeable at the time. The cable trays actually installed included these requirements, plus margins for the unforeseen. In many places, as much cable tray as practical with respect to the available physical space was installed.

Since then, many additional cable requirements have developed over and above those for which cable tray provisions were made. In addition, higher grade cables with overall protective armors have been selected and installed. These cables have approximately 50 percent greater diameters than originally anticipated.

The result of this has been that some cable trays containing control and instrumentation cables have become overfilled above the existing cable tray side rails.

The following action has been or will be taken with regard to this problem:

- a. The cable tray overfill situation has been reviewed and identified by both the Engineering and Construction Departments.

7911210 701

Mr. John G. Davis  
Page 2  
May 13, 1971

- b. An analysis has been made of the cable tray overflow situation. This indicates that overheating is not a problem since the cables are control and instrument cables and carry little or no current.

The cable tray physical loading is found to be within allowable loading. The worst case of overflow was found to be within acceptable values with a safety factor of 2.8.

- c. An analysis of the effects of the overflow on the seismic loading on trays and hangers is being performed. If found to be necessary, structural modifications or additions will be made to the hangers or cable trays.
  - d. The addition of cables in the overflowed cable trays has been stopped and additional cable trays have been added where necessary and practical.
  - e. For those cable trays which are filled above the tray rails, rail extensions will be provided to adequately protect the cable.
2. Reactor Coolant Pump Data Package - Appendix B to 10CFR50 - Criterion VIII

The Reactor Coolant pump data packages have been reviewed by B&W and Duke Power and the data packages have been changed to correspond with the pump position. The revised records are available for review.

3. Control Rod D.C. Breaker Cabinet Damage and Inspection - Appendix B to 10CFR50 - Criterion XV

The control rod drive DC breaker cabinet was received by B&W on the site November 17, 1970, and a receipt inspection was prepared by Johnny F. Stokes of B&W. On November 18, 1970, the DC breaker cabinet was over turned while being handled in the #4 Warehouse, resulting in visible damage to the cabinet door. This damage was noted on the B&W receiving report. Inspection of the DC breaker cabinet was performed by C. B. Aycock, Field Engineer-Electrical, and a breaker specialty crew, a few days later, when the crew was on the job. A visual and mechanical check was made of the DC breaker cabinet, and no damages were found other than to the door, and the door was repaired. The results of the check were verbally given to Bill Faasse, B&W Site Construction Manager, who requested the inspection. B&W and Duke Engineering gave verbal permission to C. B. Aycock to install the DC breaker cabinet, and a yellow QC 31 tag was applied to the breaker cabinet prior to installation. After installing the DC breaker cabinet,

Mr. John G. Davis  
Page 3  
May 13, 1971

an electrical control functional check was performed by the Duke Steam Department, and no problems were observed. The AEC Compliance Inspector observed no tags on the DC breaker cabinet during his inspection on April 6 - 9, 1971. Apparently, the tag had been removed while work was being performed on the DC breaker cabinet. Our tagging procedure does not require that tags be maintained on equipment after installation, only that tags must be placed on the equipment prior to installation to reflect the disposition of the equipment and associated Quality Control documentation. B&W had inadvertently neglected to document the checking of the DC breaker cabinet prior to installation, as reflected in their incomplete data package. B&W will insert into their data package the documentation of the inspection check performed by C. B. Aycock, and the circuit breaker specialty crew which will verify that the DC breakers or internal components were not damaged.

4. Identification of Welding Rods - Appendix B to 10CFR50 - Criterion VIII

Appendix B, Criterion VIII, of 10CFR50 states that the requirements are such that identification and control are designed to prevent the use of incorrect or defective items. The requirements of ANSI B31.7, Paragraph 1-725.2, indicate that legible markings are required to assure positive identification of the material until it is actually consumed in the process.

Duke Power Company orders filler metal to specification requirements such that coated electrodes are clearly marked with ink stampings on the coating designating the electrode type, and bare filler metal is flag-tagged with the filler metal type. The material is received with mill test reports which give chemical, physical and other properties of the filler metal. The type designations on the filler metal are verified by these mill test reports. A general issue control system is in effect to assure that only filler metal which has been properly received under the purchase specifications is issued to the welding crews. Verification of filler metal identification is accomplished by the welding inspectors prior to use. The legibility of weld metal type designations is maintained to the point of usage. This type of procedural control assures a continuous monitoring system that prevents the wrong type of filler metal being used in a welded joint.

It is our opinion that the above procedure provides appropriate means to assure the identification of filler metal and prevents the use of incorrect or defective items.

Mr. John G. Davis  
Page 4  
May 13, 1971

5. Compliance with Operating Procedure OP 1503 02 - Final Safety Analysis Report, Section 12.3.1

Fuel is unloaded, unpackaged, inspected, and stored in the temporary fuel storage building according to a written procedure. Attached to this procedure is a checklist for inspection and storage. Several of the items of the checklist are performed during the unloading, unpackaging, and inspection. Several items of the checklist are completed upon final storage of fuel assembly in the fuel storage rack. One step of the checklist for inspection and storage calls for the fuel assembly ID number to be recorded on a status board which is a diagram showing the location of the fuel assemblies in the fuel storage racks. During the fuel unloading operation on April 1, 1971, Fuel Assembly 1C44 was placed in the fuel storage rack. Upon completion of the storage operation the supervisor in charge initialed the remaining steps on the checklist, including the item called for recording the location on the status board. The item was initialed with the full intention of immediately performing the notation on the status board but due to a diversion of his attention at this point the notation was not performed. This omission was noted by the AEC Compliance Inspector on April 9, 1971.

Immediately following the notation of the deficiency, the Operating Engineer discussed individually with each supervisor and the operating group the need for extra care to assure that each step of every procedure or check list is completed prior to being initialed. In addition to this, the Superintendent held a meeting of station supervisors to stress the importance of following written procedures and the documentation thereof.

Also, a permanent status board has been installed in the temporary fuel storage building to give additional emphasis to this part of the procedure.

We hope that this adequately answers your concerns, and if you need further information, please advise.

Sincerely,

  
A. C. Thies

ACT:vr

cc: Mr. W. S. Lee  
Mr. E. D. Powell  
Mr. C. E. Watkins  
Mr. J. E. Smith