

DUKE POWER COMPANY

POWER BUILDING

422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

August 6, 1979 11:20

TELEPHONE: AREA 704
373-4083

Mr. James P. O'Reilly, Director
U. S. Nuclear Regulatory Commission
Region II
101 Marietta Street, Suite 3100
Atlanta, Georgia 30303

RE: RII:WDJ
50-269/79-10
50-270-79-10
50-287/79-10

Dear Mr. O'Reilly:

With regard to the above referenced inspection report and in response to a request by your staff, the following supplementary responses to Items C and D are provided.

With regard to Item C, revision 6 to NSM ON-0009 was initiated on December 13, 1978. This revision changed the reactor building sump discharge valve control switch from a General Electric VB203A to a Cutler-Hammer 10250. This revision was required because the General Electric switch initially specified did not have the proper contact operation to allow for "start," "stop," and "automatic" operation. Prior to implementation of this revision, Design Engineering was informally contacted on this change. It is not considered that this change was significant in that the design of the modification was not altered, only the equipment required to effect the design.

As stated in our initial response to this item, it is not considered that an item of noncompliance occurred in this instance.

With regard to Item D, an official interpretation of the applicability of ANSI N45.2.4-1972/IEEE Std. 366-1971, paragraph 2.5.2 has been requested.

It is Duke Power Company's position that an item of noncompliance did not occur in this instance, and that 10CFR50, Appendix B and the applicable standards, taken as complete documents support this position.

The Introduction to Appendix B of 10CFR50 states:

"Nuclear power plants and fuel reprocessing plants include structures, systems, and components that prevent or mitigate the consequences of postulated accidents that could

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cause undue risk to the health and safety of the public. This appendix establishes quality assurance requirements for the design, construction, and operation of those structures, systems, and components. The pertinent requirements of this appendix apply to all activities affecting the safety-related functions of those structures, systems and components; these activities include designing, purchasing, fabricating, handling, shipping, storing, cleaning, erecting, installing, inspecting, testing, operating, maintaining, repairing, refueling, and modifying."

Each licensee is required to establish what structures, systems, and components are safety-related and the quality assurance program is applied to them.

Criterion XIV states:

"Measures shall be established to indicate by the use of markings such as stamps, tags, labels, routing cards, or other suitable means, the status of inspections and tests performed upon individual items of the nuclear power plant or fuel reprocessing plant. These measures shall provide for the identification of items which have satisfactorily passed required inspections and tests, when necessary to preclude inadvertent bypassing of such inspections and tests."

Contrary to the cited item of noncompliance, the status of inspections and tests performed upon individual items of the nuclear power plant shall be indicated by the use of markings such as stamp, tags, labels, routing cards, or other suitable means.

The nuclear power plant is composed of, in part, structures, systems, and components which are safety-related. Installed safety-related instruments are, by virtue of being part of the system, considered to be part of the nuclear power plant.

On the other hand, measuring and test equipment, is not part of any particular structure, system or component, or of the nuclear power plant. Criterion XII is applicable to control of measuring and test equipment.

The approved Quality Assurance Program Topical Report incorporates, among other standards, the requirements of ANSI N45.2.4-1972/IEEE Std. 336-1971. The standard was originally for construction of nuclear power plants, but with the issuance of Regulatory Guide 1.30, became applicable to operating plants as well.

As stated in our initial response to this item, Section 17.2.12 of the QAPTR addresses (offline) test and measuring equipment. Inasmuch as installed instrumentation is considered to be part of the safety-related system, it is covered by the entire QA program which is applicable to all safety-related structures, systems, and components.

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This position is not contradicted by subsequent standards issued in this area. For example IEEE Std. 336-1977 revised IEEE Std. 336-1971 and in Section 2.5.2, "Calibration and Control," states:

"Measuring and test equipment used to determine compliance with (installation) specifications shall be controlled in accordance with the requirements of IEEE Std. 498-1975."

IEEE Std. 498-1975 states in Section 1.1:

"This standard sets forth the requirements for a calibration program to control and verify the accuracy of M&TE (measuring and test equipment) which is used to assure that important parts of nuclear power generating stations are in conformance with prescribed technical requirements, and that data provided by testing, inspection, or maintenance are valid. These important parts include those structures, systems, and components whose satisfactory performance is required; for the plant to operate safely, to prevent accidents that could cause undue risk to the health and safety of the public, or to mitigate the consequences of such accidents if they were to occur. This standard is intended to be used in conjunction with American National Standard Quality Assurance Program Requirements for Nuclear Power Plants, ANSI N45.2-1971."

Furthermore, in Section 1.4 of this standard, measuring and test equipment is clearly defined:

"Measuring and Test Equipment (M&TE). Devices or systems used to calibrate, measure, gauge, test, inspect, or control in order to acquire research, development, test, or operational data; to determine compliance with design, specifications, or other technical requirements. M&TE does not include permanently installed operating equipment . . .

Recalling the statements of Criterion XIV of 10CFR50 Appendix B, it is clear that measuring and test equipment is separate from installed instrumentation and that installed instrumentation is not controlled by the requirements of ANSI N45.2.4-1973/IEEE Std. 336-1971, IEEE Std. 336-1977, or IEEE Std. 498-1975.

Reference to installed instrument calibration is also made in Section 5.2.16 of ANS-3.2/ANSI N18.7-1976.

"Special calibration shall be performed when the accuracy of either installed or calibrating equipment is questionable. Records shall be made and equipment suitably marked to indicate calibration status. American National Standard N45.2.4-1972 shall be applied to those activities occurring during the operational phase that are comparable in nature and extent to related activities occurring during construction."

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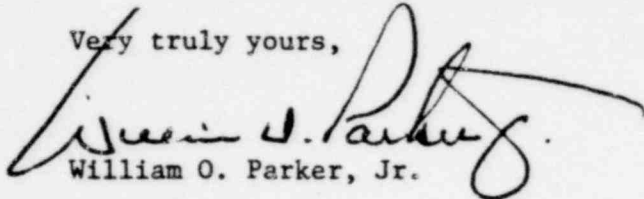
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While the methods for suitably marking installed equipment are not explicitly described, reference is made to ANSI Std. N45.2.4-1972, the content of which has been addressed previously in this response.

It continues to be the position of Duke Power Company that an item of noncompliance did not occur in this instance.

Very truly yours,

A handwritten signature in cursive script, appearing to read "William O. Parker, Jr.", written in dark ink.

William O. Parker, Jr.

RLG:scs

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