



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report Nos.: 50-424/84-10 and 50-425/84-10

Licensee: Georgia Power Company
P. O. Box 4545
Atlanta, GA 30302

Docket Nos.: 50-424 and 50-425

License Nos.: CPPR-108 and CPPR-109

Facility Name: A. W. Vogtle Nuclear Plants 1 and 2

Inspection Date: May 1 - 4, 1984

Inspection at Vogtle site near Waynesboro, Georgia

Inspectors:	<u>A. B. Ruff</u>	<u>6/6/84</u>
	A. B. Ruff	Date Signed
	<u>N. Merriweather</u>	<u>6/6/84</u>
	N. Merriweather	Date Signed
Approved by:	<u>T. E. Conlon</u>	<u>6/7/84</u>
	T. E. Conlon, Section Chief	Date Signed
	Engineering Branch	
	Division of Reactor Safety	

SUMMARY

Areas Inspected

This special, unannounced inspection involved 58 inspector-hours on site in the area of workers' concern with regard to indoctrination, training, and certification of contract electrical QC inspectors; nonconformance reports, rework without documentation of electrical related construction items and use of hold tags; methods of keeping electrical QC inspectors appraised of new procedures and changes to procedures; procedure availability for in field use; and qualification of electrical QC supervisory inspectors, and use of Level I and Level II electrical QC inspectors.

Results

Of the five areas inspected, no violations or deviations were identified in three areas; two apparent violations were found in two areas (Training and Indoctrination of Electrical Contract QC Personnel, paragraph 5(a), and Changing of Procedure Requirements by Memorandum, paragraph 5(b)).

8408270440 840725
PDR ADOCK 05000424
Q PDR

REPORT DETAILS

1. Persons Contacted

Licensee Employees

- *H. Gregory, III, General Manager, Vogtle Nuclear Construction
- *C. Hayes, Vogtle QA Manager
- *E. Groover, QA Site Manager
- *R. McManus, QC Manager
- *T. Weatherspoon, Assistant Manager, QC
- *J. Blocker, Assistant Manager QC
- *M. Upchurch, Electrical QC Section Supervisor
- *G. McCarley, Project Compliance Coordinator
- *D. Fiquett, Manager, Field Construction Operations
- *J. Fugatt, Engineering Supervisor
- F. Warren, QC Electrical Supervisor
- R. Page, QC Electrical Supervisor
- J. Kelly, Skills/Training Section Supervisor
- R. Dudley, Methods and Training Specialist
- T. Merschat, Methods and Training Specialist
- L. Owens, Site Human Resource Supervisor

Other licensee employees contacted included 15 QC personnel and 4 technicians.

NRC Resident Inspector

- *W. F. Sanders

2. Exit Interview

The inspection scope and findings were summarized on May 4, 1984, with those persons indicated in paragraph 1 above. The licensee was informed of inspection findings listed below. The licensee acknowledged the inspection finds of the first violation with no dissenting comments. However, the licensee took exception to the second violation. The licensee's comments as presented in the exit were that the QC manager has the authority (based on the Plant Vogtle Field Procedure Manual (VFPM), Preface, paragraph 2.2) to approve deviations to procedures provided such deviations satisfy the intent of the procedures; therefore, the memorandum issued on May 1, 1984, allowing electrical QC to document deficiencies on a punchlist does not violate Georgia Power Company (GPC) QA Program commitments. The inspectors took exception to this statement in that this memorandum should be part of the approved procedure (GD-T-01).

- a. Violation 50-424, 425/84-10-01, Training and Indoctrination of Electrical Contract QC Personnel, paragraph 5(a).
- b. Violation 50-424, 425/84-10-02, Changing of Procedure Requirements by Memorandum, paragraph 5(b).

3. Licensee Action on Previous Enforcement Matters

Not inspected.

4. Unresolved items

Unresolved items were not identified during this inspection.

5. Workers' Concerns

Potential Problems: On March 8, 1984, a former electrical contract QC inspector at Vogtle expressed his concerns to the NRC investigative staff in Atlanta, Georgia. Shortly after this conversation an article was published in a local newspaper of the Augusta area. This article apparently was related to many of the worker's concerns because after it appeared another electrical QC inspector called NRC and endorsed the article. He expressed concerns which essentially paralleled those of the first electrical inspector.

The following information was given to NRC investigative staff:

- a. Electrical QC inspectors are not properly indoctrinated, certified or trained and that there was virtually no training program for them. Inspectors were not familiar with 10 CFR 50 Appendix B requirements and the national standards specified therein such as, ANSI, ASME, AWS and IEEE standards. No training was received on documents which include documents such as Nonconformance Control (GD-T-01), Work Stoppage (GD-T-07), etc. that are applicable to all disciplines.
- b. Nonconformances are not properly documented and hold tags are not used. Deviations are written instead of nonconformance reports. Rework was being performed without documentation and trending analysis could not be performed since documentation of deficiencies was not required.
- c. The qualifications of electrical inspector supervisors and the proper use of Level I and Level II inspectors were questioned.
- d. Electrical QC inspectors are not required to certify by their signature that they have read the applicable procedures or changes to procedures.
- e. Inspectors were not allowed to take procedures in the field during their inspections. Access to QA library was denied, therefore, procedural references to national standards could not be examined.

Observations and Resolutions: The NRC inspectors interviewed approximately 15 electrical QC inspection personnel. These people were GPC and contract (job-shoppers) personnel who work under the direction of GPC supervisors. Additional interviews and discussions were held with GPC personnel in the Vogtle QC Department, Training and Skills Department, Human Resources Department, and QA Department. Procedures and records were also examined in the inquiry of the above listed workers' concerns.

a. Indoctrination, Training, and Certification of Electrical QC Inspectors

Vogtle plant procedure QC-A-02, Inspection Training Requirements, and QC-A-01, Qualification and Certification of Technical Inspectors, establishes requirements in the areas as identified by the respective titles. It is considered that actions performed by the licensee with regard to these procedures meets the regulatory requirements. However, the training and indoctrination were considered to be deficient for electrical QC contract personnel.

The licensee contracted with a consulting firm to have them present candidates to Vogtle Plant for possible employment as Level II electrical inspectors in specified areas. These experienced Level II inspectors were considered by Vogtle to be essentially qualified. To insure that the facts on the candidate's resume are correct, the licensee stated that they are having the consulting firm verify this and that they are performing spot checks.

The candidates were brought aboard and initially were presented, informally, the material that was considered to be necessary for them to satisfactorily complete the applicable Vogtle evaluation/certification tests. The candidates were expected to perform a self training on Vogtle plant procedures and satisfactorily complete the subject tests within a period of one week. The NRC inspectors reviewed the certification records for several contract inspectors and determined that they were certified in accordance with QC-A-01. This certification was based on their experience and the satisfactory completion of Vogtle's evaluation/certification examination.

Initially, no formal reading list was provided to contract inspectors for their self training. The self training period was short, informal, and not documented to show that contract inspectors received training on all appropriate Vogtle procedures including such documents as, GD-T-01, Nonconformance Control, and GD-T-07, Work Stoppage. No indoctrination session with regard to the technical objectives of the project; the codes and standards used; and the quality assurance elements employed at the project was provided for those new employees. The training program that was applied to contract inspectors was not addressed in the licensee's procedure QC-A-02, Inspection Training Requirements.

The failure to provide indoctrination and a formal documented training program for new employees is considered a violation and is identified as 50-424, 425/84-10-01, Training and Indoctrination of Electrical Contract QC Personnel. As stated above, inspectors were certified and inspections were performed in accordance with the requirements of the Vogtle procedures. This violation is considered to be of minor safety significance.

The licensee acknowledged that the training for new experienced contract personnel was new to them and consequently a learning curve evolved on how to best assimilate these contract inspectors into the Vogtle program. The licensee developed a "New Employee Required Reading List" which provides the required reading assignments and requires the employee's signature and the supervisor's signature to document that particular procedures and specifications were read. In addition, the training period has been extended and more on-the-job training is provided. Additional improvements are planned by the licensee. Electrical contract inspectors that were recently brought aboard stated that considerable improvement has been made in their training program. This conclusion was based on their discussions with contract inspectors who had come aboard earlier.

The criteria for 10 CFR 50, Appendix B, do not list or specify any national standards.

It is not a safety issue nor an NRC requirement for electrical QC inspectors to know the Appendix B criteria or the national standards. The site procedures incorporate the applicable requirements and provide acceptance criteria as called for by the licensee's commitments in the FSAR. Both Georgia Power Company (GPC) and contract inspection personnel were aware of 10 CFR 50 Appendix B and the IEEE standards and both acknowledged that the Vogtle procedures were the controlling documents with regard to Vogtle inspections.

b. Nonconformance Reports, Rework Without Documentation, and Use of Hold Tags

The licensee's procedure GD-T-01, Nonconformance Control, establishes the Vogtle plant's measures to comply with 10 CFR 50 Appendix B criteria 15 and 16. In this procedure a Deviation Report (DR) is synonymous with a Nonconformance Report.

In paragraph 5.1.1 the procedure states that "The DR need not be written if the discrepancy is minor and easily returned to the original design requirements during the normal construction process. In this case, notify appropriate personnel of the situation so action can be taken to correct the condition. If sufficient action has not been taken to initiate resolution within two working days, initiate a DR unless the discrepancy is tracked by other procedural methods." Based on the above, rework could be performed without any documentation; however, in January 1984 a Desk Top Instruction (DQE-07) was issued which was intended to clarify the above, and to provide additional guidance so that deficient items would be documented by a Deviation Notification (DN) for tracking construction activities, for trending and for ease in reinspection. In addition, the DN acted as a time clock to insure that a DR was initiated if corrective action was not completed within a 48 hour period.

The guidelines in determining the use of hold tags are listed in paragraphs 5.3.1.2.,3.,4., and 5 of GD-T-01 and are as follows:

- (1) Items which cannot be easily identified and located after further processing, i.e., bulk materials, require hold tags.
- (2) Items which further processing would mask the deviation require hold tags.
- (3) Deviations which cannot be corrected after further processing require hold tags.
- (4) Deviations which can be completely installed without any effect to the area of deviation do not necessarily require a hold tag.
- (5) Deviations where mechanisms are procedurally outlined to control further processing do not require a hold tag, e.g., a pour card is not to be signed until the deviation is resolved.

From the interviews with QC electrical inspectors it is considered that GD-T-01 along with the guidelines provided in the January Desk Top Instruction were being followed.

Per discussion with Electrical QC Supervisor, the Desk Top Instruction was later cancelled when it was found that paper reduction was not being accomplished. Since most of the corrective actions were not completed within a 48 hour period, DRs were issued in accordance with paragraph 5.1.1 of GD-T-01, Nonconformance Control Procedure.

On May 1, 1984, the QC manager issued a memorandum that in essence, changed GD-T-01 paragraph 5.1.3. This memorandum references paragraph 5.1.3 and states, "Initiate a DR whenever a deficiency is identified after a contractor indicated certain work was completed and ready for inspection, e.g., sign off of a pour card." The memo states that due to this requirement, all inspection discrepancies of raceways are identified on DRs and that effective immediately Electrical QC will allow raceways found deficient upon inspection to be reworked without a DR. All deficiencies will be recorded on a punch-list form that will be kept for trending purposes.

The NRC inspectors consider that the issuance of memoranda are unacceptable means to change procedure requirements and to direct QC personnel to inspect and accept work. This is also considered a deviation from the Vogtle Field Procedure Manual which states in paragraph 2.2 and paragraph 2.7 the following:

"At the direction of the PCM, review all actions required by these procedures and the implementation of them. Implement those procedures applicable to your areas. Exercise authority to approve deviations

to procedures within your area provided such deviations satisfy the intent of the procedures. Ensure all forms used for inspecting, verifying, reporting, recording, and/or documenting purposes are substantively the same in all respects as those shown in the approved VFPM procedures requiring their use. Refer to GD-A-37, Forms Management.

Prepare or designate someone to prepare new procedures, procedure revisions, and field procedure change notices (FPCNs). Ensure that procedure material is prepared and processed according to GD-A-08, Procedure Development and Control, and GD-A-37, Forms Management."

It is recognized that the above action statement applies to areas of different responsibilities, but the subject field procedure manual should be considered in its entirety not just selected portions. When considered as a whole there is no conflict in the intent, that is, a FPCN should be used to make changes (deviations) to procedures and that applicable personnel are to approve or disapprove these changes (deviations) within the guidelines of Vogtle's QA program. Although cognizant personnel were consulted on the issuance and contents of the memo, it was not formally reviewed and approved by the same organization that approved GD-T-01, Nonconformance Control. The subject memo, as it now stands, does not become a part of the approved procedure (GD-T-01) and is considered to be outside of the approved QA program. The failure to use a FPCN to change a procedure is identified as violation of minor safety significance 424, 452/84-10-02, Changing Procedure Requirements by Memorandum.

c. Qualification of Electrical Inspector Supervisors and Use of Level I and Level II Inspectors

Several electrical inspection supervisors were interviewed and found to be qualified. However, one inspector supervisor recently transferred from the civil discipline due to work reduction in that area has been assigned to the electrical area. This inspector supervisor has extensive QC experience including interface experience with electrical personnel and calibration experience with the National Bureau of Standards. To date, he has not been trained on the applicable Vogtle electrical procedures but is scheduled to receive this training. Until his training in the electrical area is complete, he is performing administrative functions only. The lead inspectors in his area handle the quality review of documentation.

Per ANSI 45.2.6 (1978), and Vogtle QC-A-01, "Qualification and Certification of Technical Inspectors" a Level I inspector shall be capable of performing the inspections, examinations, and test that are required to be performed in accordance with documented procedures and/or industry practices. Since Level II inspectors have all the

capabilities of Level I inspectors and many are performing similar inspections, it may appear that Level I inspectors are performing Level II functions. This is not the case in that Level II inspectors have additional capabilities that a Level I inspector does not have, e.g., Level II inspectors are used in supervising or maintaining surveillance over inspections and in evaluating the acceptability of inspection results. Based on discussion and review of records, it is considered that Level I and II inspectors are performing functions as defined in Vogtle's QC-A-01.

The workers' concerns with regard to the above subjects do not indicate that NRC regulations and/or licensee's commitments have been violated.

- d. Procedure Signoff By Individual Inspectors to Signify that Applicable Procedures or Changes Have Been Read

In accordance with Vogtle Desk Top Instruction QC-I-01, Maintaining Procedure Review Matrix, it is the supervisor's responsibility to insure that his workers are knowledgeable in procedures required for the specific inspection activities prior to that worker being assigned the work, and inspection personnel are responsible to maintain proficiency in procedures to permit competent performance in their assigned work. QC-I-01 also states that "Procedures will be reviewed at intervals not to exceed six (6) calendar months or at the time a complete revision is issued. Changes directed by field procedure change notices (FPCN) are to be disseminated, by the Inspection Supervisor, as received."

The preferred method of review is by group assembly. The review leader records the procedure and/or change that is reviewed, the name of those in attendance, and the date the review was conducted. Several of these completed records were examined and found to be acceptable. In addition, during the QC electrical inspector interviews, inspectors were asked how they were notified of new changes. All indicated that the supervisor discussed the procedure change with them.

There is no regulatory requirement to have inspectors sign attendance sheets for procedure review sessions or to sign that they have read a procedure and/or change. It is considered that Vogtle practices with regard to keeping their personnel apprised of procedures and changes thereto are acceptable.

- e. Inspectors Not Allowed to Take Procedures in the Field and Access to QA Library Denied

Since controlled copies of procedures require administrative controls for special handling such as, accountability, updating, periodic auditing, and voiding or destroying superseded copies and/or changes, additional expenses are incurred. For each inspector to have a controlled copy the administrative control expense would be a considerable amount. For this reason and the fact that inspectors are

trained, qualified and certified, the inspectors are not encouraged to take procedures in the field. In addition, one or more controlled copies are available for reference and review in each of the various QC offices on the site. The licensee representative has indicated that they have provided additional controlled copies of the procedures in the various QC offices. Inspectors can now sign them out if they desire for use in their field inspection and then sign them back in at the end of their work shift. RII concurs with the licensee's position in that procedures need only be accessible at the various QC offices or work areas and need not be at the place of inspection. However, RII considers that the licensee's action to make procedures available to inspectors for use on field inspections was a prudent move.

It is not necessary nor is it a requirement by NRC or GPC that inspectors review or examine the national standards that are referenced in the various inspection procedures. The interpretation of the standards are done by the architectural engineer (A/E) or GPC field engineers and are incorporated in the Vogtle procedures. It is recognized that the reference section of many procedures list national standards that may not be referenced in the action portion of the procedure. If they are referenced in the action portion of the procedure, the applicable information is included in the body of the procedure or the applicable portion of the standard is available or incorporated in other site procedures. If they are not referenced in the action portion of the procedure, but are in the reference section, then it is understood that the author of the procedure considered or used the standard to develop the procedure.

RII considers that Vogtle actions in regard to the above subjects are acceptable.