U.S. NUCLEAR REGULATORY COMMISSION

REGION III

Report No. 50-483/85012(DRP)

Docket No. 50-483 License No. NPF-30

Licensee: Union Electric Company
Post Office Box 149 - Mail Code 400
St. Louis, MO 63166

Facility Name: Callaway Plant, Unit 1

Inspection At: Callaway Site, Steedman, MO

Inspection Conducted: March 10 through May 27, 1985

Inspector: B. H. Little

Approved By: J. F. Suermann, Acting Chief
Reactor Projects Section 2A

John F. Suermann

September 30 1985
Date

Inspection Summary:

Inspection on March 10 through May 27, 1985 (Report No. 50-483/85012(DRP))
Areas Inspected: Routine unannounced inspection by the resident inspector of previous inspection findings. The inspection involved a total of 260 inspector-hours by one NRC inspector including 62 inspector-hours onsite during off-shifts.
Results: Two violations (only one of which was cited) were identified (failure to provide adequate acceptance criteria in the QC program/procedures - Paragraph 5).

DETAILS

1. Persons Contacted

D. F. Schnell, Vice President - Nuclear
*S. E. Miltenberger, Manager, Callaway Plant
*R. L. Powers, Assistant Manager - Quality Assurance
*P. T. Appleby, Assistant Manager - Support Services
*J. E. Davis, Compliance Superintendent
J. C. Gearhart, Supervisory Engineer - QA
J. R. Veatch, Supervisor Engineering (QA)
J. V. Laux, Supervisor QA
*W. A. Norton, QA Engineer
*T. L. Shaw, Supervisor, QC
*T. W. Stotlar, QA Enigneer
*F. D. Field, Manager, Quality Assurance

*Denotes those present at one or more management interviews. In addition, a number of QA, Engineering and QC personnel were contacted.

2. Background

a. Summary:

This matter relates to an allegation that Quality Control (QC) procedures were not followed in the certification of three QC assistant supervisors, and concerns regarding the qualifications of the QC assistant supervisors in some areas for which they had been certified. The allegation and concerns were made verbally by QC inspectors to members of the licensee's Quality Assurance (QA) department and subsequently to the NRC Senior Resident Inspector.

Following receipt of the QC inspectors' allegation and concerns, the QA department performed a surveillance of QC programs and procedures including certification and qualification records of currently employed QC inspectors. The surveillance substantiated the QC inspectors' allegation and concerns and, in addition, identified other QC program/procedure deficiencies. As a result of the additional deficiencies the licensee ordered a complete review of all Union Electric Company (UE) QC (operations) inspectors' (both past and present) certifications and qualifications and a review of all work authorizing documents. A QA/Engineering evaluation team was assigned the review and evaluation of the inspection activities performed by QC inspectors having questionable certifications. The licensee determined that the inspections presented no significant impact on plant components, system function or quality.

The allegation and a description of the deficiencies were documented in NRC Inspection Report No. 50-483/85002 and were designated as Open Item 483/85002-01.

b. Chronology of Events

December 1984: QC inspectors discussed the following complaints with QC supervision:

- The selection and assignment of QC assistant supervisors.
- The elimination of lead inspector positions.
- Backshift and weekend inspection assignments.

QC supervision/management held meetings to resolve QC inspectors' complaints.

QC inspectors discussed items with QA department representatives.

- QA was aware of ongoing QC/management meetings to resolve the QC inspectors' items.
- QA viewed the items as being QC departmental issues.

Late January 1985: QA was verbally informed of the QC inspectors' concerns regarding the qualifications of the QC assistant supervisors.

February 4, 1985: QA received, from QC inspectors, a verbal allegation that QC procedures were not followed in the certification of the QC assistant supervisors.

QA Supervisor (operations) ordered a QA Surveillance in the area of certifications and qualifications of QC inspectors.

February 5, 1985: NRC resident inspectors received verbal allegation and concern from a QC inspector regarding the QC procedure violation and related qualification issue.

February 6, 1985: NRC Senior Resident Inspector was advised by two QC inspectors that members of the licensee's QA department had received the QC allegation and concern.

NRC inspector met with QA management, and was advised that QA had commenced an in-depth surveillance of the issues.

February 8, 1985: QA issued Request for Corrective Action (RCA) No. P-8502-028 which documented the procedure violation and substantiated the QC inspector's allegation.

Licensee held informal discussions with QC supervision stressing procedure adherence.

February 22, 1985: QA issued Surveillance Report No. 850209 (Review of Certifications of Union Electric Nuclear Operations (UENO) Quality Control Inspectors). The report identified additional deficiencies which were documented in the following RCAs:

RCA No.	Description
P-8502-034	Insufficient Records to Support QC Certification
P-8502-035	QC Inspectors Don't Have Needed Experience
P-8502-039	Certification/Qualification Program Deficiencies

February 26, 1985: Licensee response to QA surveillance findings:

- Licensee suspended the QC certifications of seven QC inspectors who were identified by QA as having questionable certification.
- Licensee ordered: a) a complete review and evaluation of the certifications and qualification of all operational QC inspectors (past and present), b) a review of all operational work authorizing documents to identify those documents which involved UENO QC inspectors having questionable certifications, and c) the assignment of a QA/Engineering task group to review the inspection activities of the QC inspectors having questionable certifications to assess the safety/quality impact on plant hardware.

March 7, 1985: Local newspapers contained articles relating to unqualified QC inspectors at the Callaway Plant.

April 17, 1985: The NRC inspector accompanied licensee personnel during their field verification inspection of eight completed safety-related maintenance/inspection activities. No deficiencies were identified.

3. Inspection of Quality Control Inspection Program and Practices

An inspection of matters relating to the licensee's QC inspection program was performed by the NRC Senior Resident Inspector to assess the following:

- The existence and nature of the QC inspectors' concerns.
- The implementation of the licensee's QC program.
- The QC certification and program deficiencies.
- The safety/quality impact of the deficiencies on plant hardware.

- The licensee's response, both technically and administratively, to the issues.

The inspection included the following:

- Meetings with representatives of the licensee's Corporate, Plant and QA Management.
- Interviews with QC Personnel.
- Interviews with QA and Engineering Personnel.
- Document Review.
- Field verification inspection of a sample of completed work requests.

Details relating to these five areas are as follows:

a. Meetings with Representatives of Licensee's Corporate, Plant, and QA Management:

The NRC inspector met with licensee management upon notification of the QC deficiencies and on several occasions during the inspection period. Through the initial meetings and observation of the licensee's immediate response, the inspector determined that QA's review of the issues was thorough, and received prompt management attention and support. The licensee's immediate corrective action included the suspension of certifications for QC inspectors, including assistant supervisors, identified as having questionable QC certifications. The resident inspector was advised that: the existing QC programs and procedures would receive a thorough review and be revised as appropriate to assure conservative standards were applied to future QC certifications; conservative qualification standards would be applied during the review of past and present QC inspectors' certifications; and, all inspections performed by those having questionable certifications would be evaluated for potential hardware problems.

Through further discussions with the licensee's management and observation of the licensee's actions, the inspector determined that the QC program deficiencies, identified during the QA surveillance, received prompt and thorough evaluation. This evaluation included reviewing ongoing QC activities and assuring that existing policies, administrative controls and procedures governing those activities were being fully implemented.

b. Interviews with QC Personnel:

The NRC inspector held interviews with: all QC inspectors who were currently employed in the Civil, Electrical, Mechanical, NDE, and receipt inspection groups; QC assistant supervisors; and the QC Supervisor. These interviews were conducted to obtain

information relative to the existence and nature of QC inspectors' issues, and to assess the issues for potential quality impact.

The QC inspectors were specifically asked if they were aware of any order or directive which prohibited seeking technical advice or information from QA or which discouraged access to higher levels of management. The QC inspectors stated they were not aware of any orders or directives which specified or implied any such restrictions. The QC inspectors were questioned to obtain their views regarding a QC supervisor's memo dated March 10, 1984 on the subject of "Communication," which was referred to in a newspaper article on QC issues. The memo mentioned past instances of counterproductive communication, advised QC inspectors of their obligation to take QC problems to their supervisors and restated QC and UE management's "open door policy." QC inspectors expressed an overall support of the memo's subjects and did not view this as discouraging contact with upper management, QA, or the NRC.

The QC inspectors expressed confidence in their working environment, relating to their ability to identify, document and obtain resolutions of quality and safety issues.

The QC inspectors were questioned to obtain their views regarding QC inspector training and qualifications and to determine if the inspectors had concerns or had complained about unqualified inspectors to their supervision. The inspectors' response regarding training and qualification of themselves and other inspectors in their groups was generally positive. All the inspectors expressed confidence in being qualified to perform the inspections they had performed, based on their past experience and training, the nature of inspections (not complicated), and adequacy of inspection criteria and checklists.

In response to questions on training, all QC inspectors indicated that they had received adequate to very good training for the inspections they were performing. This training consisted mainly of self-study (required reading) and on-the-job-training (inspections with qualified inspectors). One QC inspector said he felt "pushed" to complete the required reading assignment. Another inspector said he would have liked additional training on processing QC paperwork. Both inspectors indicated they had not discussed their views with their supervisor.

Two QC inspectors expressed a desire for training in process measuring instruments used in the instrumentation and control (I & C) area. Both inspectors indicated they were qualified to perform their required QC inspections, basically: electrical termination; like-kind replacements; and electrical scheme checks. Though qualified, the inspectors expressed the view that they would be more comfortable performing I&C inspections if they were given training in addition to what was already provided. The

inspectors also felt that this additional training would provide a basis to support an expanded inspection program. One of the inspectors had communicated these views to QC supervision on several occasions during the past year and has recently been advised that training in this area was scheduled for May 1985.

The NRC inspector questioned each QC inspector to determine if concerns about unqualified inspectors had been made to QC supervision or members of the QA department, and, if so, when the concerns had been made and what was their nature.

The QC inspectors' response to these questions indicated that two QC inspectors informally notified members of the QA department of their concerns in late January 1985. The nature of their concerns was that QC procedures were not followed in the certification of assistant QC supervisors and that the QC inspectors believed that the assistant supervisors recently certified lacked experience and knowledge in the areas for which they had been certified. Three QC inspectors indicated they had discussed general concerns relating to divisional issues with QA personnel on or about late December 1984. The concerns related to the selection and assignment of the assistant QC supervisors, the planned elimination of lead inspector positions and weekend/backshift assignments. The QC inspectors said the nature of complaints at that time (December 1984) did not relate to unqualified inspectors nor did they identify program or procedure violations. The QC inspectors said the issues which were brought to QA's attention at that time were also being discussed with QC supervision during meetings held by upper levels of plant management.

The NRC inspector questioned QA personnel regarding their view of the QC concerns brought to their attention in late December 1984. These QA personnel indicated that the concerns did not identify quality issues but appeared to be departmental in nature involving employer/employee relations. The QA personnel said they were aware that, at the time of the complaints, QC supervision and line management were meeting with QC inspectors to identify and resolve these issues.

Based on the information provided by QC personnel during these interviews, the NRC inspector determined: that the QC inspectors' working environment was conducive to the identification and resolution of quality issues; that the QC inspectors were adequately trained and qualified for the performance of assigned inspection activities; and, that the QA department's response to the QC inspectors' concern of QC procedure violation (failure to follow procedure QCP-ZZ-01001 when certifying three individuals as Level III inspectors) was prompt and thorough.

c. Interviews with QA and Engineering Personnel:

The inspector held individual and group interviews with members of the licensee's QA and Engineering departments who were assigned to the QA/Engineering evaluation team. These interviews were performed to ascertain team members' independence and the scope and depth of the evaluation process. Team members were cognizant of their independent review responsibilities and expressed confidence in their ability to freely exercise independent judgement in the evaluation process.

The inspector determined that a complete personnel records review was performed which identified all past and present QC inspectors who had been employed by or for the UEQC operations group. Under the direction of the licensee's Superintendent of Compliance, the QC department, with QA department overview, performed an evaluation of the QC inspectors' training and qualifications. The evaluation process applied conservative criteria based on ANSI N45.2.6 - 1978 and the licensee's commitment to this Standard. The initial QA review of present inspectors identified seven QC inspectors with questionable certification including two of the assistant QC supervisors identified in the January 1985 concern (See Section 2.b). The complete review of all UEQC (operations) inspectors (past and present) re-identified the original seven inspectors and fifteen previously employed QC inspectors. A manual search of approximately 9,700 work authorizing documents (UENO) was performed to identify those documents which indicated involvement by QC inspectors having questionable certifications. The work documents indicating involvement by QC inspectors having questionable certifications were submitted to a QA/Engineering Evaluation Team consisting of two QA Engineers and two Plant Engineers for evaluation. Each document was individually reviewed by each member of the team, with final disposition requiring agreement of all team members.

The QA/Engineering evaluation was performed to assess the potential adverse effects the inspection activities may have had on installed hardware and to determine the need for reinspection. The evaluation criteria included:

(1) Acceptability of Hold/Witness/Monitoring points, based on agreement of the reviewers that the appropriate inspection attributes were identified.

(2) Acceptability of the maintenance inspection checklist, based on agreement of the reviewers that the checklist contains appropriate inspection attributes and acceptance criteria to perform the task.

(3) Acceptability of inspection, based on agreement of the reviewers that the inspection was: a) within the skills of the QC inspector (like-kind replacement, routine activities performed by skilled craft, e.g., turn-of-the-nut torquing, routine terminations, etc.), b) conducted with adequate inspection instructions, or c) without potential impact on equipment.

The NRC inspector determined, based on a review of QA surveillance Report No. 850209B, that the QA/Engineering evaluation team had reviewed 681 Work Requests, 53 Preventive Maintenance Task Sheets, and 165 Startup Maintenance Authorizations.

The QA/Engineering evaluation determined that the inspections performed were within the capability of the inspectors (e.g., routine surveillance of crafts, system cleanliness, routine torquing of bolts or terminations) or that the QC inspection checklist for more complex inspections contained adequate inspection attributes and acceptance criteria.

Although the QA review identified seven currently employed QC inspectors as having questionable "broad" certifications, the review determined that those inspectors were qualified/capable of performing the inspection activities assigned and could be recertified based on their experience and education as QC level II inspectors in "specific" areas. The licensee recertified one QC level II civil inspector for limited inspection, but chose to maintain the broad scope classification for other inspection areas and as such has not recertified the other QC inspectors at this time.

The evaluation team concluded that the inspections presented no significant impact on plant components, system function or quality. The team findings are reported in QA Surveillance Report No. 850209B.

d. Document Review:

The inspector reviewed the following documents:

- Regulatory Guide 1.58
- Operations Quality Assurance Manual
- Callaway Plant Technical Specifications (Section 6 - Audits)
- SNUPPS-C-FSAR, Appendix 3A
- ANSI N45.2.6 - 1978
- NRC Standard Review Plan Section 17 (Quality Assurance)

- Plant Procedures

  QCP-ZZ-01001 Certification of QC Personnel
  QCP-ZZ-01002 Qualification of QC Personnel

- QA Audit Report No. 0QA-0009A, A-0054, A-8407D and A8309-04

- QA Surveillance Reports Nos. 820102, 850209-A and B

- RCA Nos. P-8502-028, 034, 035 and 039

- Eight QC inspectors' certification/qualification records

- Completed Work Requests (WRs) - Sixty-eight WRs selected from the following plant systems:

  High Pressure Coolant Injection
  Auxiliary Feedwater
  Chemical and Volume Control
  Standby Emergency Diesel Generators.

By review of the licensee's program commitments and procedures, the NRC inspector determined the following: In SNUPPS-C-FSAR, Appendix 3A, the licensee committed to Regulatory Guide 1.58 (ANSI N45.2.6 - 1978) with the following clarification:

> "In instances where the education and experience recommendations of ANSI N45.2.6-1978 are not met by QC personnel, UE will demonstrate by documented results of written examinations and evaluations of actual work proficiency that these individuals possess comparable or equivalent competence. SNT-TC-1A (1975) will be used to qualify and certify NDE personnel."

Plant Administrative Procedure AP-E-301 issued June 24, 1981, and subsequent QC procedures for the qualification of QC inspectors restated ANSI N45.2.6 - 1978, Section 3.5 "Education and Experience - Recommendations," and referenced this Standard. These procedures also referred to the above "clarification" statement.

The inspector determined that the plant procedures contained no quantitative/qualitative acceptance criteria relating to the determination of initial capabilities or for the evaluation of work proficiency of comparable or equivalent competence other than a reference to ANSI N45.2.6-1978. The licensee's QA organization documented these procedural deficiencies in RCA No. P-8502-039.

Operations Quality Assurance Manual (OQAM) was implemented in February 1984, and contains the following commitment:

> "The audit system shall include internal and external audits. The system shall be planned, documented, and conducted to

assure coverage of the applicable elements of the OQAP [operations QA program], and overall coordination and scheduling of audit activities are being accomplished in accordance with requirements described herein.

Internal audits shall be conducted by the Quality Assurance department and shall be performed with a frequency commensurate with their safety significance. An audit of safety-related functions shall be completed in accordance with formal audit schedules within a period of two (2) years. Each element of the OQAP, such as design control and document control, and each area of plant operations shall be audited.

Supplementary to the biennial requirement to audit safety-related functions, other activities shall be audited at the frequencies indicated in Section 6 of the Technical Specifications and under the cognizance of the Nuclear Safety Review Board."

The above commitment is in agreement with the Callaway Plant Technical Specifications, Section 6, which, in part, require audits that encompass:

"The performance of activities required by the Operational Quality Assurance Program to meet the criteria of Appendix B, 10 CFR Part 50, at least once per 24 months."

The resident inspector reviewed current and past QA audits and surveillances relating to QC inspectors' certifications and qualifications to evaluate deficiencies previously identified, their relationship to recent deficiencies, and to assess licensee's corrective action:

- QA audit schedule dated June 29, 1984 indicated: a completed audit of QC and Compliance in May 1984; a scheduled audit in July 1984 (actually performed in August 1984) and, a scheduled audit in May 1985. The May 1984 audit was limited to the area of the identification and control of nonconforming items. The August 1984 audit (No. AD5A8407D) included the qualifications of QC-NDE inspectors. No discrepancies were identified regarding inspector qualifications. The May 1985 audit was in progress at the time this inspection was completed.

- QA Audit Report No. A8309-04, performed in September 1983, included an evaluation of the "capability level" (ANSI N45.2.6) of inspectors in the Test Program Surveillance Group (TPSG). The TPSG provided QC inspections during preoperational testing. The audit determined that all of the inspectors' qualifications were acceptable.

- QA Audit Report No. OQA-0009, performed in April/May 1981, identified QC deficiencies which were documented as five open items and a related unresolved item. Four of the

deficiencies related to procedures, and one identified a procedural violation relative to processing QA records. The unresolved item related to the availability of QC certification and training records.

The NRC inspector determined that the 1981 audit findings relative to QC certification identified the absence of QC certification letters and training records in the QA record files. (QA RCA Nos. P8502-034 and 035 identified that some QC inspectors lacked documented experience and lacked experience to support the QC certifications.) The procedural deficiencies identified in the 1981 audit related to procedural disagreement and inspection activities. (QA RCA No. P8502-039 identified deficiencies related to the lack of qualitative and quantitative acceptance criteria for the UENO QC certification/ qualification program.)

QA department follow-up review of the licensee's response to the 1981 audit findings determined that acceptable action had been taken.

- QA Surveillance Report No. 820102, performed in January 1982, included a review of the QC training program and the certification of QC inspectors. The report identified that the Letters of Certification lacked the employer's name, that test results were not documented for UE courses, and that the date of certification expiration, was not specified. The report also identified the need for validation of the QC inspector's resume when a resume is used as the basis for certification. However, QA did not identify procedure deficiencies regarding the Letters of Certification.

  The NRC inspector's review of the licensee's response to these surveillance findings determined that validation of employees previous education and employment is performed by the licensee's Personnel and Security departments. The licensee's corrective action, regarding the deficiencies in the Letters of Certification, did not address the cause of the deficiencies, i.e., inadequate procedures for that activity, but only corrected the specific deficiencies for the certifications identified. (QA RCA No. P8502-39 (February 22, 1985) identified that the UENO - QC certification program procedures did not specify the minimum information to be contained on written certifications.)

It is noted that the criteria (i.e., individual certification/ qualifications), against which the QA department performed its 1985 surveillance, were different (more prescriptive) than the criteria used in the previous surveillance. Notwithstanding this fact, the NRC inspector determined that all but one certification/qualifications of the QC inspectors reviewed by the QA department and found acceptable in previous audit and surveillance were found acceptable during the surveillance performed in 1985.

The inspector determined that the licensee referenced ANSI N45.2.6-1978 but did not provide specific qualitative acceptance criteria for the UENO - QC certification program. This condition was not detected and/or corrected until identified by QA in 1985 and reported in QA Surveillance Report No. 850209.

The inspector's review of QA Surveillance Report Nos. 850209A and B and the resulting Requests for Corrective Action (RCA's) determined that the QA department had performed a thorough review and evaluation of the QC Certification and Qualification program. Surveillance Report No. 850209A contains the licensee's findings regarding the evaluation of the certifications of past and present QC inspectors. Eighty-five (85) inspectors with 247 certifications were evaluated; 207 certifications met UENO program commitments, 22 inspectors with 29 certifications were found questionable, and 11 certifications were found questionable but the inspectors had not performed inspections related to the certifications. The QA surveillance identified and documented a QC procedure violation in the certification of QC inspectors wherein the signature of a certified Level III inspector was not obtained as required by procedure QCP-ZZ-01001. The QA surveillance also documented that QC certification and qualification procedures lacked quantitative and qualitative acceptance criteria in the following areas:

- Work experience used to satisfy the experience and education requirement.
- Documented evaluation of actual work experience.
- Guidance for formal training.
- Determination of initial training.

The inspector determined that the above procedure violation and QC procedure deficiencies presented a potential for impact on quality. Based on the review of the QC inspections performed, the related inspection criteria and checklists, and interviews with QC inspectors, the inspector determined that an adverse quality system/ hardware impact was unlikely.

The NRC inspector inspected eight records of the seventy-five QC inspector certification/qualification records that were identified during the licensee's review for inspectors having certifications which comply with UENO program commitments. The inspector reviewed fifteen QC certifications in Civil, Electrical, Mechanical, and Receipt disciplines. This review included the certifications of three QC Level III inspectors and a QC assistant supervisor. No certification deficiencies were identified.

e. Field Verification Inspection of a Sample of Completed Work Requests:

The NRC inspector, accompanied by licensee personnel, performed an in-plant inspection of eight completed safety-related maintenance/inspection activities, which had been worked on by QC inspectors with questionable certifications.

Licensee Inspection Team:

QA Electrical Engineer
QA Civil Engineer
QC Level III Electrical Inspector
QC Level II Civil Inspector
Electrical and I & E Technicians

The following items were verified:

Motor starter phase wiring
30 AMP breakers replacement
Electrical cabinet heater size and type
Fire barrier penetration seal
Wiring scheme
Electrical terminations, lugs and crimping
Wiring type, identification, size

No maintenance/inspection deficiencies were identified.

f. Licensee Corrective Action:

The initial action taken was to assure that no inspections were being performed by QC inspectors having questionable certification/qualifications, and to identify and evaluate past inspection activities performed by inspectors having questionable certifications. The licensee revised procedures for the qualification and certification of QC inspectors, and held discussions with QC supervision which stressed procedural adherence and procedural improvements. The licensee has responded to each of the QA RCAs, providing root cause, immediate corrective action and action to prevent recurrence. In addition, the licensee has formulated a QC Program Enhancement Assignment and Schedule, elements of which include:

- Task analysis for each area of inspection.
- Additional procedures and procedural controls for training, retraining, proficiency demonstrations, and testing.

4. Impact of the Licensee's Operational QC Program on Callaway Construction

During the construction phase at the Callaway plant, the QC function was performed by Daniel International Corporation and overviewed by

the Union Electric Quality Assurance Organization. Ongoing inspections during the construction of Callaway by the NRC revealed that no significant concerns were identified with the QC inspector certifications at Callaway. Examples of the NRC inspection effort may be reviewed in the Construction Appraisal Team (CAT) Report No. 50-483/82-03 and in routine Inspection Report No. 483/84-30 addressing the Government Accountability Project (GAP) allegations. The NRC has determined that the present UENO QC certification issues had no impact on the construction of the Callaway facility.

5. Summary

The inspection activities described heretofore were precipitated by an allegation made to the licensee on February 4, 1985 and to the NRC on February 5, 1985. The allegation was made by members of the licensee's QC department and contended that the QC supervisor failed to follow QC procedure QCP-ZZ-01001 "Certification of Quality Control Inspectors" in certifying three QC Assistant Supervisors as Level III inspectors. The allegation specified that the signature of the Callaway Plant Manager was obtained on the Letter of Certification rather than the signature of an available certified Level III inspector.

On February 8, 1985 the licensee's QA Organization issued a Request for Corrective Action (RCA) document substantiating the allegation. At the same time the QA department initiated a surveillance (review) of the certifications of all presently employed inspectors in the Nuclear Operation QC Organization. The QA department reviewed the qualification of individuals against a specific set of acceptance criteria, which they had developed, implementing ANSI N45.2.6-1978. The results of the certification surveillance were presented to the licensee's management on February 22, 1985. The surveillance indicated that certifications for seven individuals were questionable. The licensee's management responded to the QA surveillance findings on February 26, 1985 and took the following actions:

a. The licensee decertified the seven QC inspectors whose certifications were identified as questionable.

b. Initiated a review of the certifications and qualifications of all operations QC inspectors both past and present.

c. Initiated a review of work authorizing documents to identify those documents which involved inspectors with questionable certifications.

d. Set up a QA/Engineering evaluation team to review and evaluate the work documents identified in 5.c above for safety/quality impact on plant hardware.

The follow-up review (See Item 5.b above) looked at 85 inspectors holding 247 certifications. Of the 247 certifications 207 were acceptable, 11 certifications were found questionable (however, the inspectors holding

the certifications had not performed any inspections relating to the certifications), and the remaining 29 certifications, held by 22 inspectors (the original 7 identified by the QA department plus 15 previously employed inspectors), were also determined to be questionable.

The QA/Engineering evaluation team reviewed and evaluated those Work Requests, Preventive Maintenance Task Sheets, and Startup Maintenance Authorizations which involved inspections performed by individuals with questionable certifications. The evaluation team determined that the inspections performed were either within the capabilities of the inspectors (e.g. routine surveillance of crafts, system cleanliness, routine torquing of bolts or terminations) or that the checklists for more complex inspections contained sufficient inspection attributes and acceptance criteria such that the inspector was capable of performing the activity.

The evaluation team followed up on the document review by selecting eight completed safety-related maintenance/inspection activities, which had been performed by individuals with questionable certifications, for in-plant inspection. No deficiencies were identified.

Based on the above reviews and inspections, the licensee determined that the inspections performed by questionably certified inspectors presented no significant impact on plant components, system function, or quality.

During the surveillance of certifications and qualifications of QC inspectors, the QA organization identified a number of deficiencies in the QC qualification program. The most significant of the deficiencies dealt with QC's lack of specific qualitative and quantitative acceptance criteria to implement the guidance of ANSI N45.2.6-1978. The lack of specific acceptance criteria and attendant documentation requirements can be directly tied to the QA findings of questionable certifications: Whereas the QC department was utilizing the general guidance of ANSI N45.2.6-1978 in determining the qualifications of individuals, the QA department had developed a detailed set of acceptance criteria to implement ANSI N45.2.6 and had used those criteria in evaluating each inspector's qualifications.

The NRC inspector's activities included: meetings with the licensee's corporate, plant, and QA management; interviews with QC, QA, and engineering personnel; document review; and field inspection of selected safety-related work packages. Through these activities the NRC inspector determined that the licensee's response to the original allegation and the licensee's further investigation were prompt and thorough.

The reviews in this area identified two violations of NRC regulations as follows:

Violation No. 1

10 CFR 50, Appendix B, Criterion V states, in part, "Activities affecting quality shall be prescribed by documented...procedures... and shall be accomplished in accordance with these...procedures..."

The processing of certifying Quality Control personnel for non-NDE activities is described in QCP-ZZ-01001, Revision 2. Step 4.4.2 of this procedure states, in part: "The Quality Control Supervisor shall submit the letter of certification to the Level III for his review and approval."

Step 3.3 of that procedure defines the level of authority for a QC Level III as:

> A QC Level III person has the authority for the approval of certifications of all Quality Control Personnel performing inspections (excluding NDE and VT). If no QA Level III with certification within the proper area is employed within Nuclear Operations, the Manager, Callaway Plant, shall assume the responsibility of approving a letter of certification for a qualified person to be Level III.

Contrary to the above, the Quality Control Supervisor submitted letters of certification to the Manager, Callaway Plant, when there was a QC Level III in the specific discipline employed within UENO-QC.

The above violation was identified by the licensee and documented in QA's Request for Corrective Action (RCA) No. P-8502-028. In response to the RCA the licensee took the following corrective actions:

(1) Procedure QCP-ZZ-01001 was revised to allow approval of QC Level III inspector certification by either a certified QC Level III inspector or the plant manager.

(2) The importance of procedural compliance was stressed during a meeting between the licensee's upper management and QC supervisors.

In accordance with the NRC's Enforcement Policy to encourage and support licensee's initiative for self-identification and correction of a problem and since the licensee's actions regarding the above violation meet all the criteria of 10 CFR 2, Appendix C, no citation will be issued for this failure to comply with a procedural requirement.

Violation No. 2

10 CFR 50, Appendix B, Criterion V states, in part, "...Activities affecting quality shall be prescribed by...procedures...procedures shall include appropriate quantitative or qualitative acceptance criteria for determining that important activities have been satisfactorily accomplished."

Contrary to the above, the licensee's procedure for "Qualification of QC Personnel" QCP-ZZ-01002 did not contain appropriate

quantitative or qualitative acceptance criteria for determining qualifications for certification and as a result a number of inspectors were certified in areas where the qualifications were questionable.

The above is considered a violation, as set forth in the Appendix (483/85012-01).

The above program deficiency and related items were documented by the licensee in RCA's Nos. P-8502-034, P-8502-035 and P-8502-039. In response to the RCA's, the licensee has revised procedures QCP-ZZ-01001 "Certification of QC Personnel" and QCP-ZZ-01002 "Qualification of QC Personnel." The procedures now address the following areas.

(1) Definition of the minimum qualifications of QC inspectors as specified in ANSI N45.2.6-1978.

(2) Definition of the documentation requirements for a QC certification package.

(3) The determination of initial capabilities of candidates for QC certification is now specified.

(4) Guidance for the determination of "related" work experience is provided.

(5) The requirement for proficiency demonstrations (minimum examination questions and inspection points) for candidates not meeting the experience requirements.

Inasmuch as the licensee has taken timely and appropriate corrective action on this violation, no response to the item is required and violation 483/85012-01 is considered closed.

No other violations or deviations were identified.

6. Conclusion

Based on the review of maintenance/inspection activities performed, the licensee's evaluation and criteria applied, interviews and field verification inspection, the inspector found reasonable assurance that prior maintenance/inspections activities had been adequately performed. Additional assurance as to the adequacy of maintenance is provided by the functional/surveillance testing program. The testing program, which is independently specified and reviewed, requires post-maintenance and/or Technical Specification surveillance tests for safety-related systems or components on which maintenance has been performed.

The inspector has reviewed in detail the QC program deficiencies, causal factors and the licensee's corrective action. The inspector determined that the licensee has taken prompt, appropriate, and comprehensive corrective actions.

NRC Open Item 483/85002-01(DRP) discussed in paragraph 2.a. above is closed.

7. Exit Interview

The inspector met with licensee representatives (denoted under Persons Contacted) at intervals during the inspection period. NRC Region III Chief, Project Branch 2, attended the exit interview on May 10, 1985. The inspector summarized the scope and findings of the inspection. The licensee representatives acknowledged the findings as reported herein.