



KANSAS GAS AND ELECTRIC COMPANY

GLENN L KOESTER  
VICE PRESIDENT - NUCLEAR

January 21, 1985

Mr. R.D. Martin, Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011

KMLNRC 85-036  
Re: Docket No. STN 50-482  
Ref: Letter KMLNRC 84-175, dated 10/2/84  
from GLKoester, KG&E, to RDMartin, NRC  
Subj: Special Construction Verification Inspection

Dear Mr. Martin:

Kansas Gas and Electric Company (KG&E) retained the Delian Corporation to perform an independent construction assessment of Wolf Creek Generating Station (WCGS). This assessment was conducted during June through August, 1984 and the Assessment Report was transmitted by the reference. Subsequent to completing the construction assessment, KG&E requested Delian to evaluate the technical and programmatic adequacy of the corrective actions taken in response to the assessment findings. Attachment A provides a copy of the Construction Self Assessment Corrective Action Evaluation Report prepared by the Delian Corporation which documents their final assessment.

During October 22 through November 2, 1984 a Special Construction Verification Inspection (SCVI) was conducted by the Office of Inspection and Enforcement to assess the KG&E Construction Self Assessment effort described above. As a result of the SCVI assessment one violation and twenty-one unresolved items were identified. Attachment B is a copy of KG&E's response to the Notice of Violation documented in Inspection Report STN 50-482/84-51 and Attachment C provides a summary of KG&E's actions taken to resolve the other issues. Attachment C addresses each of the 21 items in three parts:

- o Finding
- o Action(s) taken to resolve the condition identified
- o Date when required action(s) will be completed

Supporting documentations packages for each of the 21 items are available for review on site.

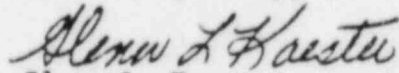
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Mr. RDMartin  
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Please contact me or Mr. Otto Maynard of my staff if you have any questions concerning this matter.

Yours very truly,



Glenn L. Koester  
Vice President - Nuclear

Attachments

xc: PO'Connor (2)  
HBundy  
WGuldemond

Attachment A to KMLNRC 85-036

ATTACHMENT A

Attachment C to KMLNRC 85-036

ATTACHMENT C

UNRESOLVED ITEM #1:Finding:

Two areas of minor deficiencies identified by the NRC SCVI were verified by DIC to be generic and require further action by them to correct existing deficiencies and prevent future deficiencies from developing: the securing of cable at raceway rollouts, and minimum bend radius for cable transferring from tray to conduit. [Section III.B.1.b.(2).(a)]. In addition, the use of temporary templates to verify minimum bend radius is an area of concern.

Response:

## a. Actions taken to resolve the condition(s) identified

The specific isolated instances of minimum bend radius violations identified by the NRC have been documented and resolved on NCR 1SN 21165E. The generic concern of potential bend radius violations due to construction activities where cable transfers between cable tray and conduit has been resolved through implementation of FCR 1-5622-E and Cost Tracking Form EU-318. If potential damage exists due to on-going construction activity, edge guards are installed to preclude cable minimum bend radius violations which would prevent any future occurrence.

The securing of cable at raceway rollouts was found to be a generic discrepancy throughout the power block. Consequently, NCR's were generated to document the discrepancies and require a 100% re-inspection and rework of any identified violations. Reference 1SN 20884E, 1SN 20885E, 1SN 20886E, 1SN 21172E, 1SN 21173E, 1SN 21174E, 1SN 21175E and 1SN 21176E. This walkdown will assure all violations are resolved.

Electrical Quality inspection of minimum bend radius is performed in accordance with the requirements of procedure QCP-X-303, "Inspection of Cable Installation". However, it is occasionally more feasible to use a template due to the configuration of the cable. In such cases, a template is prepared in office conditions with tools which ensure accuracy is maintained. The template is unique to a specific installation, made on a case-by-case basis and verified by Quality prior to use; thus it is considered to be temporary.

In addition, the following actions are being taken:

- DIC has performed a review of their construction completion procedures and construction services procedures and has determined that these procedures provide adequate guidelines/criteria to prevent future deficiencies from developing. This action is complete.
- KG&E QA has performed a review to verify that the DIC procedural evaluation was adequate. This action is complete.

- An evaluation was performed by KG&E Startup and Operations of their procedures to verify that the programmatic controls included would preclude the identified deficiencies from developing. No corrective actions were identified. This action is complete.
- KG&E Construction Procedure KP-550 is being revised to require all Safety Related and Special Scope Work Requests assigned to contractors to be routed to KG&E Quality Engineering to verify that appropriate inspection criteria has been included prior to the initiation of work. This action is scheduled for completion by January 25, 1985.

b. Date when required action(s) will be completed

The remaining actions described in bullet four (4) above are scheduled for completion by January 25, 1985.

UNRESOLVED ITEM #2A:

Finding:

No requirement for consideration of concrete spalling in obtaining and verifying expansion anchor bolt minimum embedment.

Response:

a. Actions taken to resolve the condition identified

RCI-1-0597-C was initiated to obtain the A/E's engineering evaluation on this subject. For small spalls of the type described by the RCI, it is acceptable to measure the embedment from the surface of the concrete. It is not necessary to reduce the embedment depth by the depth of the spall. The basis for the A/E position is that a minor spall, as described, could not be detrimental to any expansion anchor failure mode. It should be noted that there is a factor of safety of four between failure and allowable working load.

b. Date when required action(s) will be completed

Based on the description of the condition and the A/E evaluation, no further action should be required for this unresolved item.

UNRESOLVED ITEM #2B:

Finding:

Request for clarification of information, RCI #1-1357-E, regarding unistrut installation inspection provides an acceptable condition for sidewall deflection which has not been incorporated into the inspection criteria.

Response:

## a. Actions taken to resolve the condition(s) identified

The fundamental responsibility of Quality inspection is to verify conformance to approved design documents. A "Request for Clarification of Information" establishes guidelines which, in accordance with DIC procedure AP-III-03, "facilitate the recording of inquiries concerning the interpretation of design documents and the designer's response thereto." Use of an RCI "is limited to requesting and recording interpretation which in no way would change or supercede the authorized design documents."

Procedure QCP-X-302, Rev. 19, requires verification of raceway support "... installation per...details, and the latest approved for construction drawings...(Reference...2.6...)". Reference 2.6 identifies "Bechtel Civil Structural Conduit Support Drawings 'C-0600 Series'". The particular detail that lends itself to Unistrut sidewall spreading is found on drawing 10466-C-1602, Detail 3 and 3A. In accordance with procedural requirements, Quality inspection verifies compliance with the design drawing; i.e., the drawing shows contact between the P1064 fitting and the crown of the Unistrut, expansion anchors are required to meet specification C103A and drawing C-0003, torque is stipulated, proper attachment of the conduit strap is shown. The purpose of RCI 1-1357-E was not to establish accept/reject criteria for the installation; criteria is as shown on the drawing. RCI 1-1357-E acknowledges installation to design requirements; the sidewall deflection is a result of design. The RCI interprets guidelines that may be considered in good practice, but, as stated on the RCI, "Under no circumstances may this RCI be construed to modify, change, or supercede controlled documents used for construction."

To further substantiate that installations were inspected to design criteria and are acceptable, DIC Engineering, in conjunction with CSA, inspected approximately 80 supports that were installed to C-1602 detail 3/3A. The quantity was selected based on MIL STD 105D. All were found to be installed to design requirements, with additional assurance verified through RCI 1-1357-E.

## b. Date when full corrective action will be achieved

Based on the above activities, no further action should be required for this unresolved item.

UNRESOLVED ITEM #2C:Finding:

Generic Resolution E-014 does not require documenting acceptance criteria drawing and specification numbers and revisions on the QC checklists although required to do so by the QC procedures.



Response:

## a. Actions taken to resolve the condition(s) identified

Generic Resolution E-014 was approved and issued 09/07/84. This resolution was initiated based on repetitive software discrepancies noted during document reviews concerning the completion of the Work/Rework Assignment, P.O. Specification and Drawing sections of the Electrical Equipment Quality Checklist and the Electrical Instrument Quality Checklist. In accordance with QCP-I-05, these "minor" procedure violations were documented on a Resolution of Repetitive and/or Generic Discrepancy Sheet. The justification for resolution of this discrepancy identified that these entries were informational and not deemed as Quality characteristics since the subject information can be obtained from other source documents (i.e., Work/Rework Assignments). This conclusion is supported by the fact that Quality procedures require the Quality Inspector to inspect/verify activities in accordance with Work Assignments. The specific information required for the Quality Inspector to perform the required inspections are contained in the Work Assignment. Therefore, discrepancies noted during document review are informational in nature and appropriately resolved per the Generic Resolution E-014.

The Repetitive and/or Generic Discrepancy Sheet is a vehicle to document a minor program violation affecting software related items. In the specific case of the checklist for equipment NK12, the incorrect drawing reference was informational in nature and had no hardware impact. Based on this specific item and the information above, it is concluded that the Repetitive and/or Generic Discrepancy Sheet has been properly utilized in resolving the subject discrepancies.

## b. Date when required action(s) will be completed

Based on the above explanation, no further action should be required for this unresolved item.

UNRESOLVED ITEM #3:Finding:

The acceptability and generic implications of vendor termination lug bending, as found in panel RP-210, requires additional licensee evaluation.

Response:

## a. Actions taken to resolved the condition(s) identified

The Terminal Lug Vendor (Thomas & Betts) performed formal testing of the lugs and found no detrimental effects to the hardware. Bechtel performed an evaluation of the Vendor Test Report and found the results acceptable.



- b. Date when required action(s) will be completed

Based on the above information, no further action should be required for this unresolved item.

UNRESOLVED ITEM #4:

Finding:

Two items found on the battery rack NK-12 required additional evaluation to determine acceptability and generic implications: the actual torque valves of the brace pad bolt assemblies, and quality of the rack plug welds.

Response:

- a. Actions taken to resolve the condition(s) identified

- o NCR 1SN-21202E was initiated to resolve discrepancies on battery rack NK-12 brace pads.
- o CWP NK-172E was initiated to re-inspect plug welds on battery rack NK-12.
- o To address the generic implications of the brace pad bolt assembly concern a re-inspection of the brace pads for the safety related battery racks (NK-11, NK-13, and NK-14) has been performed. No discrepant conditions were identified.
- o The generic implication of the plug weld discrepancies was addressed in a re-inspection conducted in December, 1984. All plug welds for battery racks NK-11, NK-12, NK-13, and NK-14 were inspected for compliance to AWS D1.1-75 and design criteria. This inspection was documented in accordance with the requirements of QCP-XI-300, Appendix I and all plug welds were found to be acceptable.

- b. Date when required action(s) will be completed

Based on the results of the re-inspection activities performed on the battery rack plug welds and brace pads, no further action should be required for this unresolved item.

UNRESOLVED ITEM #5:

Finding:

The re-inspection of welds in accordance with the criteria referenced on Bechtel purchase orders, not used in the CSA, is required to provide a basis for implementation of corrective action. This should be done following the removal of paint from the welds or following an engineering evaluation of the acceptability of the method of inspection of vendor welds through paint.

Response:

## a. Actions taken to correct the condition(s) identified

Per page IV-3 and 4 of the CSA Executive Summary Report relative to Phase I CSA activity, ASME weld inspections were based on the following Codes, Specifications, and Procedures:

ASME Sections III, V, and IX

Bechtel Spec. 10466-M-204, "Specification for the Field Installation and Fabrication of Piping and Pipe Supports to ASME Section III

DIC Procedure QCP-VII-200, "Inspection of Welding Process"

DIC Procedure QCP-VII-201, "Inspection and Documentation of Fabrication and Installation of ASME, B31.1 Critical, and Special Scope Piping, Valves, and Components

The initial CSA inspection concerns were documented on a "CSA Field Inspection Concern Form". A concern was documented to:

- Require additional research of procedures and design documents relative to concern and
- Respond to concern.

Corrective actions were implemented in accordance with the contractor's quality program which required the use of the applicable procedure/procedures for re-inspection and verification of the corrected item(s). DIC QCP-VII-200, "Inspection of Welding Process", was the procedure used for weld inspection. This procedure contains all the weld criteria required by Bechtel Specification M-204. All vendor supplied pipe sub-assemblies were purchased to Bechtel Specifications 10466-M-201 a, b, and c, "Shop Fab Piping". A review of the two Bechtel Specifications, M-204 vs. M-201 series, establishes the same requirements for weld acceptability. In summation, the use of DIC Procedure QCP-VII-200 assured that the verification of welds were in compliance with Bechtel Purchase Order Specifications.

DIC Procedure QCP-VII-200 was the procedure used for the verification and acceptance of both original inspections and subsequent re-inspections, if required. Appendix III of QCP-VII-200 is the appendix relative to the inspection of ASME Section III weld. Section III.A.a, Page 4 of Appendix III, establishes the first requirement for visual inspection of completed welds as follows: "Welds shall be cleaned to remove slag, spatter, rust, and other foreign matter". Definition of foreign matter would include paint, grease, or any material which could potentially mask an indication.

In conclusion, the use of DIC Procedure QCP-VII-200 assured that:

1. The acceptance criteria of Bechtel Purchase Order specification has been implemented, and
2. The implementation of corrective action requiring weld re-inspection was not performed through foreign matter (paint, etc.).

- b. Date when required action(s) will be completed

Based on the above explanation, no further action should be required for this unresolved item.

UNRESOLVED ITEM #6:

Finding:

KG&E needs to contractually delegate responsibility for the use of written procedures and criteria that would alleviate organization disagreements concerning implementation of corrective action.

Response:

- a. Actions taken to resolve the condition(s) identified

If during field activities (such as the CSA) nonconforming conditions are identified by/to the Constructor (DIC), they are documented and controlled in accordance with their Construction Procedure AP-VI-02. Section 3.10 of this procedure states, "Client personnel may initiate an NCR by providing a written request to the Project Quality manager".

The concern expressed by some of the SCVI team inspectors was that corrective actions performed by DIC may not be adequate because DIC did not believe that they were responsible for the corrective action(s).

This concern was communicated to the KG&E Director - Quality and Superintendent Quality Systems Engineering shortly before the SCVI team left the WCGS site. In response to this concern, KG&E immediately initiated a QA surveillance (S-1217) to assess the effectiveness and timeliness of corrective actions assigned to DIC. The surveillance indicated that all corrective actions assigned to DIC were being implemented as required.

Total verification of all corrective actions regardless of the implementing organization was accomplished by both Delian and KG&E through the CSA Phase II program.

- b. Date when required action(s) will be completed

Based on the acceptable corrective actions resulting from the CSA effort as described above, KG&E is confident that the Corrective Action elements of the WCGS Quality Assurance Program are being effectively implemented by the constructor. No further action should be required for this unresolved item.

UNRESOLVED ITEM #7:

Finding:

As a result of the independent SCVI team review of the Dravo film, 33 film packets were found to be marked with a material thickness different from that shown on the reader sheet.

Response:

- a. Actions taken to resolve the condition(s) identified

This is a generic condition with Dravo film packages and reader sheets. The thickness recorded on the film package is the actual material thickness. Dravo Corp. was contacted and the following clarification was provided: "When there is weld reinforcement, the shim thickness is matched to the thickness of the weld reinforcement and added to the material thickness radiographed. When there is no weld reinforcement, the actual material thickness is recorded in the material thickness block."

- b. Date when required action(s) will be completed

Based on the above referenced letter, no further action should be required for this unresolved item.

UNRESOLVED ITEM #8:

Finding:

Review of concrete batch ticket records identified that a Level I rather than a Level II Quality Inspector evaluated inspection results, which is contrary to ANSI N45.2.6 requirements.

Response:

- a. Actions taken to resolve the condition(s) identified

DIC NCR 1SN-11639C and Generic Resolution C006 and C007 address the concern of Civil Inspectors signing Inspection Reports prior to their date of certification. The NCR was appropriately dispositioned as "rework" and corrective actions were taken.

- b. Date when required action(s) will be completed

Based on the above referenced documents, no further action should be required for this unresolved item.

UNRESOLVED ITEM #9:Finding:

The CSA Evaluation and disposition for CSA concern #55 relative to the attachment of Non-Q field routed tubing to a Q whip restraint did not consider loading from the tubing attachment and whether there was an adequate program for control, design evaluation, and as-builts of tubing attached to Q supports.

Response:

- a. Actions taken to resolve the condition(s) identified

It should be noted that the non-safety related tubing support was installed by Westinghouse and the whip restraints were installed by DIC. Westinghouse NCR 1SN 55503J was initiated. The NCR documents the use-as-is condition of the hardware identified and the approval of the disposition by the A/E. The NCR also documents the results of an additional examination to determine if welding of similar tube supports (J17G03) was a generic concern. Twenty-nine (29) additional supports were examined and no similar conditions were found.

- b. Date when required action(s) will be completed

Based on the above, no further actions should be required for this unresolved item.

UNRESOLVED ITEM #10:Finding:

Bechtel Drawing C-1C2411, Revision 0, Detail 1 requires the projection length of concrete anchor bolts to be 7" above the underside of the top flange of the safety injection accumulator tank (#TEP-01A) based frame. According to DIC personnel present at the time of the SCVI, a  $\pm 3/8$ " tolerance was allowed, permitting the total maximum projection length to be 7-3/8". The inspector(s) found that six out of the twelve embedded concrete anchor bolts had projections above the top flange greater than 7-3/8" which exceeds the maximum allowable.

Response:

- a. Actions taken to resolve the condition(s) identified

A Construction Engineering investigation of the noted condition revealed that both accumulator tanks TEP-01A and TEP-01B have embedded anchor bolts with excessive projections. Field Engineering completed an as-built survey documenting existing bolt projections.

NDC-023-C was generated, as required by site procedures. This was resolved by the generation of a Nonconformance Report. NCR 1SN 21150C was initiated and submitted to Bechtel for Engineering evaluation and was found to be acceptable to use-as-is.



Construction Engineering found this occurrence to be an isolated case. The subject bolts were installed in a very thin slab, 8 inches thick with a 2 inch ridged steel decking. By design review, no other slabs exist which the bolt embedment (including head thickness) equals the slab thickness.

- b. Date when required action(s) will be completed

Based on the above, no further action should be required for this unresolved item.

UNRESOLVED ITEM #11:

Finding:

The material traceability for cabinet to cabinet fasteners for Motor Control Centers NG01A, NG01B, NG03C, NG03D and NG04C could not be established due to lack of required traceability markings and were also either missing or were improperly installed.

Response:

- a. Actions taken to correct the condition(s) identified

A complete review of vendor drawings, data, test results, procedures and instruction manuals was performed to establish if material specification (i.e. ASTM A-307, A-325, etc.) markings were required. The review and evaluation has determined that no material specification markings are required per vendor drawings, data, etc. RCI 1-1365-E has been initiated and submitted to the A/E to confirm material traceability requirements.

All missing or improperly installed fasteners have been addressed on DIC NCR 1SN 20682E. The NCR has been closed.

- b. Date when required action(s) will be completed

A/E response to RCI-1-1365-E is in progress. The proposed completion date is scheduled for January 22, 1985.

UNRESOLVED ITEM #12:

Finding:

The material traceability of battery rack NK12 fastener assemblies could not be established due to lack of required traceability markings or because they were missing.



Response:

## a. Actions taken to resolve the condition(s) identified

A complete review of vendor data applicable to the NCX-900 battery racks was performed to establish if material specification (i.e. ASTM A-307, A-325, etc.) markings were required. An evaluation has determined that no material traceability is required per vendor drawings. The bolting material supplied by the vendor was procured to specification SAE-J429, GR 2. Per the vendors purchase requirements, no markings are required on the bolt heads. Assurance that the vendor received the correct material from his supplier was provided by certificate of conformance.

Confirmation of the information noted above has been received from the material supplier via telecon record sheet dated 1/16/85 and 1/18/85.

The missing fastener for battery rack NK-12 has been addressed on NDC-E-065 and CWP-NK-177-M.

## b. Date when required action(s) will be completed:

Based on the above, no further action should be required for this unresolved item.

UNRESOLVED ITEM #13:Finding:

High strength steel anchor bolts for main coolant pump and steam generator supports were made of indeterminate material.

Response:

## a. Actions taken to resolve the condition(s) identified

The Bechtel Procurement Specification 10466-C-134-A (Section 6.3) indicates that threaded rod (anchor bolt) material shall be as specified on the drawings. Drawing 10466-C-OC2321(Q) indicates that these threaded rods (Mark No. TR-1) shall be of A540 GR B23, Class 4 (Alloy steel bolting material for special application). ASTM A540 requires the heat number to be stamped on one surface. The Bechtel Spec. requires that each type of bolt (e.g. TR-1s) be made from one mill heat of material.

The subject bolts were received at Wolf Creek in November, 1977 and receipt inspected by DIC Quality Control. The material was verified as being A540 GR B23 Class 4 by comparing the stamped heat number against the accompanying material test report. Identification (Piece Mark) was also verified per DIC RMI 10466-C-134A (Q) and all inspection results were documented on the QC Inspection Report (MRR 9198). The bolts were QC accepted on November 22, 1977.

Acceptable anchor bolts (threaded rods) are controlled by the warehouse until being issued for installation.

At the point of installation, prior to concrete placement, Civil QC Inspectors verify that anchor bolts and other embedded items are in accordance with applicable drawings. This is documented on the Pre-Placement Checklist. When installing the rods some of the stamped ends were placed down in the concrete and are therefore no longer visible.

In summary the DIC material control program provides verifications to ensure the specified threaded rods were of the proper material and were installed in accordance with design drawings. This program meets the requirements of ANSI N45.2, Section 9 which states in part:

"...Identification may be either on the item or on records traceable to the item, as appropriate."

b. Date when required action will be completed:

Based on the above, no further actions should be required for this unresolved item.

#### UNRESOLVED ITEM #14:

##### Finding:

Safety Injection Accumulator Tanks TEP-01A and TEP-01D had anchor bolt nuts installation not in accordance with drawing requirements.

##### Response:

a. Actions taken to correct the condition(s) identified

Field As-Builts were taken of the anchor bolts installed for the accumulator tanks. An Engineering evaluation determined that the installation fully meets the design intent.

Per Bechtel disposition of RCI 1-0598-C, the cited condition at accumulator tanks TEP-01A (Q) and TEP-01D (Q) is not a deficient condition, based on the following:

- The deficiency of the bolt embedment was addressed on NCR 1SN-21150C and approved for "use-as-is" by the A/E. This approval satisfies the bolt embedment qualification imposed by the A/E in their response to RCI-1-0598-C.
- The "Bolted Connection Control Record" for travelers TEP-01A (Q) and TEP-01D (Q) have always required torque verification of nuts for these accumulator tanks and thus also satisfy the requirements of RCI-1-0598-C.

The A/E response to RCI-1-0598-C establishes that the presence of the additional nut is acceptable.

- b. Date when required action(s) will be completed

Based on the above, no further actions should be required for this unresolved item.

UNRESOLVED ITEM #15:

Finding:

An acceptable resolution of TE: 57061-K111, Design Control Audit Findings pertaining to DIC implementation of Field Change Requests is needed.

Response:

- a. Actions taken to resolve the condition(s) identified

All corrective actions associated with TE: 57061-K111 audit findings have been satisfactorily implemented and verified. All audit findings are closed.

- b. Date when required action(s) will be completed

Based on the above, no further actions should be required for this unresolved item.

UNRESOLVED ITEM #16:

Finding:

The CSA evaluation of KG&E response to CSA concern #159 needs to address and resolve the differences in the KG&E and CSA count of audits not conducted, including any pertaining to audits of construction activities performed by other than DIC. The CSA evaluation should also review the adequacy of KG&E's response on the impact of not conducting audit TE: 57061-K111 on schedule has on the assurance of quality of construction prior to plant operation.

Response:

- a. Actions taken to resolve the condition(s) identified

CSA, in their finding, apparently made an error in counting the number of scheduled audits for the 1st and 2nd quarter of 1984 due to the fact that several construction organizations were listed to be audited for the same criterion compliance. CSA apparently counted multiple entries as one audit. However, KG&E QA audits each organization separately. The scheduled audit count provided by KG&E QA was therefore the correct count. NOTE: QA's count included all construction organizations, not just DIC.

With regard to the timeliness of the TE: 57061-K111 DIC Design Control audit and the quality impact, the QA audit program established for the Construction Phase required that each of the Appendix B criterion be audited on an annual basis. Although the DIC Design Control audit was scheduled for the 2nd quarter of 1984, the last audit of this criterion was conducted in November, 1983. In accordance with the established audit program the actual date required for initiating this audit would then have been November, 1984. TE: 57061-K111 was actually conducted from August 16, 1984 to September 10, 1984, with the report issued October 1, 1984. Therefore, no quality impact could be assumed since no violations of the audit program or standards existed.

b. Date when required action(s) will be completed

Based on the above explanation, no further action should be required for this unresolved item.

UNRESOLVED ITEM #17:

Finding:

The KG&E evaluation of SFR 1-BB-147 for reportability to the NRC and of the related controls for the tightening of termination lugs during installation is identified for review.

Response:

a. Actions taken to resolve the condition(s) identified

WCGS Request for Reportability, 84-33, was initiated and evaluated during June, 1984. The request was evaluated by KG&E and was determined not to be a potentially reportable 50.55(e) condition.

A review was performed of DIC procedures to verify that adequate programmatic controls exist for the tightening of termination lugs during installation. This review verified that these controls are in place in WP-X-304 (Para. 3.16) and QCP-X-304 (Para. 4.8.8).

b. Date when required action(s) will be completed

Based on the above information, no further action should be required for this unresolved item.

UNRESOLVED ITEM #18:

Finding:

The CAR #18 and the CSA Concern #160 action plan should be revised to include additional clarification of intended corrective action requirements involving SFRs for resolution of "design errors" or without "identifiable or retrievable documentation".

Response:

## a. Actions taken to resolve the condition(s) identified

- SFR Design Errors: Audit TE: 50140-K003 (Startup Field Reports) identified a generic problem with the SFR form and procedures in defining the type of problem to be checked in Block 6. The audit identified mainly that nonconforming conditions were not always marked as "NCR", but as "Other", "Design Info Inadequate", "Drawing Error" and "System Design Problem".

However, no evidence was identified to conclude that a design control problem existed for SFRs checked "Design Problem". Since the audit did identify numerous program breakdowns, it was felt that the Startup program for tracking design changes should be evaluated further, though not necessarily included in CAR #18. Therefore, this evaluation was included in the scope of audit TE: 50140-K012 (Design Control). This audit indicated that no conditions adverse to quality were identified relative to design changes dispositioned via SFRs.

In summary, due to the fact that (1) no problems were noted in the SFR audit in identifying design errors and (2) no problems were noted in the subsequent audit for the tracking of design error resolutions, no further action was deemed necessary.

- Identifiable or Retrievable Documentation: Finding #2 of CAR #18 addresses the necessity for the implementing work documents to be traceable to the SFR. The recommended corrective actions [Items 3(d) through 5 (1)] of CAR #18, were verified to assure traceability/retrievability of work documentation. In response, Startup prepared a cross reference table relating SFRs to the associated work documents. KG&E QA verified, through surveillances TE: 53359-S-1219 and TE: 53359-S-1230, that the information contained in the cross reference table was accurate. Where RIRs were generated for SFRs without identifiable or retrievable documentation, this was so noted in the tables. Related activities with regard to other Responsible Work Organizations (RWOs) were reviewed for compliance to their QA programs for handling the SFR resolution work. This review indicated that the SFR resolutions were properly implemented by the applicable work documents generated by Westinghouse and KG&E Maintenance (the RWO's).

## b. Date when required action(s) will be completed

Based on the above information, no further action should be required for this unresolved item.

UNRESOLVED ITEM #19:Finding:

Appropriate revision of procedure ADM 14-416, Rev. 0 is required to prevent recurrence of deficiencies in the use of NDCs of the type discussed in the KG&E report KQWLO 84-134.



Response:

- a. Actions taken to resolve the condition(s) identified

KG&E QA initiated Surveillance Report S-1225 concerning the use and disposition of Notice of Discrepant Conditions (NDC's). The surveillance resulted in issuance of Quality Program Violation (QPV) 12/84-01 which addressed the procedural implementation deficiencies. The violation was verified and closed on 01/12/85.

No revisions to procedure ADM 14-416 are required as a result of the evaluation/verification of CSA concern #170 and the verification and closure of QPV 12/84-01.

- b. Date when required action(s) will be achieved

Based on the above information, no further action should be required for this unresolved item.

UNRESOLVED ITEM #20:Finding:

KG&E should audit a sample of NCRs issued after the close out of NDCs for compliance with procedure AP-VI-02, Section 3.30 provisions of "prior to and after N-stamping" of ASME systems/components.

Response:

- a. Actions taken to resolve the condition(s) identified

QA Letter, Patrick to Rudolph, Subject: CSA Concern 84/51-20, dated 01/14/85, was issued assessing the need to perform an audit or surveillance to verify that the proper ASME Section (III and XI) is being utilized. The letter states that due to the multiple levels of programmatic controls established, it is very unlikely for an error to remain undetected and uncorrected. Furthermore, since the program will be completely revised in a matter of days, an audit of the "old" program would be inappropriate. The present audit schedule does, however, require an audit to be performed on the "new" DIC Construction Services program in the first quarter of 1985.

- b. Date when full required action(s) will be completed

Based on the above information, no further actions should be required for this unresolved item.



UNRESOLVED ITEM #21:Finding:

The KG&E/CSA corrective actions should ensure that the KG&E program for identification and review of deficiencies for reportability to the NRC is being implemented in a timely manner for: SFR or NCRs checked "potentially reportable"; and for deficiencies in construction which could have gone undetected due to the breakdown in the SFR QA program, as identified by the TE: 50140-K003 Design Control audit.

Response:

## a. Actions taken to resolve the condition(s) identified

As a result of independent action by the Quality First organization, the SFR Reportability issue was examined by Quality First Action Request (QFAR) 9/84-005 (initiated 09/28/84 and closed on 11/05/84).

The QFAR precipitated a review by KG&E Startup of all previously written SFR's up to October 1, 1984 for compliance to the requirements of ADM 01-033, "Instructions Describing Reportability, Review, and Documentation of Licensee Event Reports (LERs), and Defect Deficiencies". SFR's were evaluated and reviewed in five (5) categories including those marked as "Yes" for potential reportability and those SFR's that were downgraded from "Yes" to "No" potential reportability. As a result of the examination, fourteen (14) SFR's were reviewed for reportability. The evaluation for reportability revealed no reportable conditions were identified that had not been previously reported.

A KG&E QA Surveillance (S-1234) was initiated to evaluate the 50.55(e) reportability discussed in this unresolved item. The surveillance concluded that the actions associated with the request for reportability relative to the SFR problems were proper, correct, and in accordance with established procedures.

## b. Date when required action(s) will be achieved

Based on the above, no further actions should be required for this unresolved item.

# DELIAN CORPORATION

2-T-14-002

January 11, 1985

Mr. Richard M. Grant  
Director - Quality  
Kansas Gas and Electric Company  
Wolf Creek Generating Station  
P. O. Box 309  
Burlington, KS 66839

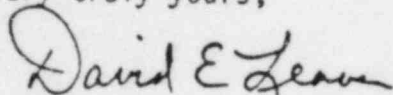
Dear Dick,

This letter forwards the report, "Construction Self Assessment Corrective Action Evaluation," prepared by Delian Corporation to document the joint Delian - KG&E effort to address concerns defined in last summer's Construction Self Assessment (CSA) of Wolf Creek. The report briefly outlines the objectives and scope of the corrective action evaluation effort, summarizes the results, and discusses the key, original CSA conclusions in light of the corrective action results.

Based on the completed corrective actions and those few which are still in-process, it is Delian's judgment that all of the concerns of the CSA have been or are being satisfactorily resolved, either through corrective action performed by KG&E and/or its contractors or through investigations which demonstrated that the original concern is not a problem.

It has been a pleasure working with KG&E on the corrective action evaluation and I wish you the best in your efforts toward making Wolf Creek operational.

Very truly yours,



David E. Leaver  
Vice-President  
Delian Project Manager

cc: Marvin Fertel  
Carl Parry

Enclosure

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