



Tennessee Valley Authority, 1101 Market Street, Chattanooga, Tennessee 37402

August 10, 2010

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, D.C. 20555-0001

10 CFR 2.201

In the Matter of )  
Tennessee Valley Authority )

Docket No. 52-014  
52-015

BELLEFONTE COMBINED LICENSE APPLICATION - NRC INSPECTION REPORT  
NO. 05200014/2010-201 AND 05200015/2010-201- REPLY TO NOTICE OF  
VIOLATION (NOV)

By letter dated July 12, 2010, the U.S. Nuclear Regulatory Commission (NRC) issued Inspection Report Numbers 05200014/2010-201 and 05200015/2010-201 concerning the May 17 - 21, 2010 inspection conducted at the Tennessee Valley Authority's (TVA's) Chattanooga office. The purpose of this inspection was to verify that QA processes and procedures applied to activities related to the combined license application (COLA) for Bellefonte (BLN) Units 3 and 4 were effectively implemented.

The inspection report identified two Severity Level IV violations from the inspection. The Notice of Violation, included in the inspection report, cites these violations and explains that certain TVA QA program policies and implementation procedures were not in compliance with the applicable requirements of Appendix B to 10 CFR Part 50. The Enclosure to this letter provides the TVA response to the Notice of Violation.

If you should have any questions, please contact Tom Spink at 423-751-7062.

Sincerely,

Thomas E. Spink  
Manager, Bellefonte Nuclear Plant  
AP1000 Licensing

Enclosure

cc: See Page 2

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**ENCLOSURE  
BELLEFONTE COMBINED LICENSE APPLICATION  
NRC INSPECTION REPORT  
NO. 05200014/2008-001 AND 05200015/2008-001  
REPLY TO NOTICE OF VIOLATION (NOV)**

**VIOLATION: 05200014/2010-201-01 and 05200015/2010-201-01**

**RESTATEMENT OF VIOLATION**

Criterion IV, "Procurement Document Control," of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50, states, in part, that measures shall be established to assure that applicable regulatory requirements, design bases, and other requirements which are necessary to assure adequate quality are suitably included or referenced in the documents for procurement of material, equipment, and services, whether purchased by the applicant or by its contractors or subcontractors.

TVA Procedure SPP-4.1, "Procurement of Material, Labor and Services," defines the procurement functions with respect to nuclear quality and safety-related structures, systems, and components (items) and services for nuclear power plants. Specifically, Step 4.1.1.C of SPP-4.1 states, in part, that the organization requesting the contract shall maintain the documentation that evidences the independent review and ensure that all technical and quality requirements are otherwise prepared, reviewed and released. Additionally, Step A.4 in Appendix B to SPP-4.1 states, in part, that when requesting labor and services, the requester shall include/address the following procurement provisions in Steps C.1 and C.2 (i.e. "9 Points").

Contrary to the above, as of May 21, 2010, TVA failed to implement its procurement process consistent with TVA Procedure SPP-4.1. Specifically, Procurement Requests NGD-13, Revision 0, and NGC-32, Revision 0, did not have a documented independent review, and NGD-10, Revision 0, did not include the listed procurement provisions in Steps C.1 and C.2 of Appendix B to SPP-4.1.

This issue has been identified as Violations 05200014/2010-201-01 and 05200015/2010-201-01.

**TVA's REPLY TO VIOLATION 05200014/2010-201-01 and 05200015/2010-201-01**

**(1) The Reason for the Violation**

TVA accepts the violation and offers the following discussion regarding the circumstances and corrective actions. The violation is the result of failure to strictly follow procedure, SPP-4.1, Procurement of Material Labor and Services, which has been determined to be overly prescriptive for the types of Procurement Requests (PRs) typically generated by Nuclear Generation Development and Construction (predominately non-safety related and quality related personal service contracts). SPP 4.1 is primarily designed to govern the procurement of materials (spare parts and

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equipment) and services required to support the operating nuclear plant fleet where the independent review of PRs by the Procurement Engineering Group is considered a critical issue to assure that the design bases of the plants are maintained and that on-site services do not compromise operating plant systems. NGDC personnel erroneously assumed that the documented independent review was not required for the more simplistic services typically procured for BLN Units 3 and 4 at this time.

**(2) Corrective Steps Taken and Results Achieved**

TVA has initiated two Problem Evaluation Reports (PERs) to address and evaluate the issues identified by the inspection. The PERs are:

1. PER 230724, "Missing "Nine Points" memo on BLN Hydrology Project PR NGD-32 R0"
2. PER 230738, "Independent Review of NGD PRs associated with the BLN Hydrology Project not documented"

PR NGD-32 was revised to include the "9 Points" and to document the independent review. The contract associated with PR NGD-13 is closed and the PR cannot be revised. The contracts associated with these two PRs were reviewed and found not to be deficient in any technical or quality related aspect.

The third PR identified in the inspection report, PR NGD-10, was reviewed and found to include both the independent review signature and the "9 Points". The review identified that it was PR NGD-32 that did not include the listed procurement provisions in Steps C.1 and C.2 of Appendix B to SPP-4.1.

An extent of condition evaluation has been conducted to identify additional PRs without documentation of independent review. Of sixteen PRs initiated by NGDC, fourteen did not include an independent review. Of these, three were Quality-Related and three were Safety-Related. The purchase orders associated with these Quality-Related and Safety-Related PRs have been reviewed and determined to include appropriate technical and quality requirements.

Additionally, Supply Chain has implemented administrative controls to reject any PR they receive that does not include evidence of independent review or the "9 Points".

**(3) Corrective Steps that will be Taken to Avoid Further Violations**

NGDC will develop a tailored procurement procedure focused on personal services contracts to guide the development of PRs for services required at this stage of BLN Units 3 & 4 development and other construction activities not associated with operating plant maintenance and construction modifications.

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**(4) Date When Full Compliance Will Be Achieved**

NGDC achieved full compliance on August 5, 2010.

**VIOLATION: 05200014/2010-201-02 and 05200015/2010-201-02**

**RESTATEMENT OF VIOLATION**

Criterion XVIII, "Audits" of Appendix B, "Quality Assurance Criteria for Nuclear Power Plants and Fuel Reprocessing Plants," to 10 CFR Part 50 requires that a comprehensive system of planned and periodic audits shall be carried out to verify compliance with all aspects of the quality assurance program and to determine the effectiveness of the program. The audits shall be performed in accordance with the written procedures or check lists by appropriately trained personnel not having direct responsibilities in the areas being audited.

TVA-NQA-PLN89-A "Tennessee Valley Authority Nuclear Quality Assurance Plan," (NQAP), section 12, "Auditing," establishes requirements for internal audits to assess the adequacy and effectiveness of the QA Program. The NQAP commits to Regulatory Guide (RG) 1.28, Revision 3, dated August 1985 which states, in part, the applicable elements of an organization's quality assurance program should be audited at least once each year or at least once during the life of the activity, whichever is shorter.

Contrary to the above, TVA failed to conduct an internal audit on the Bellefonte Units 3 and 4 COLA project within one year of becoming an applicant on October 30, 2007.

This issue has been identified as Violations 05200014/2010-201-02 and 05200015/2010-201-02.

**TVA's REPLY TO VIOLATION 05200014/2010-201-02 and 05200015/2010-201-02**

**(1) The Reason for the Violation**

TVA accepts the violation and offers the following discussion regarding the circumstances and corrective actions. The development and submittal of the Bellefonte Units 3 & 4 COLA was a unique first time industry evolution in which there was a consortium of external groups, known as NuStart, involved in an NRC license application development and review process. As the Applicant for the R- COLA in February of 2006, TVA informed the NRC that the NuStart QA program would be applied to produce the COLA prior to its submittal, with TVA providing oversight of these activities. TVA assumed responsibility under its existing fleet QA program (NQAP) only

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for those safety-related activities performed directly by TVA. After submittal of the COLA, the NuStart QA program continued to be applied and TVA assumed that reliance on the NuStart QA program with TVA oversight would continue to be acceptable until issuance of the COL. TVA failed to recognize the effect of COLA submittal on the responsibilities of the applicant in regards to implementation of QA requirements, and therefore failed to fully implement the provisions of TVA's NQAP. It is important to note, however, that while the ultimate responsibility for applying QA program requirements was not properly understood by TVA, appropriate QA program standards and requirements have been applied throughout the COLA process to date.

**(2) Corrective Steps Taken and Results Achieved**

TVA has initiated a Problem Evaluation Reports (PER) to address and evaluate the issues identified by the inspection. The PER is:

PER 230639 , "TVA failed to perform internal annual audits of BLN 3&4."

**(3) Corrective Steps that will be Taken to Avoid Further Violations**

Prior to the April 2010 QA Audit BLA-002, Bellefonte Site Standard Practice SSP-3.1, Revision 10, Conduct of Quality Assurance, was revised to add BLN Units 3 and 4 to the scope of the procedure, which placed the project on the annual audit schedule.

**(4) Date when Full Compliance will be Achieved**

Full compliance was achieved on April 12, 2010 with the conduct of Audit BLA-002