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JAMES J. FISICARO Director

September 30, 1994

U.S. Nuclear Regulatory Commission Document Control Desk Mail Stop P1-37 Washington, D.C. 20555

Subject:

Clarification of Independent Verification Process at River Bend

Station as Requested in NRC Inspection Report 50-458/94-13

River Bend Station - Unit 1/Docket No. 50-458

File No .:

G9.5, G15.4.1

RBG-40914 RBF1-94-0050

References:

- 1) NRC Inspection Report 50-458/94-13 dated June 28, 1994
- Entergy Operations, Inc. letter dated August 5, 1994 to NRC which transmitted EOI's reply to NRC Notice of Violation IR 94-13 (RBG-40785).

#### Gentlemen:

By Reference 1, the NRC requested that RBS clarify its requirements for the qualification of independent verifiers. We provided a very brief summary of the verification process in Reference 2 and committed to provide details by September 30, 1994. These details are provided in the enclosure to this letter.

Should you have any questions, please contact Mr. T. W. Gates at (504) 381-4866.

Sincerely,

MKB/kvm enclosure

JE01 .

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#### SUMMARY

General programmatic requirements for River Bend Station (RBS) independent verification activities associated with the control of plant equipment are established in ADM-0076, "Verification Program." Qualification requirements for plant personnel who could be expected to perform a verification task as part of their job function are primarily defined in ADM-0007, "Selection, Training, Qualification and Evaluation of Plant Staff Personnel," and ADM-0022, "Conduct of Operations." These qualification requirements are supplemented, as needed, by lower level departmental administrative procedures for specific positions. If appropriate, a departmental administrative procedure will also establish a responsibility for the section supervisor to evaluate assigned tasks and ensure that the assigned individual is qualified. Other requirements notwithstanding, ADM-0076 states that each individual is responsible for informing their respective foreman or supervisor if they have been assigned a verification task that they have insufficient knowledge to perform. This process is consistent with Entergy's philosophy for individual accountability. Additionally, ADM-0015, "Station Surveillance Test Program," states that if special qualifications are required for performing a STP, these requirements must be noted in the prerequisite section of the STP.

For the STP (i.e., STP-050-3601) that was reviewed by the NRC inspector in IR 94-13, there are no procedural requirements which mandate the performer or the independent verifier be qualified as a reactor engineer. While this STP has historically been performed by a reactor engineer (as noted by the NRC inspector), this is not required to satisfy the procedural requirements of the STP. Reactor engineering personnel typically perform this STP because the Reactor Engineering Group is administratively responsible for this STP and as such is responsible for ensuring its performance. The qualifications required by the STP are those for plant staff personnel as specified in ADM-0007. The other requirement is that the performer must have read and understood the STP. These administrative controls allow any qualified plant staff personnel to perform this task provided they have been assigned the task via plant staff management and they consider themselves to have sufficient knowledge. Note that certain steps in the STP do refer to other procedures that do require special qualifications and approvals (e.g., the movement of control rods as required for the performance of this STP invokes the requirements of REP-0051, "Control Rod Movement").

We believe that these administrative controls have served to provide for reliable performances of this STP in the past; however, EOI has identified the following enhancements to provide additional assurance that this STP will continue to be performed without error. The "cookbook" type calculations in this STP that currently require independent verification will be revised to require independent technical review. This change in terminology is required since the terminology of independent verification is generally limited to the physical manipulations of plant equipment and is not applicable to the simple mathematical checks done in this STP. In addition to this change, explicit qualification requirements will be added to the STP for both the performer and the technical reviewer. These changes will be implemented by November 30, 1994.

Note that in NRC Inspection Report 50-458/94-18, dated September 16, 1994, NRC inspectors did provide positive comments regarding the clarity and effectiveness of ADM-0076. While these comments do provide indications that RBS has effected improvements in this area, additional improvements are in progress.

## RECENT HISTORY OF RBS's VERIFICATION PROGRAM

In response to NRC violation 93-20-02, an independent verification task force was formed to evaluate the verification program at RBS. The primary product of the task force was the development of Administrative Procedure ADM-0076, "Verification Program." Before the approval of ADM-0076 in November 1993, all verification requirements, including qualification of verifier, were specified in individual program procedures (e.g., ADM-0007, "Selection, Training, Qualification and Evaluation of Plant Staff Personnel;" ADM-0015, "Station Surveillance Test Program;" ADM-0022, "Conduct of Operations;" ADM-0023, "Conduct of Maintenance;" and ADM-0027, "Protective Tagging"). All of these contained information which defined the requirements for component or procedure verification as well as qualification requirements for an individual performing verification.

During the development of this procedure, a bench marking effort was conducted. INPO was contacted to obtain references to quality industry programs. This led to initiating reviews of the verification programs at Waterford 3, Grand Gulf, Arkansas Nuclear One, Hatch, and Diablo Canyon. In addition, Nuclear Network questions and responses were utilized to assist with resolution of some of the more difficult problem areas. The documentation assembled during the bench marking effort indicated that some programs were much the same as RBS in that each department provides the guidance for independent verification (including qualification) as it applies to the specific work practice. It was also identified that some plants had a dedicated administrative level procedure which included all departments in a single program. The task force determined that an administrative level procedure which defined the programmatic requirements was the most appropriate method.

#### **CURRENT STATUS**

ADM-0076 currently defines the processes of the RBS verification program as follows:

Verification: an act of ensuring a condition conforms to the specified requirements. This
method of checking is used to ensure that any error is identified and corrected in a timely
manner so as to minimize impact on equipment, systems, and plant operations.

- Independent Verification: The act of checking a condition, such as a component position, separated from activities related to establishing the condition or component's position. It is the primary method of verification that provides the greatest assurance of proper component manipulation. Lormally the Verifier will not observe performance of the action and the Performer shall not influence the Verifier's verification.
- Independent Verifier: An individual knowledgeable of this procedure (ADM-0076)
  assigned to perform an Independent Verification of a completed task. While performing
  the Independent Verification, this individual shall not be influenced by the person who
  performed the original task that is being independently verified.

The task force set December 1996 as the completion date for the complete integration of ADM-0076 with all applicable plant procedures. [This date was chosen because of the magnitude of the task. All plant procedures must be evaluated with a significant number of revisions expected to be required. In addition to redefining the role of an independent verifier, the new procedure defined the verification functions which should be performed concurrently instead of independently (a new concept at RBS) and self-checking.]

The qualifications of a verifier are not explicitly defined in the current version of ADM-0076. Other than requiring that an individual performing an independent verification be trained on and knowledgeable of the requirements of ADM-0076, the procedure does not attempt to define individual departmental qualification requirements. Departmental administrative procedures define the qualification requirements for individuals performing verifications to ensure sufficient technical expertise and plant knowledge to adequately implement the verification program. Presently the detailed qualification requirements are presented in the various plant administrative procedures and are summarized below:

ADM-0007, "Selection, Training, Qualification, and Evaluation of Plant Staff Personnel,"
 establishes the minimum education and experience requirements for plant personnel.
 Qualification in accordance with ADM-0007 alone does not necessarily qualify an
 individual to perform tasks at River Bend. Additional training requirements are specified
 in departmental administrative procedures (OSP-0007, "Non-licensed

Operator Candidate Guide;" OSP-0010, "Licensed Operator Candidate Qualification Guide;" OSP-0025, "Shift Technical Advisor Qualification Guide," MSP-0009, "Qualification of Maintenance Personnel;" CSP-0003, "Chemistry Personnel Qualification;" RWS-0203, "Personnel Qualification for Radwaste Section;" TSP-0001, "System Engineering Training and Qualification;" and RSP-0003, "Personnel Qualification for the Radiation Protection Section.")

 ADM-0022, "Conduct of Operations," which control operations and operational activities specifies that Nuclear Equipment operators or above, regardless of building qualification, shall be considered as qualified to perform independent/concurrent verification. It also

specifies that I&C personnel qualified per ADM-007 or MSP-0028 and assigned to perform lineups or surveillance test procedures (STPs) are considered qualified to perform independent verification. Step 4.2.1.1 of that procedure goes on to state that System Engineers qualified per TSP-0001 and assigned to perform STPs are considered qualified to perform independent verification. The procedure references ADM-0076 for programmatic requirements.

Two other programs controlled by administrative level procedures at RBS assign responsibilities for independent verification. The station surveillance testing program (ADM-0015) and protective tagging (ADM-0027) both implement portions of the verification program.

- ADM-0015, "Station Surveillance Test Program," is currently being revised. This revision
  will add references to ADM-0076 where appropriate and will be reviewed to ensure that no
  inconsistencies with ADM-0076 exist. This procedure does require the identification of
  any special qualifications that are necessary for performance of an STP and the listing of
  these qualifications in the prerequisite section of the STP.
- ADM-0027, "Protective Tagging," has recently been revised (Revision 14) to include appropriate references to ADM-0076. This revision has established the desired consistency with ADM-0076.

## PLANNED FUTURE ENHANCEMENTS

As noted in RBS's response to NRC's IR 93-13 and in RBS's Long Term Performance Improvement Plan (LTPIP), RBS has recognized weaknesses in its current procedure program. A comprehensive procedure improvement plan is described in the LTPIP. This improvement plan includes activities to improve procedure quality and usability, to improve administrative controls, to streamline and enhance the procedure maintenance and change process, and to establish effective information management systems. As discussed in IR 94-13, the current organization of the qualification requirements for independent verifiers does not serve to provide the level of understanding that is desired. These requirements are sometimes fragmented. In accordance with the programs currently in place at RBS, this deficiency is being addressed on a schedule that is commensurate with the safety significance of the issue. For the activities associated with integrating ADM-0076, a schedule with a completion date of December 1996 has been established. A more detailed description of the global requirements for an independent verifier will be added to ADM-0076 as part of this process. These requirements will reflect some of the qualifications delineated in the INPO good practice document OP-214 on Independent Verification.