

# Babcock & Wilcox

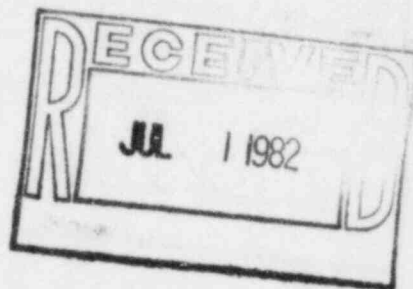
a McDermott company

Nuclear Power Generation Division

3315 Old Forest Road  
P.O. Box 1260  
Lynchburg, Virginia 24505  
(804) 384-5111

June 23, 1982

Mr. Uldis Potapovs, Chief  
Vendor Inspection Branch  
U.S. Nuclear Regulatory Commission  
Office of Inspection and Enforcement  
Region IV  
611 Ryan Plaza Drive, Suite 1000  
Arlington, Texas 76011



Dear Mr. Potapovs:

As promised in our meeting of June 3, 1982, we are attaching our report on the findings of our Calculation Source Reference Pilot Program which presents the same conclusions as those presented to you orally in the meeting.

In commenting favorably on our conclusions and plan at the end of the meeting, you asked that we be as explicit as possible in defining how we would treat new and revised calculations so that your inspectors would have a clear-cut basis for future audits. We have done this in our report but are also briefly summarizing the plan in this letter.

We will continue to use September 1, 1980 as the date separating "New" and "Old" calculations. All original calculation packages and revisions generated after this date will have all inputs referenced to the source in accordance with NPG-0402-01. As described in the meeting--and based on the favorable results of the pilot program--we do not plan to review the source calculation for missing input references. However, we will document and retain the generic instructions for identifying and verifying source references for design inputs for calculations that may require repair at a future date.

Old calculations which are planned for release for new effectivities (contracts) will be determined to be satisfactory with regard to source references prior to release or will be revised to have the inputs referenced to their source prior to release.

Our understanding at the meeting of June 3, 1982 is that the plan as presented--in the meeting--and reflected in the attached plan--is acceptable in lieu of the plan previously presented in our letter of June 24, 1980. We would appreciate your confirmation as early as is convenient.

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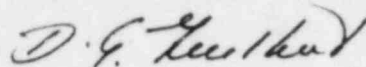
Idis Potapovs

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23, 1982

We appreciate the opportunity to have met with you and your consideration in this matter.

Very truly yours,



D. E. Gilbert  
Vice President  
Nuclear Power Generation Division

DEG:ddb

Attachment

cc: D. H. Roy  
E. L. Davis  
C. A. Armontrout  
W. A. Cobb  
A. H. Lazar  
G. D. Quale

RESOLUTION

NRC AUDIT FINDING NO. 79-04

I. Finding:

The NRC Audit Finding No. 79-04 was issued January 23, 1980 as a result of December 1979 inspection.

A. Deviation Notice:

The Bellefonte FSAR, Chapter 17.1B3.4, Design Verification requires that "There are procedures for verification of calculations. The cognizant analyst...is required to document the calculations as to purpose, assumptions, method, input data, results and conclusions...certified computer programs are used as determined by the cognizant analyst."

This requirement is implemented by B&W administrative procedure NPG-0402-01 "Processing of NPGD Prepared Calculations" Section VIA, which requires that Form PDS-21036 General Calculations, include:

- "2 Identification of the design inputs and their sources...
- 5 The identification of computer programs used including program name, program version, and date of the run that was used."

Contrary to this requirement, the Calculation Package #32-4057-00 did not include the sources of design inputs, computer program name, program version, or dates of runs used.

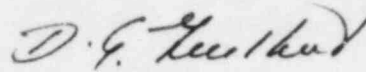
II. Schedule of Events and Responses to the Finding:

- A. Letter issued to NRC by J. H. MacMillan, Vice President, NPGD on 2-26-80 stating that the specific calculation would be corrected and other calculations would be corrected if updated.
- B. On 4-11-80 NRC issued letter to NPGD requesting that all calculations be reviewed and corrected.
- C. Letter issued to NRC by D. E. Guilbert, Vice President, NPGD on 5-1-80 agreeing to conduct audit to determine the magnitude of the problem as stated in the finding.
- D. After audit, letter was issued to NRC by D. E. Guilbert, Vice President, NPGD on 6-24-80 stating that the problem was generic but unidentified input sources were common knowledge and past calculations need not be reviewed.

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- D. After audit, letter was issued to NRC by D. E. Guilbert, Vice President, NPGD on 6-24-80 stating that the problem was generic but unidentified input sources were common knowledge and past calculations need not be reviewed.

- E. On 7-11-80, NRC stated that the 6-24-80 letter has been reviewed and that the NPGD position was unacceptable. NRC requested that NPGD submit a plan for review of past calculations.
- F. NPGD developed requested plan and it was submitted to NRC on 8-6-80.
- G. The NRC accepted the plan in letter submitted to NPGD on 9-2-80.
- H. To determine the magnitude of the complete Calculation Source Reference Program, a plan was developed by NPGD Engineering to conduct a Pilot Program and was implemented on 9-9-81.

### III. The CPSR Pilot Program:

- A. The purpose of the program was to:
  - 1. Identify the calculations to be reviewed
  - 2. Develop procedures and guidelines for the source review/repair process
  - 3. Determine recoverability of reference information
  - 4. Develop repair statistics
- B. The Pilot Program was completed with the following results and conclusions:
  - 1. No safety problems were found.
  - 2. No changes in calculation results were identified.
  - 3. All source references were found to be retrievable and valid.
  - 4. Generic instructions to identify source references and repair calculations were developed.
  - 5. Administrative Procedure NPG-0402-01 "Preparing and Processing NPGD Calculations" was revised.

### IV. NPGD Recommendations:

With the results of the Pilot Program, NPGD recommendations are as follows:

- Not to perform the CPSR Program as stated in the 8-6-80 plan.

However, NPGD will:

- Continue to use September 1, 1980 as the date separating "New" and "Old" calculations. All original calculation packages (revision level "00" and revisions\* generated after this date will have all

inputs referenced to the source in accordance with NPG-0402-01 "Preparing and Processing of NPGD Calculations."

- \* Revisions are documents with revision 01 or higher, and as provided by NPG-0402-01, may be either complete revisions, wherein all pages of the document are revised and carry the new revision level identification, or partial revisions, which include only selected pages which replace or supplement the material in the earlier version of the document.
- Conduct periodic audits and training to assure that the responsibilities stated in NPG-0402-01 are adhered to.
- Assure that records and documentation are maintained, in accordance with the NPGD Records Management Program, to permit retrievability of input information should it be ever required.
- Document and retain the generic instructions for identification of design input source references, if the need should occur, to be used to verify and identify source references at a future date.