

ORGANIZATION: WESTINGHOUSE ELECTRIC CORPORATION
PITTSBURGH, PENNSYLVANIA

REPORT NO.: 99900404/85-01	INSPECTION DATE(S): 3/4-6/85	INSPECTION ON-SITE HOURS: 51
CORRESPONDENCE ADDRESS: Westinghouse Electric Corporation Nuclear Technology Division ATTN: Mr. J. L. Gallagher, General Manager Post Office Box 355 Pittsburgh, Pennsylvania 51230 ORGANIZATIONAL CONTACT: Mr. P. T. McManus, Quality Assurance TELEPHONE NUMBER: (412) 825-7988		
PRINCIPAL PRODUCT: Nuclear Steam Supply Systems NUCLEAR INDUSTRY ACTIVITY: Westinghouse provides NSSS components, other safety and non-safety related components, and services.		
ASSIGNED INSPECTOR: <u>John W. Craig for</u> P. D. Milano, Special Projects Inspection Section (SPIS)		<u>6/18/85</u> Date
OTHER INSPECTOR(S): J. W. Craig, SPIS W. P. Haass, Program Coordination Section		
APPROVED BY: <u>John W. Craig</u> John W. Craig, Chief, SPIS, Vendor Program Branch		<u>6/18/85</u> Date
INSPECTION BASES AND SCOPE: A. <u>BASES</u> : 10 CFR Part 21 and 10 CFR Part 50. B. <u>SCOPE</u> : The purpose of the inspection was to followup on previous inspection findings and to review the Westinghouse system for providing information to their customers pertaining to installation and operation of Westinghouse supplied equipment.		
PLANT SITE APPLICABILITY: Multiple: Westinghouse NSSS facilities.		

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REPORT
NO.: 99900404/85-01

INSPECTION
RESULTS:

PAGE 2 of 5

A. Violations and Nonconformances

None

B. Status of Previous Inspection Findings

1. (Closed) Nonconformance (A/84-03): No documentation was available to determine the effect of an error identified in Problem Report No. 1511 on the design activity accomplished utilizing the WECAN computer code.

The Westinghouse Plant Engineering Division "Evaluation of WECAN Problem Report 1511," dated 12/14/84, was reviewed. The evaluation indicated that there was no impact on safety-related design since the feature with the error was not utilized in piping modeling or equipment analysis. However, WECAN users and affected management were informed of the requirements for evaluation and documentation of error reports.

2. (Open) Nonconformance (B/84-03): No procedures were in place to review and document the effect of computer program and system errors on design, past and ongoing.

The procedure for verification of computer programs is being revised to address the review and documentation of the effect of computer code errors. However, the procedure had not been issued at the time of the NRC inspection.

3. (Open) Nonconformance (C/84-03): Field Change, Control No. CAE-9455, authorizing design changes to the Instrumentation and Control Protection System, was approved and constructed without Quality Assurance and Nuclear Safety Department approvals.

Westinghouse is reviewing the Commonwealth Edison Projects active Change Controls to ensure that any field changes which did not have Quality Assurance or Nuclear Safety approval were properly evaluated. The item remains open until the reviews are completed.

4. (Closed) Nonconformance (D/84-03): The computer program ANSYS, procured from SWANSON, remained available for use on safety-related designs after Westinghouse was notified that the program contained errors. The errors were of a nature that erroneous results could be obtained. The Advance Energy Systems Division also continued to use and maintain ANSYS for its own safety-related design activities

REPORT
NO.: 99900404/85-01

INSPECTION
RESULTS:

PAGE 3 of 5

after receipt of the error notices. When requested, no documentation could be produced to justify the acceptability of the version of ANSYS that contained the errors.

Westinghouse Plant Engineering Division (PED) utilized ANSYS on three occasions during this period, none of which was for safety-related applications. On February 22, 1985, PED disapproved the use of ANSYS for further work in the division. The Advance Energy Systems Division did not utilize the program after this date due to the termination of the Clinch River Breeder Reactor Program in 1983. Further investigation for other potential users is ongoing.

5. (Closed) Nonconformance (E/84-03): An error identified and corrected in the computer program NOTRUMP verification calculation note SEC-RFFA-1381-CO (Generic CE Plant NOPRUMP Small Break Spectrum) was not similarly corrected in the affected verification calculation note SEC-RFFA-1381-CO (CE NOTRUMP Input Deck).

Westinghouse Safeguards Engineering and Development (SE&D) calculation note system allows revisions to calculation notes by adding the next higher "Cx" suffix number. This allows for revisions of notes that have been archived on microfilm. In this case, while note SEC-RFFA-1381-C1 was added to correct a portion of the original note, its title was sufficiently different to be misinterpreted as a different note. SE&D Instruction and Guidance NS-SED-IG-3 has been clarified so that calculation notes that are not related by specific title will have different calculation note numbers.

6. (Closed) Nonconformance (F/84-03): The computer program NOTRUMP verification calculation notes SEC-RFFA-1381-CO and SEC-RFFA-1381-C1 contain reviewer comments requiring resolution. However, the comments did not include the documented resolution and the verifier's signature.

The Safeguards Engineering and Development Instruction and Guidance Material (NS-SED-IG-3) Preparation of Calculation Notes has been modified to require that "reviewer comment resolution must be documented in to calculation note." In the above cases and in the past, the design verifier's final signature was used as evidence that all comments had been resolved.

7. (Closed) Nonconformance (G/84-03): The set of problems identified in the computer program WECAN User Manual, Table 5-2, Volume II, did not support the verification of gap element, STIF 77, which demonstrates

REPORT
NO.: 99900404/85-01

INSPECTION
RESULTS:

PAGE 4 of 5

the capability of the element to simulate the opening and closing of a gap between structural components. This item of nonconformance was corrected during the course of the inspection.

By means of WECAN User's Memo 85-04, dated February 27, 1985, all users were notified of the verification completion of the STIFF 77 element.

8. Since the implementation of the procedures, modification and evaluation of the 10 CFR 21 reporting system are still in progress, the remaining open items from NRC Inspection Report 99900404/84-02 were not reviewed.

C. Inspection Report Summary

An internal Westinghouse system was initially developed in the late 1950's to provide information relating to installation, operation, and maintenance of equipment. This system was comprised of Data Letters which were sent to Westinghouse service personnel. This system was used in special cases as a means of providing information to Westinghouse customers.

In 1977, Westinghouse instituted a system of Technical Bulletins to supplement the system of Data Letters. While the Technical Bulletins contained information similar in nature to Data Letters, Technical Bulletins were utilized if the information affected the written guidance contained in instruction books rather than providing supplemental information to Westinghouse service personnel. Technical Bulletins and Data Letters were initially used as a means to transmit information within Westinghouse. However, Technical Bulletins were sometimes sent to the Westinghouse customers. Based upon discussions with Westinghouse personnel and absent written guidance describing the purpose of Data Letters or Technical Bulletins, the specific use of either document is somewhat unclear. However, Data Letters have not been issued since 1982.

Each Division within Westinghouse is required to determine when a Technical Bulletin should be issued. Technical input is then provided to the Nuclear Service Integration Division (NSID) which is responsible for the preparation, review, approval, and issuance of Technical Bulletins. NSID prepares the Bulletins with concurrence from the responsible design organizations.

Technical Bulletins can be and are used to provide supplemental and revised information for instruction (Installation, Operation, Maintenance Manuals) manuals. The affected documents are not revised at a later date to incorporate this information.

ORGANIZATION: WESTINGHOUSE ELECTRIC CORPORATION
PITTSBURGH, PENNSYLVANIA

REPORT
NO.: 99900404/85-01

INSPECTION
RESULTS:

PAGE 5 of 5

After the Salem ATWS event in 1982, Westinghouse implemented a more formal control mechanism for tracking their customers' receipt of safety-related Technical Bulletins. A computerized tracking system is used to track return receipts for those Technical Bulletins that affect safety-related equipment (basic component), as defined by Westinghouse. These Technical Bulletins contain a form which Westinghouse requests that their NSSS customers to return acknowledging receipt of the Bulletin.

During the inspection, selected Technical Bulletins were reviewed. The receipt, evaluation and implementation of actions, if any, that are determined by utilities to be appropriate, will be reviewed during future NRC inspections.