

G&H VISIT
MISC8

October 11, 1985

NOTE TO: S. Hou, CPSES TRT
FROM: R. Masterson, CPSES TRT
SUBJECT: VISIT TO GIBBS & HILL TO FOLLOW-UP ON ALLEGATION AP-26 M/P
CATEGORY 35, SSER #10

On October 8, 1985 the NRC CPSES TRT visited Gibbs & Hill Inc.'s office for the purpose of following up allegation AP-26 which stated that the ADLPIPE computer program was not validated. An agenda (attached) was established and followed during the meeting. Below, in summary, is a result of the follow-up visit.

1. Gibbs & Hill (G&H) procedure EDP-10 Revision 3, March 31, 1983 was reviewed and found to be acceptable. G&H procedure manual procedure DC-8 Revision 6, Item 3.2 established the use of EDP-10.
2. EDP-10 provides requirements for engineering responsibilities, Class A (ADLPIPE) computer usage, verification and checking of computer programs, maintenance of the computer library, production use, modification and revision verification, error detection and document control.
3. G&H representatives for engineering, computer programs and library, and quality assurance provided the TRT a detailed overview and interface for their respective departments.
4. The TRT reviewed evidence of benchmark problems to verify ADLPIPE and found the results acceptable.
5. The TRT reviewed the ADLPIPE users manual which described the application of all three options provided by NRC Regulatory Guide 1.92 for evaluation of modal responses.
6. G&H provided objective evidence of forms and procedures which controlled the use of revised versions of ADLPIPE and engineering evaluation and conclusions for revisions or errors documented by in house engineers or the vendor.
7. The TRT observed objective evidence of the discovery, evaluation and corrective action of errors affecting ADLPIPE. The TRT was advised that no error related to ADLPIPE has required corrective action for the Comanche Peak Project.
8. G&H provided results of in-house audits performed by the QA Dept. which documented compliance with EDP-10.

The TRT did not have any findings that would result in a notice of violation or open item, however, two observations were noted.

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Observation #1

The QA department was not required to document and sign off on the initial verification and/or subsequently released versions of ADLPIPE. They did, however, perform scheduled audits to verify the correct implementation of EDP-10.

Observation #2

G&H could not find the ADLPIPE analysis with which they verified their initial version of ADLPIPE (Version IC). However, subsequent versions had evidence of confirmatory analysis with ADLPIPE, SAP, hand calculations, and NRC NUREG/CR-1677.

R. Masterson
Comanche Peak TRT

cc: D. Terao
V. Ferrarini
A. Vietti-Cook

NRC Audit of Piping Analysis Computer Code
10/8/85

Attendance List

NRC Staff & Consultant

S. Hou	NRC/CPSES TRT
R. Masterson	EAS/TRT Consultant

Personnel Interviewed

John Marshall	TUGCO/Nuclear Licensing
Robert E. Ballard	G & H/Director of CPSES Project
Martin S. Miller	G & H/QA Supervisor
Claudine I Corban	G & H/Applied Mechanics Specialist
Edmond Bond	G & H/Manager of Computer Department
Bernard Fried	G & H/Programmer, Computer Department