

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING APPEAL BOARD

In the Matter of)	Docket Nos. 50-275
)	50-323
PACIFIC GAS AND ELECTRIC)	
COMPANY)	Design Quality Assurance
)	
(Diablo Canyon Nuclear Power)	
Plant, Units 1 and 2)	

AFFIDAVIT OF AZRIEL SHUSTERMAN

STATE OF CALIFORNIA)	
)	ss.
CITY AND COUNTY OF SAN)	
FRANCISCO)	

I, Azriel Shusterman, being duly sworn, depose and say:

1. I am employed by Bechtel Power Corporation (Bechtel) as a Pipe Support Engineer and was assigned as a Squad Leader of the Onsite Project Engineering Group (OPEG) located at the Diablo Canyon nuclear power project near Avila Beach, California. In this capacity, I supervised the design activities of approximately eight engineers in the OPEG pipe support group from October 1982 through March 1983.

2. Mr. Stokes has alleged that I intentionally authorized, approved, and "covered up" a recalculation of a hanger which had been previously disqualified. There is the clear implication that I may have done this on other occasions. (January 25 Tr., pp. 195-197)
3. Contrary to the assertion of Mr. Stokes, the verification of existing pipe support 100-132 was not reassigned to "cover up" a prior analysis, but solely to qualify that support, if possible, prior to requiring modification. I have never assigned calculations or recalculations for any purpose other than legitimate professional reasons.
4. The analysis of small bore support 100-132 was originally assigned to Mr. G. Katcher in about January 1983, and his analysis was checked by Mr. D. N. Patel. The results of this analysis showed the support baseplate to be overstressed.
5. In discussions between myself, Mr. Katcher and Mr. Patel, it was agreed that the completed analysis was done assuming the support baseplate to be rigid. I proposed that a more sophisticated reanalysis should be performed using the more realistic assumption that the support baseplate was flexible. This analysis method is an accepted industry practice and did not result in the violation of any licensing criteria. Mr. Patel agreed that this approach would be acceptable, but Mr. Katcher did not. I did not consider it necessary in this case to require modification of the support until other entirely acceptable, analytical methods had been tried for demonstrating support qualification. Furthermore, I did not

consider it prudent to be limited by Mr. Katcher's apparent lack of familiarity with another acceptable analytical method. Consequently, I assigned the reanalysis to another engineer, Mr. G. Shah, who was familiar with the proposed approach. Mr. Gautam was assigned to check the reanalysis. I then considered, and now consider, that reassignment to be entirely proper and clearly within the normally accepted prerogatives of a supervisor.


6. This analysis reassignment coincidentally occurred at the time of the division of the pipe support group into separate Unit 1 and Unit 2 teams located in separate trailers. At that time, Mr. Katcher was assigned to the Unit 2 team.
7. The reanalysis completed by Mr. Shah and checked by Mr. Gautam showed the support to be qualified. Its qualification was reported to me. However, the calculation contained an error which went undetected in the checking process. Had the error not been made, the support would not have qualified in the reanalysis using the method that was actually employed. The reanalysis did not consider baseplate flexibility as I had instructed, and was completed using a more simplified model than was used in the original analysis by Mr. Katcher.

8. This error was discovered during an audit of this calculation in December, 1983. At that time the calculation was assigned to another pair of engineers, Mr. R. Amin and Mr. Singh, to reanalyze and check using an appropriately detailed model and considering baseplate flexibility. This calculation demonstrates acceptable qualification of the support and meets licensing criteria in all respects.

Dated: March 4, 1984


AZRIEL SHUSTERMAN

Subscribed and sworn to
before me this 4th day
of March, 1984.


Nancy J. Lemaster,
Notary Public in and for the
City and County of San Francisco,
State of California.
My commission expires
April 14, 1986.

SEAL

