

UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION

BEFORE THE ATOMIC SAFETY AND LICENSING BOARD

In the Matter of

TEXAS UTILITIES GENERATING COMPANY,)
ET AL.)

Docket Nos. 50-445
50-446

(Comanche Peak Steam Electric
Station, Units 1 and 2))

AFFIDAVIT OF JOSEPH J. HOLONICH

Q1. By whom are you employed, and what is the nature of the work
you perform?

A1. I am currently employed by the U.S. Nuclear Regulatory
Commission (NRC) as a Nuclear Engineer Intern in the Thermal-Hydraulics
Section of the Core Performance Branch. A statement of my educational
and professional qualifications is attached. My duties include evaluating
the thermal-hydraulic performance of reactor cores and the reactor coolant
system needed for safe operation during normal and transient conditions.

Q2. What are the nature of your responsibilities regarding the
Comanche Peak Steam Electric Station ("CPSES")?

A2. I am familiar with the technical information contained in the
Final Safety Evaluation Report (FSAR) for CPSES and was assigned
the review responsibility for Section 4.4 of the FSAR.

Q3. What is the subject matter addressed in your affidavit?

A3. I address Contention 2, which alleges:

One or more reports used in the construction of computer codes for the CPSES/FSAR have not been suitably verified and formally accepted; thus conclusions based on these computer codes are invalid.

In particular, I have been asked to determine if paragraph 2 of the Applicants' "Statement of Material Facts As To Which There Is No Genuine Issue" ("Statement of Material Facts"), with regard to NRC Staff acceptance of, Reports 23, and paragraph 3, with respect to Staff acceptance of Applicants' analyses based on Report 6, are correct; and if the Staff supports the Applicants' position.

Q4. Have you read, and do you agree with paragraph 2 of the Applicants' Statement of Material Facts, with regard to NRC Staff acceptance of Report 23?

A4. I have read paragraph 2 of the Applicants' Statement of Material Facts, and I agree that the Staff has accepted topical report 23.

Q5. Have you read, and do you agree with paragraph 3 of the Applicants' Statement of Material Facts, with regard to Staff acceptance of Applicants' analyses which rely on Report 6?

A5. I have read and agree with paragraph 3 to the following extent:

Report 6 has not been formally accepted, but the Staff review of Report 6 is favorable with respect to using FACTRAN in accident and transient analyses.

- Q6. Describe the subject matter of Report 6 and Report 23, and indicate whether the Staff has formally accepted each report?
- A6. Report 6, WCAP-7908, "FACTRAN-A FORTRAN-IV Code for Thermal Transients In a UO_2 Fuel Rod" (June 1972), was submitted by Westinghouse Electric Corporation (Westinghouse). The report describes and constructs the FACTRAN computer code, which calculates the transient temperature distribution in a cross section of a metal clad UO_2 fuel rod, and the transient heat flux at the surface of the cladding during certain transients and accidents. Report 6 was referenced in Section 15.2.3.2 of the CPSES FSAR.


The Staff review of Report 6 is complete, but the report has not been formally accepted because the Staff has not yet issued a formal Safety Evaluation Report ("SER") for this topical report. However, Staff review of Report 6 has led to a favorable conclusion regarding the acceptability of utilizing FACTRAN in transient and accident analysis, contingent upon certain restrictions to be delineated in the SER. The Staff's approval is based upon a review of Report 6, the proposed Appendix to the report, and additional information submitted by Westinghouse. The use of FACTRAN will result in realistic analyses because the modeling concepts associated with the code are considered acceptable for analyzing thermal transients in UO_2 fuel rods.

Report 23, WCAP-7956, "THINC-IV, An Improved Program for Thermal-Hydraulic Analysis of Rod Bundle Cores" (October 1973), was submitted for NRC Staff acceptance by Westinghouse. This report describes, constructs, and presents experimental verification data for the THINC-IV

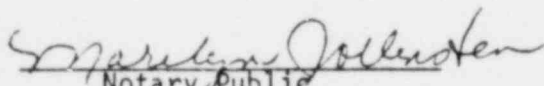
computer code. The THINC-IV code is used for the steady-state, thermal-hydraulic analysis of reactor cores. This computer code was referenced by Applicants throughout the CPSES FSAR. Report 23 was used as background information in my review of Section 4.4.

Report 23 was formally accepted by the NRC Staff. Westinghouse was notified of the formal acceptance of Report 23 on April 19, 1978.

The above statements and opinions are true and correct to the best of my personal knowledge and belief.


Joseph D. Holonich

Subscribed and sworn to before me,
this 12th day of February, 1982.


Notary Public

My Commission expires: July 1, 1982

JOSEPH J. HOLONICH

CORE PERFORMANCE BRANCH

DIVISION OF SYSTEMS INTEGRATION

U. S. NUCLEAR REGULATORY COMMISSION

EDUCATIONAL AND PROFESSIONAL QUALIFICATIONS

I am employed as a Nuclear Engineer Intern in the Thermal-Hydraulics Section of the Core Performance Branch, Division of Systems Integration.

In May, 1980 I graduate from the Pennsylvania State University with a Bachelor of Science degree in Nuclear Engineering. I have been continuously employed by the NRC since June, 1980.

My present work assignment at the NRC include the review responsibility of the reactor core thermal-hydraulic design submitted in support of reactor construction permits and operating licenses. I also participate in the review of analytical models used in the evaluation of core thermal-hydraulic behavior under various operating and postulated accident transient condition.