



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

Docket

October 30, 1989

Docket Nos. 50-390
and 50-391
EA 89-213

Mr. Oliver D. Kingsley, Jr.
Senior Vice President, Nuclear Power
Tennessee Valley Authority
6N 38A Lookout Place
1101 Market Street
Chattanooga, Tennessee 37402-2801

Dear Mr. Kingsley:

SUBJECT: NRC INVESTIGATION REPORT 2-86-016

This refers to an investigation conducted by the NRC's Office of Investigations (OI) concerning (1) the completeness of your discussions during meetings with the NRC in early 1984 and your correspondence in early 1985 regarding deficiencies in your Watts Bar welding program, specifically the issue of weld inspections done through carbo-zinc primer and (2) the accuracy of a September 27, 1985 Nuclear Safety Review Staff (NSRS) response to a TVA Employee Response Team (ERT) report on the same subject that was provided to the NRC in October 1985. A synopsis of this investigation is enclosed for your information.

The investigation was conducted after TVA management informed the Director, NRR, in early 1985 that certain welds had been inspected through a coating of carbo-zinc primer, that this was contrary to the requirements of the code of record and that TVA had informed the staff of this fact during meetings in January and February 1984. TVA made this assertion orally on March 25, 1985 and confirmed it in writing on March 28, 1985. The investigation also included a review of an allegation that the NSRS response concerning the carbo-zinc issue, provided to the NRC staff in October 1985, was deliberately designed to obfuscate the seriousness of the issue and the inadequacy of TVA's original corrective action to close the issue.

The underlying technical issue -- that, contrary to the American Welding Society Standard D 1.1 which is the code of record for structural welding at Watts Bar, initial inspection of welds were made through carbo-zinc paint -- was identified by TVA in 1984 and was addressed in the Watts Bar Welding Program, a corrective action program to address deficiencies in welding and related matters. The technical adequacy of TVA's corrective action was confirmed during the NRC staff's review of that program in 1988 and 1989 documented was in NRC Inspection Report 50-390/89-04 dated August 9, 1989. That review identified no further information germane to the issues of this investigation.

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Through its review of the OI investigation and the information developed there, the NRC staff has concluded that (1) in the meeting with the Region II staff on January 12, 1984, although the carbo-zinc issue may have been mentioned in passing, it was not an identified subject of the meeting, nor was it highlighted or discussed in any detail, nor its significance identified, (2) although the TVA Board of Directors instructed the TVA staff to present the exceptions to the AWS welding code to the NRC staff, the carbo-zinc issue was not discussed by TVA during the February 10, 1984 meeting called at TVA's request to discuss TVA's welding program, (3) some members of the NRC staff understood that the February 10, 1984 meeting involved in part an employee's concerns, (4) when, on March 25, 1985, TVA executives assured Mr. Denton that the carbo-zinc issue had been discussed with the staff, they reasonably believed that to be true, (5) TVA's March 28, 1985 letter was prepared by a knowledgeable TVA engineering staff member on the basis of available internal TVA memoranda, and (6) although the September 27, 1985 NSRS response is obscure in places and critical of the original ERT report, no evidence was developed to show that the response was inaccurate or designed to discredit the original ERT report identifying the carbo-zinc problem or to obfuscate the significance of the issue.

Based on information developed in its investigation, the Office of Investigation concluded that no evidence was developed to support a conclusion that TVA representatives made willful false statements or statements in careless or reckless disregard to the NRC. Nonetheless, OI concluded that, although the purposes of the February 10, 1984 meeting included familiarizing the NRC staff with the TVA welding program, TVA failed to disclose the subject of inspection through carbo-zinc primer and that this constituted a material false statement by omission based on the VEPCO decision which controlled in 1984.

In December 1987, the Commission revised its general policy on enforcement (10 CFR Part 2, Appendix C) effective February 1, 1988 with regard to the completeness and accuracy of information. Among other things, this revision stated the Commission's intention to limit the use of the term "material false statement" to situations in which there is an element of intent, involving deliberateness or careless disregard. Given the absence of any intent or careless disregard on the part of TVA managers regarding the incompleteness of the discussions with the NRC staff on February 10, 1984, the staff elects, consistent with the Commission's guidance, not to label the omission a material false statement.

Notwithstanding the above, the staff maintains that the discussion in the February 10, 1984 meeting was incomplete and misleading. Furthermore, we note that any such future submittal of inaccurate, incomplete or misleading information would constitute, at a minimum, a violation of 10 CFR 50.9, which became effective on February 1, 1988, and could subject you to NRC enforcement actions, including civil penalties, modification, suspension or revocation of your license.

The NRC staff is aware that, TVA, as part of its Corporate Nuclear Performance Plan, has taken significant personnel and procedural actions to assure full, candid and timely disclosure of safety problems to the NRC. Therefore, the staff concludes that no additional action is required in response to this letter. In accordance with Section 2.790 of the NRC's Rules of Practice, a copy of this letter will be placed in the NRC Public Document Room.

Sincerely,
Original signed by
Dennis M. Crutchfield

Dennis M. Crutchfield, Associate Director
for Special Projects
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Enclosure:
Synopsis of OI Report

cc w/enclosure:
See next page

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*For previous concurrences see attached ORC

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October 30, 1989

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SYNOPSIS

On April 8, 1986, the Executive Director for Operations (EDO), U.S. Nuclear Regulatory Commission (US NRC) requested an investigation to determine the circumstances surrounding possible material false statements made by the Tennessee Valley Authority (TVA) regarding TVA's adherence to licensing commitments on welding and in the representation of the circumstances to the NRC.

In June 1982, the Nuclear Safety Review Staff (NSRS) of TVA issued two reviews, R-82-02-WBN and R-82-07-WBN, which were audit type reports pertaining to the Watts Bar Nuclear Plant (WBNP), Tennessee. These reports contained, in part, three findings all related to the visual inspection of structural welds (on cable tray supports conduit supports, duct supports, and miscellaneous items) after application of carbo zinc primer. In early 1983, the responsibility for monitoring and closure of these welding findings was transferred from NSRS to the newly created Office of Quality Assurance (OQA), a TVA staff office. OQA subsequently resolved and closed these issues in August 1983 after coordination with TVA's Office of Engineering Design and Construction (OEDC) which was the staff office responsible for resolving the technical issues. Also in 1983, NSRS conducted a review, R-83-19-OQA, of OQA in which NSRS disputed OQA's closure action of the welding issues. After subsequent coordination and meetings between OQA, NSRS, and OEDC, and with the availability of additional supporting documentation, NSRS ultimately concurred in February 1984 that OQA had sufficient justification in the resolution and closure of the welding issues involved. During the latter part of 1983 and early 1984, there was, however, a concerned employee of NSRS who raised the issue that the US NRC was not aware of the details of how TVA had implemented the American Welding Society (AWS) code at WBNP. This employee did not, however, question the findings regarding the weld inspections in the NSRS reviews. As a result of the employee's concern which was brought before the TVA Board of Directors, TVA held separate meetings with Region II (RII), US NRC on January 12, 1984, and with the Office of Nuclear Reactor Regulation (NRR), US NRC on February 10, 1984. In those meetings, TVA presented general information on the welding program and licensing commitments to the two NRC staffs, but did not introduce the specific details of visual inspection of structural steel welds through carbo zinc primer which had been identified in the NSRS reviews.

In a letter dated March 28, 1985, the Manager of Nuclear Power, TVA, provided the Director, NRR, information which NRR had requested regarding employee concerns on the welding issues at WBNP, and the letter further indicated that the employee concerns, which included the carbo zinc issue, had been furnished and understood by RII and NRR at the aforementioned meetings.

Also in early 1985, TVA hired Quality Technology Company (QTC), a private firm, to conduct TVA's employee concern program from which emanated a concern that TVA's closure of the carbo zinc issue was premature, was without adequate technical justification, and the acceptability of structural hardware was indeterminate. These concerns were the subject of a QTC Employee Response Team (ERT) Investigation Internal Report NS-85-001-001 dated August 12, 1985, which was submitted to the TVA General Manager who requested that NSRS prepare a response to the QTC investigation. The NSRS Response was finalized on September 27, 1985.

In November 1985, another former member of NSRS advised TVA that the NSRS Response to QTC ERT Preliminary Report NS-85-001-001 was inaccurate and was an attempt to discredit the original NSRS Report (R-82-07-WBN) and the NSRS reviewers. After the receipt by NRR of this latter information of the concerned employee, NRR alleged that TVA possibly misled the Director NRR into believing that the NRR staff had been previously informed of relevant employee concerns, and thus material false statements were made by TVA.

The OI investigative efforts in this case substantiated that the NRR Project Manager for WBNP had been advised in advance, as early as January 1984, that the scheduled NRR/TVA meeting February 10, 1984, was a direct result of an employee concern.

Also, two of the four TVA representatives who attended the meeting of February 10, 1984, testified that the NRR representatives were told during the meeting that the welding issues involved a concerned employee, but were not furnished details. Further, two TVA representatives and the NRR Project Manager individually testified that TVA requested a letter on the results of the February 10, 1984, meeting to substantiate to the first concerned employee and the TVA Board that TVA's general welding program and commitments had been presented to NRR. The information developed during the OI investigation reflected that the inspection of structural welds through carbo zinc was not considered an important issue by TVA management at the time of the meeting of February 10, 1984, and it was not specifically mentioned during that meeting.

The OI investigative inquiries into resolving the NSRS Response to ERT Preliminary Report NS-85-001-001 revealed no substantive evidence that the NSRS Response was intended to discredit the original NSRS report or the NSRS reviewers. The OI investigation further revealed that the NSRS Response was prepared by an NSRS staff member who was not previously involved in the carbo zinc matter, which TVA proffered as an unbiased opinion in preparing the Response. The NSRS staff member independently chose the format for the Response which he considered unique to answer and rebutt the QTC investigative report. Also, the NSRS Response was an internal TVA communication to the General Manager, and therefore, not intended for external distribution to the NRC, however, a copy of the Response was later provided to NRR. There was no substantive evidence uncovered by OI to support a conclusion of a material false statement or the obfuscation in the dissemination of information to the NRC in the NSRS Response.

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The letter of March 28, 1985, from the Manager of Nuclear Power, TVA to the Director, NRR, was found to have been prepared on the basis of information furnished by a knowledgeable engineering staff member, and both he and the Manager of Nuclear Power had not attended the previously mentioned TVA/NRC meeting of February 10, 1984. Thus, the summary of events in the letter of March 25, 1985, was primarily based on other existing TVA documents which were furnished as enclosures to the letter.

The ultimate conclusion resulting from the OI investigation was that TVA failed to disclose the details of the carbo zinc welding issue to NRR at the meeting on February 10, 1984. NRR's position is that the carbo zinc issue was "material" within the meaning of the Atomic Energy Act of 1954, and that the full disclosure of all the information on February 10, 1984, would have had a "natural tendence or capability" to influence a "reasonable [NRC] agency

expert" in the licensing process. Thus, there was a material false statement by omission by TVA as defined in the VEPCO decision. (1)

(1) See Virginia Electric and Power Company (North Anna Power Stations, Units 1 and 2), CLI-76-22, 4 NRC 480 (1976)