



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

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JUN 19 1984

MEMORANDUM FOR: File
FROM: Bruno Uryc, Investigative Coordinator
SUBJECT: TRIP REPORT - REVIEW OF DPC INVESTIGATION
CASE NO: RII-84-A-0012

On May 24, 1984, the undersigned returned to the Catawba Nuclear Plant to review the status of the Duke Power Company (DPC) investigation into the allegation concerning the overheating of socket welds. This was a planned visit to follow up on the initial visit which was conducted during the period May 1-3, 1984, at the site. The results of the initial visit are reported in Memo to File dated May 23, 1984.

During this follow up visit, the primary focus was to determine the status of the investigative effort to date by DPC. Considerable time was spent with Mr. Ray Hollins, the DPC engineer who is in charge of the DPC investigation into this matter.

Administrative Review of Investigative Process

The initial interviews conducted by DPC served as screening interviews which were used by DPC to identify concerns and to establish investigative parameters. DPC intended to use these screening interviews to identify concerns of particular individuals and to conduct additional indepth interviews of those individuals who may have had knowledge of the matter involving the overheating of socket welds. As a result of the screening interviews, concerns were identified and the individual employees who brought forward these concerns were interviewed in detail to ascertain the facts and circumstances of their concerns.

The DPC plan for investigation/resolution of concerns involves four general stages as follows: 1/ data assembly - development of a list of individual concerns and grouping the concerns into like categories; 2/ Evaluation - assignment of the category of concerns to a competent individual who will be responsible for the investigation and resolution of that category of concerns. Initially, all concerns will be considered a potential deficiency. If the concern is unfounded, it will be documented with rationale for such a decision. If the concern can be traced to a piece of hardware, the item will be handled in accordance with the appropriate QA procedure. If no tangible item can be identified, the concern will be addressed, but QA procedure Q-1 will not be implemented. When the investigation is complete and the scope of the concern has been established, the individual who is responsible for the investigation and resolution of the concern shall report the findings to the investigation director, who shall evaluate the findings to determine if adequate investigation has been performed to resolve the concern. 3/ Resolution - after a thorough investigation, the responsible individual will determine what action should be taken to resolve the issue. A summary and conclusion statement for each concern will be prepared by the responsible individual and submitted to investigation director for

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review. 4/ Documentation - a special form has been devised (Investigation/Resolution of Concern) and will be completed for each concern. This document will stand alone in addressing the concern and shall contain sufficient rationale and facts to justify the conclusion reached and action taken to deal with the concern. This document shall be reviewed and by a second qualified individual for technical adequacy and completeness. The director of the investigation will submit a summary and conclusion statement with his evaluation to the Vice President - Construction. The individual who is responsible for the investigation and resolution of a technical concern, along with the screening interviewer, will meet with each individual employee who had a concern to explain what action has or will be taken to resolve the concern. If no action is to be taken, the rationale for that decision will also be explained to the individual. If the individual who made the concern known is not satisfied with the resolution and additional discussion does not satisfy the concern, then an offer will be made to set up a conference with the NRC for the individual. The Vice President - Construction will be responsible for preparing and submitting a final report to the Executive Vice President, Engineering and Construction, and the Review Board.

The procedure outlined above appears to represent a valid and logical approach to resolving the concern and the Region II Staff will continue to closely monitor DPC activity in connection with the resolution of the concerns as it progresses to conclusion. Mr. Hollins was advised, at this meeting as well as during the initial meeting, that the Region II Staff will be examining the entire investigative effort and the results of the investigation. The next major step of the DPC investigative process is the reinterview of those individuals that expressed concerns. The Region II Staff will review these investigative results during the next meeting with DPC at the Catawba site.

Technical Review of Investigative Process

Discussions were held with Mr. D. Llewellyn and Mr. B. Kruse concerning the status of the investigation of welding concerns. Mr. Llewellyn discussed the technical issues which were being developed during the second round of interviews and described actions which DPC planned to resolve the issue.


One of the major issues which was developed is the concern over interpass temperature when welding stainless steel. It has become apparent to the DPC technical interviewers that the welders were associating the welding procedure allowance of "warm-to-the-touch" too closely with the requirement of below 350°F. As a result of this the welding engineering group is preparing a demonstration in the weld test shop to show the welders a comparison between "warm-to-the-touch" (which should be about 100°F to 120°F) and 350°F.

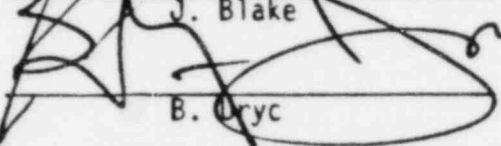
Mr. Llewellyn indicated that as concerns are identified they will be treated in a similar manner, that is, the concern will be used as a training aid rather than an attempt being made to explain it away.

Mr. Kruse discussed the overheated or "burnt" socket concern. He had essentially completed the metallography work and has prepared the reports which compared the overheated test weld assemblies with the properly welded ones. He informed us that he had been in contact with EPRI concerning in-place metallography of sample welds. Results of EPRI work was expected by the end of the month.

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Mr. Llewellyn and Mr. Kruse indicated that a search of welding records was under way that would enable them to determine how many socket welds could have been improperly welded on the back shaft.



J. Blake


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