Nebraska Public Power District

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NLS8400226

August 9, 1984

Office of Nuclear Reactor Regulation
Operating Reactors Branch No. 2
Division of Licensing
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attention: Mr. Domenic B. Vassallo, Chief

Reference: 1) Letter from J. M. Pilant to D. G. Eisenhut dated March 1, 1984, (NLS8400074) "NUREG-0737, Supplement 1 - Detailed Control Room Design Review (DCRDR)"

2) Letter from D. B. Vassallo to J. M. Pilant dated June 4, 1984, "Review of Detailed Control Room Design Review (DCRDR) Program Plan Submittal"

Dear Mr. Vassallo:

Subject: Response to NRC Review of Detailed Control Room Design Review (DCRDR) Program Plan Submittal
Cooper Nuclear Station
NRC Docket No. 50-298, DPR-46

In Reference 1, the District submitted to the NRC the Program Plan for Detailed Control Room Design Review at Cooper Nuclear Station, including the proposed schedule for implementation.

In Reference 2, the NRC presented the District with their comments and identified Staff concerns related to the Program Plan submittal of Reference 1.

This letter addresses the District's response to the three major Staff concerns identified on page 10 of Reference 2 and provides the NRC with notification of a change in submittal date for the DCRDR summary report, which was originally scheduled to be submitted August, 1984, in accordance with Reference 1.

I. NRC Major Concerns

A. The active participation of personnel from all pertinent disciplines, particularly human factors, in each technical task.

The District has made a concerted effort to ensure that personnel from all pertinent disciplines are participating in each technical task. Human factors scientists have been actively used in the

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completion of the BWROG Control Room Survey Checklists, evaluation of Licensee Event Reports and Scram Reports, operator interviews, etc. Human factors scientists are directly involved in the task analysis characteristics identification and will actively participate in the implementation of the task analysis at the CNS plant site. Personnel with human factors engineering and training experience will be given significant roles during the assessment of Human Engineering Discrepancies, selection of design improvements, integration, and verification. Human factors scientists with extensive human engineering experience have been and shall continue to be readily available as senior level consultants to meet both scheduled and unscheduled needs in support of the CRDR program.

B. The ability of the function and task analyses to produce appropriate results for comparison with the control room inventory.

This concern was also addressed by the BWROG CRDR Committee and the NRC on May 4, 1984, and at the CRDR workshop held at Boston Edison Company on May 30, 31, and June 1, 1984. The objective of these meetings was to clarify CRDR technical issues. As a result of information received from the NRC, the task analysis workscope methodology was expanded in the following two ways:

- The first expansion of task analysis workscope included the identification of the characteristics of information needs and control capability requirements. Information characteristics include parameter type, range, setpoints, resolution/accuracy, speed of response, units, and the need for trending. Control characteristics include discrete versus continuous (i.e., on and off versus increase and decrease), function allocation (i.e., manual, automatic, operator selectable) rate, gain response requirements, transfer function, and frequency of use. These requirements and characteristics, when applicable, will be incorporated in the task analysis data sheets for various plant emergency entry conditions and operator actions, per CNS emergency operating procedures. Any inadequacies discovered will be assessed to determine whether a change is required. Columns for data recording of this information have been added to the task analysis worksheet.

- The second expansion of task analysis concerned the specific amount of procedural "branching" required to determine, with reasonable assurance, that suitable controls and displays are available to meet emergency procedure actions/needs. This branching requirement causes the task analysis methodology to leave the emergency procedures and analyze applicable sections of plant procedures dealing with operation of essential systems (e.g., RCIC, HPCI, . . .). This branching is included in the task analysis methodology.

C. Update of the February, 1981, control room survey to cover changes to the control room since that survey.

This concern has already been addressed and completed. During the week of June 4, 1984, the CRDR team reviewed the 1981 checklists against various panels. The review covered the following checklist items:

- Panel layout and design.
- Instrumentation and hardware.
- Annunciators.
- Generic control room survey items from the 1981 checklists.

For those panels that had undergone label improvement and design enhancements (i.e., Panels 9-3, 9-4, etc.), reevaluation of the 1981 data was conducted. For all panels, review comments were incorporated in the checklists to assist the team in the follow-up phase of CRDR assessment. Checklists were also completed for three panels not covered in the 1981 survey.

II. DCRDR Summary Report Submittal

The District proposes to submit the DCRDR summary report to the NRC by December, 1984.

However, there is a potential for increasing the work scope and changing the schedule based on the total number and scope of proposed design changes identified from the DCRDR assessment phase. The District will inform the NRC of any required change in summary report submittal date and provide information in response to any NRC concerns relating to the subject report.

Should you have any questions or require additional information, please contact me.

Sincerely,

Jay M. Pilant
Technical Staff Manager
Nuclear Power Group

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