

DMB

Iowa Electric Light and Power Company

December 16, 1985

NG-85-5686

Mr. James G. Keppler
Regional Administrator
Region III
U. S. Nuclear Regulatory Commission
799 Roosevelt Road
Glen Ellyn, IL 60137

Subject: Duane Arnold Energy Center
Docket No. 50-331
Op. License DPR-49
Response to NRC Inspection Report 85-032

File: A-102, NRC-4

Dear Mr. Keppler:

This letter is provided in response to the subject inspection of activities at the Duane Arnold Energy Center on October 21st through 25th, 1985. Attachment 1 provides our response in accordance with your request.

Very truly yours,

R. W. McGaughy

Richard W. McGaughy
Manager, Nuclear Division

RWM/WJM/kp

Attachments: Response to Inspection Report 85-032

cc: L. Liu
L. Root
M. Thadani
NRC Resident Inspector
Commitment Control No. 85-0338

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NRC Item 1

10 CFR 50, Appendix B, Criterion XVII, as implemented by Iowa Electric Light and Power Company Quality Assurance Manual, Section 8.9, requires evaluation and trending of the cause of malfunctioning equipment and operating experience with equipment to ensure that conditions adverse to quality are promptly identified and corrected.

Contrary to the above, the inspector identified that no trending was performed for (A) corrective maintenance and (B) preventive maintenance and no provisions in the licensee's administrative program were in place to require such actions. This is considered a significant program deficiency.

Response to Item 1

Corrective Action Taken:

We recognize the advantage of increased use of trending activities in the conduct of our maintenance activities. In this regard, we initiated development of a Computerized History and Maintenance Planning System (CHAMP's) in 1983. This system provides remote terminal access to currently coded equipment data files which includes substantial data on manufacturer, environmental qualification requirements, cross references to drawings, quality level information, preventive maintenance history and preplanned tasks. Development of this system is continuing and milestones for activities which will allow further trending activities are identified below.

We have completed essential aspects of our computerized Material Management Information System (MMIS) data base. This computerized system, compatible with CHAMP's, allows optimizing warehouse inventories and the prompt procurement of replacement materials. Trending associated with this data base will realize improvements for maintaining inventory in support of corrective and preventive maintenance action requests (CMAR's, PMAR's) and for obtaining non-inventory replacements in optimum time.

We have completed the scoping and engineering record file in support of Nuclear Plant Reliability Data System (NPRDS). This information is on line and accessible. Reporting of failures to NPRDS is ongoing. A full backfit of failure records to January 1, 1984 will be completed by July, 1986. Our engineering and maintenance personnel are expanding their use of the DAEC data and the data from other facilities.

The Deviation Reporting (DR) system data base currently contains over 3,000 records of technical specification related equipment problems since commencement of commercial operation. These records, with cross reference to applicable maintenance action requests, are computerized and available for use by engineering and operations personnel. This data base will be integrated with the CHAMP's data base and made conveniently accessible with the companion information discussed above. This will also result in increasing the scope of the data library accessible to maintenance personnel.

The computerization of CMAR records currently includes three years of CMAR failure data. This data base will be transferred into the CHAMP's working system by February, 1986. Data entered commencing in January, 1986 will include comprehensive information on corrective maintenance work completion details.

In cooperation with Oak Ridge National Laboratory, the historic DAEC CMAR history has been reviewed and coded for approximately 8,000 records related to major safety-related components. This data, currently in limited use by engineering personnel, will be transferred into CHAMP's compatible data, loaded into the computer, and integrated with our other data bases. This activity will be completed in July, 1986.

Finally, our personnel are being provided broad access to the computer terminals and training has been ongoing on the use of these tools.

Corrective Action to be Taken

Responsible maintenance personnel have initiated a review of industry and regulatory guidance on applications of trending. This effort, in conjunction with a review of programs implemented at other nuclear facilities, will result in an integrated program plan by March, 1986. Scope and schedule for refinements to the computerized data system, library data and administrative controls will be included in the program plan. This will address maximizing effective utilization of this information in planning and implementing corrective and preventive maintenance.

The transfer and verification of Oak Ridge data discussed above will occur in July, 1986. The transfer and integration of the Deviation Report data base will occur in September, 1986. NPRDS data records backfit to January 1, 1984 will be completed by July, 1986.

Training and installation of computer terminals is continuing in support of integrated application of the technology and tools. Finally, commencing in January, 1986, computerized data will be coded to include work completion details as discussed above. The refinement of computerized data records to include appropriate CMAR records not captured by the current history, Oak Ridge and Deviation Report data bases will commence in late 1986.

Date of Full Compliance

The implementation dates for the key programmatic activities are identified in the above discussion of these activities. Commencing in February, 1986, the available computerized CMAR and DR data bases will be consulted by maintenance planners during processing of safety-related CMAR's. Administrative procedural guidance to this effect will also be implemented in February, 1986.

Additional Comments

The cover letter of the subject Inspection Report requested that we address computerized equipment history, corrective maintenance backlog and Engineering Work Request (EWR) backlog. The computerization of our CMAR records is continuing on the schedule identified above.

Regarding the CMAR and EWR backlog, we have directed further management attention to prioritize and effect reductions in these areas. The active CMAR and EWR requests involve items that are both safety-related and non-safety related. For CMAR's that were awaiting procurement of parts, as noted in the body of your report, the material requisitions for parts on these items will be completed by the end of this month (December, 1985). Increased management attention will ensure prompt attention in this area on an ongoing basis.

Consistent with the recommendation of your inspector, we will implement a two month CMAR operating basis objective by fourth quarter, 1986. As you are aware, we have focused substantial management attention on shifting our maintenance activities as much as practical to preventive from corrective. We note the need to balance the often conflicting objectives of reducing backlog, reducing contractor dependency and increasing training requirements for our existing work force and new skilled personnel additions that are in progress. The emphasis in this area will continue.