8005150138

THE CLEVELAND ELECTRIC ILLUMINATING COMPANY

P.O. BOX 5000 • CLEVELAND, OHIO 44101 • TELEPHONE (216) 622-9800 • ILLUMINATING BLDG. • 55 PUBLIC SQUARE

*Serving The Best Location in the Nation*

DOCKET NUMBER
PROPOSED RULE PR-50 (31)
(45 FR 6793)

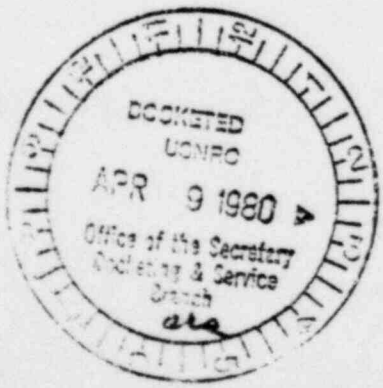
March 25, 1980

Mr. Samuel J. Chilk, Secretary
U.S. Nuclear Regulatory Commission
Washington, DC 20555
Attention: Docketing and Service Branch

Dear Sir:

The Cleveland Electric Illuminating Company is opposed to regulations making NPRDS mandatory as set forth in the Advanced Notice of Proposed Rulemaking in the Federal Register of January 30, 1980, pg. 6793ff. We are in agreement with previous findings of the General Accounting Office in this matter which indicated that there probably was insufficient economic justification to make NPRDS reporting mandatory. CEI also concurs with the finding of the President's Commission on the Accident at Three Mile Island which recommended a program for the assessment of experience in operating reactors. Industry efforts and cooperation aimed at substantial improvement in evaluating operating experience and making corrections based on the lessons learned should be allowed more time before further diluting the resources available to enhance these programs.

With the establishment of the Institute for Nuclear Plant Operations and the Nuclear Safety Analysis Center, a consensus approach generated by involvement of industry leaders in directing the most beneficial utilization of cooperative industry effort should result in improvement in NPRDS reporting as well as in other critical matters. Mandatory participation in NPRDS and other parallel proliferating regulatory requirements will serve to detract from the support that can and will be devoted to the more promising voluntary programs. Resources of manpower and time are not unlimited. Choices and decisions will of necessity be made and obviously the regulatory requirement will take priority. It does not follow generally that the public health and safety will benefit when that happens.




L-4-1, 14.50

Acknowledged by card. 4-9-80

The NPRDS is just now at the point where meaningful data is becoming available for industry's use. We strongly urge the Commission to delay or forego plans which would make mandatory participation in the system until the new approaches have been given more opportunity to demonstrate the value of voluntary compliance.

Attached are some specific comments on some of the questions set forth in the Federal Register notice.

Sincerely,

D. R. Davidson, Vice-President
Construction and Engineering Group

JJW:mgk

Attachment

1. How should NPRDS effort be apportioned between improving plant availability and improving plant safety? Where should the emphasis be?

   The emphasis in NPRDS effort should be on improved safety. The Technical Specifications tell a plant what it must do (i.e., reduce power, shutdown,...) when safety systems fail. Thus, reducing recurrent failures in safety systems will improve plant safety and at the same time improve plant availability.

2. How should NPRDS data be used by industry, the public and the NRC to achieve this emphasis? What other uses if any, should be made of NPRDS data?

   Because of the long time to design and construct a nuclear power plant, most of the installed equipment is virtually obsolete before the plant is ever operated. Thus, failure data is gathered on outmoded equipment no longer marketed. This makes the use of NPRDS data during new plant design questionable. About all that can be gathered is a particular manufacturer's track record with no assurance of continued performance. It can serve some good in specifying replacement equipment if the equipment is already in use at some plant. At a given plant it is not useful in dealing with equipment already in operation. NPRDS only confirms what is already known (i.e., certain valve types need alot of maintenance). This information is reported on the LER to NRC and has led to NRC issuing bulletins to alert the industry to possible generic faults.

   The NPRDS data should be used by NRC to establish the surveillance requirements in the plant technical specifications. When a specific piece of equipment is found to be more reliable than assumed, the testing should be reduced. This will also increase plant availability by reducing the chance of plant trips due to test personnel error.

3. How should NPRDS data be gathered and analyzed to facilitate recommended uses?

   To facilitate changing technical specifications, failure rate data should be compared to the inspection/testing frequency. Attention should be given to how many test intervals are accumulated between failures.

   To facilitate use during plant design, information is needed on not only when the failure affected plant safety but how often routine preventative maintenance is required to prevent failure.

4. Who should alert appropriate persons concerning problems uncovered from analysis of NPRDS data? Who should initiate design, maintenance or operating improvements?

   Potential generic problems identified by participating organizations should be referred to organizations such as NSAC and INPO. These organizations should develop the ability to establish that across the industry a situation exists which indicates a weakness in design, need for changes in test or surveillance schedules, etc. These properly should not be called alerts, however, and it is doubtful that significant events that need quick action will come from analysis of NPRDS data.

5. What systematic analysis is conducted currently by licensees and the public? To what extent and for what purpose should each licensee, the NRC and the public analyze data?

   Presently each time an LER is submitted the licensee analyzes the event to see if there are any generic problems. In the past it is this process that has uncovered generic design problems. Once reported to NRC, they have issued bulletins alerting the industry to possible problems. This results in all licensees analyzing the application of a given piece of equipment in their plant.

6. If NPRDS reporting is made mandatory, what form of NPRDS management (i.e., industry, NRC or joint industry/NRC) will best lead to fully responsive reporting and to meaningful analysis?

   The present system of industry management will produce the best response. At the very least it should be a joint industry/NRC effort.

7. To what extent, if any, should the NRC manage NPRDS reporting and data analysis?

   Management of the system by NRC would force the system into the regulatory arena with loss of flexibility and attendant complications of legal and political impacts. NRC representation on the N18-20 Subcommittee, which directs the activities of the NPRDS, should be adequate to provide the NRC with a mechanism for constructive input.

8. If NPRDS reporting is made mandatory, how should the NRC inspect and enforce mandatory licensee participation? Should licensees be subject to enforcement penalties for noncompliance with NPRDS requirements?

   The NRC has sufficient regulation through Technical Specifications and 10CFR21 requirements to ensure that nuclear safety concerns are properly reported. NPRDS should not be used as a regulatory tool.

9. What improvements should be made to the NPRDS Manual or other guiding vehicle to enhance uniformity of reportable scope, completeness and accuracy of reporting, and usability of the data?

   The Manual should cover the different generations of reactor vendor plants. It should cover what systems and components are under NPRDS reporting. The system should be flexible enough so that the component numbering system in use at a given plant can be used. At one plant a single number might cover what is broken down into several parts having distinct numbers. This will make it easier for the plant to report failures because the report will cover the component as it is known at that plant and not have a plant number and a different NPRDS number.

10. Any data-gathering system needs feedback to maintain and upgrade system capability in the face of changing events, methodological advances and other factors. Feedback is particularly necessary to modify data-gathering activity upon which the whole analytical system rests. What feedback features, if any, should be addressed by rulemaking?

    With increased usage of the data base by NSAC, INPO and NRC, there will be additional useful feedback. There should be no need for further rulemaking involving this question.

11. Should the NPRDS and LER systems be restructured to avoid overlapping data-gathering requirements or should present system formats be retained?

    Although data may overlap for the two systems, the functions are independent. Overlap should not be a concern inasmuch as LERs are designed for rapid reporting of significant events both equipment related and non-equipment related. NPRDS is designed for long term reliability of systems and components.

12. In the event you recommend eliminating duplication between LER and NPRDS reporting, how would you restructure each system's reporting requirements? Comment specifically on the idea expressed in summary paragraph 8 of limiting LER reporting to items of major safety significance. Should such restructuring be done simultaneously with making NPRDS reporting mandatory or should ongoing NPRDS and LER upgrading efforts continue separately?

    We do not recommend eliminating duplication between LER and NPRDS reporting.

13. Do you agree with the summary paragraph 2 estimate of a minimum of 3,500 components as an appropriate scope? Assuming a reportable scope of 3,500 components, how many NPRDS failure reports should be expected per month per operating plant?

As discussed under item 9, the exact number of components is not important. What is required is that all components be covered. For example: one plant might report a valve as one component; another might report the motor, valve and limit switches as separate components. The NPRD system should be designed to allow the plant to use its numbering system in filing information on components. The above reporting would make a large difference in the number of reports. Under the present definition of when a report is required, it is expected that there would be about one report per month per plant. This is based on the premise that repair of a component before it actually fails is not reportable. i.e., Replacement of a pump seal before the seal leakage makes the pump inoperable is not reportable.

14. Should the scope of systems and components presently summarized by the NPRDS Manual be expanded or contracted and, if so, in what areas?

TMI-2 related investigations have indicated the need to look carefully at various currently non-reportable components in proximity to safety-related systems. The resulting change in the NPRDS scope is expected to be fairly minor, however.

15. Do the costs of preparing and submitting failure reports differ between the LER and NPRDS systems? What do you estimate these costs to be?

We have no experience in this area.

16. Are the per-plant figures of $75,000 to $200,000 for one-time development of NPRDS engineering data and $50,000 for annual NPRDS reporting considered valid or are these figures understated or overstated?

Estimates of costs for generating the NPRDS engineering data for Perry Plant will be about $300,000 utilizing information gathered for other purposes such as spare parts evaluation. We have no estimates at this time for annual NPRDS reporting.

17. What alternatives to mandatory reporting would provide the data necessary for complete and accurate reliability analysis and at what level of assurance?

Accuracy of data is very important in any system used to analyze failure data. It is not required that 100% accuracy be achieved to attain valid and useful results from the existing system. The most productive system would be one whose value and usefulness is readily apparent to the participants rather than one mandated by regulatory agencies without establishing either attribute.

18. Do the benefits to the utility and public of improved availability and increased reactor safety warrant the cost of NPRDS or is there a less costly way to realize equivalent benefits in regulatory actions?

The NPRDS should have as its goal the improvement of nuclear plant safety. The existing system has progressed markedly and has the potential for even greater effectiveness as experience with the system is gained. Regulatory action is not warranted nor advisable in this matter. It certainly is not warranted if cost is included in the evaluation.

19. How should the NPRDS be funded? Should industry fund fully or should the NRC contribute funds to support the industry system?

NPRDS funding should continue to be primarily funded by utilities with partial funding from the NRC if they wish to participate and make use of the collected data.

20. Should the six early-design plants, excluded when the NPRDS commenced, continue to be excluded or should all plants be required to participate?

There is no compelling technical reason for inclusion of the early prototype plants in NPRDS. There is difficulty even in utilizing data on later plants for predicting failure rates for third and fourth generation equipment. Little would be gained by expanding the program to include the six early units.

21. Certain operator errors must now be reported within the scope of the LER system. Furthermore, NPRDS reports sometimes include corresponding human error information. To what extent, if any, should an improved NPRDS collect man-machine interface data and perform reliability analysis which consider human factors?

This is an important consideration which the NPRDS should incorporate in the reporting system. As stated earlier, there should not necessarily be conflicts because the LER and NPRDS reporting overlaps. It is believed that the ANSI N18-20 Subcommittee will review this question in their deliberations.