

COCYST NUMBER R-50 16 EROPUSED AU (45 FR 6793

March 28, 1980

Mr. Samuel J. Chilk Secretary U.S. Nuclear Regulatory Commission Washington, D.C. 20555

Attention: Docketing and Service Branch

Dear Sir:

Florida Power Corporation would like to take this opportunity to submit written comments to the Advanced Notice of Rulemaking regarding the Nuclear Plant Reliability Data System (NPRDS) as published in the January 30, 1980 Federal Register, pages 6793 through 6795.

Florida Power Corporation has been an active participant in NPRDS since 1976.

Florida Power Corporation is firmly opposed to regulations making NPRDS mandatory and involving this industry developed and supported data system in the regulatory process. We believe that the proper role of the NRC should be as a participant in the development of data system requirements, and as a major user of the data base.

It is our belief that a need exists not for more extensive collection of data, but for more comprehensive utilization of data from existing sources. A large body of data is currently available from such sources as the NRC Grey Book, LERs, NERC reporting, and NPRDS. Mandatory participation in the NPRDS would not add sufficient information to the existing data systems to justify the increased costs, limited additional benefit, and duplication of data from existing sources.

Our comments in response to the list of twenty-one specific questions in the Federal Register notice are included as Attachment A. We would be pleased to meet with you to discuss these responses in more detail.

Sincerely,

POWER CORPORATION

J. A. Hancock Assistant Vice President Nuclear Operations

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General Office 3201 Thirty-fourth Street South . P.O. Box 14042, St. Petersburg, Florida 33733 . 813-866-5151

FLORIDA POWER CORPORATION RESPONSES TO QUESTIONS POSED BY ADVANCED NOTICE TO PROPOSED RULEMAKING

QUESTION NO. 1 - How should NPRDS effort be apportioned between improving plant availability and improving plant safety? Where should the emphasis be?

RESPONSE:

NPRDS was developed to provide long term failure statistics on safety related systems and components for the purpose of improving plant safety. This should continue to be the objective of NPRDS.

QUESTION NO. ? - 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?

RESPONSE:

NPRDS data should be used to identify systems and components which have common cause failures, recurring failures, or serious safety implications. This should then form the basis for inproving system reliability through improved design or surveillance.

The NRC should use NPRDS data as a source of failure rates for components and systems in their Integrated Reliability Evaluation Program, in their Systematic Evaluation Program of selected operating plants, and in the development of regulatory guides for surveillance testing of safety related equipment in operating plants, and for refining the Limiting Conditions for Operation in plant technical specifications.

QUESTION NO. 3 - How should NPRDS data be gathered and analyzed to facilitate recommended uses?

RESPONSE:

The means for NPRDS data collection is already well established and is adequate for its intended purpose. More extensive analysis needs to be performed on the data base to identify areas where safety can be improved.

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QUESTION NO. 4 - Who should alert appropriate persons concerning problems uncovered from analysis of NPRDS data? Who should initiate design, maintenance or operating improvements?

RESPONSE:

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NPRDS determinations will be achieved through analysis of failure data submitted by many participants over a long period of time. Trends will be identified by those performing the analysis of the data. These organizations should be responsible for notifying NRC and industry of their findings. Design changes or improvements to operating or maintenance procedures should be initiated by utilities either on an individual basis or collectively through utility organizations.

QUESTION NO. 5 - What systematic analysis is conducted currently by licensees? To what extent and for what purpose should each licensee be required to analyze data from its plant and from other similar plants?

RESPONSE:

We regularly review operating experience at other plants of similar design through participation in utility owners group organizations and through membership in various industry organizations. Nonroutine or specialized analyses are performed as required by our immediate needs. The imposition of a requirement that each licensee analyze the NPRDS data base would result in needless duplication of effort.

QUESTION NO. 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?

RESPONSE:

The management of NPRDS should not be dependent upon mandatory or voluntary consideration. The management should be based upon input from industry, government, and the utilities.

Meaningful and responsive reporting is being accomplished under the present management.

QUESTION NO. 7 - To what extent, if any, should the NRC manage NPRDS reporting and data analysis?

RESPONSE:

The NPRDS has been developed and operated primarily by industry for industry's benefit. Under the present management of NPRDS, NRC has representatives on the ANSI N18-20 Subcommittee. We consider that

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this participation is adequate in providing the NRC with a mechanism for constructive input. Management of the system by NRC would inherently force the system into the regulatory arena with all the attendant loss of flexibility and complications of legal and political impacts.

QUESTION NO. 8 - If NPRDS reporting is mandatory, how should the NRC inspect and enforce mandatory licensee participation? Should licensees be subject to enforcement penalties for non-compliance with NPRDS requirements?

RESPONSE:

A requirement that all utilities participate in NPRDS does not necessitate a separate inspection and enforcement function at the utility level by the NRC.

The NRC has sufficient regulation (through Technical Specifictions and 10 CFR 21 requirements) to ensure that nuclear safety concerns are properly reported. NPRDS is a long term statistical data base developed by the industry, and it is inappropriate to suggest or consider enforcement penalties.

QUESTION NO. 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?

RESPONSE:

Uniformity of responsible scope can be enhanced through development of a standardized reportable scope. Completeness, accuracy of reporting, and usability of the data can be enhanced through expanded audits of the data and through increased usage of the data.

QUESTION NO. 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 datagathering activity upon which the whole analytical system rests. What feedback features, if any, should be addressed by rulemaking?

RESPONSE:

There have been a number of changes to the NPRDS procedures manual and reporting forms since the system went into operation in July 1974, all as a result of feedback to the ANSI N18-20 Subcommittee. With the expected usage of the data base by NSAC, NRC, and INPO, there will be additional valuable feedback. We see no need for this subject to be addressed further.

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QUESTION NO. 11 - Should the NPRDS and LER systems be restructured to avoid overlapping data-gathering requirements or should present systems' formats be retained?

RESPONSE:

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. Although data may overlap, the functions are independent. Restructuring should be limited to satisfying the intent of the LER system and should not be tied to NPRDS.

QUESTION NO. 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?

RESPONSE:

We do not recommend eliminating duplication between LER and NPRDS reporting. We agree that LERs should be limited to items of major safety significance to the extent that "significance" can be determined. Since the purpose of NPRDS is long term reliability data, we do not agree that a mandatory system is a necessary precursor for such a change.

QUESTION NO. 13 - Do you agree with the summary Paragraph 2 estimate of a minimum of 3500 components as an appropriate scope? Assuming a reportable scope of 3500 components, how many NPRDS failure reports should be expected per month per operating plant?

RESPONSE:

Florida Power Corporation has described in excess of 5400 components as input to the NPRDS data base. It has been our experience that 4 - 5 failures per month are reportable under NPRDS.

QUESTION NO. 14 - Should the scope of systems and components presently summarized by the NPRDS Manual be expanded or contracted and, if so, what areas?

RESPONSE:

The scope of reportable items should be changed as dictated through operating experience, and feedback from data analysis and use.

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QUESTION NO. 15 - Does the cost of preparing and submitting failure reports differ between the LER and NPRDS system? What do you estimate these costs to be?

RESPONSE:

It has been our experience that the cost of preparing reports for the LER system is much greater than for the NPRDS system. We have not identified the detailed costs for reporting in each system. This estimate is based on the relative manpower effort required for each.

QUESTION NO. 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?

RESPONSE:

It is our opinion that the estimated development cost for initial participation in NPRDS is realistic. The annual cost for failure reporting is considerably less than your estimate. No attempt has been made to determine exact costs for either initial participation or continued annual support.

QUESTION NO. 17 - What alternatives to mandatory reporting would provide the data decessary for complete and accurate reliability analyses and at what level of assurance?

RESPONSE:

The present system of voluntary reporting has been in effect for several years. The data base continues to grow and failures are being reported on a regular basis. It is not necessary for the data base to contain 100% of the potential data in order to perform meaningful statistical analyses. Feedback generated through increased usage of the data already in the data base will further enhance utility participation in NPRDS. Accuracy in the present system of voluntary reporting is achieved through extensive checking of the input data through the use of computers and through annual training seminars.

QUESTION NO. 18 - Do the benefits to the utility and the 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 action?

RESPONSE:

As addressed in Question 1, the NPRDS effort is and should continue to be directed at improving nuclear plant safety. Improved reactor safety would certainly justify the cost of NPRDS. Making NPRDS

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mandatory may not necessarily increase its benefit, but it definitely will increase its cost.

QUESTION NO. 19 - How should the NPRDS be funded? Should industry fund fully or should the NRC contribute funds to support the industry system?

RESPONSE:

We believe that NPRDS funding should continue to come primarily from the utilities but partial funding from the NRC in recognition of their participation and use of the program is appropriate. Moreover, partial funding by the NRC will guarantee the NRC a measure of control over the system's operation. In addition to the annual funds provided to the NPRDS contractor, the major cost of the NPRDS will continue to be borne by the utilities through their efforts in supplying data to the system.

QUESTION NO. 20 - Should the six early design plants, excluded when the NPRDS commenced, continue to be excluded or should all plants be required to participate?

RESPONSE:

The six early design plants were excluded when the NPRDS commenced because of technical reasons. These early plants were unique in design and were each one of a kind. Inclusion of data from these plants would not truly represent subsequently built plants. There-fore, these data would not be technically correct to include.

QUESTION NO. 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 analyses which consider human factors?

RESPONSE:

NPRDS is designed to collect detailed failure data on safety related systems and components within the reportable scope. If such failures are caused by operation or maintenance errors, the system is designed to record that cause and its effects. Human errors which do not result in a system or component failure belong in a separate human factor engineering reliability data base.