

# NSP

NORTHERN STATES POWER COMPANY

MINNEAPOLIS, MINNESOTA 55401

DOCKET NUMBER  
PROPOSED RULE PR-50 (17)

March 31, 1980 (45 FR 6793)

Secretary  
U. S. Nuclear Regulatory Commission  
Washington, D.C. 20555

SUBJECT: Comments on Advance Notice of Proposed Rulemaking to  
Require Mandatory Participation in the NPRDS

Dear Secretary:

Northern States Power Company is pleased to provide the Commission our responses to the twenty-one questions set forth in the advance notice of proposed rulemaking to make NPRDS participation mandatory. Our comments are included as Attachment 1.

Northern States Power Company presently has three nuclear units participating in the NPRDS. We believe our participation to date has been conducted in a responsible manner.

Since the burden of NPRDS participation inherently falls upon plant staffs, an enthusiastic level of commitment to the program requires feedback of definitive measures by which the program results in a positive safety benefit. We are frankly concerned that NPRDS, with or without NRC mandate and participation, can readily become an onerous system of reporting for the sake of reporting with minimal beneficial use of the assembled data.

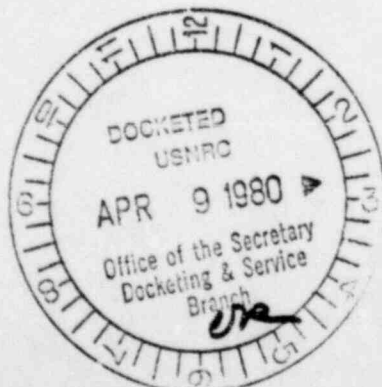
We believe that prior to any further consideration of rule making on this subject, the NRC should first be prepared to demonstrate with specificity how a safety benefit would be derived from the system and precisely how that value would be communicated in feedback to those people responsible for providing the input.

Until such time that the NRC can demonstrate that worthwhile and achievable goal in terms of improving safety through use of NPRDS can practically be achieved, we suggest the system remain under industry management.

Very truly yours,

*D. E. Gilberts*  
D. E. Gilberts  
Vice President  
Power Production

8005210625



Acknowledged by card. 4-9-80

L-4-1, A.50

## Attachment 1

### Northern States Power Company's Response to NRC

#### Question Regarding the NPRDS

##### NRC Question #1

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

##### NSP Response

The focus of the NPRDS should be towards improving plant safety. If at some point in time it can be proved that the NPRDS has contributed significantly to improving plant safety additional use of the data system could be considered.

##### NRC Question #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?

##### NSP Response

This question is revealing in that it reemphasizes NSP's basic opinion regarding the NPRDS; namely, that not enough attention has been paid to the use of collected data. We are aware of the fact that various organizations, in particular the NSSS vendors, have established programs for analyzing NPRDS data. However, the efforts to-date appear to be too diffuse. NSP's recommendation, therefore, is that the utility industry, possibly through EPRI, assume more responsibility for the analysis of NPRDS data and dissemination of the results of those analyses to the nuclear industry as well as the public.

Further, it is questioned if NPRDS can be of any significant benefit to operating plants. With the time frame involved in collection and analysis of data, significant problems should be and will be well known by other means. NPRDS data should be of most use to designers of new facilities, where it could lead to selection of components based on the track record. However, even in that area, it may be that the constant state-of-the-art advances that take place will quickly obsolete much NPRDS data. New, improved components may well be the best choice, but will have no track record.

##### NRC Question #3

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

##### NSP Response

NSP feels that the present procedures for gathering NPRDS data should be

continued, i.e., responsibility should remain with the staffs at operating plants. Since most of the useful analyses of NPRDS data that we feel can and should be performed will yield results of generic interest it is NSP's opinion that responsibility for those analyses be centralized. This responsibility should rest with the utility industry (e.g. EPRI) but should involve other organizations including NSSS and equipment vendors, the NRC, architect-engineers and specialized consultants.

#### NRC Question #4

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

#### NSP Response

In our response to Question #3 we recommended that responsibility for analysis of NPRDS data be assumed by the utility industry, e.g., EPRI. This organization would then have the added responsibility to alert plant owners, the NRC, and vendors of problems, real or potential.

#### NRC Question #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?

#### NSP Response

See response to Question #2.

#### NRC Question #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?

#### NSP Response

Regardless of whether or not participation in the NPRDS is made mandatory NSP strongly believes that management control over the program should rest with the utility industry. It is particularly important, however, that the industry assume prime responsibility not just for data collection and data base management, but also for the analysis of NPRDS data and reporting of results.

#### NRC Question #7

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

#### NSP Response

NSP believes that most of the problems with the NPRDS are tied to the fact that no one, including the NRC, has proven that meaningful analyses of NPRDS

data can or cannot be performed and the results used to significantly improve plant safety or reliability. We feel that the industry is capable of improving its management of the NPRDS. The NRC should be supportive in this regard especially in light of its overburdening responsibilities in other more safety significant areas.

#### NRC Question #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?

#### NSP Response

NSP believes the NPRDS should be made mandatory if, and only if, the NRC can clearly demonstrate how the data can be analyzed and the results used to improve plant design, operating safety, and reliability.

#### NRC Question #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?

#### NSP Response

There are several areas where improvements can be made in the Manual. We do not feel, however, that specific recommendations for changes to the Manual should be included in our comments on a notice of proposed rule-making. Suffice it to say that NSP would be willing to provide detailed comments on the NPRDS reporting procedures manual at such time that the future management of the program is decided upon.

#### NRC Question #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?

#### NSP Response

The issue of feedback cannot be separated from the question of management responsibility for the collection and analysis of NPRDS data. Once the responsibility question is answered feedback control will take care of itself.

#### NRC Question #11

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

#### NSP Response

Avoiding overlapping data-gathering requirements could be one of the benefits to operating plants that are currently participating in NPRDS. Significant revisions to the forms should not be required to accomplish this, but revisions to reporting requirements would be required.

#### NRC Question #12

In the event you recommend eliminating duplication between LER and NPRDS reporting, how would you restructure each system's reporting requirements?

#### NSP Response

See response to Question #11.

#### NRC Question #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 NPRES failure reports should be expected per month per operating plant?

#### NSP Response

The average value of the reportable scope for all plants could very well be between 3,000 - 3,500 components assuming a uniform interpretation of the NPRDS Manual. However, individual plants may vary significantly from this average value and still conform to the reporting requirements. These variations are related to plant type, vintage, number of shared systems for multi-unit stations, valid differences in interpretation of reporting requirements, etc. A major fear that many utilities have with regard to direct NRC involvement in the approval of reportable scope lists is that too much reliance will be placed on "magic numbers" by individuals not located at the plant site and thus in a position to evaluate properly the unique situation at each plant.

#### NRC Question #14

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

#### NSP Response

NSP feels that any change in the present scope of the NPRDS must be justified in terms of the end uses of the data and the specific improvements in plant safety or availability that could be expected. Since, in our opinion, even the present scope of the NPRDS, i.e., safety class 1 and 2 and electrical class 1E, has not been adequately justified in terms of the practical uses of the data base any increase in the present scope at this time must be fully justified in terms of costs and benefits.

#### NRC Question #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?

### NSP Response

From a purely technical standpoint the costs for preparing each of these reports should not differ greatly since the same tasks are involved in developing the information to be reported which is basically the same. However, it is a fact that most plant staffs will spend more time on LER's than NPRDS failure reports because of the licensing requirements, hence, priority, that applies to LER submittal. The cost of developing failure reports will vary greatly with the component involved, the nature of the failure, the experience of the individuals assigned to determine cause and corrective action, etc. If a conscientious evaluation of equipment failures is made, the cost can be substantial and can involve many different individuals or groups.

### NRC Question #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?

### NSP Response

NSP's experience indicates that the cost of developing the NPRDS engineering data base should not exceed about \$100,000. The annual reporting cost is difficult to estimate if one includes all costs of failure investigation and analysis, determination of corrective action, followup evaluations, and documentation and reporting. This work involves a number of systems engineers and obviously exceeds by a great amount the \$50,000 usually quoted.

### NRC Question #17

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

### NSP Response

The better alternative is for the utility industry to assume immediate responsibility for the full-time management of the NPRDS including both data collection and analysis; for participating utilities to formally acknowledge the responsibility of the assigned group and its authority to regulate participation in the NPRDS; and for all participants to renew their commitment to full and timely reporting to the NPRDS.

### NRC Question #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?

### NSP Response

This question cannot be answered until the benefits of the NPRDS are evaluated and defined in specific terms. This task should receive the highest priority from both the industry and NRC and should be done before any rule is imposed to make NPRDS mandatory. Significant utility cost savings could be achieved by selective exemption of equipment in which re-

liability data for the intended purposes of NPRDS is not useful.

NRC Question #19

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

NSP Response

If the utility industry is to assume the responsibility for control and analysis of NPRDS data, it is appropriate they should provide the funding.

NRC Question #20

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

NSP Response

Exclude the six plants. In addition, there are a number of other plants of an older vintage that might be dropped. This assessment could be made once the equipment engineering data base is updated and a determination can be made of the commonality of equipment.

NRC Question #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.

NSP Response

This aspect of the NPRDS should receive substantial attention during the evaluation of the uses of the NPRDS and the changes that could be made to improve its effectiveness.