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     50-263 Monticello Nuclear Generating Plant, Northern States      05000263  
     50-282 Prairie Island Nuclear Station, Unit 1, Northern Stat      05000282  
     50-306 Prairie Island Nuclear Station, Unit 2, Northern Stat      05000306

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                          Office of Nuclear Reactor Regulation, Director (Post 870411)

SUBJECT: Responds to Generic ltr 88-20, Suppl 1 re individual plant exam for severe accident vulnerabilities.

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October 30, 1989

Generic Letter 88-20

Director of Nuclear Reactor Regulation  
U S Nuclear Regulatory Commission  
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MONTICELLO NUCLEAR GENERATING PLANT  
Docket No. 50-263 License No. DPR-22

PRAIRIE ISLAND GENERATING PLANT  
Docket Nos. 50-282 License Nos. DPR-42  
50-306 DPR-60

Response to Individual Plant Examination  
for Severe Accident Vulnerabilities  
Generic Letter No. 88-20, Supplement No. 1

In response to Supplement No. 1 of Generic Letter 88-20, this submittal provides: 1) the method selected for performing the Individual Plant Examination (IPE), 2) a description of the method selected, and 3) the IPE schedule and milestones. This information is provided under oath and affirmation in accordance with 10 CFR Part 50, Section 50.46(f).

The method selected for both Monticello and Prairie Island will consist of Level II PRAs with a containment performance analysis which exceeds the requirements of Appendix 1 to Generic Letter 88-20.

Development of each of these PRAs is currently in progress. Technical activities associated with the PRAs are being performed by NSP personnel with experience in plant operations and transient analysis under guidance from members of the IPE Partnership, the principal contractors to IDCOR. By performing most of the work with NSP personnel, NSP is assuring that its staff is involved in all phases of the examination process and is developing an in-house capability to utilize the PRA and its insights in day-to-day operations and decision making.

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Dir of NRR  
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The front end analysis for each of the IPEs will be done in two parts. The first part will be performing the IDCOR's IPE Methodology ( IPEM ), and the second part will be the expansion of the IPEM to a full scope Level I analysis. The IPEM provides a comprehensive collection of insights from previous PRAs and industry operating experience around which to develop plant specific logic models. Results from the IPEM are available early in the development of the IPE, long before detailed logic modeling is completed. This permits early identification of plant specific contributors to risk and provides a means of focusing efforts to complete the full scope PRA.

The Level II analysis uses the functional sequence grouping identified from the Level I results. Phenomena important to accident sequence progression and containment challenge are addressed in the containment event trees through the identification of system successes and failures which lead to the potential for or prevention of these phenomena. Phenomena referenced in NUREG/CR-2300 which are not explicitly included in the containment event trees will be discussed qualitatively to provide justification for their exclusion from the accident sequence quantification and to assure insights associated with these phenomena are understood. Integration of Level I and Level II analyses is being assured through the use of common accident analysis tools (such as the MAAP code) and by use of both Level I and Level II analysts in the quantification of accident sequences for both the front and back end analyses. MAAP will be used extensively in the analysis of response to severe accidents, to assure realistic plant response, to determine system success criteria and avoid unnecessary conservatism.

On completion of each PRA, NSP will submit a summary of the results to meet the intent of guidance provided by NUREG-1335. Insights from the PRA as to the plant design and operating characteristics which are important to severe accident prevention and mitigation will be provided. Any improvements which NSP has elected to implement as a result of the IPE will also be described.

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The IPEs are scheduled to be completed by November 26, 1991, and February 10, 1993, for Monticello and Prairie Island respectively, as shown on the attached figure. An extension is requested to February 10, 1993, for the Prairie Island IPE submittal because NSP is performing two new Level II PRAs with most of the work being done by NSP personnel. Please contact us if you have questions related to this work.



Thomas M Parker  
Manager  
Nuclear Support Services

c: Regional Administrator-III, NRC  
NRR Prairie Island Project Manager, NRC  
NRR Monticello Project Manager, NRC  
Prairie Island Resident Inspector, NRC  
Monticello resident Inspector, NRC  
G Charnoff

Attachments:

Affidavit of T M Parker  
Figure - IPE Schedule

UNITED STATES NUCLEAR REGULATORY COMMISSION

NORTHERN STATES POWER COMPANY

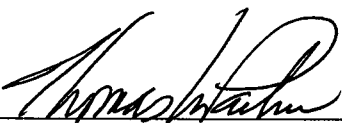
MONTICELLO NUCLEAR GENERATING PLANT DOCKET NO. 50-263  
PRAIRIE ISLAND NUCLEAR GENERATING PLANT DOCKET NOS. 50-282, 50-306

**RESPONSE TO GENERIC LETTER 88-20**

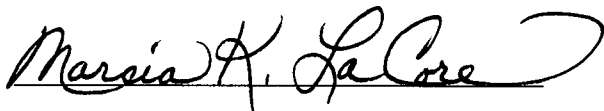
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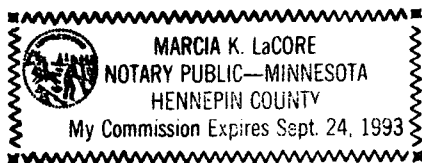
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NORTHERN STATES POWER COMPANY

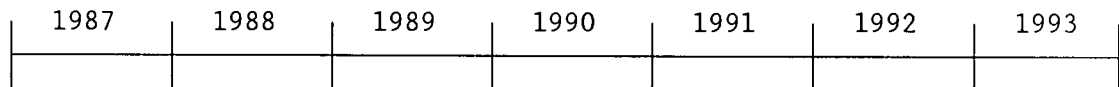
By   
Thomas M Parker  
Manager, Nuclear Support Services

On this 30<sup>th</sup> day of October, 1989 before me a notary public in and for said County, personally appeared Thomas M Parker, Manager Nuclear Support Services, and being first duly sworn acknowledged that he is authorized to execute this document on behalf of Northern States Power Company, that he knows the contents thereof, and that to the best of his knowledge, information, and belief the statements made in it are true and that it is not interposed for delay.





### IFE SCHEDULE FOR MONTICELLO AND PRAIRIE ISLAND



(12/87) (12/88)  
[ ] Monticello IPEM

(9/88) (11/91)  
[ ] Monticello PRA/IPE

(10/88) (5/91)  
[ ] Prairie Island IPEM

(8/90) (2/93)  
[ ] Prairie Island PRA/IPE