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Mano K. Nazar
Site Vice President
Prairie Island Nuclear Generating Plant
Nuclear Management Company, LLC
1717 Wakonade Dr. East • Welch MN 55089

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10 CFR Part 50
Section 50.46

U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

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

Corrections to ECCS Evaluation Models

Attached is the annual report of corrections to the Prairie Island Nuclear Generating Plant (PINGP) Emergency Core Cooling System (ECCS) Evaluation Models. This report is being submitted in accordance with the provisions of 10 CFR 50, Section 50.46.

The applicable corrections noted in Attachment 1 have been applied to Prairie Island's current ECCS analyses of record, and all analyses were found to be in compliance with the applicable acceptance criteria (Attachments 2 and 3). Since all analyses remain in compliance, no reanalysis is required or planned.

In this letter we have made no new Nuclear Regulatory Commission commitments. Please contact Jack Leveille (651-388-1121, Ext. 4142) if you have any questions related to this letter.

Mano K. Nazar
Site Vice President
Prairie Island Nuclear Generating Plant

c: Regional Administrator - Region III, NRC
Senior Resident Inspector, NRC
NRR Project Manager, NRC

Attachments:
1. ECCS Evaluation Model Changes and Errors
2. Small Break LOCA Peak Clad Temperature (PCT) Margin Utilization Sheets
3. Large Break LOCA Peak Clad Temperature (PCT) Margin Utilization Sheets

A001

ATTACHMENT 1

ECCS EVALUATION MODEL
CHANGES AND ERRORS

Neutronics Calculation Moderator Density Weighting Factor Error

Background

An error was discovered in WCOBRA/TRAC whereby power used in normalization of moderator density weighting factors was double-accounted for channels with multiple simulated rods. The error biases the average moderator density to be slightly higher, resulting in slightly higher power generation in the hot rod. The error is qualitatively conservative, however, quantitatively insignificant. This issue was determined to be a Non-Discretionary change in accordance with Section 4.1.2 of WCAP-13451.

PINGP Affected Evaluation Model

- SECY UPI WCOBRA/TRAC Large Break LOCA Evaluation Model

Estimated Effect

At the beginning of the transient calculation, the difference in weighted density is less than 1% for all plant types. This difference is similar to the density difference between (2250 psia, 586°F) and (2250 psia, 588.8"F) thermodynamic state points. The difference in average moderator density affects the reactivity. The difference in reactivity at the beginning of the transient is negligible. As the transient progresses, with voiding of the core, the strong negative reactivity dominates. Therefore, it was estimated that the error has 0°F PCT impact on plant calculations. Given the quantitatively insignificance of the error, the SECY UPI WCOBRA/TRAC code version will not be corrected. However, the error will be corrected during the next revision of the Best Estimate WCOBRA/TRAC code.

Inclusion of Required NOTRUMP Version 38.0 Input Variables in SPADES

Background

Following the release of NOTRUMP Version 38.0, which introduced several new input variables to the Evaluation Model, it became necessary to update the SPADES code to reflect these new input variables. These input variables are required to activate the revised model features incorporated into the NOTRUMP Version 38.0 code. This change was determined to be a Discretionary Change in accordance with Section 4.1.1 of WCAP-13451.

PINGP Affected Evaluation Model

- 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Estimated Effect

This change simply introduces the new input parameters required by the release of NOTRUMP Version 38.0 to SPADES. The revised NOTRUMP model PCT effects have previously been assessed, and this change to SPADES does not introduce an additional PCT impact.

Use of NOTRUMP Subcooled Steam Table Routines in SPADES

Background

A review of SPADES calculation methodology determined that subcooled fluid node properties were being calculated based on steam tables that were inconsistent with those of NOTRUMP. As a result, slight differences in fluid node conditions could be seen between SPADES and NOTRUMP. The SPADES code has been modified to utilize the NOTRUMP subcooled steam table properties. This reduces perturbations incurred during the steady-state simulation period with NOTRUMP resulting from differences in subcooled steam table properties. This revision was determined to be a Discretionary Change in accordance with Section 4.1.1 of WCAP-13451.

PINGP Affected Evaluation Model

- 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Estimated Effect

The nature of this change leads to an estimated PCT impact of 0°F.

Accumulator Line Friction Factor in the NOTRUMP Evaluation Model

Background

The current input for the NOTRUMP evaluation model uses a dimensionless value of 0.013 for line loss friction factor in the accumulator injection lines. This is based on fully developed, turbulent flow in the general pipe size range for accumulator injection lines applicable to Westinghouse designed NSSSs However, in small break LOCA during accumulator injection, the flow seldom obtains velocities high enough to support the fully developed, turbulent flow value. Taking this into account yields a friction factor on the order of 0.016. This revision was determined to be a Discretionary Change in accordance with Section 4.1.1 of WCAP-13451.

PINGP Affected Evaluation Model

- 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Estimated Effect

The nature of this change leads to an estimated PCT impact of 0°F.

Improved Code I/O and Diagnostics, and General Code Maintenance

Background

Various changes in code input and output format have been made to enhance usability and help preclude errors in analyses. This includes both input changes (e.g., more relevant input variables defined and more common input values used as defaults) and input diagnostics designed to preclude unreasonable values from being used, as well as various changes to code output which have no effect on calculated results. In addition, various blocks of coding were rewritten to eliminate inactive coding, optimize the active coding, and improve commenting, both for enhanced usability and to facilitate code debugging when necessary. These changes were determined to be Discretionary Changes in accordance with Section 4.1.1 of WCAP-13451.

PINGP Affected Evaluation Model

- 1985 Westinghouse Small Break LOCA Evaluation Model with NOTRUMP

Estimated Effect

The nature of these changes leads to an estimated PCT impact of 0°F.

WCOBRA/TRAC Unheated Structure Multiplier

This generic error was previously addressed plant specifically for Prairie Island 1 and 2 as presented in the 10 CFR 50.46 Reporting Page 'Modeling Updates and Unheated Conductor Input Corrections (Plant Specific)' enclosed in letter NSP-00-057 12/11/2000.

Background

A survey of current BE EM and SECY UPI EM analyses utilizing WCOBRA/TRAC identified an error in the application for the SECY UPI EM. The error was in the use of unheated conductor multipliers with values less than 1.0. There are some allowable exceptions where use of a value less than 1.0 is acceptable, but in general, a value greater than or equal to 1.0 is to be used. The survey showed that three analyses contained this error. This error was determined to be a Non-Discretionary change in accordance with Section 4.1.2 of WCAP-13451.

PINGP Affected Evaluation Models

SECY UPI _WCOBRA/TRAC Large Break LOCA Evaluation Model

Estimated Effect

For SECY UPI EM analyses, a plant specific analysis was performed for a representative plant (Prairie Island) by recalculating the unheated conductor inputs such that multipliers greater than or equal to 1.0 were used. This resulted in a benefit in reflood PCT for the representative (Prairie Island) plant. As stated earlier, this item has previously been reported for Prairie Island. The PCT impact for this issue is logged in the PCT Summary sheets in Attachment 2. The item is listed under "Prior Permanent ECCS Model Assessments" as item 7, Modeling Updates and Unheated Conductor Input Corrections (plant specific) (2000 Report). The previously reported Prairie Island specific PCT impact was -147°F.

ATTACHMENT 2

Small Break LOCA Peak Clad Temperature (PCT)
Margin Utilization Sheets

Westinghouse LOCA Peak Clad Temperature Summary For Small Break

Plant Name:	Prairie Island Unit 1
Utility Name:	Nuclear Management Company, LLC
Revision Date:	2/20/02

Analysis Information

EM:	NOTRUMP	**Analysis Date:**	07/93	**Limiting Break Size:**	6 inch
FQ:	2 8	**FdH:**	2		
Fuel:	OFA	**SGTP (%):**	25		
Notes:	Zirlo™ (14X14)				

	Clad Temp (°F)	Ref.	Notes
LICENSING BASIS			
Analysis-Of-Record PCT	1195	1	(a)
MARGIN ALLOCATIONS (Delta PCT)			
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS			
1 . Effect of SI in Broken Loop (Plant Specific)	21	4	(b,c)
2 . Effect of Improved Condensation Model (Plant Specific)	4	4	(b)
3 . Plant-Specific Assessment to Rebaseline Limiting Case	218	4,6	(d,e,f)
4 . Annular Pellets Misapplication (1998 Report)	39	1,6	
5 . All Other Items in Reference 2 Except A.1 & A 2	0	6	(f)
6 . No Items for 1999 Report	0	7	
7 . SBLOCA Accumulator Water Level (plant specific misapplication) (2000 Report)	25	8,10	
8 . NOTRUMP Mixture Level Tracking / Region Depletion Errors (2000 Report)	13	9,10	
B. PLANNED PLANT CHANGE EVALUATIONS			
1 . MFW Temperature	3	3	
2 . AFW Flow Reduction to 180 gpm	0	5	
3 . Accumulator Minimum Pressure 699 7 psia	50	11	
4 . 5 Reconstituted Rods Evaluation N/A	0	12,13	(g)
C. 2001 PERMANENT ECCS MODEL ASSESSMENTS			
1 . None	0		
D. TEMPORARY ECCS MODEL ISSUES*			
1 . None	0		
E. OTHER			
1 . None	0		
LICENSING BASIS PCT + MARGIN ALLOCATIONS	PCT = 1568		

* It is recommended that these temporary PCT allocations which address current LOCA model issues not be considered with respect to 10 CFR 50.46 reporting requirements

References:

1 . WCAP-13920, "Small Break Loss-of-Coolant Accident Engineering Report for the Prairie Island ZIRLO™ Fuel Upgrade," November 1993 (Includes Update NSD-SAE-ESI-97-522)

Plant Name: Prairie Island Unit 1
Utility Name: Nuclear Management Company, LLC
Revision Date: 2/20/02

2 . Annual Reports for 1993 through 1997 (NSP-94-204, NSP-95-202, NSP-96-202, NSP-97-201, NSP-98-012)

3 . NSP-97-504, "Northern States Power Company Prairie Island Units 1 and 2, Feedwater Temperature Increase/Net RCS Heat Input Addition Program, Transmittal of Final Safety Evaluation," September 23, 1997.

4 NSP-98-031, " SBLOCA Evaluation for Elimination of AFW Flow for Prairie Island Units 1 and 2," September 8, 1998.

5 . NSP-98-046, " SBLOCA Evaluation for AFW Flow Reduction for Prairie Island Units 1 and 2 - Final," November 3, 1998.

6 . NSP-99-010, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1998," April 29, 1999.

7 . NSP-00-005, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1999," February 2000

8 . 00NS-G-0019/CAB-00-126, "Northern States Power Company Prairie Island Units 1 and 2, Prairie Island Unit 2 Cycle 20 LOCA Reload Confirmation & Final Fuel Rod Design Report", March 28, 2000.

9 NSP-00-025, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Appendix K (BART/BASH/NOTRUMP) EM Mid-Year Notification and Reporting for 2000," July 5, 2000.

10 . NSP-01-006, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 2000," March 6, 2001.

11 . NF-NS-02-4/CAD-02-35, "NMC Prairie Island Unit 2, Cycle 21, Revised LOCA Reload Confirmation and FCEP Checklist," January 25, 2002.

12 . 00NS-G-0076/CAB-00-390, "Prairie Island Unit 1 Cycle 21 LOCA Reload Confirmation and FCEP Checklist," December 15, 2000

13 . Rothrock (NMC) to Swigat (W), "Prairie Island Unit 1 LOCA PCT," May 30, 2001

Notes:

(a) Annular pellet sensitivity study result.

(b) Plant-specific assessments for the effects that were originally estimated for these two items in NSP-93-222

(c) Also includes the effect of relocation of the break location to the midplane of the cold leg (see WCAP-10054-P-A, Addendum 2, Revision 1). The original estimate (NSP-93-222) did not include this effect.

(d) Value requested by customer pending completion of Westinghouse investigation Rebaseline study includes newer code versions, COSI condensation model and select input changes (e.g more conservative power shape, solid fuel pellets)

(e) At the request of NSP, this line item was included in the 1998 50 46 section of the PCT Sheet and has been subsequently rolled into the Prior Permanent Section, consistent with the original request This represents a deviation from Westinghouse's normal approach

(f) The estimated effects of previous code changes (through the -19 °F accumulated as of 1997 Annual Report NSP-98-012) are superceded by the Items A.1, A.2 & A 3 plant-specific calculations performed to rebaseline the limiting case (1438 - 1195 = 21 + 4 + 218), originally summarized in the 1998 Report (NSP-99-010)

(g) Reconstitution for Cycle 21, recanted per Reference 4

Westinghouse LOCA Peak Clad Temperature Summary For Small Break

Plant Name:	Prairie Island Unit 2
Utility Name:	Nuclear Management Company, LLC
Revision Date:	2/ 6/02

Analysis Information

EM:	NOTRUMP	Analysis Date:	07/93	Limiting Break Size:	6 inch
FQ:	2.8	FdH:	2		
Fuel:	OFA	SGTP (%):	25		
Notes:	Zirlo™ (14X14)				

	Clad Temp (°F)	Ref.	Notes
LICENSING BASIS			
Analysis-Of-Record PCT	1195	1	(a)
MARGIN ALLOCATIONS (Delta PCT)			
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS			
1 . Effect of SI in Broken Loop (Plant Specific)	21	4	(b,c)
2 . Effect of Improved Condensation Model (Plant Specific)	4	4	(b)
3 . Plant-Specific Assessment to Rebaseline Limiting Case	218	4,6	(d,e,f)
4 . Annular Pellets Misapplication (1998 Report)	39	1,6	
5 . All Other Items in Reference 2 Except A 1 & A 2	0	6	(f)
6 . No Items for 1999 Report	0	7	
7 . SBLOCA Accumulator Water Level (plant specific misapplication) (2000 Report)	25	8, 10	
8 . NOTRUMP Mixture Level Tracking / Region Depletion Errors (2000 Report)	13	9, 10	
B. PLANNED PLANT CHANGE EVALUATIONS			
1 . MFW Temperature	3	3	
2 . AFW Flow Reduction to 180 gpm	0	5	
3 . Accumulator Minimum Pressure 699.7 psia	50	11	
C. 2001 PERMANENT ECCS MODEL ASSESSMENTS			
1 . None	0		
D. TEMPORARY ECCS MODEL ISSUES*			
1 . None	0		
E. OTHER			
1 . None	0		
LICENSING BASIS PCT + MARGIN ALLOCATIONS	PCT = 1568		

* It is recommended that these temporary PCT allocations which address current LOCA model issues not be considered with respect to 10 CFR 50 46 reporting requirements

References:

1 WCAP-13920, "Small Break Loss-of-Coolant Accident Engineering Report for the Prairie Island ZIRLO™ Fuel Upgrade," November 1993 (Includes Update NSD-SAE-ESI-97-522)

2 Annual Reports for 1993 through 1997 (NSP-94-204, NSP-95-202, NSP-96-202, NSP-97-201, NSP-98-012)

Westinghouse LOCA Peak Clad Temperature Summary For Small Break

Plant Name:	Prairie Island Unit 2
Utility Name:	Nuclear Management Company, LLC
Revision Date:	2/ 6/02

3 NSP-97-504, "Northern States Power Company Prairie Island Units 1 and 2, Feedwater Temperature Increase/Net RCS Heat Input Addition Program, Transmittal of Final Safety Evaluation," September 23, 1997

4 . NSP-98-031, " SBLOCA Evaluation for Elimination of AFW Flow for Prairie Island Units 1 and 2," September 8, 1998

5 . NSP-98-046, " SBLOCA Evaluation for AFW Flow Reduction for Prairie Island Units 1 and 2 - Final," November 3, 1998.

6 NSP-99-010, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1998," April 29, 1999

7 . NSP-00-005, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1999," February 2000

8 . 00NS-G-0019/CAB-00-126, "Northern States Power Company Prairie Island Units 1 and 2, Prairie Island Unit 2 Cycle 20 LOCA Reload Confirmation & Final Fuel Rod Design Report", March 28, 2000

9 . NSP-00-025, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Appendix K (BART/BASH/NOTRUMP) EM Mid-Year Notification and Reporting for 2000," July 5, 2000.

10 . NSP-01-006, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 2000," March 6, 2001.

11 . NF-NS-02-4/CAD-02-35, "NMC Prairie Island Unit 2, Cycle 21, Revised LOCA Reload Confirmation and FCEP Checklist," January 25, 2002

Notes:

(a) Annular pellet sensitivity study result

(b) Plant-specific assessments for the effects that were originally estimated for these two items in NSP-93-222.

(c) Also includes the effect of relocation of the break location to the midplane of the cold leg (see WCAP-10054-P-A, Addendum 2, Revision 1) The original estimate (NSP-93-222) did not include this effect

(d) Value requested by customer pending completion of Westinghouse investigation Rebaseline study includes newer code versions, COSI condensation model and select input changes (e g more conservative power shape, solid fuel pellets)

(e) At the request of NSP, this line item was included in the 1998 50 46 section of the PCT Sheet and has been subsequently rolled into the Prior Permanent Section, consistent with the original request. This represents a deviation from Westinghouse's normal approach.

(f) The estimated effects of previous code changes (through the -19 °F accumulated as of 1997 Annual Report NSP-98-012) are superceded by the Items A.1, A 2 & A 3 plant-specific calculations performed to rebaseline the limiting case (1438 - 1195 = 21 + 4 + 218), originally summarized in the 1998 Report (NSP-99-010)

ATTACHMENT 3

Large Break LOCA Peak Clad Temperature (PCT)
Margin Utilization Sheets

Westinghouse LOCA Peak Clad Temperature Summary For SECY UPI Large Break

Plant Name: Prairie Island Unit 1
Utility Name: Nuclear Management Company, LLC
Revision Date: 2/20/02

Analysis Information

EM:	SECY UPI WC/T	Analysis Date:	03/95	Limiting Break Size:	Cd = 0 4
FQ:	2.4	FdH:	1.77		
Fuel:	OFA	SGTP (%):	15		
Notes:	Zirlo™, SGTP Evaluated up to 25%				

	Clad Temp (°F)	Ref.	Notes
LICENSING BASIS			
Analysis-Of-Record PCT	2180	1,2	(a)
MARGIN ALLOCATIONS (Delta PCT)			
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS			
1 Fixed Heat Transfer Node Assignment Error/Accumulator Water Injection Error (1995 Report)	-175	3	
2 1-D Transition Boiling Heat Transfer Error (1997 Report)	59	5	
3 . Vessel Channel DX Error (1997 Report)	-14	5	
4 Input Consistency (1997 Report)	-66	5	
5 . No Items for 1996 & 1998 Reports	0	4,6	
6 . Accumulator Line Pressurizer Surge Line Data / Plant Specific Accumulator Level & Line Volume / Plant Specific Restart Error: Reanalysis (1999 Report)	113	7	(b)
7 . Modeling Updates and Unheated Conductor Input Corrections (plant specific) (2000 Report)	-147	8,10	(c)
B. PLANNED PLANT CHANGE EVALUATIONS			
1 Sensitivity Study for Steam Generator Tube Plugging Increase to 25%	52	8	
2 . Accumulator Water Volume +/- 25 ft3 Range	12	12	
3 . Accumulator Pressure Extended to +/- 55 psi Range	21	12	
4 . 5 Reconstituted Rods Evalulation	0	9,11	(c)
C. 2001 PERMANENT ECCS MODEL ASSESSMENTS			
1 . Accumulator Pressure +/- 30 psi Range	8	12	(d)
D. TEMPORARY ECCS MODEL ISSUES*			
1 . None	0		
E. OTHER			
1 . None	0		
LICENSING BASIS PCT + MARGIN ALLOCATIONS	**PCT = 2043**		

* It is recommended that these temporary PCT allocations which address current LOCA model issues not be considered with respect to 10 CFR 50 46 reporting requirements.

References:

1 . 95NS-G-0021, "Updated UPI LBLOCA," March 24, 1995.

Plant Name: Prairie Island Unit 1
Utility Name: Nuclear Management Company, LLC
Revision Date: 2/20/02

2 WCAP-13919, Addendum 1, "Prairie Island Units 1 and 2 WCOBRA/TRAC Best Estimate UPI Large Break LOCA Analysis Engineering Report Addendum 1 Updated Results," December 1996

3 NSP-96-202, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting," February 20, 1996

4 NSP-97-201, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting," April 17, 1997.

5 . NSP-98-012, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1997," February 27, 1998

6 . NSP-99-010, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1998," April 29, 1999

7 . NSP-00-005, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1999," February 2000

8 . NSP-00-057, "Northern States Power Company Prairie Island Units 1 and 2 LOCA Evaluation of 25% SGTP with Other Modeling Updates," December 11, 2000

9 . 00NS-G-0076/CAB-00-390, "Prairie Island Unit 1 Cycle 21 LOCA Reload Confirmation and FCEP Checklist," December 15, 2000

10 NSP-01-006, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 2000," March 6, 2001.

11 . Rothrock (NMC) to Swigat (W), "Prairie Island Unit 1 LOCA PCT," May 30, 2001

12 . NSP-02-9, "Nuclear Management Company Prairie Island Units 1 and 2 LBLOCA Accumulator Pressure and Volume Ranges Evaluation," February 15, 2002.

Notes:

(a) P-bar-HA increased from 1.57 to 1.59

(b) Reanalysis for all listed issues

(c) Reanalysis for both issues

(d) Related JCO in existence (NSP-01-030) NMC cognizant of uncertainty application and PCT sheet categorization

(e) Reconstitution for Cycle 21 recanted per Reference 11.

Westinghouse LOCA Peak Clad Temperature Summary For SECY UPI Large Break

Plant Name:	Prairie Island Unit 2
Utility Name:	Nuclear Management Company, LLC
Revision Date:	2/20/02

Analysis Information

EM:	SECY UPI WC/T	Analysis Date:	03/95	Limiting Break Size:	Cd = 0 4
FQ:	2 4	FdH:	1.77		
Fuel:	OFA	SGTP (%):	15		
Notes:	Zirlo™, SGTP Evaluated up to 25%				

	Clad Temp (°F)	Ref.	Notes
LICENSING BASIS			
Analysis-Of-Record PCT	2180	1,2	(a)
MARGIN ALLOCATIONS (Delta PCT)			
A. PRIOR PERMANENT ECCS MODEL ASSESSMENTS			
1 Fixed Heat Transfer Node Assignment Error/Accumulator Water Injection Error (1995 Report)	-175	3	
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4 . Input Consistency (1997 Report)	-66	5	
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7 . Modeling Updates and Unheated Conductor Input Corrections (plant specific) (2000 Report)	-147	8,9	(c)
B. PLANNED PLANT CHANGE EVALUATIONS			
1 . Sensitivity Study for Steam Generator Tube Plugging Increase to 25%	52	8	
2 . Accumulator Water Volume +/- 25 ft3 Range	12	10	
3 . Accumulator Pressure Extended to +/- 55 psi Range	21	10	
C. 2001 PERMANENT ECCS MODEL ASSESSMENTS			
1 . Accumulator Pressure +/- 30 psi Range	8	10	(d)
D. TEMPORARY ECCS MODEL ISSUES*			
1 . None	0		
E. OTHER			
1 . None	0		
LICENSING BASIS PCT + MARGIN ALLOCATIONS	PCT = 2043		

* It is recommended that these temporary PCT allocations which address current LOCA model issues not be considered with respect to 10 CFR 50 46 reporting requirements.

References:

1 . 95NS-G-0021, "Updated UPI LBLOCA," March 24, 1995.

2 . WCAP-13919, Addendum 1, "Prairie Island Units 1 and 2 WCOBRA/TRAC Best Estimate UPI Large Break LOCA Analysis Engineering Report Addendum 1: Updated Results," December 1996

Plant Name: Prairie Island Unit 2
Utility Name: Nuclear Management Company, LLC
Revision Date: 2/20/02

3 . NSP-96-202, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting," February 20, 1996.

4 . NSP-97-201, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting," April 17, 1997.

5 NSP-98-012, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1997," February 27, 1998

6 NSP-99-010, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1998," April 29, 1999.

7 . NSP-00-005, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50 46 Annual Notification and Reporting for 1999," February 2000.

8 . NSP-00-057, "Northern States Power Company Prairie Island Units 1 and 2 LOCA Evaluation of 25% SGTP with Other Modeling Updates," December 11, 2000.

9 . NSP-01-006, "Northern States Power Company Prairie Island Units 1 and 2 10 CFR 50.46 Annual Notification and Reporting for 2000," March 6, 2001.

10 . NSP-02-9, "Nuclear Management Company Prairie Island Units 1 and 2 LBLOCA Accumulator Pressure and Volume Ranges Evaluation," February 15, 2002

Notes:

(a) P-bar-HA increased from 1.57 to 1 59

(b) Reanalysis for all listed issues

(c) Reanalysis for both issues

(d) Related JCO in existence (NSP-01-030). NMC cognizant of uncertainty application and PCT sheet categorization