

September 1, 1987

Docket No. 50-410

DISTRIBUTION

LICENSEE: Niagara Mohawk Power Corporation
FACILITY: Nine Mile Point Unit 2
SUBJECT: SUMMARY OF MEETING HELD ON AUGUST 18, 1987 WITH
NIAGARA MOHAWK POWER CORPORATION (NMPC) OGC

Docket File
NRC PDR
Local PDR
PDI-1 Rdg.
MHaughey
R. Capra
OGC
JCraig
EJordan
JPartlow
ACRS(10)
BClayton
JJohnson, RI
DNeighbors
RGoel
JKudrick

On August 18, 1987 the NRC staff met with representatives of NMPC to discuss drawdown time calculations for Nine Mile Point Unit 2 (NMP-2). NMPC had recently determined that the original calculations to determine drawdown time for NMP-2, which assumed loss of offsite power, did not represent the worst case condition. At the meeting, NMPC presented the results of the revised, more conservative calculations. The new analysis applies to the first cycle of operation only. The analysis for operation beyond the first cycle will be completed at a later date.

NMPC has performed the new analysis under the provisions of 10 CFR 50.59. If the NRC staff determines that this is not an unreviewed safety issue, and therefore not covered by the provisions of 10 CFR 50.59, the licensee will be informed.

Because NMPC intends to operate NMP-2 under restrictions more stringent than those presently in the Technical Specifications in order to be bounded by the new analysis, NMPC is not proposing a change to the Technical Specifications.

In addition to the discussions concerning the revised drawdown time, the recent amendment request to revise the allowable service water temperature to 81°F was discussed. The licensee agreed to provide additional information concerning (1) procedures to be used to bring the third closed loop cooling water (CCP) heat exchanger on line when needed; (2) procedures concerning radwaste loads in the turbine area; and (3) what was involved in reducing the K factors.

Enclosure 1 contains a copy of the handout supplied by NMPC during the meeting. Enclosure 2 contains a list of meeting attendees.

Mary F. Haughey, Project Manager
Project Directorate I-1
Division of Reactor Projects, I/II

Enclosures:
As stated

cc: See next page

M. Haughey
PDI-1
MHaughey
8/1/87

8709100380 870901
PDR ADOCK 05000410
PDR



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Niagara Mohawk Power Corporation

Nine Mile Point Nuclear Station
Unit 2

cc:

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- TASK 1 - EFFECT OF INITIAL VACUUM**
- TASK 2 - MAXIMUM DRAWDOWN TIME**
- TASK 3 - EFFECT OF INLEAKAGE - ANNULUS MODEL**
- TASK 4 - COMPARISON OF ANNULUS VS. THREED MODEL**
- TASK 5 - EFFECT OF INLEAKAGE AND DRAWDOWN TIME -
THREED MODEL**
- TASK 6 - CURRENT OPERATION LIMITATIONS**



TASK 1

**SRP CASE (LOCA + LOOP + DIV. II 600V
BUS FAILURE)**

SGTS FAN CAPACITY - 4000 CFM

INLEAKAGE - 3190 CFM

**ANNULUS
MODEL**

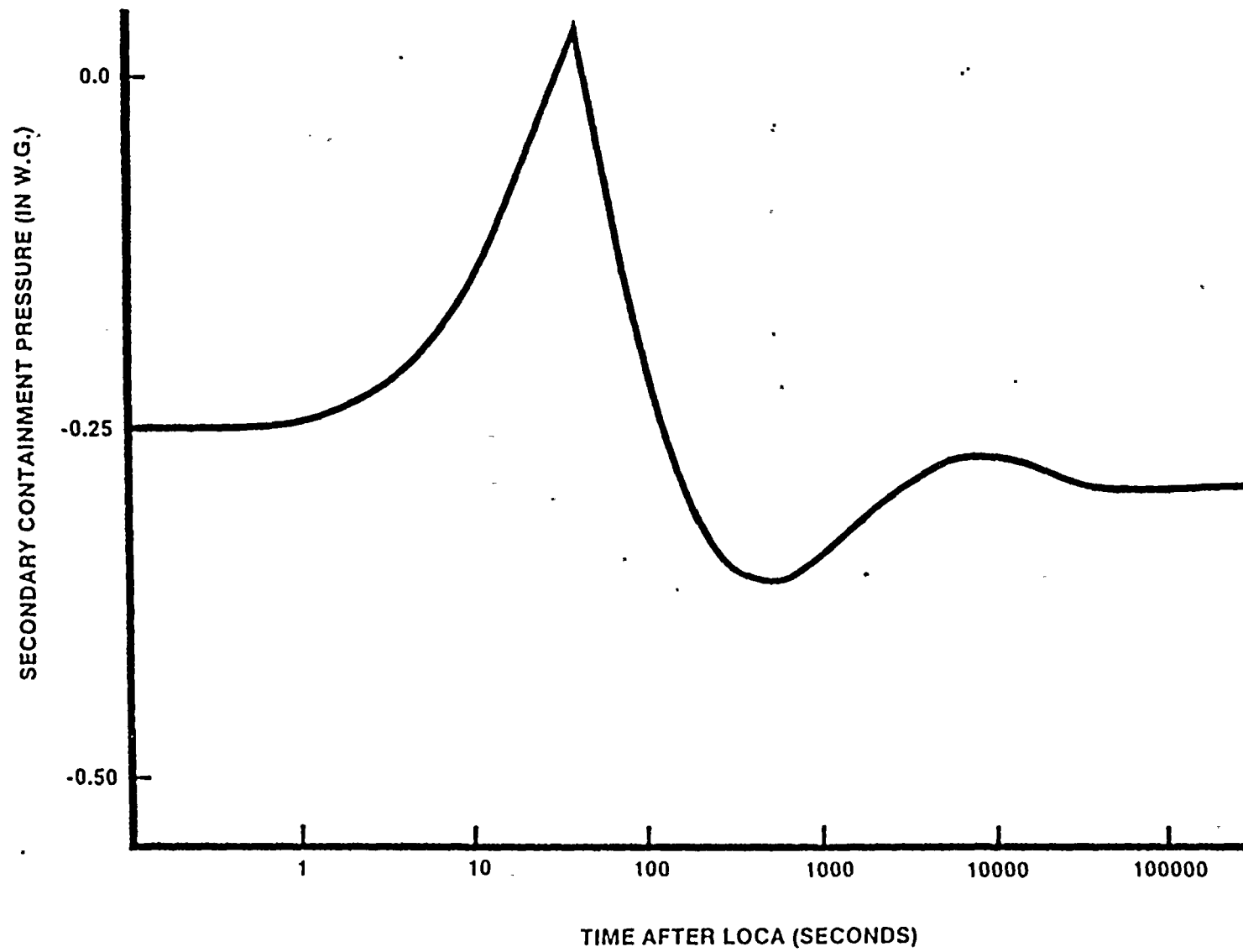
INITIAL VACUUM, IN W.G.

ΔT

DRAWDOWN TIME, SEC.

0	16	105
- 0.25	16	95
- 0.40	16	93





NMP2 FSAR FIGURE 6.2 - 76



TASK 2

<u>LOCATION</u>	<u>DRAWDOWN TIME (SEC)</u>	<u>DOSE (REM)</u>		
		<u>CONTAINMENT DEPRESSURIZATION</u>	<u>MISCELLANEOUS</u>	<u>TOTAL</u>
CONTROL ROOM	129	0.55	23.35	23.90
	360	1.63*	23.35*	24.98*
	468	2.16*	23.35*	25.51*

EAB	129	80	10	90
	360	210*	10	220*
	468	289*	10	299*

*INTERPOLATED



TASK 3

REVISED SRP CASE (LOCA +
DIV. II 600V BUS FAILURE)(NO LOOP)

SGTS FAN CAPACITY - 4000 CFM

REVISED
ANNULUS MODEL

INLEAKAGE - 2400 CFM

INLEAKAGE - 2800 CFM

ΔT

DRAWDOWN TIME, SEC.

DRAWDOWN TIME, SEC.

25

120

127

20

140

158

19

148

170

15

202

2010

14

640

2340



TASK 4

DRAWDOWN TIME \leq 129 SEC.
 SGTS FAN CAPACITY - 4000 CFM

<u>IN LEAKAGE, CFM</u>	ΔT					
	<u>FSAR</u>		<u>SRP</u>		<u>REVISED SRP</u>	
	<u>ANNULUS</u>	<u>THREED</u>	<u>ANNULUS</u>	<u>THREED</u>	<u>ANNULUS</u>	<u>THREED</u>
3190	14	14	16	13	19	18
2800	11.25	12	14	11	17.75	16
2400	10	10	11.5	9	17.25	14
2000	9	8			16.75	12



TASK 5A

REVISED SRP CASE (LOCA +
DIV. II 600V BUS FAILURE)

THREED MODEL

SGTS FAN CAPACITY - 4000 CFM

INLEAKAGE - 3190 CFM

ΔT

DRAWDOWN TIME, SEC.

19

112

18

120

17

133

15

242

14

661



TASK 5B

REVISED SRP CASE (LOCA +
DIV. II 600V BUS FAILURE)

SGTS FAN CAPACITY - 4000 CFM
INLEAKAGE - 2800 CFM

THREED MODEL

ΔT

17

16

15

12

11

9

DRAWDOWN TIME, SEC.

114

122

134

295

518

713



TASK 5C

REVISED SRP CASE (LOCA +
DIV. II 600V BUS FAILURE)

THREED MODEL

SGTS FAN CAPACITY - 4000 CFM

INLEAKAGE - 2400 CFM

ΔT

14

13

10

9

8

DRAWDOWN TIME, SEC.

124

135

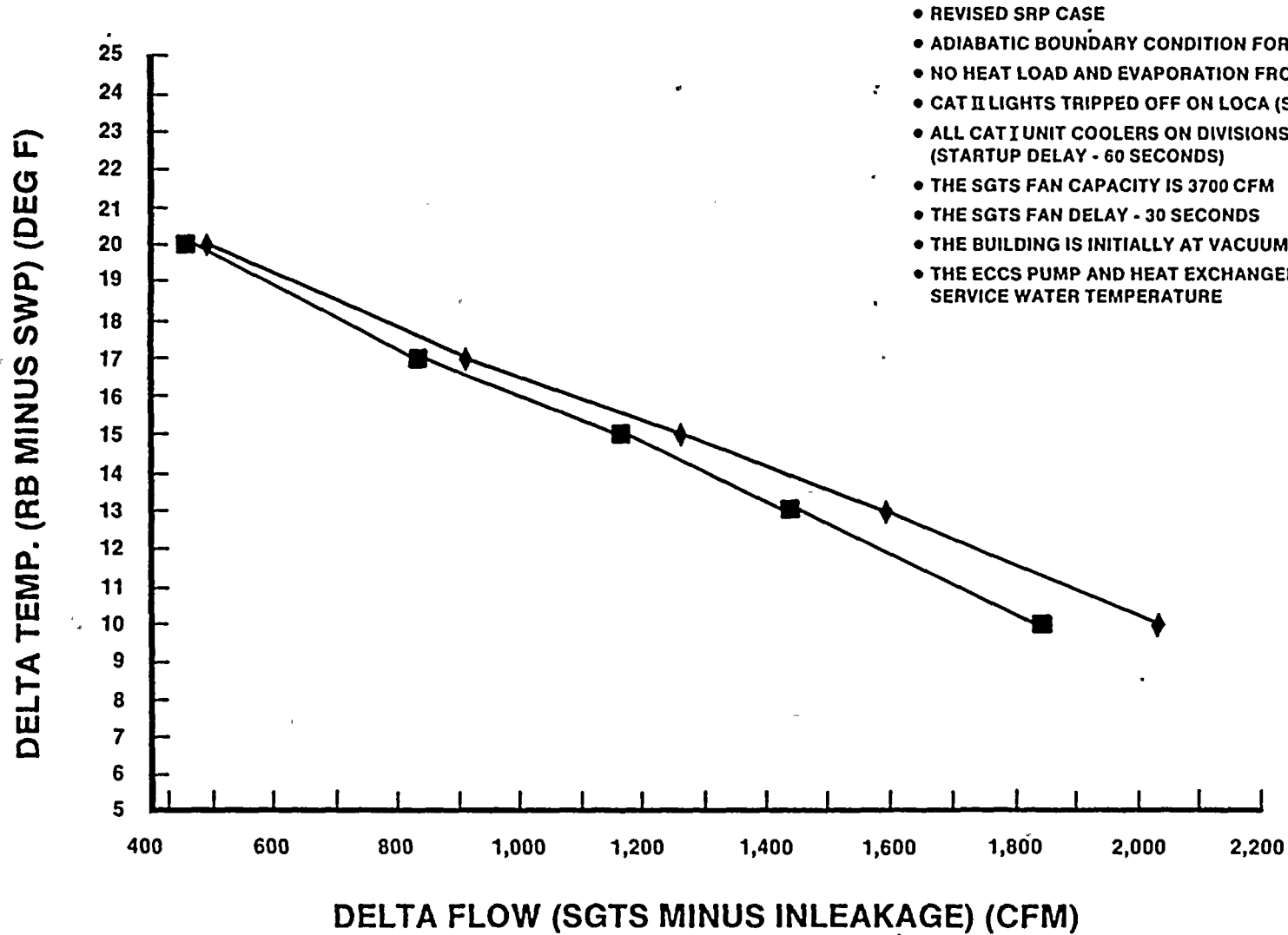
223

306

424



DELTA TEMPERATURE VS. DELTA FLOW



- REVISED SRP CASE
- ADIABATIC BOUNDARY CONDITION FOR SECONDARY CONTAINMENT
- NO HEAT LOAD AND EVAPORATION FROM THE SPENT FUEL POOL
- CAT II LIGHTS TRIPPED OFF ON LOCA (SIGNAL)
- ALL CAT I UNIT COOLERS ON DIVISIONS I & III ARE OPERATING (STARTUP DELAY - 60 SECONDS)
- THE SGTS FAN CAPACITY IS 3700 CFM
- THE SGTS FAN DELAY - 30 SECONDS
- THE BUILDING IS INITIALLY AT VACUUM CONDITIONS
- THE ECCS PUMP AND HEAT EXCHANGER ROOMS ARE INITIALLY AT SERVICE WATER TEMPERATURE

■ CALCULATED

◆ CALCULATED
+ 10% MARGIN



RESULTS OF SURVEILLANCE TEST N2-OSP-GTS-ROO1

PERFORMED 8/16/87

INITIAL CONDITIONS:

SERVICE WATER TEMPERATURE	71.4°F
AMBIENT TEMPERATURE	83°F
REFUEL FLOOR AVERAGE TEMPERATURE	98.9°F
BUILDING Δ P AT START	- 0.25" W.C.

TEST RESULTS:

STEADY STATE INLEAKAGE AT - 0.45 IN. WC = 1880 CFM
(CORRESPONDS TO 1500 CFM @ -0.25 IN. WC)



LIST OF MEETING ATTENDEES

ON AUGUST 18, 1987

<u>Name</u>	<u>Organization</u>
Mary Haughey	NRC
Don Neighbors	NRC
Raj Goel	NRC
Jack Kudrick	NRC
John Craig	NRC
Don Hill	NMPC
Ed Klein	NMPC
M. K. Allen	SWEC
V. B. Patel	SWEC
M. S. Stocknoff	SWEC
Peter Francisco	NMPC
John E. Arthur	RG&E
Mark Wetterhahn	Conner & Wetterhahn



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