

INDIANA AND MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revision: 17.1

Table: 14.3.4-40

Page: 1 of 3

CALCULATED MAXIMUM PEAK PRESSURES COMPARED WITH DESIGN PRESSURE

(HISTORICAL INFORMATION)

Type of Break	Location ¹	Peak Pressure		Peak Differential Pressure ²		n ·
		Augmented	Unaugmented	Augmented	Unaugmented	Design
DECL	Element 1	13.7	14.1	10.8	12.7	16.6
DECL	Element 2	10.8	12.23	8.6 ³	10.5 3	12.0
DECL	Element 3	9.8	11.2 3	7.5 ³	9.4 ³	12.0
DECL	Element 4	9.7	11.1 3	7.6 ³	9.5 ³	12.0
DECL	Element 5	10.5	11.9 ³	8.6 ³	10.5 3	12.0
DECL	Element 6	11.6	13.0 ³	10.4 ³	12.3 3	16.6
DEHL	Element 1	13.3	13.7 3	13.0 ³	13.5 3	16.6
DEHL	Element 2	10.6	11.0 3	10.3 3	10.8 3	12.0
DEHL	Element 3	8.9	9.3 3	8.3 3	8.8 3	12.0
DEHL	Element 4	9.0	9.4 3	8.0 ³	8.5 ³	12.0
DEHL	Element 5	10.5	10.9 ³	10.2 ³	10.7 3	12.0
DEHL	Element 6	13.6	14.0	13.2	13.7	16.6
DECL	Element 40	9.8	10.6	9.8	10.6	12.0
DECL	Element 41	8.7	9.5 ³	8.7	9.5	12.0
DECL	Element 42	7.8	8.6 3	7.8	8.6	12.0
DECL	Element 43	7.8	8.6 3	7.8	8.6	12.0
DECL	Element 44	8.5	9.3 ³	8.5	9.3	12.0

¹ Element 1-6 are break locations

² For Elements 1 through 6 the peak differential pressure is across the operating deck or the lower crane wall. For Elements 7 through 24 the peak differential pressure is across the upper crane wall. For Elements 40 through 45 the peak differential pressure is across the containment shell.

³ The unaugmented peak pressure and peak differential pressure other than Elements 1/40 (DECL) and 6/45 (DEHL) are conservatively estimated by taking the ΔP (unaug-aug) and adding it to the augmented pressure. Elements 2 through 6 and 41 through 45 for DECL and 1 through 5 and 40 through 44 for DEHL reflect this change. In Elements 7 through 24 the ΔP (unaug-aug) for peak pressure was used to estimate the unaugmented peak differential pressure.



INDIANA AND MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revision: 17.1

Table: 14.3.4-40

Page: 2 of 3

CALCULATED MAXIMUM PEAK PRESSURES COMPARED WITH DESIGN PRESSURE

(HISTORICAL INFORMATION)

Type of Break	Location ¹	Peak Pressure		Peak Differential Pressure ²		
		Augmented	Unaugmented	Augmented	Unaugmented	Design
DECL	Element 45	9.5	10.3 3	9.5	10.3	12.0
DEHL	Element 40	10.7	10.8 3	10.7	10.8	12.0
DEHL	Element 41	8.3	8.4 3	8.3	8.4	12.0
DEHL	Element 42	7.0	8.1 3	7.0	8.1	12.0
DEHL	Element 43	7.1	7.2 ³	7.1	7.2	12.0
DEHL	Element 44	8.4	8.5 ³	8.4	8.5	12.0
DEHL	Element 45	10.7	10.8	10.7	10.8	12.0
DECL	Elements 7-8-9	6.1	6.1	6.6 ³	6.6 ³	12.0
DECL	Elements 10-11-12	5.9	6.1	5.9	6.1 ³	12.0
DECL	Elements 13-14-15	5.6	6.0	5.2	5.6 ³	12.0
DECL	Elements 16-17-18	6.0	6.2	5.4	5.6 ³	12.0
DECL	Elements 19-20-21	6.7	6.7	6.0	6.0 ³	12.0
DECL	Elements 22-23-24	6.0	6.1	6.6	6.7 ³	12.0
DEHL	Elements 7-8-9	7.1	7.2	7.8	7.9 ³	12.0
DEHL	Elements 10-11-12	7.6	7.6	6.8	6.8 ³	12.0
DEHL	Elements 13-14-15	6.4	6.8	6.0	6.4 ³	12.0
DEHL	Elements 16-17-18	6.0	6.5	6.1	6.6 ³	12.0
DEHL	19-20-21	6.8	6.8	6.9	6.9 ³	12.0
DEHL	22-23-24	7.1	7.5	7.6	8.0 3	12.0
STEAMLINE	S.G. Doghouse	20.8	20.8	20.5	20.5	26.4
STEAMLINE	Fan Room	13.9	13.9	13.9	13.9	16.0



INDIANA AND MICHIGAN POWER D. C. COOK NUCLEAR PLANT UPDATED FINAL SAFETY ANALYSIS REPORT

Revision: 17.1

Table: 14.3.4-40

Page: 3 of 3

CALCULATED MAXIMUM PEAK PRESSURES COMPARED WITH DESIGN PRESSURE

(HISTORICAL INFORMATION)

Type of Break	Location ¹	Peak Pressure		Peak Differential Pressure ²		Dagiera
		Augmented	Unaugmented	Augmented	Unaugmented	Design
SECL	Lower Rx Cavity	12.2	13.8	11.4	12.3	15.0
SECL	Upper Rx Cavity	40.4	47.0	36.9	44.1	48.0
6" Spray Line	Pressurizer Enclosure	14.0	17.8	13.1	16.4	80.0
LOCA	Reactor Vessel Annulus	63.0	95.0	63.0	95.0	1000.0
LOCA	Reactor Pipe Annulus	419.0	735.0	419.0	735.0	2000.0