

# Quad Cities Nuclear Power Station

## Updated Final Safety Analysis Report

### (UFSAR)

Rev 15 - October 2019

Quad Cities Nuclear Power Station, Unit 1 and 2  
Renewed Facility Operating License Nos. DPR-29 (Unit 1) and DPR-30 (Unit 2)  
NRC Docket Nos. STN 50-254 (Unit 1) and 50-265 (Unit 2)

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
<b><u>Volume 1</u></b>			
1-i	6	1.3-1	0
1-ii	6	1.4-1	7
1-iii	0	1.4-2 Deleted	7
1-iv	3	1.5-1	6
1-v	13	1.6-1	11
		1.6-2	13
1.1-1	7	1.6-3	13
1.1-2	15	1.6-4 Deleted	7
1.1-3	6	1.7-1	3
1.1-4 Deleted	7	1.8-1	12
		1.8-2 Deleted	7
1.2-1	13		
1.2-2	9	Table 1.8-1 Sheet 1	9
1.2-3	0	Table 1.8-1 Sheet 2	9
1.2-4	0	Table 1.8-1 Sheet 3	10
1.2-5	9	Table 1.8-1 Sheet 4	9
1.2-6	3	Table 1.8-1 Sheet 5	8
1.2-7	14		
1.2-8	9	2-i	9
1.2-9	14	2-ii	9
1.2-10	0	2-iii	2
1.2-11	7	2-iv	0
1.2-12	9		
1.2-13	13	2.1-1	9
1.2-14	0	2.1-2	6
1.2-15	7	2.1-3	6
1.2-16	0	2.1-4 Deleted	7
1.2-17	0		
1.2-18	10	Table 2.1-1	2
1.2-19	13	Table 2.1-2 Sheet 1	2
1.2-20	0	Table 2.1-2 Sheet 2	2
1.2-21	14		
1.2-22 Deleted	7	Figure 2.1-1	0
1.2-23 Deleted	7	Figure 2.1-2	0
1.2-24 Deleted	7		
1.2-25 Deleted	7	2.2-1	13
		2.2-2	13
Table 1.2-1	0	2.2-3	0
Table 1.2-2	9	2.2-4	0
Table 1.2-3 Sheet 1	15	2.2-5 Deleted	7
Table 1.2-3 Sheet 2	15		
Table 1.2-3 Sheet 3	4	Table 2.2-1	0
Table 1.2-3 Sheet 4	5	Table 2.2-2	0
Table 1.2-3 Sheet 5	15		

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 2.2-3	0	3.1-4	5
Table 2.2-4	3	3.1-5	5
		3.1-6	9
2.3-1	0	3.1-7	5
2.3-2	4	3.1-8	5
2.3-3	9	3.1-9	5
2.3-4	9	3.1-10	5
2.3-5 Deleted	7	3.1-11	5
		3.1-12	5
2.4-1	4	3.1-13	5
2.4-2	12	3.1-14	5
2.4-3	6	3.1-15	5
2.4-4	5	3.1-16	5
2.4-5	5	3.1-17	5
2.4-6 Deleted	7	3.1-18	5
		3.1-19	5
Figure 2.4-1	0	3.1-20	5
Figure 2.4-2	5	3.1-21	5
		3.1-22	5
2.5-1	9	3.1-23	5
2.5-2	0	3.1-24	5
2.5-3	9	3.1-25	5
		3.1-26	5
Appendix 2A Deleted	9	3.1-27	5
		3.1-28	5
		3.1-29	5
<b><u>Volume 2</u></b>			
3-i	5	3.1-30	5
3-ii	1	3.1-31	5
3-iii	12	3.1-32	5
3-iv	1	3.1-33	9
3-v	9	3.1-34	9
3-vi	7	3.1-35	9
3-vii	9	3.1-36	12
3-viii	8		
3-ix	5	3.2-1	9
3-x	3	3.2-2	8
3-xi	8	3.2-3	13
3-xii	5	3.2-4	9
3-xiii	13	3.2-4a	6
3-xiv	13	3.2-5	8
		3.2-6	6
3.1-1	6	3.2-7	15
3.1-2	0	3.2-8 Deleted	7
3.1-3	12	3.2-9 Deleted	7

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
		3.6-7	5
3.3-1	0	3.6-8	5
3.3-2	0	3.6-9	5
3.3-3	1	3.6-10	5
3.3-4	0	3.6-11	5
3.3-5	0	3.6-12	5
3.3-6	0	3.6-13	6
3.3-7 Deleted	7	3.6-14	7
		3.6-14a	7
Figure 3.3-1	0	3.6-15	6
Figure 3.3-2	0	3.6-16	9
		3.6-17 Deleted	7
3.4-1	0	3.6-18 Deleted	7
3.4-2	13		
3.4-3	12	3.7-1	0
3.4-4	5	3.7-2	0
3.4-5	0	3.7-3	4
3.4-6	7	3.7-4	14
3.4-7	13	3.7-5	4
3.4-8	5	3.7-6	9
3.4-9	6	3.7-7	3
3.4-10	6	3.7-8	6
3.4-11 Deleted	7	3.7-9	3
3.4-12 Deleted	7	3.7-10	14
		3.7-11	14
3.5-1	11	3.7-12	3
3.5-2	0	3.7-13	3
3.5-3	0	3.7-14	10
3.5-4	11	3.7-15	9
3.5-5	11	3.7-16 Deleted	7
3.5-6	11	3.7-17 Deleted	7
3.5-7	6	3.7-18 Deleted	7
3.5-8	0	3.7-19 Deleted	7
3.5-9	0	3.7-20 Deleted	7
3.5-10 Deleted	7		
		Table 3.7-1	3
Figure 3.5-1	0	Table 3.7-2	0
		Table 3.7-3	0
3.6-1	9		
3.6-2	0	Figure 3.7-1	0
3.6-3	3	Figure 3.7-2	0
3.6-4	9	Figure 3.7-3	0
3.6-5	9	Figure 3.7-4	0
3.6-6	9	Figure 3.7-5	0

# QUAD CITIES - UFSAR

## LIST OF EFFECTIVE PAGES CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Figure 3.7-6	0	Table 3.8-4 Sheet 4	0
Figure 3.7-7	0	Table 3.8-4 Sheet 5	0
Figure 3.7-8	0	Table 3.8-5	0
Figure 3.7-9	0	Table 3.8-6 Sheet 1	0
Figure 3.7-10	0	Table 3.8-6 Sheet 2	0
		Table 3.8-6 Sheet 3	0
3.8-1	6	Table 3.8-6 Sheet 4	0
3.8-2	6	Table 3.8-7	15
3.8-3	6	Table 3.8-8 Sheet 1	0
3.8-4	13	Table 3.8-8 Sheet 2	0
3.8-5	6	Table 3.8-8 Sheet 3	0
3.8-6	6	Table 3.8-9 Sheet 1	0
3.8-7	8	Table 3.8-9 Sheet 2	15
3.8-8	8	Table 3.8-9 Sheet 3	0
3.8-9	5	Table 3.8-10	0
3.8-10	0	Table 3.8-11	8
3.8-11	5	Table 3.8-12	4
3.8-12	5	Table 3.8-13 Sheet 1	6
3.8-13	5	Table 3.8-13 Sheet 2	6
3.8-14	5	Table 3.8-14 Sheet 1	6
3.8-15	0	Table 3.8-14 Sheet 2	6
3.8-16	13	Table 3.8-15	0
3.8-17	4	Table 3.8-16	0
3.8-18	6	Table 3.8-17	6
3.8-19	6		
3.8-20	6	Figure 3.8-1	0
3.8-21	9	Figure 3.8-2	0
3.8-22	13	Figure 3.8-3	0
3.8-23	13	Figure 3.8-4	0
3.8-24	5	Figure 3.8-5	0
3.8-25	5	Figure 3.8-6	0
3.8-26	6	Figure 3.8-7	0
3.8-27	0	Figure 3.8-8	0
3.8-28	6	Figure 3.8-9	0
3.8-29 Deleted	7	Figure 3.8-10	0
3.8-30 Deleted	7	Figure 3.8-11	0
3.8-31 Deleted	7	Figure 3.8-12	0
		Figure 3.8-13	0
Table 3.8-1	0	Figure 3.8-14	0
Table 3.8-2	6	Figure 3.8-15	0
Table 3.8-3	4	Figure 3.8-16	0
Table 3.8-4 Sheet 1	0	Figure 3.8-17	0
Table 3.8-4 Sheet 2	0	Figure 3.8-18	0
Table 3.8-4 Sheet 3	0	Figure 3.8-19	0

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Figure 3.8-20	0	3.9-16	8
Figure 3.8-21	0	3.9-16a	7
Figure 3.8-22	0	3.9-17	4
Figure 3.8-23	4	3.9-18	4
Figure 3.8-24	5	3.9-19	4
Figure 3.8-25	0	3.9-20	4
Figure 3.8-26	0	3.9-21	4
Figure 3.8-27	0	3.9-22	4
Figure 3.8-28	0	3.9-23	4
Figure 3.8-29	0	3.9-24	4
Figure 3.8-30	0	3.9-25	4
Figure 3.8-31	0	3.9-26	4
Figure 3.8-32	0	3.9-27	5
Figure 3.8-33	0	3.9-28	15
Figure 3.8-34	0	3.9-29	4
Figure 3.8-35	0	3.9-30	7
Figure 3.8-36	0	3.9-31	7
Figure 3.8-37	0	3.9-31a	7
Figure 3.8-38	0	3.9-31b	7
Figure 3.8-39	0	3.9-31c	7
Figure 3.8-40	5	3.9-31d	7
Figure 3.8-41	0	3.9-31e	7
Figure 3.8-42	0	3.9-31f	13
Figure 3.8-43	8	3.9-31g	13
		3.9-31h	7
3.9-1	15	3.9-32	4
3.9-2	8	3.9-33	5
3.9-2a Deleted	8	3.9-34	4
3.9-3	8	3.9-35	4
3.9-3a Deleted	8	3.9-36	9
3.9-4	8	3.9-36a	9
3.9-5	7	3.9-37	9
3.9-5a	9	3.9-38	8
3.9-5b	9	3.9-39	14
3.9-6	15	3.9-39a Deleted	12
3.9-7	4	3.9-40	14
3.9-8	4	3.9-40a Deleted	14
3.9-9	8	3.9-41	14
3.9-10	4	3.9-42	4
3.9-11	6	3.9-43	14
3.9-12	9	3.9-43a Deleted	14
3.9-13	4	3.9-44	4
3.9-14	4	3.9-45	14
3.9-15	13	3.9-46	14

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
3.9-46a Deleted	12	Table 3.9-15 Sheet 1	0
3.9-47	12	Table 3.9-15 Sheet 2	0
3.9-47a Deleted	12	Table 3.9-16	5
3.9-48	12	Table 3.9-17	0
3.9-48a	15	Table 3.9-18 Sheet 1	7
3.9-49	12	Table 3.9-18 Sheet 2	7
3.9-50	12	Table 3.9-19	8
3.9-51	12	Table 3.9-20	7
3.9-52	15	Table 3.9-21	8
3.9-53	15		
3.9-54 Deleted	7	Figure 3.9-1	0
3.9-55 Deleted	7	Figure 3.9-2	0
3.9-56 Deleted	7	Figure 3.9-3	0
3.9-57 Deleted	7	Figure 3.9-4	0
3.9-58 Deleted	7	Figure 3.9-5	3
		Figure 3.9-6	0
Table 3.9-1	0	Figure 3.9-7	0
Table 3.9-1a	8	Figure 3.9-8	0
Table 3.9-2 Sheet 1	12	Figure 3.9-9	0
Table 3.9-2 Sheet 2	12	Figure 3.9-10	0
Table 3.9-2 Sheet 3	12	Figure 3.9-11	0
Table 3.9-3	3	Figure 3.9-12	0
Table 3.9-4	3	Figure 3.9-13	0
Table 3.9-5	3	Figure 3.9-14	0
Table 3.9-6	3	Figure 3.9-15	0
Table 3.9-7 Sheet 1	0	Figure 3.9-16	0
Table 3.9-7 Sheet 2	0	Figure 3.9-17	0
Table 3.9-7 Sheet 3	0	Figure 3.9-18	0
Table 3.9-7 Sheet 4	0	Figure 3.9-19	3
Table 3.9-7 Sheet 5	15	Figure 3.9-20	3
Table 3.9-7 Sheet 6	15		
Table 3.9-7 Sheet 7	15	3.10-1	7
Table 3.9-7 Sheet 8	15	3.10-1a	6
Table 3.9-8 Sheet 1	0	3.10-2	0
Table 3.9-8 Sheet 2	0	3.10-3	15
Table 3.9-9	0	3.10-4	4
Table 3.9-10	0	3.10-5	0
Table 3.9-11 Sheet 1	7	3.10-6	0
Table 3.9-11 Sheet 2	7	3.10-7	0
Table 3.9-11 Sheet 2a	7	3.10-8	2
Table 3.9-11 Sheet 3	7	3.10-9	0
Table 3.9-12	7	3.10-10	0
Table 3.9-13 Deleted	7	3.10-11	6
Table 3.9-14 Deleted	7	3.10-12 Deleted	7

# QUAD CITIES - UFSAR

## LIST OF EFFECTIVE PAGES CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
		Appendix 3B Deleted	9
Table 3.10-1	0		
Table 3.10-2	0	<b><u>Volume 3</u></b>	
Table 3.10-3 Sheet 1	15	4-i	11
Table 3.10-3 Sheet 2	0	4-ii	15
Table 3.10-3 Sheet 3	0	4-iii	0
Table 3.10-3 Sheet 4	0	4-iv	7
Table 3.10-3 Sheet 5	0	4-v	14
Table 3.10-4	6	4-vi	7
		4-vii	13
Figure 3.10-1	0		
Figure 3.10-2	0	4.1-1	15
		4.1-2	14
3.11-1	0	4.1-3	15
3.11-2	7		
3.11-3	7	Table 4.1-1 Sheet 1	15
3.11-4	13	Table 4.1-1 Sheet 2	0
3.11-5	8	Table 4.1-2	15
3.11-6	7	Table 4.1-3	15
3.11-7	13	Table 4.1-3a Deleted	8
3.11-8	15		
3.11-9	14	4.2-1	15
3.1-10 Deleted	7	4.2-2	15
		4.2-3	15
Figure 3.11-1 Sheet 1	7	4.2-4	13
Figure 3.11-1 Sheet 1a	14	4.2-5	15
Figure 3.11-1 Sheet 1b	14	4.2-6	15
Figure 3.11-1 Sheet 1c	14	4.2-7	15
Figure 3.11-1 Sheet 1d	11	4.2-8	15
Figure 3.11-1 Sheet 2	5	4.2-9	7
Figure 3.11-1 Sheet 3	7	4.2-10	14
Figure 3.11-1 Sheet 3a	11	4.2-11	15
Figure 3.11-1 Sheet 4	5	4.2-12	15
Figure 3.11-1 Sheet 5	7	4.2-13	15
Figure 3.11-1 Sheet 5a	14	4.2-14	15
Figure 3.11-1 Sheet 6	5	4.2-15	15
Figure 3.11-1 Sheet 7	7	4.2-16	15
Figure 3.11-1 Sheet 7a	11	4.2-17	15
Figure 3.11-1 Sheet 8	5	4.2-18	15
Figure 3.11-1 Sheet 9	7	4.2-19	15
Figure 3.11-1 Sheet 9a	14	4.2-20	4
Figure 3.11-1 Sheet 10	5	4.2-21	15
		4.2-22	15
Appendix 3A Deleted	9	4.2-23	14



QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
4.2-24	15	4.3-25	14
4.2-25 Deleted	7	4.3-25a Deleted	11
4.2-26 Deleted	7	4.3-26	11
4.2-27 Deleted	7	4.3-27	15
4.2-28 Deleted	7	4.3-28	15
4.2-29 Deleted	7	4.3-28a Deleted	11
		4.3-29 Deleted	7
Figure 4.2-1 Deleted	14	4.3-30 Deleted	7
Figure 4.2-2 Deleted	14	4.3-31 Deleted	7
Figure 4.2-3	15	4.3-32 Deleted	7
Figure 4.2-4	9		
Figure 4.2-5	9	Table 4.3-1	0
Figure 4.2-6 Deleted	7	Table 4.3-2	4
Figure 4.2-6a	9		
Figure 4.2-6b	9	Figure 4.3-1	4
Figure 4.2-7	9	Figure 4.3-2	0
Figure 4.2-8 Deleted	10	Figure 4.3-3	4
Figure 4.2-9 Deleted	10	Figure 4.3-4	4
Figure 4.2-10 Deleted	12	Figure 4.3-5	0
		Figure 4.3-6 Deleted	7
4.3-1	15	Figure 4.3-7 Deleted	7
4.3-2	15	Figure 4.3-8	0
4.3-3	4	Figure 4.3-9	8
4.3-4	14	Figure 4.3-10	4
4.3-5	14	Figure 4.3-11	4
4.3-6	14	Figure 4.3-12	4
4.3-7	15	Figure 4.3-13	4
4.3-8	14	Figure 4.3-14	4
4.3-9	14	Figure 4.3-15	4
4.3-10	14	Figure 4.3-16	4
4.3-11	14	Figure 4.3-17	4
4.3-12	14	Figure 4.3-18	4
4.3-13	4	Figure 4.3-19	4
4.3-14	15	Figure 4.3-20	4
4.3-15	11	Figure 4.3-21	4
4.3-16	11	Figure 4.3-22	4
4.3-17	11	Figure 4.3-23	4
4.3-18	11	Figure 4.3-24	4
4.3-19	11	Figure 4.3-25	4
4.3-20	15	Figure 4.3-26	4
4.3-21	15		
4.3-22	15	4.4-1	14
4.3-23	15	4.4-2	11
4.3-24	15	4.4-3	15

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
4.4-4	14	Figure 4.4-4B Deleted	7
4.4-5	11	Figure 4.4-4C Deleted	7
4.4-6	11	Figure 4.4-5 Deleted	7
4.4-7	7		
4.4-8	7	4.5-1	5
4.4-9	11	4.5-2	9
4.4-10	10	4.5-3 Deleted	7
4.4-11	4		
4.4-12	14	4.6-1	0
4.4-12a Deleted	9	4.6-2	12
4.4-13	15	4.6-2a	8
4.4-14	15	4.6-2b	15
4.4-15	15	4.6-2c	15
4.4-16	15	4.6-2d Deleted	8
4.4-16a Deleted	15	4.6-3	13
4.4-17	15	4.6-4	15
4.4-17a Deleted	15	4.6-5	12
4.4-18	14	4.6-6	13
4.4-19	14	4.6-6a Deleted	12
4.4-20	15	4.6-7	15
4.4-21	15	4.6-8	13
4.4-22	15	4.6-9	12
4.4-23 Deleted	11	4.6-9a Deleted	12
4.4-24 Deleted	11	4.6-10	3
4.4-25 Deleted	11	4.6-11	12
4.4-25a Deleted	10	4.6-12	12
4.4-26 Deleted	7	4.6-12a Deleted	12
4.4-27 Deleted	7	4.6-13	12
4.4-28 Deleted	7	4.6-14	12
4.4-29 Deleted	7	4.6-14a Deleted	12
4.4-30 Deleted	7	4.6-15	15
		4.6-16	6
Table 4.4-1 Sht 1 Deleted	7	4.6-17	10
Table 4.4-1 Sht 2 Deleted	7	4.6-18	3
Table 4.4-1A Deleted	7	4.6-19	7
Table 4.4-2 Deleted	7	4.6-20	15
Table 4.4-2A Deleted	7	4.6-21	8
		4.6-22	6
Figure 4.4-1	7	4.6-23	14
Figure 4.4-2 Deleted	7	4.6-24	15
Figure 4.4-2A Deleted	7	4.6-25 Deleted	7
Figure 4.4-3 Deleted	7	4.6-26 Deleted	7
Figure 4.4-4	7	4.6-27 Deleted	7
Figure 4.4-4A Deleted	7	4.6-28 Deleted	7

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
4.6-29 Deleted	7	5.2-8	13
		5.2-9	8
Table 4.6-1	0	5.2-10	13
		5.2-11	13
Figure 4.6-1	0	5.2-12	8
Figure 4.6-2	0	5.2-13	5
Figure 4.6-3	0	5.2-14	6
Figure 4.6-4	0	5.2-15	5
Figure 4.6-5	0	5.2-16	12
Figure 4.6-6	7	5.2-17	7
Figure 4.6-7	3	5.2-18	15
Figure 4.6-8	3	5.2-19	6
Figure 4.6-9	3	5.2-20	12
Figure 4.6-10	7	5.2-21	15
Figure 4.6-11	7	5.2-22	12
		5.2-22a Deleted	12
5-i	9	5.2-23	12
5-ii	5	5.2-24	6
5-iii	13	5.2-25	15
5-iv	5	5.2-26 Deleted	7
5-v	9	5.2-27 Deleted	7
5-vi	13	5.2-28 Deleted	7
		5.2-29 Deleted	7
5.1-1	5	5.2-30 Deleted	7
5.1-2	9	5.2-31 Deleted	7
5.1-3	6		
5.1-4	9	Table 5.2-1	6
		Table 5.2-2	8
Table 5.1-1 Sheet 1	15	Table 5.2-3	5
Table 5.1-1 Sheet 2	0	Table 5.2-4	7
Table 5.1-1 Sheet 3	15		
Table 5.1-1 Sheet 4	10	Figure 5.2-1	7
Table 5.1-2	13	Figure 5.2-2 Deleted	7
		Figure 5.2-3	7
Figure 5.1-1	3	Figure 5.2-4 Deleted	7
5.2-1	15	5.3-1	6
5.2-1a Deleted	12	5.3-2	0
5.2-2	15	5.3-3	8
5.2-3	15	5.3-4	8
5.2-4	12	5.3-4a Deleted	8
5.2-5	12	5.3-5	9
5.2-6	15	5.3-6	9
5.2-7	15	5.3-7	6

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
5.3-8	0	5.4-23	5
5.3-9	6	5.4-24	8
5.3-10	5	5.4-25	12
5.3-11	6	5.4-26	15
5.3-12	8	5.4-27	6
5.3-13 Deleted	7	5.4-28	6
5.3-14 Deleted	7	5.4-28a	12
5.3-15 Deleted	7	5.4-29	5
		5.4-30	13
Table 5.3-1	8	5.4-31	6
		5.4-32	5
Figure 5.3-1 Deleted	7	5.4-33	5
Figure 5.3-2 Deleted	7	5.4-34	6
Figure 5.3-3 Deleted	7	5.4-35	6
Figure 5.3-4a	9	5.4-36	6
Figure 5.3-4b	9	5.4-37	13
Figure 5.3-4c	9	5.4-38	5
Figure 5.3-4d Deleted	4	5.4-39	12
Figure 5.3-4e Deleted	4	5.4-39a Deleted	12
Figure 5.3-5	6	5.4-40 Deleted	7
		5.4-41 Deleted	7
5.4-1	5	5.4-42 Deleted	7
5.4-2	0	5.4-43 Deleted	7
5.4-3	12	5.4-44 Deleted	7
5.4-4	0	5.4-45 Deleted	7
5.4-5	0	5.4-46 Deleted	7
5.4-6	0		
5.4-7	8	Table 5.4-1	7
5.4-8	8	Table 5.4-2	9
5.4-9	8	Table 5.4-3	0
5.4-9a	6	Table 5.4-4	0
5.4-10	11	Table 5.4-5	3
5.4-11	4	Table 5.4-6	4
5.4-12	4		
5.4-13	0	Figure 5.4-1	0
5.4-14	9	Figure 5.4-2	0
5.4-15	9	Figure 5.4-3	0
5.4-16	9	Figure 5.4-4	0
5.4-17	7	Figure 5.4-5	0
5.4-18	5	Figure 5.4-6	0
5.4-19	8	Figure 5.4-7	0
5.4-20	9	Figure 5.4-8	4
5.4-21	12	Figure 5.4-9	0
5.4-22	7	Figure 5.4-10	8

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Figure 5.4-11	10	6.2-10b	6
Figure 5.4-12	3	6.2-10c	13
Figure 5.4-13	3	6.2-11	7
		6.2-11a	13
Appendix 5A Deleted	9	6.2-12	7
		6.2-13	12
<b><u>Volume 4</u></b>		6.2-13a	7
6-i	5	6.2-13b Deleted	14
6-ii	12	6.2-14	15
6-iii	5	6.2-15	7
6-iv	15	6.2-16	7
6-iva Deleted	8	6.2-17	7
6-v	15	6.2-17a Deleted	14
6-vi	7	6.2-18	14
6-via	7	6.2-19	8
6-vii	7	6.2-19a Deleted	8
6-viii	7	6.2-20	15
6-viia	7	6.2-21	15
6-ix	7	6.2-22	3
6-x	13	6.2-23	8
6-xi	13	6.2-23a Deleted	6
		6.2-24	7
6.0-1	0	6.2-25	7
6.0-2	5	6.2-26	7
6.0-3	5	6.2-27	15
6.0-4	9	6.2-28	15
6.0-5 Deleted	7	6.2-29	15
6.1-1	5	6.2-30	15
6.1-2	6	6.2-31	4
6.1-3	5	6.2-32	8
6.1-4 Deleted	7	6.2-33	8
		6.2-34	6
6.2-1	6	6.2-35	6
6.2-2	6	6.2-36	13
6.2-3	0	6.2-37	14
6.2-4	0	6.2-38	7
6.2-5	0	6.2-38a	7
6.2-6	0	6.2-39	7
6.2-7	0	6.2-40	8
6.2-8	13	6.2-41	8
6.2-8a	6	6.2-42	11
6.2-9	13	6.2-42a	11
6.2-10	2	6.2-43	11
6.2-10a	13	6.2-43a Deleted	11

# QUAD CITIES - UFSAR

## LIST OF EFFECTIVE PAGES CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
6.2-44	9	Table 6.2-7 Sheet 10	10
6.2-44a	9	Table 6.2-7 Sheet 11	11
6.2-45	5		
6.2-46	8	Figure 6.2-1	0
6.2-47	11	Figure 6.2-2	0
6.2-48	6	Figure 6.2-3	0
6.2-49	7	Figure 6.2-4	0
6.2-49a	7	Figure 6.2-5	0
6.2-50	8	Figure 6.2-6	0
6.2-51	5	Figure 6.2-7	7
6.2-52	10	Figure 6.2-11	0
6.2-53	11	Figure 6.2-12	0
6.2-54	5	Figure 6.2-13	0
6.2-55	13	Figure 6.2-14	0
6.2-55a	11	Figure 6.2-15	0
6.2-55b	15	Figure 6.2-16 Deleted	7
6.2-56 Deleted	7	Figure 6.2-16a	7
6.2-57 Deleted	7	Figure 6.2-16b	7
6.2-58 Deleted	7	Figure 6.2-16c	7
6.2-59 Deleted	7	Figure 6.2-17 Deleted	7
6.2-60 Deleted	7	Figure 6.2-18 Deleted	7
6.2-61 Deleted	7	Figure 6.2-18a	7
6.2-62 Deleted	7	Figure 6.2-18b	7
6.2-63 Deleted	7	Figure 6.2-18c	7
6.2-64 Deleted	7	Figure 6.2-19 Deleted	7
		Figure 6.2-20 Deleted	7
Table 6.2-1 Sheet 1	6	Figure 6.2-20a	7
Table 6.2-1 Sheet 2	10	Figure 6.2-21 Deleted	7
Table 6.2-2	8	Figure 6.2-21a	7
Table 6.2-3	8	Figure 6.2-22 Deleted	7
Table 6.2-4 Deleted	7	Figure 6.2-22a	7
Table 6.2-5	12	Figure 6.2-23 Deleted	7
Table 6.2-6	14	Figure 6.2-23a	7
Table 6.2-7 Sheet 1	13	Figure 6.2-24 Deleted	7
Table 6.2-7 Sheet 2	13	Figure 6.2-24a	7
Table 6.2-7 Sheet 3	15	Figure 6.2-25 Deleted	7
Table 6.2-7 Sheet 4	13	Figure 6.2-25a	7
Table 6.2-7 Sheet 5	13	Figure 6.2-26	0
Table 6.2-7 Sheet 5a	13	Figure 6.2-27	0
Table 6.2-7 Sheet 6	13	Figure 6.2-28	0
Table 6.2-7 Sheet 6a	13	Figure 6.2-29	0
Table 6.2-7 Sheet 7	13	Figure 6.2-30 Deleted	7
Table 6.2-7 Sheet 8	13	Figure 6.2-31	0
Table 6.2-7 Sheet 9	13	Figure 6.2-32	0

# QUAD CITIES - UFSAR

## LIST OF EFFECTIVE PAGES CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Figure 6.2-33	0	6.3-23a Deleted	8
Figure 6.2-34	0	6.3-24	15
Figure 6.2-35 Deleted	7	6.3-24a Deleted	8
Figure 6.2-36	4	6.3-25	11
Figure 6.2-37	7	6.3-25a Deleted	11
Figure 6.2-38	0	6.3-26	11
Figure 6.2-39	3	6.3-27	5
Figure 6.2-39A	3	6.3-28	5
Figure 6.2-40	0	6.3-29	7
Figure 6.2-41	0	6.3-30	15
Figure 6.2-42	0	6.3-31	7
Figure 6.2-43	0	6.3-31a Deleted	11
		6.3-32	15
6.3-1	15	6.3-33	14
6.3-1a	12	6.3-34	14
6.3-2	12	6.3-35	15
6.3-3	14	6.3-35a Deleted	12
6.3-4	12	6.3-36	14
6.3-5	15	6.3-36a Deleted	12
6.3-5a Deleted	12	6.3-37	15
6.3-6	15	6.3-37a Deleted	8
6.3-7	6	6.3-38	15
6.3-7a Deleted	11	6.3-38a Deleted	8
6.3-8	14	6.3-39	14
6.3-9	13	6.3-39a Deleted	8
6.3-10	15	6.3-40	15
6.3-11	5	6.3-41	15
6.3-12	11	6.3-41a Deleted	8
6.3-12a Deleted	11	6.3-42	15
6.3-13	14	6.3-43	15
6.3-14	14	6.3-44	15
6.3-15	13	6.3-44a Deleted	8
6.3-16	5	6.3-45	15
6.3-17	15	6.3-45a Deleted	8
6.3-17a Deleted	11	6.3-46	15
6.3-18	14	6.3-46a Deleted	8
6.3-19	5	6.3-47	11
6.3-20	6	6.3-47a Deleted	11
6.3-20a	11	6.3-48	15
6.3-21	11	6.3-48a Deleted	11
6.3-21a Deleted	11	6.3-49	15
6.3-22	15	6.3-50	11
6.3-22a	14	6.3-50a Deleted	11
6.3-23	15	6.3-51	14

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
6.3-52	11	Table 6.3-3C Sheet 2	11
6.3-53	11	Table 6.3-3C Sheet 3	11
6.3-54	11	Table 6.3-3C Sheet 4	11
6.3-55	11	Table 6.3-3C Sheet 5	11
6.3-56	11	Table 6.3-3D Sheet 1	14
6.3-56a Deleted	7	Table 6.3-3D Sheet 2	14
6.3-57	11	Table 6.3-3D Sheet 3	14
6.3-57a Deleted	7	Table 6.3-3D Sheet 4	14
6.3-58	11	Table 6.3-3E Sheet 1	15
6.3-58a Deleted	11	Table 6.3-3E Sheet 2	14
6.3-58b Deleted	8	Table 6.3-4	7
6.3-59	5	Table 6.3-5	6
6.3-60	6	Table 6.3-6	5
6.3-61	6	Table 6.3-7A	8
6.3-62	7	Table 6.3-7B	8
6.3-63	13	Table 6.3-7C	11
6.3-64	12	Table 6.3-7D	9
6.3-65	8	Table 6.3-7E	15
6.3-65a	14	Table 6.3-8A Deleted	8
6.3-65b 15	15	Table 6.3-8B Deleted	8
6.3-66 Deleted	7	Table 6.3-9A	8
6.3-67 Deleted	7	Table 6.3-9B Sheet 1	8
6.3-68 Deleted	7	Table 6.3-9B Sheet 2	8
6.3-69 Deleted	7	Table 6.3-10A Deleted	8
6.3-70 Deleted	7	Table 6.3-10B Deleted	8
6.3-71 Deleted	7	Table 6.3-11A Deleted	8
6.3-72 Deleted	7	Table 6.3-11B Deleted	8
6.3-73 Deleted	7	Table 6.3-12A Deleted	8
6.3-74 Deleted	7	Table 6.3-12B Deleted	8
6.3-75 Deleted	7	Table 6.3-12C	11
		Table 6.3-12D	12
Table 6.3-1	7	Table 6.3-12E	15
Table 6.3-2 15	15	Table 6.3-13 Sheet 1	5
Table 6.3-3A Deleted	7	Table 6.3-13 Sheet 2	5
Table 6.3-3A Sht 2 Deleted	8	Table 6.3-13 Sheet 3	5
Table 6.3-3A Sht 3 Deleted	8	Table 6.3-14 Deleted	8
Table 6.3-3A Sht 4 Deleted	8	Table 6.3-14A Deleted	8
Table 6.3-3A Sht 5 Deleted	8	Table 6.3-14B	11
Table 6.3-3B Sht 1 Deleted	8	Table 6.3-14C	14
Table 6.3-3B Sht 2 Deleted	8	Table 6.3-14D	15
Table 6.3-3B Sht 3 Deleted	8	Table 6.3-15	0
Table 6.3-3B Sht 4 Deleted	8	Table 6.3-16	0
Table 6.3-3B Sht 5 Deleted	8	Table 6.3-17	0
Table 6.3-3C Sheet 1	11	Table 6.3-18	7



# QUAD CITIES - UFSAR

## LIST OF EFFECTIVE PAGES CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 6.3-19 Deleted	8	Figure 6.3-28B	7
Table 6.3-19A Deleted	8	Figure 6.3-28C	7
Table 6.3-19B	11	Figure 6.3-28D	7
Table 6.3-19C	14	Figure 6.3-28E	7
Table 6.3-19D	15	Figure 6.3-29	7
		Figure 6.3-30	0
Figure 6.3-1	8	Figure 6.3-31	8
Figure 6.3-2	5	Figure 6.3-32	8
Figure 6.3-3	5	Figure 6.3-33	8
Figure 6.3-4	0	Figure 6.3-34	8
Figure 6.3-5 Sheet 1	9	Figure 6.3-35	8
Figure 6.3-5 Sheet 2	5	Figure 6.3-36	8
Figure 6.3-8	0	Figure 6.3-37	8
Figure 6.3-9 Sheet 1	4	Figure 6.3-38	8
Figure 6.3-9 Sheet 2	4	Figure 6.3-39	0
Figure 6.3-9 Sheet 3	4	Figure 6.3-40	0
Figure 6.3-9 Sheet 4	7	Figure 6.3-41 Deleted	7
Figure 6.3-9 Sheet 5	4	Figure 6.3-41a	7
Figure 6.3-10 Sheet 1	4	Figure 6.3-42 Deleted	7
Figure 6.3-10 Sheet 2	4	Figure 6.3-42a	7
Figure 6.3-11 Sheet 1	4	Figure 6.3-43	8
Figure 6.3-11 Sheet 2	4	Figure 6.3-44	8
Figure 6.3-12	5	Figure 6.3-45	8
Figure 6.3-13	11	Figure 6.3-46	8
Figure 6.3-14	7	Figure 6.3-47	8
Figure 6.3-15 Sheet 1	7	Figure 6.3-48	8
Figure 6.3-15 Sheet 2	6	Figure 6.3-49	8
Figure 6.3-16 Sheet 1	7	Figure 6.3-50	8
Figure 6.3-16 Sheet 2	6	Figure 6.3-51	8
Figure 6.3-17 Sheet 1	5	Figure 6.3-52	8
Figure 6.3-17 Sheet 2	7	Figure 6.3-53	8
Figure 6.3-18	6	Figure 6.3-54	8
Figure 6.3-19 Sheet 1	7	Figure 6.3-55	8
Figure 6.3-19 Sheet 2	6	Figure 6.3-56	8
Figure 6.3-20	7	Figure 6.3-57 Deleted	7
Figure 6.3-21	7		
Figure 6.3-22	7	6.4-1	9
Figure 6.3-23	7	6.4-2	10
Figure 6.3-24	7	6.4-3	6
Figure 6.3-25	7	6.4-4	15
Figure 6.3-26	7	6.4-5	12
Figure 6.3-27	7	6.4-6	9
Figure 6.3-28	7	6.4-7	11
Figure 6.3-28A	7	6.4-8	14

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
6.4-9	14	7-vii	13
6.4-10 Deleted	7		
6.4-11 Deleted	7	7.1-1	7
6.4-12 Deleted	7	7.1-2	6
6.4-13 Deleted	7	7.1-3	8
		7.1-3a	8
Table 6.4-1	15	7.1-4	0
		7.1-5 Deleted	7
Figure 6.4-1	0	7.2-1	9
Figure 6.4-2	12	7.2-2	6
Figure 6.4-3	14	7.2-3	12
Figure 6.4-4	8	7.2-3a Deleted	12
Figure 6.4-5	3	7.2-4	12
Figure 6.4-6	3	7.2-5	12
Figure 6.4-7	3	7.5-5a Deleted	7
		7.2-6	7
6.5-1	4	7.2-7	8
6.5-2	9	7.2-8	8
6.5-3	9	7.2-9	7
6.5-4	5	7.2-10	9
6.5-5	6	7.2-11	5
6.5-6	9	7.2-12	10
6.5-6a	6	7.2-13	7
6.5-7	6	7.2-14	5
6.5-8	11	7.2-15	5
6.5-9	6	7.2-16	7
6.5-10 Deleted	7	7.2-17	9
6.5-11 Deleted	7	7.2-18	6
6.5-12 Deleted	7	7.2-19	12
		7.2-20	7
Figure 6.5-1	4	7.2-21	7
		7.2-22	5
6.6-1	15	7.2-23	7
6.6-2	15	7.2-24	9
6.6-3	8	7.2-25	7
6.6-4	12	7.2-26	7
6.6-5 Deleted	7	7.2-27	4
		7.2-28	11
7-i	0	7.2-28a Deleted	11
7-ii	11	7.2-29	10
7-iii	11	7.2-30	10
7-iv	0	7.2-31	7
7-v	9	7.2-32	9
7-vi	14	7.2-33	7

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
7.2-34	13	7.3-3	7
7.2-35	9	7.3-4	7
7.2-35a Deleted	12	7.3-5	0
7.2-36	12	7.3-6	7
7.2-37	6	7.3-7	7
7.2-38	9	7.3-8	8
7.2-39	7	7.3-9	7
7.2-40	7	7.3-10	0
7.2-41	0	7.3-11	5
7.2-42	3	7.3-12	0
7.2-43	9	7.3-13	8
7.2-44	9	7.3-14	7
7.2-45	2	7.3-15	7
7.2-46	9	7.3-16	4
7.2-46a Deleted	12	7.3-17	7
7.2-47	12	7.3-18	7
7.2-48	7	7.3-18a	7
7.2-49	0	7.3-19	8
7.2-50	9	7.3-20	6
7.2-51	7	7.3-21	0
7.2-52	5	7.3-22	7
7.2-53	6	7.3-23	7
7.2-54	7	7.3-24	0
7.2-55	7	7.3-25	10
7.2-56 Deleted	7	7.3-26	10
7.2-57 Deleted	7	7.3-27	10
7.2-58 Deleted	7	7.3-28	10
7.2-59 Deleted	7	7.3-29	15
7.2-60 Deleted	7	7.3-30	15
7.2-61 Deleted	7	7.3-31	6
7.2-62 Deleted	7	7.3-32	6
7.2-63 Deleted	7	7.3-33	10
		7.3-34	10
Table 7.2-1 Sheet 1	9	7.3-35	10
Table 7.2-1 Sheet 2	10	7.3-36	10
		7.3-37	10
Figure 7.2-1	0	7.3-37a	10
Figure 7.2-2	0	7.3-38	10
Figure 7.2-3	8	7.3-39	15
Figure 7.2-4	7	7.3-40	5
Figure 7.2-5	7	7.3-41	15
		7.3-42	15
7.3-1	7	7.3-42a	15
7.3-2	8	7.3-43	15

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
7.3-44	5	7.6-12	14
7.3-45 Deleted	7	7.6-13	14
7.3-46 Deleted	7	7.6-14	10
7.3-47 Deleted	7	7.6-15	10
7.3-48 Deleted	7	7.6-15a	10
7.3-49 Deleted	7	7.6-15b	10
7.3-50 Deleted	7	7.6-15c	9
		7.6-15d	9
Table 7.3-1	15	7.6-15e	15
		7.6-16	13
Figure 7.3-1	10	7.6-17	7
		7.6-18	12
7.4-1	5	7.6-18a Deleted	12
7.4-2	5	7.6-19	14
7.4-3 Deleted	7	7.6-20	12
		7.6-21	12
Table 7.4-1	0	7.6-22	15
		7.6-23 Deleted	7
7.5-1	7	7.6-24 Deleted	7
7.5-2	7		
7.5-3	0	Table 7.6-1	9
7.5-4	11		
7.5-4a Deleted	11	Figure 7.6-1	0
7.5-5	11	Figure 7.6-2	9
7.5-6	11	Figure 7.6-3	0
7.5-6a Deleted	11	Figure 7.6-4	0
7.5-7	0	Figure 7.6-5	2
7.5-8	11	Figure 7.6-6	0
7.5-9	3	Figure 7.6-7	0
7.5-10	3	Figure 7.6-8	0
7.5-11 Deleted	7	Figure 7.6-9	0
7.5-12 Deleted	7	Figure 7.6-10	0
7.6-1	9	Figure 7.6-11	0
7.6-2	12	Figure 7.6-12	7
7.6-2a Deleted	12	Figure 7.6-13	0
7.6-3	15	Figure 7.6-14	0
7.6-4	6	Figure 7.6-15	0
7.6-5	9	Figure 7.6-16	14
7.6-6	0	Figure 7.6-17	9
7.6-7	0		
7.6-8	7	7.7-1	0
7.6-9	0	7.7-2	0
7.6-10	0	7.7-3	9
7.6-11	6	7.7-4	0

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
7.7-5	9	Figure 7.7-3B	11
7.7-6	9	Figure 7.7-4 Deleted	8
7.7-7	0	Figure 7.7-5 Deleted	8
7.7-8	0	Figure 7.7-6 Deleted	8
7.7-9	4	Figure 7.7-7 Deleted	8
7.7-10	3		
7.7-11	11	7.8-1	13
7.7-11a Deleted	11	7.8-2	15
7.7-12	11	7.8-3	13
7.7-13	11	7.8-4	13
7.7-13a Deleted	11	7.8-5	15
7.7-14	11	7.8-6	15
7.7-14a Deleted	11	7.8-7 Deleted	7
7.7-15	11	7.8-8 Deleted	7
7.7-15a Deleted	11		
7.7-16	11	<b><u>Volume 5</u></b>	
7.7-17	11	8-i	12
7.7-17a Deleted	8	8-ii	13
7.7-18	11	8-iii	3
7.7-19	11	8-iv	13
7.7-20	11		
7.7-21	11	8.1-1	13
7.7-22	11	8.1-2	5
7.7-23	11	8.1-3 Deleted	7
7.7-24	11		
7.7-25	11	8.2-1	13
7.7-25a Deleted	11	8.2-2	13
7.7-26 Deleted	11	8.2-2a Deleted	13
7.7-27 Deleted	11	8.2-3	13
7.7-28 Deleted	11	8.2-4	13
7.7-28a Deleted	11	8.2-5 Deleted	7
7.7-29 Deleted	11	8.2-6 Deleted	7
7.7-30 Deleted	7		
7.7-31 Deleted	7	Table 8.2-1	4
7.7-32 Deleted	7	Table 8.2-2	13
Table 7.7-1	8	Figure 8.2-1	13
Table 7.7-2	8	Figure 8.2-2	13
Figure 7.7-1	8	8.3-1	6
Figure 7.7-2 Deleted	11	8.3-2	13
Figure 7.7-2A	11	8.3-3	13
Figure 7.7-3 Deleted	10	8.3-4	14
Figure 7.7-3A Deleted	11	8.3-4a	13

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
8.3-5	13		
8.3-5a Deleted	12	Table 8.3-1 Sheet 1	13
8.3-6	15	Table 8.3-1 Sheet 2	15
8.3-7	12	Table 8.3-1 Sheet 3	15
8.3-7a Deleted	12	Table 8.3-1 Sheet 4	11
8.3-8	12	Table 8.3-1 Sheet 5	12
8.3-9	5	Table 8.3-2	11
8.3-10	9	Table 8.3-3	9
8.3-10a Deleted	6	Table 8.3-4	11
8.3-11	7	Table 8.3-5	10
8.3-12	12	Table 8.3-6	6
8.3-13	14	Table 8.3-7	0
8.3-14	7	Table 8.3-8	5
8.3-15	12		
8.3-15a Deleted	12	Figure 8.3-1	5
8.3-16	5	Figure 8.3-2	3
8.3-17	5		
8.3-18	5	9-i	13
8.3-19	13	9-ii	5
8.3-20	12	9-iii	5
8.3-21	12	9-iv	14
8.3-22	12	9-v	13
8.3-23	5	9-vi	13
8.3-24	6	9-vii	10
8.3-25	5	9-viii	13
8.3-26	8	9-ix	13
8.3-27	5		
8.3-28	8	9.1-1	14
8.3-28a	6	9.1-2	14
8.3-29	14	9.1-2a Deleted	11
8.3-30	13	9.1-3	5
8.3-30a Deleted	12	9.1-4	14
8.3-31	12	9.1-5	12
8.3-32	12	9.1-6	13
8.3-32a Deleted	12	9.1-7	13
8.3-33	12	9.1-8	13
8.3-34 Deleted	7	9.1-8a Deleted	11
8.3-35 Deleted	7	9.1-9	13
8.3-36 Deleted	7	9.1-10	14
8.3-37 Deleted	7	9.1-10a	14
8.3-38 Deleted	7	9.1-10b	13
8.3-39 Deleted	7	9.1-10c	13
8.3-40 Deleted	7	9.1-10d	13
8.3-41 Deleted	7	9.1-11	13

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
9.1-12	13	Figure 9.1-9	13
9.1-13	13	Figure 9.1-10	0
9.1-14	13	Figure 9.1-11	13
9.1-15	13	Figure 9.1-12	4
9.1-16	5	Figure 9.1-13	0
9.1-17	5	Figure 9.1-14	3
9.1-18	6	Figure 9.1-15	3
9.1-19	11	Figure 9.1-16	11
9.1-20	11	Figure 9.1-17	0
9.1-21	11	Figure 9.1-18	0
9.1-22	11	Figure 9.1-19	13
9.1-23	9	Figure 9.1-20	13
9.1-24	13		
9.1-25	13	9.2-1	6
9.1-25a Deleted	12	9.2-2	15
9.1-26	13	9.2-2a	12
9.1-26a Deleted	7	9.2-3	15
9.1-27	14	9.2-4	10
9.1-28	14	9.2-5	11
9.1-29 Deleted	7	9.2-6	11
9.1-30 Deleted	7	9.2-7	11
9.1-31 Deleted	7	9.2-8	13
9.1-32 Deleted	7	9.2-8a Deleted	11
9.1-33 Deleted	7	9.2-9	6
9.1-34 Deleted	7	9.2-10	4
		9.2-11	4
Table 9.1-1	0	9.2-12	5
Table 9.1-2	13	9.2-13	10
Table 9.1-3 Sht 1 Deleted	9	9.2-14	12
Table 9.1-3 Sht 2 Deleted	9	9.2-15	7
Table 9.1-3 Sht 3 Deleted	9	9.2-16	5
Table 9.1-3 Sht 4 Deleted	9	9.2-17	5
Table 9.1-4	13	9.2-18	5
Table 9.1-5	13	9.2-19	5
Table 9.1-6	13	9.2-20	5
Table 9.1-7	13	9.2-21	7
Table 9.1-8	13	9.2-22 Deleted	7
Table 9.1-9	13	9.2-23 Deleted	7
		9.2-24 Deleted	7
Figure 9.1-1	0	9.2-25 Deleted	7
Figure 9.1-2	0	9.2-26 Deleted	7
Figure 9.1-3	3	9.2-27 Deleted	7
Figure 9.1-7	13		
Figure 9.1-8	13	Table 9.2-1	5

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 9.2-2	11	9.3-31 Deleted	7
Table 9.2-3	6	9.3-32 Deleted	7
Table 9.2-4	10	9.3-33 Deleted	7
		9.3-34 Deleted	7
Figure 9.2-1	5	9.3-35 Deleted	7
Figure 9.2-2	11		
Figure 9.2-3	6	Table 9.3-1 Sheet 1	8
Figure 9.2-4	10	Table 9.3-1 Sheet 2	8
		Table 9.3-1 Sht 3 Deleted	8
9.3-1	12	Table 9.3-2	10
9.3-2	10		
9.3-3	12	Figure 9.3-1	10
9.3-4	13	Figure 9.3-2	6
9.3-5	13	Figure 9.3-3	2
9.3-6	8	Figure 9.3-4	2
9.3-6a	8	Figure 9.3-5	9
9.3-7	9	Figure 9.3-6	5
9.3-8	13	Figure 9.3-7	3
9.3-8a Deleted	6	Figure 9.3-8	3
9.3-9	8		
9.3-9a Deleted	7	9.4-1	10
9.3-10	8	9.4-1a Deleted	12
9.3-11	8	9.4-2	12
9.3-12	15	9.4-3	12
9.3-13	8	9.4-4	5
9.3-14	9	9.4-5	15
9.3-15	8	9.4-6	9
9.3-16	8	9.4-7	13
9.3-17	8	9.4-7a	10
9.3-18	13	9.4-8	14
9.3-19	8	9.4-9	14
9.3-20	8	9.4-10	13
9.3-21	5	9.4-11	12
9.3-22	10	9.4-12	5
9.3-23	11	9.4-13 Deleted	7
9.3-23a	9	9.4-14 Deleted	7
9.3-24	10	9.4-15 Deleted	7
9.3-24a	6		
9.3-25	6	Figure 9.4-1	6
9.3-26	5	Figure 9.4-2 Deleted	10
9.3-27	5	Figure 9.4-3	6
9.3-28 Deleted	7		
9.3-29 Deleted	7	9.5-1	5
9.3-30 Deleted	7	9.5-2	8



QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
9.5-3	15	10.3-2	12
9.5-4	8	10.3-3	0
9.5-5	13	10.3-4 Deleted	7
9.5-6	6		
9.5-7	9	Figure 10.3-1	8
9.5-8	13		
9.5-8a	6	10.4-1	7
9.5-9	13	10.4-2	7
9.5-10	8	10.4-3	13
9.5-11 Deleted	7	10.4-4	11
9.5-12 Deleted	7	10.4-5	13
9.5-13 Deleted	7	10.4-6	7
9.5-14 Deleted	7	10.4-7	13
		10.4-8	9
Table 9.5.4-1	0	10.4-9	4
		10.4-10	8
Figure 9.5-1	8	10.4-11	8
Figure 9.5-2	5	10.4-12	13
Figure 9.5-3	6	10.4-13	7
		10.4-14	14
9.6-1	14	10.4-15	13
9.6-2	14	10.4-16	14
9.6-3	14	10.4-17 Deleted	7
9.6-4	14	10.4-18 Deleted	7
9.6-5	14	10.4-19 Deleted	7
		10.4-20 Deleted	7
10-i	0	10.4-21 Deleted	7
10-ii	4		
10-iii	7	Table 10.4-1 Sheet 1	7
10-iv	3	Table 10.4-1 Sheet 2	8
10-v	13	Table 10.4-2	4
		Table 10.4-3	4
10.1-1	7	Table 10.4-4	8
10.1-2 Deleted	7	Table 10.4-4a Deleted	7
		Table 10.4-5	0
Table 10.1-1	11		
		Figure 10.4-1	7
10.2-1	13		
10.2-2	12	<b><u>Volume 6</u></b>	
10.2-3	12	11-i	4
10.2-4	14	11-ii	13
10.2-5	11	11-iii	13
10.2-6 Deleted	7	11-iv	13
10.3-1	13	11-v	13

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
11-vi	13	Table 11.2-1 Sheet 1	6
		Table 11.2-1 Sheet 2	5
11.1-1	0	Table 11.2-1 Sheet 3	5
11.1-2	0	Table 11.2-1 Sheet 4	15
11.1-3	0	Table 11.2-1 Sheet 5	5
11.1-4	0	Table 11.2-1 Sheet 6	15
11.1-5	0	Table 11.2-1 Sheet 7	15
11.1-6	0	Table 11.2-1 Sheet 8	5
11.1-7	0	Table 11.2-2 Sheet 1	5
11.1-8	0	Table 11.2-2 Sheet 2	5
11.1-9 Deleted	7	Table 11.2-3	5
		Table 11.2-4 Sheet 1	5
Table 11.1-1	8	Table 11.2-4 Sheet 2	15
Table 11.1-2 Sheet 1	8	Table 11.2-4 Sheet 3	5
Table 11.1-2 Sheet 2	8	Table 11.2-5 Sheet 1	5
Table 11.1-3 Sheet 1	7	Table 11.2-5 Sheet 2	0
Table 11.1-3 Sheet 2	7	Table 11.2-5 Sheet 3	5
Table 11.1-4 Sheet 1	0	Table 11.2-5 Sheet 4	0
Table 11.1-4 Sheet 2	0	Table 11.2-6	0
Table 11.1-5	0		
Table 11.1-6	0	11.3-1	6
Table 11.1-7	0	11.3-2	6
Table 11.1-8	0	11.3-3	6
Table 11.1-9	0	11.3-4	13
Table 11.1-10	0	11.3-4a Deleted	11
Table 11.1-11	0	11.3-5	11
		11.3-6	0
Figure 11.1-1	0	11.3-7	6
Figure 11.1-2	0	11.3-8	13
Figure 11.1-3	0	11.3-9	6
		11.3-10	13
11.2-1	13	11.3-11	9
11.2-2	13	11.3-12	7
11.2-3	13	11.3-13	7
11.2-4	13	11.3-14	0
11.2-5	11	11.3-15 Deleted	7
11.2-6	4	11.3-16 Deleted	7
11.2-7	6	11.3-17 Deleted	7
11.2-8	6	11.3-18 Deleted	7
11.2-9 Deleted	7	11.3-19 Deleted	7
11.2-10 Deleted	7	11.3-20 Deleted	7
11.2-11 Deleted	7		
11.2-12 Deleted	7	Table 11.3-1	6
		Table 11.3-2 Sheet 1	0

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 11.3-2 Sheet 2	0	11.5-17 Deleted	7
Table 11.3-3	6		
Table 11.3-4	7	Table 11.5-1 Sheet 1	6
Table 11.3-5	0	Table 11.5-1 Sheet 2	6
Table 11.3-6	0	Table 11.5-1 Sheet 3	9
Table 11.3-7	0		
		Figure 11.5-1	15
Figure 11.3-1	6	Figure 11.5-2	9
		Figure 11.5-3	9
11.4-1	15	Figure 11.5-4	0
11.4-1a Deleted	13	Figure 11.5-5	9
11.4-2	13	Figure 11.5-6	9
11.4-3	6		
11.4-4	9	12-i	9
11.4-5	5	12-ii	9
11.4-6	8	12-iii	0
11.4-7	15	12-iv	0
11.4-8	13	12-v	13
11.4-9 Deleted	13		
11.4-10 Deleted	7	12.1-1	4
11.4-11 Deleted	7	12.1-2	4
11.4-12 Deleted	7	12.1-3	4
11.4-13 Deleted	7	12.1-4	4
11.4-14 Deleted	7	12.1-5	5
		12.1-6	4
Table 11.4-1	0	12.1-7	5
		12.1-8	4
11.5-1	15	12.1-9 Deleted	7
11.5-2	15	12.1-10 Deleted	7
11.5-3	15		
11.5-4	9	12.2-1	0
11.5-4a	9		
11.5-5	15	12.3-1	9
11.5-6	2	12.3-2	4
11.5-7	15	12.3-3	10
11.5-8	9	12.3-4	0
11.5-9	9	12.3-5	6
11.5-10	9	12.3-6	7
11.5-11	12	12.3-7	13
11.5-12	7	12.3-8	15
11.5-13 Deleted	7	12.3-9	5
11.5-14 Deleted	7	12.3-10	9
11.5-15 Deleted	7	12.3-11 Deleted	7
11.5-16 Deleted	7		

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 12.3-1	0	13.1-13 Deleted	11
Table 12.3-2	6	13.1-14 Deleted	11
Table 12.3-3 Sheet 1	15		
Table 12.3-3 Sheet 2	12	13.2-1	14
Table 12.3-3 Sheet 3	12	13.2-2	14
Table 12.3-3 Sheet 4	7	13.2-3	6
Table 12.3-4 Sheet 1	15	13.2-4	6
Table 12.3-4 Sheet 2	12	13.2-5	14
Table 12.3-4 Sheet 3	15	13.2-5a	14
Table 12.3-5	7	13.2-6	6
		13.2-7	4
Figure 12.3-1	0	13.2-8	4
Figure 12.3-2	0	13.2-9	6
		13.2-10 Deleted	7
12.4-1	0	13.2-11 Deleted	7
12.4-2 Deleted	7	13.3-1	8
		13.3-2	8
12.5-1	13	13.3-3 Deleted	7
12.5-2	14	13.4-1	6
12.5-3	12	13.4-2 Deleted	7
12.5-4	6	13.5-1	8
12.5-5 Deleted	7	13.5-2	8
12.5-6 Deleted	7	13.5-3	8
		13.5-4	4
Appendix 12A Deleted	9	13.5-5	8
		13.5-6	8
<b><u>Volume 7</u></b>		13.5-7	4
13-i	14	13.5-8	8
13-ii	3	13.5-9 Deleted	7
13-iii	4	13.5-10 Deleted	7
13-iv	4		
		Table 13.5-1	6
13.1-1	11		
13.1-2	11	13.6-1	10
13.1-3	11	13.6-2	10
13.1-4	13	13.6-3 Deleted	7
13.1-5 Deleted	11	13.7-1	7
13.1-6 Deleted	11	13.7-2	6
13.1-7 Deleted	11	13.7-3	6
13.1-8 Deleted	11	13.7-4 Deleted	7
13.1-9 Deleted	11	13.7-5 Deleted	7
13.1-10 Deleted	11	13.7-6 Deleted	7
13.1-11 Deleted	11		
13.1-12 Deleted	11	Table 13.7-1 Sheet 1	7

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 13.7-1 Sheet 2	0	14.2-30	0
Table 13.7-1 Sheet 3	6	14.2-31	0
Table 13.7-1 Sheet 4	0	14.2-32	0
		14.2-33	0
Appendix 13A	0	14.2-34	0
		14.2-35	0
Figure 13A.5-1	0	14.2-36	0
		14.2-37	0
14-i	0	14.2-38 Deleted	7
14-ii	0	14.2-39 Deleted	7
14-iii	0	14.2-40 Deleted	7
14.1-1	0	Table 14.2-1	0
14.1-2 Deleted	7	Table 14.2-2 Sheet 1	0
		Table 14.2-2 Sheet 2	0
14.2-1	0	Table 14.2-3 Sheet 1	0
14.2-2	0	Table 14.2-3 Sheet 2	0
14.2-3	0	Table 14.2-3 Sheet 3	0
14.2-4	0	Table 14.2-3 Sheet 4	0
14.2-5	0		
14.2-6	0	Figure 14.2-1	0
14.2-7	0	Figure 14.2-2	0
14.2-8	0	Figure 14.2-3	0
14.2-9	0	Figure 14.2-4	0
14.2-10	0	Figure 14.2-5	0
14.2-11	0	Figure 14.2-6	0
14.2-12	0		
14.2-13	0	15-i	14
14.2-14	0	15-ii	14
14.2-15	0	15-iii	14
14.2-16	0	15-iv	14
14.2-17	0	15-v	14
14.2-18	0	15-vi	15
14.2-19	0	15-vii	10
14.2-20	0		
14.2-21	0	15.0-1	15
14.2-22	0	15.0-1a	15
14.2-23	0	15.0-2	5
14.2-24	0	15.0-3	15
14.2-25	0	15.0-3a	14
14.2-26	0	15.0-4	15
14.2-27	0	15.0-4a Deleted	14
14.2-28	0	15.0-5	15
14.2-29	0		

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 15.0-1	7	15.3-1a	14
		15.3-2	11
15.1-1	15	15.3-3	11
15.1-1a Deleted	11	15.3-3a	11
15.1-2	15	15.3-4	11
15.1-2a	14	15.3-5	15
15.1-3	8	15.3-6	15
15.1-4	10	15.3-7	15
15.1-5	14	15.3-8 Deleted	7
15.1-6 Deleted	7	15.3-9 Deleted	7
Figure 15.1-1	0	Figure 15.3-1	4
Figure 15.1-2	0	Figure 15.3-2	4
Figure 15.1-3	0	Figure 15.3-3	4
Figure 15.1-4	0	Figure 15.3-4	4
		Figure 15.3-5	4
15.2-1	15	Figure 15.3-6	4
15.2-1a	15	Figure 15.3-7	4
15.2-2	14	Figure 15.3-8	4
15.2-3	15		
15.2-4	15	15.4-1	15
15.2-5	14	15.4-1a	14
15.2-6	14	15.4-1b Deleted	15
15.2-6a Deleted	11	15.4-2	15
15.2-7	14	15.4-2a	15
15.2-8	14	15.4-3	15
15.2-9	15	15.4-4	11
15.2-9a	15	15.4-5	15
15.2-10	15	15.4-6	15
15.2-10a Deleted	15	15.4-6a	15
15.2-11	15	15.4-7	15
15.2-12	15	15.4-7a	14
15.2-13 Deleted	7	15.4-8	15
		15.4-9	15
Figure 15.2-1	4	15.4-9a Deleted	15
Figure 15.2-2	4	15.4-10	15
Figure 15.2-3	4	15.4-11	14
Figure 15.2-4	4	15.4-12	15
Figure 15.2-5	4	15.4-12a	15
Figure 15.2-6	4	15.4-12b	14
Figure 15.2-7	4	15.4-13	15
Figure 15.2-8	4	15.4-13a	14
		15.4-13b	14
15.3-1	15	15.4-13c	14

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
15.4-14	7	15.6-10	9
15.4-15	7	15.6-10a	9
15.4-16	7	15.6-10b	9
15.4-17	13	15.6-10c	9
15.4-18	9	15.6-11	4
15.4-18a	9	15.6-11a	9
15.4-19	14	15.6-12	14
15.4-20	15	15.6-13	7
15.4-20a	15	15.6-14	14
15.4-20b	15	15.6-14a	9
15.4-21 Deleted	7	15.6-15	9
15.4-22 Deleted	7	15.6-16	9
15.4-23 Deleted	7	15.6-17	9
		15.6-17a	15
Table 15.4-1	14	15.6-17b	14
Table 15.4-1a	9	15.6-17c	15
Table 15.4-1b	15	15.6-17d	9
Table 15.4-2 Deleted	6	15.6-18	11
		15.6-18a	9
Figure 15.4-1	4	15.6-19	9
Figure 15.4-2	4	15.6-20	9
Figure 15.4-3	4	15.6-21	9
Figure 15.4-4	4	15.6-22	15
		15.6-23	9
15.5-1	15	15.6-24	9
15.5-1a Deleted	10	15.6-25	10
15.5-2	15	15.6-26	7
15.5-3	15	15.6-27	4
15.5-4 Deleted	7	15.6-28	14
		15.6-28a Deleted	14
Figure 15.5-1 Deleted	10	15.6-29	14
Figure 15.5-2 Deleted	10	15.6-30 Deleted	7
		15.6-31 Deleted	7
15.6-1	7		
15.6-2	4	Table 15.6-1	9
15.6-3	7	Table 15.6-2 Sheet 1	7
15.6-3a	8	Table 15.6-2 Sheet 2	4
15.6-4	7	Table 15.6-2a	9
15.6-5	8	Table 15.6-3	9
15.6-5a	7	Table 15.6-4	9
15.6-6	7	Table 15.6-5	9
15.6-7	4	Table 15.6-5a	14
15.6-8	4	Table 15.6-5b Sheet 1	14
15.6-9	12	Table 15.6-5b Sheet 2	14

QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
Table 15.6-6 Sheet 1	8	Table 15.7-1	7
Table 15.6-6 Sheet 2	8	Table 15.7-2	7
Table 15.6-7 Sheet 1	14	Table 15.7-3 Sheet 1	7
Table 15.6-7 Sheet 2	14	Table 15.7-3 Sheet 2	7
Table 15.6-7 Sheet 3	9	Table 15.7-4	7
Table 15.6-7 Sheet 4	9	Table 15.7-4a	9
Table 15.6-8	9	Table 15.7-4b	15
Table 15.6-8a	15	Table 15.7-5	9
Table 15.6-9	9		
		15.8-1	15
Figure 15.6-1	0	15.8-1a	15
Figure 15.6-2	0	15.8-1b	15
Figure 15.6-3	0	15.8-2	15
Figure 15.6-4	4	15.8-3	15
Figure 15.6-5	0	15.8-4	15
Figure 15.6-6	0	15.8-5	0
Figure 15.6-7	9	15.8-6	0
		15.8-7	0
15.7-1	7	15.8-8	0
15.7-2	14	15.8-9	0
15.7-3	14	15.8-10	15
15.7-4	15	15.8-11	14
15.7-4a Deleted	14	15.8-12 Deleted	7
15.7-5	15	15.8-13 Deleted	7
15.7-5a Deleted	14		
15.7-6	15	Figure 15.8-1	0
15.7-6a	14	Figure 15.8-2	0
15.7-6b	15	Figure 15.8-3	0
15.7-6c	14		
15.7-7	9	16-i	0
15.7-8	9	16.0-1	0
15.7-8a	9		
15.7-8b	9	17-i	0
15.7-9	4		
15.7-10	4	17.1-1	0
15.7-11	4	17.1-2 Deleted	7
15.7-12	9		
15.7-12a	7	17.2-1	8
15.7-13	14	17.2-2 Deleted	7
15.7-13a Deleted	14		
15.7-13b Deleted	14	Appendix A	
15.7-14	14	A-i	8
15.7-15	15	A-ii	8
		A-iii	12



QUAD CITIES - UFSAR

LIST OF EFFECTIVE PAGES  
CURRENT THROUGH REVISION 15

<u>Page/Table/Figure No.</u>	<u>Revision</u>	<u>Page/Table/Figure No.</u>	<u>Revision</u>
A-1	13		
A-2	13		
A-3	13		
A-4	15		
A-5	12		
A-6	13		
A-7	12		
A-8	12		
A-9	12		
A-10	12		
A-11	12		
A-12	13		
A-13	12		
A-14	13		
A-15	12		
A-16	12		
A-17	12		
A-18	12		
A-19	8		
A-20	12		
A-21	8		
A-22	12		
A-23	12		
A-24	12		
A-25	12		
A-26	12		
A-27	11		