



General Electric Company  
175 Curtner Avenue, San Jose, CA 95125

December 22, 1994

MFN No. 163-94  
Docket No. 52-001

Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

Attention: R.W. Borchardt, Director  
Standardization Project Directorate  
Associate Directorate for Advanced Reactors  
and License Renewal  
Office of Nuclear Reactor Regulation

Subject: Submittal of Revision 1 to the ABWR Design Control  
Document

References: (1) R.W. Borchardt to Mr. Joseph Quirk, dated  
December 8, 1994.  
(2) J.F. Quirk to Mr. Dennis Crutchfield, Submittal  
of Final ABWR Design Control Document,  
MFN No. 134-94, dated October 28, 1994.

Enclosed is one (1) copy of the replacement pages to the subject document for the Docket Control Desk and one (1) copy for the Public Document Room. Further, in accordance with direction of NRR project staff, General Electric Nuclear Energy (GE-NE) is providing thirteen (13) copies of the replacement pages to the NRR recipients listed on Attachment 1. This is being done to accelerate the distribution process and ensure timely staff receipt.

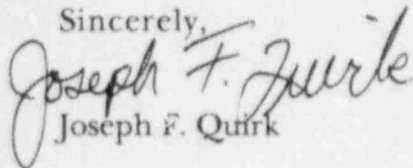
As requested by the Reference 1, this revision of the DCD is accompanied by a list of the currently effective pages. This list is provided as Attachment 2.

Reference 1 also requested that tables of Attachment 3 of Reference 2, that submitted DCD Revision 0 for review, be updated to reflect the staff's comments and any other changes, and be resubmitted as DCD Revision 1. In addition, Reference 2 requested that GE refer to information which was removed from the DCD because it represents detailed PRA information as "Industry Initiative" as opposed to "NRC DCD Guidance". This is also provided in this transmittal as Attachment 3. To better keep track of the updates and other changes pertaining to Revision 0 and Revision 1, inserts into the existing table as a result of Revision 1 have been inserted as item numbers (LH entry) with a lettered suffix (e.g. 16a). When the entry is affected by both Revision 0 and Revision 1, a combined number and number with lettered suffix (e.g. 16/16a) is used.

Finally, Reference 1 requested that GE reverify all building figures in Tier 1 Sections 2.15 and 3.2 for divisional, fire, flood, and radiological boundaries at the appropriate elevations. This reverification has been completed and, where necessary, the Tier 1 figures have been realigned consistent with the Certified Design Material. Three Tier 1 figures were upgraded.

All of the DCD Revision 1 replacement changes are identified in the Page Change Instructions (Attachment 4).

Sincerely,

  
Joseph F. Quirk

#### Attachments

cc: with enclosure

A.J. Beard(GE)  
N.D. Fletcher(DOE)  
S.P. Frantz(Newman,  
Bouknight & Edgar)  
M. A. Rowden(Fried,  
Frank...)  
N.T. Patel(GE)  
J.N. Fox(GE)

w/o enclosure

S.M. Franks(DOE)  
T.H. Boyce(NRC)  
S.A. Hucik(GE)  
F.A. Ross(DOE)

w/o enclosure

F.J. Miraglia(NRC)  
W.H. Rasin(NEI)  
R.L. Simard(NEI)  
R.J. Bell(NEI)

# ATTACHMENT 1

## DIRECT SHIPMENT OF DCD REPLACEMENT PAGES TO NRR RECIPIENTS

<u>QUANTITY</u>	<u>RECIPIENT</u>	<u>ORGANIZATION</u>
3	RICHARD W. BORCHARDT	NRR/ADAR/PDST
1	GOUTAM BAGCHI	NRR/ADT/DE/ECGB
1	CARL BERLINGER	NRR/ADT/DE/EELB
1	CONRAD E. McCracken	NRR/ADT/DSSA/SPLB
1	ROBERT C. JONES	NRR/ADT/DSSA/SRXB
1	RICHARD J. BARRETT	NRR/ADT/DSSA/SCSB
1	EDWARD J. BUTCHER	NRR/ADT/DSSA/SPSB
1	MATTHEW CHIRAMAL	NRR/ADT/DRCH/HICB
1	MARYLEE M. SLOSSON	NRR/ADT/DRCH/HHFB
1	R. LEE SPESSARD	NRR/ADT/DOTS
1	JANICE E. MOORE	OGC

## ATTACHMENT 2

### Effective Pages of DCD as of Dec. 1994

ALL PAGES IN THE DCD ARE REV. 0 EXCEPT FOR THOSE LISTED BELOW:

<b>Introduction</b>		<b><u>Section 2.8.4</u></b>		2.15.12-10	1
<b><u>TOC</u></b>		2.8.4-1	1	<b><u>Section: 3.2</u></b>	
i/ii	1	<b><u>Section 2.12.14</u></b>		3.2-2	1
<b><u>LOT</u></b>		2.12.14-3	1	3.2-3	1
iii/iv	1	<b><u>Section 2.15.5</u></b>		3.2-4	1
<b><u>Section 1.0</u></b>		2.15.5-15	1	3.2-6	1
1.0-5	1	<b><u>Section 2.15.10</u></b>		3.2-7	1
1.0-6	1	2.15.10-3	1	3.2-8	1
1.0-7	1	2.15.10-5	1	3.2-9	1
1.0-9	1	2.15.10-6	1	3.2-10	1
1.0-10	1	2.15.10-8	1	3.2-11	1
1.0-11	1	2.15.10-9	1	3.2-12	1
1.0-12	1	2.15.10-10	1	3.2-13	1
1.0-13/14	1	2.15.10-11	1	3.2-15	1
		2.15.10-12	1	3.2-22	1
		2.15.10-13	1	<b><u>Section 5.0</u></b>	
<b><u>Section 2.7.1</u></b>		2.15.10-14	1	5.0-2	1
2.7.1-3	1	2.15.10-15	1		
2.7.1-4	1	2.15.10-16	1	<b>Tier 2</b>	
<b><u>Section 2.8.1</u></b>		<b><u>Section 2.15.12</u></b>		<b><u>TOC</u></b>	
2.8.1-1/2	1	2.15.12-3	1	i	1
<b><u>Section 2.8.3</u></b>		2.15.12-5	1	ii	1
2.8.3-1/2	1	2.15.12-6	1	iv	1
		2.15.12-9	1	<b><u>Chapter 1 TOC</u></b>	
				1.0-i	1



## Effective Pages of DCD as of Dec. 1994

ALL PAGES IN THE DCD ARE REV. 0 EXCEPT FOR THOSE LISTED BELOW:

<u>Section 1.1</u>		<u>Section 3.3</u>		3H.2-6	1
1.1-3	1	3.3-3	1	3H.2-12	1
<u>Section 1.8</u>		<u>Section 3.7</u>		3H.2-30	1
1.8-29	1	3.7-39	1	<u>Section 3H.3</u>	
1.8-34.1	1	<u>Section 3.8</u>		3H.3-2	1
1.8-35	1	3.8-42	1	3H.3-5	1
1.8-38	1	3.8-60	1	<u>Appendix 3K</u>	
1.8-39	1	<u>Section 3.9</u>		3K-1	1
1.8-40	1	3.9-29	1	3K-2	1
1.8-41	1	3.9-30	1	3K-3	1
1.8-42	1	3.9-31	1	3K-4	1
1.8-43	1	3.9-36	1	3K-5	1
1.8-44	1	3.9-56	1	3K-6	1
1.8-45	1	3.9-84	1	<u>Section 4.2</u>	
1.8-46	1	3.9-87	1	4.2-6	1
1.8-47	1	3.9-121	1	4.2-7	1
1.8-51	1	<u>Section 3H.1</u>		<u>Section 5.2</u>	
<u>Section 2.0</u>		3H.1-4	1	5.2-41	1
2.0-2	1	3H.1-5	1	5.2-44	1
<u>Section 2.3</u>		3H.1-7	1	5.2-45	1
2.3-1	1	3H.1-13	1	5.2-53	1
2.3-6	1	3H.1-16	1	<u>Section 6.2</u>	
<u>Chapter 3 TOC</u>		<u>Section 3H.2</u>		6.2-81	1
iii/iv	1	3H.2-2	1	6.2-82	1

## Effective Pages of DCD as of Dec. 1994

ALL PAGES IN THE DCD ARE REV. 0 EXCEPT FOR THOSE LISTED BELOW:

6.2-83	1	7A-5	1	<u>Section 11.5</u>	
6.2-84	1	7A-7	1	11.5-23	1
6.2-85	1	7A-8	1	<u>Section 12.2</u>	
6.2-86	1	7A-9	1	12.2-32	1
6.2-87	1	<u>Appendix 7B</u>		12.2-33	1
<u>Section 6.3</u>		7B-1	1	12.2-66	1
6.3-30	1	7B-4	1	<u>Section 12.3</u>	
<u>Section 6.7</u>		7B-5	1	12.3-26	1
6.7-1	1	<u>Chapter 9 LOF</u>		<u>Chapter 14 TOC</u>	
6.7-2	1	viii	1	iv	1
<u>Appendix 6C</u>		<u>Section 9.2</u>		<u>Section 14.2</u>	
6C-5	1	9.2-12	1	14.2-140	1
<u>Section 7.1</u>		9.2-58	1	<u>Section 14.3</u>	
7.1-2	1	<u>Section 9.3</u>		14.3-1	1
7.1-4	1	9.3-9	1	14.3-2	1
<u>Section 7.2</u>		9.3-18	1	14.3-3	1
7.2-55	1	9.3-21	1	14.3-4	1
<u>Section 7.3</u>		9.3-24	1	14.3-5	1
7.3-96	1	9.3-36	1	14.3-6	1
<u>Section 7.6</u>		9.4-54	1	14.3-7	1
7.6-7	1	<u>Appendix 9B</u>		14.3-8	1
7.7-49	1	9B-15/16	1	14.3-9	1
<u>Appendix 7A</u>		<u>Section 10.2</u>		14.3-10	1
7A-4	1	10.2-11	1	14.3-11	1

## Effective Pages of DCD as of Dec. 1994

**ALL PAGES IN THE DCD ARE REV. 0 EXCEPT FOR THOSE LISTED BELOW:**

14.3-12	1	14.3-36	1	<b><u>Section 15.4</u></b>	
14.3-13	1	14.3-37	1	15.4-7	1
14.3-14	1	14.3-38	1	<b><u>Section 15.6</u></b>	
14.3-15	1	14.3-39	1	15.6-7	1
14.3-16	1	14.3-40	1	15.6-26	1
14.3-17	1	14.3-41	1	15.6-27	1
14.3-18	1	14.3-42	1	15.6-30	1
14.3-19	1	14.3-43	1	<b><u>Chapter 16</u></b>	
14.3-20	1	14.3-44	1	<b><u>Section 3.3</u></b>	
14.3-21	1	14.3-45	1	3.3-1	1
14.3-22	1	14.3-46	1	3.3-2	1
14.3-23	1	14.3-47	1	3.3-3	1
14.3-24	1	14.3-48	1	3.3-5	1
14.3-25	1	14.3-49	1	3.3-6	1
14.3-26	1	14.3-50	1	3.3-18	1
14.3-27	1	14.3-51	1	3.3-19	1
14.3-28	1	14.3-52	1	3.3-21	1
14.3-29	1	14.3-53	1	3.3-28	1
14.3-30	1	14.3-54	1	3.3-29	1
14.3-31	1	14.3-55	1	3.3-42	1
14.3-32	1	14.3-56	1	3.3-47	1
14.3-33	1	14.3-57	1	3.3-48	1
14.3-34	1	14.3-58	1	3.3-53	1
14.3-35	1	14.3-59/60	1	3.3-68	1

## Effective Pages of DCD as of Dec. 1994

ALL PAGES IN THE DCD ARE REV. 0 EXCEPT FOR THOSE LISTED BELOW:

3.3-69	1	<u>Appendix 18E</u>	
<u>Section 3.5</u>		18E-1	1
3.5-2	1	18E-23	1
<u>Section 3.6</u>		<u>Appendix 18F</u>	
3.6-41	1	18F-5	1
<u>Section 3.7</u>		18F-6	1
3.7-4	1	18F-7	1
<u>Section B3.3</u>		18F-10	1
B3.3-61	1	18F-12	1
B3.3-62	1	<u>Section 19.8</u>	
B3.3-63	1	19.8-35	1
B3.3-64	1	<u>Attachment 19EA</u>	
<u>Section B3.5</u>		19EA-33	1
B3.5-9	1	<u>Appendix 19M</u>	
B3.5-10	1	19M-1	1
<u>Chapter 17 TOC</u>			
i	1	<u>Appendix 19P</u>	
<u>Section 17.3</u>		19P-1/2	1
17.3-6	1	<u>Appendix 19R</u>	
<u>Appendix 18A</u>		19R-33	1
18A-1/2	1	<u>Chapter 21</u>	
<u>Section 18A.6</u>		21-543	1
18A.6-8	1	21-544	1
		21-545	1

### ATTACHMENT 3

#### DIFFERENCES BETWEEN DCD AND SSAR/CDM AND CHANGES TO DCD INTRODUCTION

##### LEGEND

Category	Description
1	NRC Comment
2	NRC DCD Guidance <ol style="list-style-type: none"><li>Tier 2*</li><li>Proprietary Information</li><li>Not Used</li><li>Safeguards Information</li><li>Internal Consistency (Tier 1/CDM and Tier 2/SSAR)</li></ol>
3	GE Initiated Change for Clarification, Completeness, or Elimination of Disconnects
4	DCD Improvements over the SSAR or CDM of Significant Value. Improvements of Lesser Value and not Specifically Recorded are: <ul style="list-style-type: none"><li>• Minor Improvements in Format</li><li>• Correction of Spelling</li><li>• Inclusion of Scanned/Redrafted Figures</li><li>• Corrections to Table of Contents</li><li>• Replacement of "Deleted" with "Not Used" Commensurate with a New Document</li></ul>
5	Removal of Detailed PRA Information-Industry Initiative

# Changes to DCD Introduction

Item No.	DCD Pages	DCD Section	Change	Cat.	Reason
1	1.0-5	3.8	Added New Section 3.8	1	NRC Comment
2	1.0-6	Table 1	Changed "Delineation" to "Designated". Replaced "None" with "First Full Power" for Table 5 and next to entries. Added "Table 1.8-21" to next to last entry. Clarified Note 1.	1	NRC Comment
3	1.0-7	Table 3	Added "3.8.1.2.2" and "3.8.4.1.5.2"	1	NRC Comment
4	1.0-7	Table 4	Added "3.8.4.5.1.2" and corrected "3H.4.2.1" to "3H.2.4.1"	1	NRC Comment
5	1.0-9	Table 6	Relocated "3.9-2" two places ; changed "delineated" to "designated"; added "the" before the word "second" in note (1); added "1.8-20" in last column.	1	NRC Comment
6	1.0-10	Table 7	Added "Table 1.8-20" , "Ref. 3.9-11" and "Ref. 3.9-9". Referenced drawing notes 29 and 32. Added section reference for thermal oscillations. Added second reference for seismic anchor motion. Added "Table 3.9-1". Replaced "Tables 3.9-1, 3.9-2" with "Table 1.8-21". Changed "Earthquake Design Load" to "Earthquake Cycles".	1	NRC Comment
7	1.0-11	Table 7	Added "Table 1.8-20." Removed "Table 1.8-21." Added clarifying note (3). Added "(Ref. 3.9-10)"	1	NRC Comment
8	1.0-12	Table 8	Extensively revised	1	NRC Comment
9	1.0-13/14	Table 10	Added "(except Section 7A.4)".	1	NRC Comment

Changes to DCD Introduction

Item No.	DCD Pages	DCD Section	Change	Cat.	Reason
10	1.0-13/14	Table 11	Added superscript (1) to title. Deleted "(a)" from 7B.1, 7B.2 abd 7B.3.	1	NRC Comment
11	1.0-13/14	Table 11	Added "7A.2(4)" and "7A.2(10)"	3	Completeness



# Differences Between ABWR DCD and CDM

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	v/vi	Table of Contents	Added footnote "*** section number in parentheses-section, under which the subject is covered."	4	Lost in a rollover
1a	2.7.1-3 and 2.7.1-4	Table 2.7.1a	Changed "SGTS(A)" to "SGTS(B)", "SGTS(B)" to "SGTS(C)", "FCS(A)" to "FCS(B)", and "FCS(B)" to "FCS(C)".	3	Inconsistent with P&IDs
1b	2.8.1-1/2	2.8.1	Added "to" following the word predicted under item (1).	1	NRC Comment
1c	2.8.3-1/2	2.8.3	Replaced "dual" with "the" in first sentence. Added "s" to control rod in first sentence of item (4). Added "(associated with a given accumulator)" after stuck rod in item (4).	1	NRC Comment
1d	2.8.4-1	2.8.4	Added "s" to component and event in fourth paragraph.	1	NRC Comment
2	2.12.1-1	2.12.1	Inserted "at least" before "a UAT or a RAT" in second line of next to last paragraph.	3	Clarification
3	2.14.6-5/6	Table 2.14.6	Changed "7.34 kg/cm <sup>2</sup> " to "0.72 MPa" under item 8.	4	Incomplete units conversion
4/4a	2.12.14-1 and 2.12.14-3	2.12.14 and Figure 2.12.14	Deleted "is a voltage regulating device and" in front of "The alternate power supply" at the end of the fourth paragraph and replaced "VOLTAGE REGULATING DEVICE" with "ALTERNATE POWER SUPPLY" in figure. In Revision 1, updated figure to be consistent with CDM.	3	Clarification

# Differences Between ABWR DCD and CDM

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
5	2.15.5-7	2.15.5	Changed "45°C" to "50°C".	3	Max room temperature lower than maximum outside air. See Chapter 9 changes.
5a	Mult.	Section 2.15.5, 2.15.10, 2.15.12, 3.2	Realigned DCD figures consistent with CDM. DCD Figure 2.15.10h upgraded to show solid lines around RSS (A) area. DCD Figure 2.15.10h upgraded to show secondary containment barrier for R/B. Figure 2.15.10j upgraded to remove and extraneous dotted line in the vicinity of column R3/RB. There are no other differences between the DCD and CDM building figures.	1	NRC Comment
6	2.15.5-23	Figure 2.15.5j	Reversed HWH inlet to outlet and HNCW outlet to inlet.	3	Clarification
7	5.0-2	Table 5.0	Changed "26.6°C" to "26.7°C" under 1% exceedance values.	3	Rounding error
8	5.0-2	Table 5.0	Changed "717.85 kPa" to "718.20 kPa" under minimum static bearing capacity.	3	Conversion error
8a	5.0-2	Table 5.0	Changed "2.35 kPa" to "2.394 kPa" under maximum snow load and "13.8 kPaD" to 13.827 kPaD" under Maximum pressure drop.	1	NRC Comment

# Differences Between ABWR DCD and SSAR

## Chapter 1

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	1.1-1	1.1.1	Replaced "Advanced Boiling Water Standard Safety Analysis Report" with "Tier 2" in first paragraph.	2e	NRC DCD Guidance
2	1.1-1	1.1.1	Replaced "SSAR" with "Tier 2" in second paragraph.	2e	NRC DCD Guidance
2a	1.1-3	1.1.5	Removed "Final design approval (FDA) and" from section	3	Consistency with the application of the DCD
3	1.2-24	1.2.2.10.1.3	Removed last sentence.	4	Last two sentences the same.
4	1.6-1	1.6	Replaced section title and introductory sentence	4	Clarification
5	1.6-2 thru 1.6-6	Table 1.6-1	Changed "SSAR" to "Tier 2" in right-hand column.	2e	NRC DCD Guidance
6	1.7-1	1.7.1	Replaced "...the ABWR SSAR" with "Tier 2" in second line.	2e	NRC DCD Guidance
7	1.7-23	Table 1.7-2	Under item 2D changed explanation of function from "Output exists if and only if all specified inputs exist" to "Output exists if specified number of inputs exist."	4	Clarification
8	1.7-24	Table 1.7-2	In truth table for item 3C changed "1" to "0" in right-hand bottom corner.	4	Correction
9	1.8-12, 1.8-13	Table 1.8-19	Italicized SRP 3.5.3, 3.8.1 and 4.2 Appendices, and added 2 footnotes to page 1.8-24.	2a	NRC DCD Guidance
10	1.8-27	Table 1.8-20	Corrected title of Reg. Guide 1.43.	4	Correction

# Differences Between ABWR DCD and SSAR

## Chapter 1 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
11	1.8-27	Table 1.8-20	Italicized Reg. Guide 1.47 and referenced footnote 4.	2a	NRC DCD Guidance
12	1.8-29	Table 1.8-20	Italicized Reg. Guide 1.75 and referenced footnote 4.	2a	NRC DCD Guidance
12a	1.8-29	Table 1.8-20	Italicized Reg. Guide 1.84 and referenced footnote 1.	2a	NRC DCD Guidance
13	1.8-30	Table 1.8-20	Italicized Reg. Guides 1.92 and 1.100 and referenced footnotes 1 and 2, respectively.	2a	NRC DCD Guidance
14	1.8-31	Table 1.8-20	Italicized Reg. Guide 1.105 and referenced footnote 3.	2a	NRC DCD Guidance
15	1.8-34	Table 1.8-20	Italicized Reg. Guides 1.152 and 1.153 and referenced footnote 4.	2a	NRC DCD Guidance
16/16a	1.8-34.1	Table 1.8-20	Added notes (1) thru (4). Clarified note (1).	2a	NRC DCD Guidance/Comment
17	1.8-35	Table 1.8-21	Changed "1983" to "1989" under ACI 318 entry. <sup>1</sup>	3	UBC references ACI 318-1989. Changed for internal consistency.

<sup>1</sup>Returned ACI 349 to 1980 Edition in Revision 1. There is no longer a difference between DCD and SSAR pertaining to ACI 349.

# Differences Between ABWR DCD and SSAR

## Chapter 1 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
18/18a	1.8-35 thru 1.8-87	Table 1.8-21	Italicized the following codes and standards: <sup>2</sup> ACI 349 IEEE 845 AISC N690 IEEE 1012 ANS 7-4.3.2 IEEE 1023 ANS 57.5 ANS 58.2 IEEE 1042 ANSI/HFS-100 IEEE 1228 (Draft) DOD 5000.2 ANSI/NQA-2a DOD AD/A223168 ASTM C776 DOE AR602-1 ASTM C934 DOE DI-HFAC-80740 IEEE C37.90.2 DOE ESD-TR-86-278 IEEE C62.41 DOE HDBK-761A IEEE C62.45 DOE HDBK-763 IEEE C63.12 DOE-STD-2167A IEEE 279 DOD TOP 1-2-610 IEEE 323 MIL-H-46855B IEEE 338 MIL-HDBK-217 IEEE 344 MIL-HDBK-251 IEEE 384 MIL-HDBK-759A IEEE 603 MIL-STD-461C IEEE 730 MIL-STD-462 IEEE 802.2 MIL-STD-1472D IEEE 802.5 MIL-STD-1478 IEEE 828 IEC 801-2 IEEE 829 IEC 880 IEEE 830 IEC 964  and added the corresponding nine notes to page 1.8-47.	2a	NRC DCD Guidance. Also added MIL-HDBK-217 and IEC 801-2 for consistency with text.

<sup>2</sup>Removed Italics from ANSI N101.4 in Revision 1. Now same as SSAR.



## Differences Between ABWR DCD and SSAR

## Chapter 1(Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
19	1.8-36	Table 1.8-21	Revised title of ANSI A58.1.	4	Cleanup
19a	1.8-39	Table 1.8-21	Added and italicized "ASME NQA-2a" and referenced footnotes (3) and (4).	1	NRC Comment
19b	1.8-40	Table 1.8-21	Added and italicized "ANSI X3.139", "ANSI X.143", "ANSI X3.166" and "X3T9.5/84-49" and referenced footnotes (3) and (4).	1	NRC Comment
19c	1.8-42	Table 1.8-21	Added number for IEEE 7-4.3.2 .	3	Missing Number
19d	1.8-42	Table 1.8-21	Referenced footnote (9) under IEEE 338 and added footnote (9) to page 1.8-47.	3	Incomplete
19e	1.8-43	Table 1.8-21	Added and italicized IEEE 518 and referenced footnotes (3) and (4).	1	NRC Comment
19f	1.8-51	Table 1.8-21	Replaced IEEE 1033 with IEEE 1050 and referenced footnotes (3) and (4).	1/3	IEEE 1033 canceled
20	1.8-46	Table 1.8-21	Added ASCE 7 1988 under "others".	4	Missing reference
20a	1.8-51	Table 1.8-22	Added IE Bulletin 79-02	1	NRC Comment
21	1.9-1	1.9	Replaced "SSAR" with "Tier 2" 3 places.	2e	NRC DCD Guidance
22	1A-11	1A.2.9	Italicized "Plant-specific SRV models – with NUREG-0737 requirements"	2a	NRC DCD Guidance
23	1AA-2	1AA.2(3)	Changed "3.87E-6 c/kg h" to "1.5E-4 Gy/h" and "1.29E-4 c/kg h" to "5.0E-3 Gy/h".	4	Correct units
24	1AA-3	1AA-3.1	In first paragraph replaced "SSAR" with "Tier 2".	2e	NRC DCD Guidance
25	1AA-6	1AA.4.3	In second paragraph replaced "0.983" with "estimated to be very high"	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 2

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	2.0-2	Table 2.0-1	Changed "26.6°C" to "26.7°C" under 1% Exceedance Value for Ambient Design Temperature.	4	Rounding error
2	2.0-2	Table 2.0-1	Changed "717.85 kPa" to "718.20 kPa" under Minimum Static Bearing Capacity.	4	Conversion error
2a	2.0-2	Table 2.0-1	Changed "2.354kPa" to "2.394 kPa" under maximum snow load.	1	NRC Comment
2b	2.3-1	2.3.1.2	Changed "717.85 kPa" to "717.20 kPa".	3	Conversion error
2c	2.3-6	2.3.2.33	Changed "717.85 kPa" to "718.20 kPa".	1	NRC Comment



# Differences Between ABWR DCD and SSAR

## Chapter 3

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	3.2-8	3.2.5.3(3)	Italicized text, added footnote.	2a	NRC DCD Guidance
2	3.2-8, 3.2-9	3.2.5.3(4)	Italicized (a) and (b), added footnote on page 3.2-9.	2a	NRC DCD Guidance
3	3.2-9	3.2.5.3	Italicized last paragraph, using footnote of Item 2.	2a	NRC DCD Guidance
4	3.2-63	Table 3.2-3	Six places, italicized text, added footnote.	2a	NRC DCD Guidance
4a	3.3-3	3.3.4	Deleted date from ASCE 7	4	Cleanup
5	3.4-15	3.4.2	Second paragraph, first line: replaced "ABWER" with "ABWR".	1	Incorrect acronym; NRC comment
6	3.5-8	3.5.1.1.2.2(4)	Equation (3.5-3): Removed small dashes from top of "f".	4	Consistency with Figure 3.5-1 definition
7	3.6-12	3.6.2.1.4.1	Italicized text, added footnote.	2a	NRC DCD Guidance
8	3.6-12	3.6.2.1.4.2	Italicized text, added footnote on page 3.6-14.	2a	NRC DCD Guidance
9	3.6-14	3.6.2.1.4.3	Italicized text, added footnote on page 3.6-15.	2a	NRC DCD Guidance
10	3.6-15	3.6.2.1.4.4	Italicized text, using Item 9 footnote.	2a	NRC DCD Guidance
11	3.6-15	3.6.2.1.4.5	Italicized text, using Item 9 footnote.	2a	NRC DCD Guidance
12	3.6-16	3.6.2.1.5.2	Italicized text, added footnote.	2a	NRC DCD Guidance
13	3.6-17	3.6.2.1.5.3.1	Italicized text, added footnote.	2a	NRC DCD Guidance
14	3.6-17	3.6.2.1.5.3.2	Italicized text, using Item 13 footnote.	2a	NRC DCD Guidance

## Differences Between ABWR DCD and SSAR

### Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
15	3.6-22 thru 3.6-25	3.6.2.3.1	Italicized text, added footnote on page 3.6-25.	2a	NRC DCD Guidance
16	3.6-25	3.6.2.3.2.1	Italicized text, added footnote.	2a	NRC DCD Guidance
17	3.6-26	3.6.2.3.2.2	Italicized text, using Item 16 footnote.	2a	NRC DCD Guidance
18	3.6-29	3.6.3	Changed "this SSAR" to "Tier 2" in second paragraph.	2e	NRC DCD Guidance
19	3.7-8, 3.7-9	3.7.2.1.4	Italicized text, added footnote on page 3.7-9.	2a	NRC DCD Guidance
20	3.7-21	3.7.3.1	Italicized text three places, added footnote.	2a	NRC DCD Guidance
21	3.7-22	3.7.3.2	Italicized text three places, added footnote.	2a	NRC DCD Guidance
22	3.7-23	3.7.3.3.1.2	Italicized text, added footnote.	2a	NRC DCD Guidance
23	3.7-23	3.7.3.3.1.3(1)	Italicized text, added footnote.	2a	NRC DCD Guidance
24	3.7-24	3.7.3.3.1.4	Changed "the SSAR" to "Tier 2" in first paragraph	2e	NRC DCD Guidance
25	3.7-25	3.7.3.3.1.4(2)	Italicized text, added footnote.	2a	NRC DCD Guidance
26	3.7-25	3.7.3.3.1.6	Italicized text, using Item 25 footnote.	2a	NRC DCD Guidance
27	3.7-25	3.7.3.3.1.7	Italicized text, using Item 25 footnote.	2a	NRC DCD Guidance
28	3.7-25, 3.7-26	3.7.3.3.1.8	Italicized text, added footnote on page 3.7-26.	2a	NRC DCD Guidance
29	3.7-27	3.7.3.3.4	Italicized text three places, added footnote.	2a	NRC DCD Guidance
30	3.7-28, 3.7-29	3.7.3.6	Italicized text, added footnote on page 3.7-29.	2a	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
31	3.7-29 thru 3.7-31	3.7.3.7.1	Italicized text, added footnote on page 3.7-31.	2a	NRC DCD Guidance
32	3.7-31 thru 3.7-33	3.7.3.7.2	Italicized text, added footnote on page 3.7-33.	2a	NRC DCD Guidance
33	3.7-35, 3.7-36	3.7.3.8.1.6	Italicized text, added footnote on page 3.7-36.	2a	NRC DCD Guidance
34	3.7-36, 3.7-37	3.7.3.8.1.7	Italicized text, added footnote on page 3.7-37.	2a	NRC DCD Guidance
35	3.7-37	3.7.3.8.1.8	Italicized text, using footnote of Item 34.	2a	NRC DCD Guidance
36	3.7-38, 3.7-39	3.7.3.8.1.9	Italicized text two places, added footnote on page 3.7-39.	2a	NRC DCD Guidance
36a	3.7-39	3.7.3.8.1.9	Changed "IV" to "III" in last sentence.	1	NRC Comment
37	3.7-39	3.7.3.8.1.10	Italicized text, using footnote of Item 36.	2a	NRC DCD Guidance
38	3.7-40, 3.7-41	3.7.3.13	Italicized text two places, added footnote on page 3.7-41.	2a	NRC DCD Guidance
39	3.8-2	3.8.1.1.1	Added an italicized paragraph with footnote.	2a	NRC DCD Guidance
40	3.8-3	3.8.1.2.2	Italicized text, added footnote.	2a	NRC DCD Guidance
41	3.8-20	3.8.2.2.3	Italicized first paragraph, added footnote.	2a	NRC DCD Guidance
42	3.8-22	3.8.2.4.1.4	italicized second paragraph, added footnote.	2a	NRC DCD Guidance
43	3.8-27	3.8.3.2	Added an italicized paragraph with footnote.	2a	NRC DCD Guidance
44	3.8-28	3.8.3.2	Added an italicized paragraph with footnote.	2a	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
45	3.8-30	3.8.3.5.1	Italicized text, added footnote.	2a	NRC DCD Guidance
46	3.8-30	3.8.3.5.2	Italicized text, using Item 45 footnote.	2a	NRC DCD Guidance
47	3.8-35	3.8.4.2.1(1)	Italicized text, added footnote.	2a	NRC DCD Guidance
48	3.8-36	3.8.4.2.1(2)	Italicized text, added footnote, and changed "Table 3.8-10" to "Table 3.8-9".	2a	NRC DCD Guidance
49	3.8-37	3.8.4.2.1(9)	Removed "88" from ANSI/ASCII 7	4	Date is applied by Table 1.8-21
50	3.8-38	3.8.4.2.2	Italicized first sentence, added footnote.	2a	NRC DCD Guidance
51	3.8-38	3.8.4.2.3	Changed "AISC" to "ANSI/AISC-N690" and italicized first sentence, using Item 47 footnote.	2a	NRC DCD Guidance
51a	3.8-60	3.8.4.3.2	Changed "1.96 kPa" to "19.61 kPa"	1	NRC Comment
52	3.8-44	3.8.4.4.1	Italicized first sentence, added footnote.	2a	NRC DCD Guidance
53	3.8-46	3.8.4.5.1.2	Changed title from "Materials Criteria" to "Structural and Materials Criteria" and added italicized sentence.	2a	NRC DCD Guidance
54	3.8-46	3.8.4.5.2	Italicized first sentence, added footnote.	2a	NRC DCD Guidance
55	3.8-46	3.8.4.5.3	Italicized first sentence, using Item 54 footnote.	2a	NRC DCD Guidance
56	3.8-47	3.8.5.2	Italicized text, added footnote.	2a	NRC DCD Guidance
57	3.8-54, 3.8-55	Table 3.8-4	Italicized References 13, 14 and 15, added footnotes on page 3.8-55.	2a	NRC DCD Guidance
58	3.8-54	Table 3.8-54	Changed "Table 3.9-10" to "Table 3.9-9" in Reference 15	4	Correction



# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
59	3.8-55	Table 3.8-4	Removed Note 1.	1	NRC comment
60/60a	3.8-60	Table 3.8-9	Italicized text (1) thru (6), added footnote.	2a	NRC DCD Guidance
60b	3.8-60	3.8.4.3.2	Added "with" following the word accordance in item (7)(c).	4	Cleanup
61	3.8-61, 3.8-62	Table 3.8-10	Italicized text, added footnote on page 3.8-62.	2a	NRC DCD Guidance
62	3.9-1	3.9.1.2	Italicized last paragraph, added footnote.	2a	NRC DCD Guidance
63	3.9-7	3.9.1.7	Created a new Subsection 3.9.1.7 with an italicized paragraph and footnote.	2a	NRC DCD Guidance
64	3.9-14	3.9.2.2.1	Italicized text three places, added footnote.	2a	NRC DCD Guidance
65	3.9-28	3.9.3.1	Italicized text three places, added footnote.	2a	NRC DCD Guidance
65a	3.9-29	3.9.3.1	Added paragraph summarizing supplement 3 to Bulletin 88-08 and how ABWR addresses.	1	NRC Comment
66	3.9-29	3.9.3.1	Italicized text two places, added footnote.	2a	NRC DCD Guidance
67	3.9-32	3.9.3.1.1.7	Italicized text, added footnote.	2a	NRC DCD Guidance
67a	3.9-36	3.9.3.1.19	Added reference to Table 3.9-1	1	NRC Comment
68	3.9-36	3.9.3.1.20	Italicized text, added footnote.	2a	NRC DCD Guidance
69	3.9-36	3.9.3.1.21	Italicized text, using Item 68 footnote.	2a	NRC DCD Guidance
70	3.9-36	3.9.3.1.22	Italicized text, using Item 68 footnote.	2a	NRC DCD Guidance
71	3.9-37	3.9.3.2.1.1	Italicized a last portion of first paragraph, added footnote.	2a	NRC DCD Guidance
72	3.9-41	3.9.3.2.3.1.4	Italicized a sentence, added footnote.	2a	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
73	3.9-42	3.9.3.2.3.1.4	Italicized text two places, added footnote.	2a	NRC DCD Guidance
74	3.9-45	3.9.3.2.5.1.2	Italicized a sentence, added footnote.	2a	NRC DCD Guidance
75	3.9-50	3.9.3.4	Italicized last three sentences, added footnote.	2a	NRC DCD Guidance
76	3.9-50	3.9.3.4.1	Italicized text three places, using Item 75 footnote.	2a	NRC DCD Guidance
77	3.9-51	3.9.3.4.1	Italicized text two places, added footnote.	2a	NRC DCD Guidance
78	3.9-51, 3.9-52	3.9.3.4.1	Italicized text three places, added footnote.	2a	NRC DCD Guidance
79	3.9-53	3.9.3.4.1	Italicized text one place, added footnote.	2a	NRC DCD Guidance
80	3.9-53, 3.9-54	3.9.3.4.1	Italicized text two places, added footnote.	2a	NRC DCD Guidance
81	3.9-55	3.9.3.4.1(5)	Italicized a sentence in first paragraph, added footnote.	2a	NRC DCD Guidance
82	3.9-56	3.9.3.4.1(6)	Italicized text two places, added footnote.	2a	NRC DCD Guidance
82a	3.9-56	3.9.3.4.1	Added R.G.1.94 to italicized portion of paragraph (a).	1	NRC Comment
83	3.9-77	3.9.6.2.2	Added an italicized paragraph at top with footnote.	2a	NRC DCD Guidance
84	3.9-77	3.9.6.2.2(1)	Italicized text, added footnote.	2a	NRC DCD Guidance
85	3.9-77, 3.9-78	3.9.6.2.2(2)	Italicized text, added footnote on page 3.9-78	2a	NRC DCD Guidance
86	3.9-84	3.9.8	Italicized Reference 3.9-6, added footnote	2a	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
87/87a	3.9-84	3.9.8	Italicized References 3.9-7, 3.9-9, 3.9-10, and 3.9-11 and added footnote. Added date to Reference 3.9-11	2a/1	NRC DCD Guidance/Comment
88	3.9-86	Table 3.9-1	Italicized Event 12, added footnote	2a	NRC DCD Guidance
89	3.9-87	Table 3.9-2	Italicized Event 3*, added footnote	2a	NRC DCD Guidance
90	3.9-88	Table 3.9-2	Italicized Notes 7 and 9, added footnote	2a	NRC DCD Guidance
91	3.9-88	Table 3.9-2	Italicized Note 12, added footnote	2a	NRC DCD Guidance
91a	3.9-121	Table 3.9-8	Added reference for K17 Radwaste System Valves (Tier 2 figures).	1	NRC Comment
92	3.9-139	Table 3.9-8	Deleted "SSAR" under notes (a) and (d)	2e	NRC DCD Guidance
93	3.10-1	3.10	Added an italicized paragraph with footnote.	2a	NRC DCD Guidance
94	3.10-2	3.10.1.1	Italicized text three places, added footnote.	2a	NRC DCD Guidance
95	3.10-3	3.10.1.3	Italicized last sentence, added footnote.	2a	NRC DCD Guidance
96	3.10-3	3.10.2.1	Italicized last sentence using Item 89 footnote.	2a	NRC DCD Guidance
97	3.13-11	3.13.4.5 3.13.4.6 3.13.4.7	Changed "SSAR" to "Tier 2"	2e	NRC DCD Guidance
98	3.13-14	3.13.5.2	Replaced "are less than 1% of" with "is a very small percentage of the" in the last paragraph	2b	NRC DCD Guidance

\* Moved RH bracket inside superscript to satisfy NRC Comment.



# Differences Between ABWR DCD and SSAR

## Chapter 3 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
99	3.11-5	3.11.7	Italicized reference 3.11-2 and added footnote	2a	NRC DCD Guidance
99a	3A-3	3A.3.2	NRC comment that Equation 3A-1 is missing a factor of 70. The equation is dimensionless and therefore requires no coefficient (factor). Same as SSAR.	1	NRC Comment
100	3A-85	Figure 3A-17	Provided correct figure for elevation -10.95 m	4	Incorrect figure in SSAR
101	3A-295 and 3A-296	Figures 3A-227 and 3A-228	Reversed these figures	4	Incorrect in SSAR
102	3B-24 thru 3B-39  3B-41 and 3B-42  3B-47 thru 3B-49  3B-53 thru 3B-59  3B-61 thru 3B-64  3B-66 and 3B-68  3B-70 thru 3B-73/74	Tables 3B-2 thru 3B-9  Figure 3B-2 and 3B-3  Figure 3B-8 thru 3B-10  Figures 3B-14 thru 3B-20  Figures 3B-22 thru 3B-25  Figures 3B-27 and 3B-29  Figures 3B-31 thru 3B-34	Changed "provided under separate cover" to "not part of DCD (Refer to SSAR Appendix 3B"	2b	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 3(Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
103	3B-27	3B.4.4.1	Removed "SSAR" in third line of first paragraph.	2e	NRC DCD Guidance
104	3E-43	Figure 3E-6	Removed duplicate title in body of figure.	4	Cleanup
105	3G-14	Figure 3G-7	Replaced Figure 3G-7 [AP LOAD (MS NOZZLE BREAK) CASE AP2, NODE: 81, HORIZONTAL] with Figure 3G-7 [AP LOAD (MS NOZZLE BREAK) CASE APA2, NODE: 33, HORIZONTAL]	4	Correction
106	3H.1-3	3H.1.4.1.1	Italicized codes (1), (3) and (5) and added footnotes	2a	NRC DCD Guidance
107/107a	3H.1-3 thru 3H.1-5	3H.1.4.2	Revised parameters to be consistent with Table 2.0-1 and deleted date from ASCE 7.	4/1	Cleanup/NRC Comment
108/108a	3H.1-7	3H.1.4.3.1.3	Revised snow load to agree with Table 2.0-1.	4	Cleanup
108b	3H.1-13	3H.1.5.2	Revised shearwave velocity to agree with Table 2.0-1	1	NRC Comment
108c	3H.1-16	3H.1.5.5.2.1	Changed "9.90x10 <sup>5</sup> kPa" to "9.67x10 <sup>4</sup> kPa."	1	NRC Comment
109/109a	3H.2-2 thru 3H.2-6	3H.2.4	Revised parameters to be consistent with Table 2.0-1 and deleted date from ASCE 7.	4/1	Cleanup/NRC Comment
110	3H.2-2 and 3H.3-2	3H.2.4.1, and 3H.3.4.1	Italicized ACI349 and ANSI/AISC-N690	2a	NRC DCD Guidance
110a	3H.2-12	3H.2.5.2	Deleted date from ASCE 7	4	Cleanup
110b	3H.2-30	Figure 3H.2-19	Replaced "psi" with "psf".	1	NRC Comment
111/111a	3H.3-2 thru 3H.3-5	3H.3.4	Revised parameters to be consistent with Table 2.0-1 and deleted date from ASCE 7.	4	Cleanup

# Differences Between ABWR DCD and SSAR

## Chapter 3 (continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
112	3H.3-29	Figure 3H.3-1	Changed "0.15 ksf" with "7.18 kPa" and "4.48 ksf" with "215 kPa" in vertical center of table.	4	Units conversion
113	3I-7	Table 3I-4	Deleted footnote 2 and changed "40" to "50" for diesel generator room.	3	Must cool with outside air as high as 46.1°C
114/114a	3K-1 thru 3K-6	3K	Added entire appendix**	2a/1	NRC DCD Guidance/Comment
115	3L-1 and 3L-2	Figures 3L-8 and 3L-9	Removed duplicate title in body of figures.	4	Cleanup
116	3M-6	3M.7(1)	Removed "in the SSAR" from third line of first paragraph.	2e	NRC DCD Guidance
117	3M-7	3M.8	Replaced "SSAR" with "Tier 2", 2 places	2e	NRC DCD Guidance
118	3MA-19	3MA.5.2	Changed "SSAR" to "Tier 2"	2e	NRC DCD Guidance

\*\* Modified phrase "NRC Approval" to "NRC Staff Approval" two places on page 3K-1 for Revision 1. Also, replaced "the reference in Subsection 4.2.2(c)(3)" with "IEEE-344" in section 3K.6 on page 3K-4 for Revision 1.

# Differences Between ABWR DCD and SSAR

## Chapter 4

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	4.2-1	4.2	Added italicized paragraph with footnote.	2a	NRC DCD Guidance
2	4.2-1	4.2	Added italicized sentences with footnote.	2a	NRC comment
3	4.2-3 thru 4.2-5	4.2.2.1 and 4.2.2.2	Italicized text, added footnote on page 4.2-5.	2a	NRC DCD Guidance
4	4.2-5 thru 4.2-6	4.2.3.1.1	Italicized text, added footnote on page 4.2-6. <sup>†</sup>	2a	NRC DCD Guidance
5	4.2-6	4.2.3.1.2	Italicized text using a Section 4.2 footnote. <sup>†</sup>	2a	NRC DCD Guidance
5a	4.2-7	4.2.3.1.2, 4.2.4	Changed "Subsection 4.2-3" to "Reference 4.2-3" and italicized second sentence of Section 4.2.4	3	Clarification
5b	4.2-7	4.2.5	Added date for NEDE-31152P	1	NRC Comment
6	4.2-7	4.2.5	Italicized references, added footnote. <sup>††</sup>	2a	NRC DCD Guidance
7	4.2-8	Figure 4.2-1	Italicized title, added footnote.	2a	NRC DCD Guidance
8	4.2-9/10	Figure 4.2-2	Italicized title, added footnote.	2a	NRC DCD Guidance
9	4.3-2	4.3.2.1	Italicized a sentence, added footnote.	2a	NRC DCD Guidance
10	4.3-8	Figure 4.3-1	Italicized title, added footnote.	2a	NRC DCD Guidance
11	4A-1	4A.1, 4A.2, 4A.3	Italicized text, added footnote.	2a	NRC DCD Guidance
12	4B-1	4B.1	Italicized sentences, added footnote.	2a	NRC DCD Guidance

<sup>†</sup> For Revision 1, extended paragraph (2) italics to Section 4.2.3.2.

<sup>††</sup> For Revision 1, italicized Reference 4.2-3.

# Differences Between ABWH DCD and SSAR

## Chapter 4 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
13	4B-1	4B.2	Replaced proprietary SSAR Sections 4B.2 through 4B-16 with Reference AB-1, italicized the reference using Item 12 footnote.	2b	NRC DCD Guidance
14	4C-1	4C.1	Italicized sentences, added footnote.	2a	NRC DCD Guidance
15	4C-1, 4C-2	4C.2, 4C.3	Italicized, added footnote on page 4C-2.	2a	NRC DCD Guidance
16	4D-1	4D	Removed proprietary information, referenced SSAR.	2b	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 5

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	5.2-30	5.2.4.3.2.1	Added "Appendix 5A demonstrates compliance with Regulatory Guide 1.150." at bottom of section.	4	Ties appendix to text.
1a	5.2-41	5.2.5.2.1	Removed last paragraph	3	Redundant to Section 5.2.5.2.3
1b	5.2-41	5.2.5.2.2	Added "RHR" in front of "Shutdown Cooling System" in third line of item (2).	1	NRC Comment
2	5.2-44	5.2.5.2.2(11)	Replaced "RCU" with "RCW" in middle of paragraph.	1	Incorrect acronym; NRC comment.
2a	5.2-44	5.2.5.2.2(11)	Added period after "variable" in third to last line.	1	NRC Comment
2b	5.2-45	5.2.5.4.2	Changed "Pickings" to "Packings" in fourth line.	1	NRC Comment
3	5.2-51 thru 5.2-53	Table 5.2-1	Added code case N-476 and italicized code cases N-71-15 through N-430 and N-476.	2c	NRC DCD Guidance
4	5.3-13	5.3.3.1.1.1	Added "located between the two seal rings. A monitor line is attached to the tap to provide an indication of leakage from the inner seal-ring seal." to the bottom of the page.	4	Should be part of SSAR. "Lost" in a rollover.
5	5.4-16	5.4.5.4	Replaced "sections" with "s" in second sentence of second paragraph.	4	"sections" should be "seconds" and abbreviated as "s".
6	5.4-29	5.4.7.1	Added "pressure" in front of "design" in fourth to last line of subsection.	4	Missing word.



# Differences Between ABWR DCD and SSAR

## Chapter 5 (Continued)

7	5.4-66	Table 5.4-4	Changed "32.6°C" to "37.8°C".	3	See reason for Item 2 of Chapter 9.
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# Differences Between ABWR DCD and SSAR

## Chapter 6

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	6.2-14	6.2.1.1.3.5	Removed subsection 6.2.1.1.3.5.	3	Not required with UHS of 35°C.
2	6.2-26	6.2.1.1.5.5	Added "sense a gap between the disk and the seating surface. If the gap is less than 9 mm," following the third line of the third paragraph.	4	Lost in SSAR amendment rollover.
3	6.2-61	6.2.4.2	Added "containment isolation" before "signals" in the seventh paragraph of Section 6.2.4.2.	1	NRC comment
4	6.2-62	6.2.4.2.6	Added "of GDC 54" in front of "that no active failure..." in the first paragraph of the section.	1	NRC comment
5	6.2-63	6.2.4.2.6	Added "power operated" in front of "isolation valve arrangements..." in fifth paragraph of the section.	1	NRC comment
6	6.2-63	6.2.4.2.6	Replaced "nonpowered" with "manual" in front of "isolation valves is maintained..." in the last paragraph of the section.	1	NRC comment
6a	6.2-81 thru 6.2-87	6.2.5.2.6.2 6.2.5.2.6.3 6.2.5.2.6.4 6.2.5.2.6.6 6.2.5.2.6.9	Replaced numerical values with word values for consistency with Appendix 19E.	1	NRC Comment
7	6.2-126 thru 6.2-167	Table 6.2-7	Changed "SSAR" to "Tier 2".	2e	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 6 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
7a	6.3-30	Table 6.3-4	Changed "Subsection 5.3.3.7.8" to "Subsection 6.3.3.7.8". No longer different from SSAR.	3	Correction
8	6.3-44	Table 6.3-15	In third line of second column changed "PFL" to "LPFL".	4	Incorrect acronym
9	6.3-32 and 6.3-50 thru 6.3-87/88	Tables 6.3-6 and Figures 6.3-10 6.3-29	Changed "[Proprietary information provided under separate cover]" to "[Proprietary information not part of DCD (Refer to SSAR Section 6.3)]".	2b	NRC DCD Guidance
10	6.4-7	6.4.2.5.1	Changed "2.7%" to "25%" in the third column of the table under "halogens".	1	NRC comment
11	6.4-9	6.4.4.2	Removed "... with portable air analyzers indicate the need to do so. However, the operator is allowed..." from the top of the page.	4	Sentence repeated due to rollover.
11a	6.7-1	6.7.1	Added "providing nitrogen for:" at end of first sentence of second paragraph.	1	NRC Comment
11b	6.7-2	6.7.3	Changed "safety portion" to "safety-related portion" in first line of paragraph.	1	NRC Comment
12	6A-12	6A	Added "activated carbon is greater than two inches deep, each representative" to top of the page.	4	Originally in SSAR, lost in a rollover.
12a	6C-5	6C.5	Changed "130m <sup>3</sup> /h" to "1130m <sup>3</sup> /h" in next to last line.	3	SSAR incorrect

# Differences Between ABWR DCD and SSAR

## Chapter 7

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	7.1-7 thru 7.1-11	7.1.2.1.6	Italicized text, added footnote on page 7.1-11.	2a	NRC DCD Guidance
1a	7.1-4	7.1.1.4.2	Replaced "SLC System" with "SLCS" in last line.	1	NRC Comment
2	7.1-31	7.1.2.10.9	Added Italicized paragraph with footnote.	2a	NRC DCD Guidance
3	7.2-32	7.2.2.2.1(6)	Italicized "Regulatory Guide 1.105" and added footnote.	2a	NRC DCD Guidance
3a	7.2-55	Figure 7.2-6	Removed "NOT" in four places	1	NRC Comment
4	7.3-72	7.3.2.1.2(3)(f)	Italicized RG1.105 and Reference 7.3-2 and added footnote.	2a	NRC DCD Guidance
5/5a	7.3-96	7.3.4	Italicized Reference 7.3-2 and added footnote. In Revision 1, changed "November" to "October" under Reference 7.3-2.	2a	NRC DCD Guidance/Comment
6	7.4-24 7.6-23 7.6-30	7.4.2.3.2(3)(f), 7.6.2.1.2(3)(f), 7.6.2.6.2(3)(f)	Italicized RG1.105 and added footnote.	2c	NRC DCD Guidance
7	7.5-24 thru 7.5-27	Tables 7.5-4, 7.5-5 and 7.5-6	Changed "Safety Analysis" to "Tier 2" in third column.	2e	NRC DCD Guidance
8	7.5-28	Table 7.5-8	Replaced "S" with "T" in right hand column and "S=SSAR" with "T=Tier 2" in footnote.	2e	NRC DCD Guidance
9	7.6-3	7.6.1.1.1(4)	Changed "nv" to "neutron/cm <sup>2</sup> " four places.	4	Incomplete units conversion
9a	7.6-7	7.6.1.1.2.1(9)	Changed "84.37 kg/cm <sup>2</sup> g" to 8.27 MPaG."	3	Incomplete units change
10	7.6-27	7.6.2.3	Replaced "SSAR" with Tier 2	2e	NRC DCD Guidance
11	7.6-30	7.6.2.6.2(3)	Italicized RG 1.105.	2a	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 7 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
12	7.6-47	Figure 7.6-9	Removed duplicate title in body of figure.	4	Cleanup
13	7.7-77	7.7.1.11	Replaced "of the SSAR" with "Tier 2" in first line.	2a	NRC DCD Guidance
14	7A-1	7A.1	Added two italicized paragraphs with footnote	2a	NRC DCD Guidance
15/15a	7A-2 thru 7A-12	7A.2	Italicized all of Section 7A.2. In Revision 1, added reference to IEEE 518 and 1050 under item (4) on page 7A-4 with footnote and modified reference to ANSI FDDI under item (10) on page 7A-7.	2a/1	NRC DCD Guidance/Comment
16	7A-7	7A.2	Changed "the SSAR" to "Tier 2" in Response (11)	2e	NRC DCD Guidance
16a	7A-9	7A.2	Replaced "IEEE-1033" with "IEEE-1042".	3	IEEE-1033 canceled
17	7A-12 thru 7A-15	7A.3	Italicized all of Section 7A.3 and added footnote	2a	NRC DCD Guidance
18	7A-16 thru 7A-20	7A.5 thru 7A.7	Italicized Sections 7A.5 through 7A.7 and added footnote	2a	NRC DCD Guidance
19	7B-1	7B.1	Changed "IEEE (draft H)" to "IEEE 1228 (draft)" under item (1)(a)(iv).	4	Reference Update
20	7B-1 thru 7B-7/8	7B.1 thru 7B.3	Italicized Sections 7B.1 through 7B.3 and added footnotes	2a	NRC DCD Guidance
21	7C-2 thru 7C-5	7C.2 and 7C.3	Italicized Section 7C.2 and added footnote	2a	NRC DCD Guidance
22	7C-5	7C.4	In first paragraph changed "less than 10E-6" to "extremely low."	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 7 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
23	7C-7	7C.4	Replaced "2200°F" with "1204°C" under JUNE 1992	4	Incomplete units change
24	7C-11 thru 7C-13	7C.5	Italicized Section 7C.5 and added footnote.	2a	NRC DCD Guidance



## Differences Between ABWR DCD and SSAR

### Chapter 8

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	8 2-15	Table 8.2-1	"SSAR" changed to "Tier 2" on first line.	2e	NRC DCD Guidance



# Differences Between ABWR DCD and SSAR

## Chapter 9

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	9.1-6	9.1.2.1.3	Changed "1361 kg" to "13.35 kN" under Item 6.	4	Incomplete unit conversion.
2	9.2-6	9.2.5.1(1)	Changed "37.8°C" to "35°C average" at end of Item (1).	3	During the course of the staff review, GE changed from 95°F (35°C) to 100°F (37.8°C) and the FDA version of the SSAR ended at the 100°F value. Page 2-11 of the FSER shows a 95°F value for the UHS (Emergency Cooling Water Inlet). As part of the FOAKE program, the systems cooled by the UHS were evaluated and it was determined that the federally mandated phase out of several commonly used refrigerants would require lowering the UHS temperature to 95°F (35°C). FOAKE also found that plate type heat exchangers would be much more suitable. Finally, it is prudent to allow the use of both screw-type and centrifugal-type chillers.

## Differences Between ABWR DCD and SSAR

## Chapter 9 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
2a	9.2-12	9.2.8.3.1	Deleted second "well" in first line of paragraph.	1	NRC Comment
3	9.2-20	9.2.11.1.1(1)	Changed "37.8°" to "(i.e., 35°C average)" in second line of second paragraph.	3	See reason for Item 2 above.
4	9.2-21	9.2.11.2	Inserted the following paragraph: "The Control and Service Building general arrangement drawings, Figures 1.2-14 through 17 (and companion Fire Protection drawings, Figures 9A.4-11 through 13, and Radiation Protection drawings, Figures 12.3-42, 43, 48 and 64) show the location of the RCW pumps and heat exchangers. (Note: The heat exchangers are depicted as shell-and-tube type; however, the alternate plate-type can be accommodated in the same area of the Control Building in a horizontal arrangement at elevation -8200mm, the same elevation as the pumps)."	3	See reason for Item 2 above.
5	9.2-22	9.2.11.2	Removed "due to tube plugging" in paragraph beginning with "The above analysis shows ..."	3	See reason for Item 2 above.
6	9.2-25	9.2.11.3.2	Removed "the tubing side" from paragraph beginning with "System components and piping materials ..."	3	See reason for Item 2 above.
7	9.2-27	9.2.11.4	Replaced "tube plugging" with "leakage" in next to last sentence in first paragraph.	3	See reason for Item 2 above.

# Differences Between ABWR DCD and SSAR

## Chapter 9 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
8	9.2-27	9.2.11.4	Replaced last word "fouling" in second paragraph with "refurbishing".	3	See reason for Item 2 above.
9	9.2-27	9.2.11.5	Replaced "a tube leak" with "leakage" in the next to the last paragraph.	3	See reason for Item 2 above.
10	9.2-31	9.2.13.2	Deleted "centrifugal" in front of compressor in the third sentence of the second paragraph.	3	See reason for Item 2 above.
11	9.2-34	9.2.13.5	Changed last sentence of third paragraph to read "two-way valve based on refrigerant compressor discharge pressure".	4	Consistency with P&IDs
12	9.2-50	Table 9.2-4a	Changed "54.01" to "127.24" in the fourth column of the total load entry.	1	NRC comment
13/13a	9.2-58	Table 9.2-8	Removed "type-centrifugal hermetic" in Revision 1	3	See reason for Item 2 above.
14	9.3-5	9.3.2.3.4	Changed "Reactor" to "Turbine" in front of "Building Sample Station"	4	Correction
14a	9.3-9	9.3.3.1.3	Replaced "This" with "That" in second paragraph	1	NRC Comment
14b	9.3-9	9.3.3.2	Replaced "in with "is" in the third line of paragraph	1	NRC Comment
15	9.3-9	9.3.3.2	Removed "(Subsection 9.3.2.1)" from the first line.	1	NRC comment
16	9.3-9	9.3.3.2.1	Changed "is" to "are".	1	NRC comment

## Differences Between ABWR DCD and SSAR

## Chapter 9 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
17	9.3-13	9.3.5.2	Changed Item (a) from "High RPV pressure (7.76 MPaG) and average power range monitor (APRM) not downscale for 3 minutes, or" to "High RPV pressure (7.76 MPaG) and startup range neutron monitor (SRNM) not downscale for 3 minutes, or."	4	Modified to reflect SRNM
17a	9.3-18 9.3-21	9.3.6.2 9.3.7.2	Removed "which" following "isolation valves".	1	NRC Comment
18	9.3-22	9.3.7.2	Added last paragraph "outside primary containment a manually-operated valve is kept closed and locked during normal plant operation. During refueling, the valve is opened to provide air inside containment. A check valve is provided inside the containment."	4	Paragraph lost in an Amendment 34 rollover
18a	9.3-24	9.3.8.2 1	Removed "and system" in second line of first paragraph.	1	NRC Comment
19	9.3-34	Table 9.3-1	Changed "85.8" to "8.41" in next to last column under Pump Discharge to Injection Valve Inlet entry.	4	Correction of unit conversion
20	9.4-8	9.4.1.2.3.3(6)	Removed "at E1.7200 in C/B" from end of sentence.	4	Wrong elevation

# Differences Between ABWR DCD and SSAR

## Chapter 9 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
21	9.4-18	9.4.5.1.3	Added "On a smoke alarm in a division of the secondary containment HVAC system, the HVAC system shall be put into smoke removal mode. To remove smoke from the secondary "to top of paragraph beginning with containment, the exhaust filter..."	4	Lines lost on a Amendment 34 rollover.
22	9.4-24	9.4.5.4.1.2	In second paragraph changed "46°C" to "46.1°C", changed "45°C" to "50°C" in two places.	4	46.1°C consistent with Tier 1 Table 5.0 and Tier 2 Table 2.0-1. 45°C/50°C temperature allows cooling from outside air.
23	9.4-27	9.4.5.5.5	Changed "45°C" to "50°C"	4	See reason for item 22 above
23a	9.4-54	Figure 9.4-2c	Changed "AUX" to "HOUSE" and "GAS" to "COMBUSTION". This aligns the DCD with the SSAR (no difference).	3	Inconsistency
24	9.5-24	9.5.1.3.9	Replaced last sentence with "Fire detection and alarm systems are supplied with power from a non-Class 1E uninterruptible power supply."	4	Consistency with Tier 1
25	9.5-59	9.5.12.3.3	Removed probabilities at end of first paragraph.	2c	NRC DCD Guidance
26	9A.2-8 and 9A.2-9	Table 9A.2-1	Changed "SAR" to "Tier 2" at top of fifth column and in note 13.	2e	NRC DCD Guidance
27	9A.4-53	9A.4.1.1.37(f)	Changed "RCWU" to CUW	4	Incorrect acronym

# Differences Between ABWR DCD and SSAR

## Chapter 9 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
28	9A.4-48	9A.4.3.2-6(5)(c)	Changed "with No. 2 fuel oil with min. flash point of 377°C" to "with minimum flash of 37.8°C".	1	NRC comment
29	9A.5-16	9A.5.7	Removed "of the SSAR" in 2 places	2e	
29a	9B-15/16	Figure 9B-1	Replaced DCD Figure with SSAR Figure. No difference between DCD and SSAR.	3	Inconsistency



## Differences Between ABWR DCD and SSAR

### Chapter 10

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1a	10.2-11	10.2.3.1	Replaced "ASTM A-170" with "ASTM A-370"	1	NRC Comment

# Differences Between ABWR DCD and SSAR

## Chapter 11

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	11.2-1	11.2.1.2	At end of second sentence from bottom, "receiver tank" changed to "sample tank" and "LCW" inserted in front of "sample tanks".	1	NRC comment
2	11.2-5	11.2.3.1	Changed second line to read: "... effluent from the LCW sample tank or the hot shower drain sample tanks as indicated ...".	1	NRC comment
3	11.5-3	11.5.1.2	The middle paragraph – sentence changed "10CFR20.6" to "10CFR20.1302" and "Amendments 1 and 2" to "Attachments 1 and 2".	1	NRC comment
4	11.5-20	Table 11.5-1	In fifth column under main streamline tunnel area deleted " $10^{-13}$ to $10^{-6}$ Amps". In fifth column under reactor building vent exhaust deleted " $10^{-2}$ to $10^2$ mR/h". In fifth column under drywell sump discharge deleted " $10^{-13}$ to $10^{-6}$ Amps". In fifth column under offgas pretreatment changed " $10^{-2}$ to $10^4$ Mgy/h" to " $10^{-2}$ to $10^4$ mGy/h".	1	NRC comment

## Differences Between ABWR DCD and SSAR

## Chapter 11 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
5	11.5-22	Table 11.5-2	In fourth column under plant stack discharge (normal range) changed " $3.51 \times 10^{-9}$ cpm per MBq/cm <sup>3</sup> " to " $3.51 \times 10^8$ cpm per MBq/cm <sup>3</sup> ".  In fifth column under plant stack discharge (normal range) changed " $3.7 \times 10^{-4}$ " to " $3.7 \times 10^3$ MBq/cm <sup>3</sup> " to " $3.7 \times 10^{-9}$ to $3.7 \times 10^{-3}$ MBq/cm <sup>3</sup> ".	1	NRC comment
6	11.5-23	Table 11.5-2	In fifth column under radwaste building ventilation exhaust changed " $3.7 \times 10^{-7}$ to $3.7 \times 10^{-2}$ MBq/cm <sup>3</sup> " to " $3.7 \times 10^{-9}$ to $3.7 \times 10^{-3}$ MBq/cm <sup>3</sup> ".	1	NRC comment
7/7a	11.5-23	Table 11.5-2	Designated footnote in fifth column under Standby Gas Treatment System Exhaust - Inline Configuration (added footnote to page 11.5-24). Removed designated footnote to Offline configuration.	1	NRC comment
8	11.5-23	Table 11.5-2	In fourth and fifth column under gland seal condenser exhaust discharge changed " $3.6 \times 10^6$ " to " $1.33 \times 10^9$ " and " $3.7 \times 10^{-7}$ to $3.7 \times 10^{-2}$ " to " $3.7 \times 10^{-9}$ to $3.7 \times 10^{-3}$ ", respectively.	1	NRC comment
9	11.5-23	Table 11.5-2	In fourth column under standby gas treatment exhaust changed " $3.6 \times 10^6$ " to " $1.33 \times 10^9$ ".	1	NRC comment
9a	11.5-23	Table 11.5-2	Changed "Main" to "Plant" in first entry in fifth column of fifth entry.	1	NRC Comment

# Differences Between ABWR DCD and SSAR

## Chapter 11 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
10	11.5-24	Table 11.5-2	Added footnote "This dynamic range reflects post-accident conditions; the entry for expected activity in this row is for the expected normal activity, i.e. non-accident."	1	NRC comment
11	11.5-25	Table 11.5-3	In fourth column under reactor building cooling water intersystem leakage changed from " $3.7 \times 10^{-1}$ to $3.7 \times 10^{-2}$ MBq/cm <sup>3</sup> " to " $3.7 \times 10^{-7}$ to $3.7 \times 10^{-2}$ MBq/cm <sup>3</sup> ".	1	NRC comment

# Differences Between ABWR DCD and SSAR

## Chapter 12

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	12.0-x	List of Figures	Added "(Gy/h)" to end of title for Figure 12.3-74.	1	NRC comment
1a	12.2-32 12.2-33	Table 12.2-8	Added "" to "8.9E-1" figure and added footnote "Multiply by 6 if Hydrogen Water Chemistry is in use".	3	Erroneously omitted in SSAR
1b	12.2-66	Table 12.2-21	"Nanotesla" changed to "Gamma" under Part A	3	SSAR Unit conversion incomplete
2	12.3-23	12.3.3.1	In first paragraph replaced "Certified Design Material (GE document 25A5447)" with "Tier 1".	2e	To make referencing consistent
2a	12.3-26	12.3.4	Replaced "DAC3.7b" with "Table 3.2b of Tier 1"	3	Updated designation
3	12.4-9/10	Table 12.4-1	In second column replaced "SSAR" with "Tier 2".	2e	NRC Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 13

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
			None		



# Differences Between ABWR DCD and SSAR

## Chapter 14

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	14.3-1 thru 14.3-23	14.3	Relabeling consistent with change from CDM/SSAR to Tier 1/Tier 2.	2e	NRC DCD Guidance
1a	14.2-140	14.2.12.2.9(4)	Changed "62.2°C" to "80°C" under level 1.	3	Incorrect conversion
2	14.3-1	14.3	Changed last sentence from "... basis for NRC authorization to load fuel per the provisions of 10 CFR Part 52.103." to "... basis for the NRC finding under CFR Part 52.103(g)."	3	To more closely follow the language of Part 52.
2a	14.4-1	14.3	Modified first paragraph to better reflect the Tier 1 information.	1	NRC Comment
2b	14.3-9	14.3	Changed "Table 19.2-1" to "Table 19.8-1" and "Table 19.2-7" to "Table 19.8-7" at end of first paragraph on page 14.3-9. This change aligns the DCD with the SSAR (No difference).	1	NRC Comment
3	14.3-12	14.3.2.2	Changed first sentence of item (3) from "As required by 10CFR52.103, the inspections, tests, and analyses must be completed ..." to "The inspections, tests, and analyses are to be completed ...".	3	To more closely follow the language of Part 52.
3a	14.3-23, 24, 26, 28, 29, 30, 50, 58	Tables 14.3-1,2,3,10,11	Incorporated editorial comments	1	NRC Comment
3b	14.3-59/60	Table 14.3-12	Changed "safety" to "safe" and "RSS design basis " with "as seismic".	1	NRC Comment

# Differences Between ABWR DCD and SSAR

## Chapter 14 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
4	14.3-24 thru 14.3-58	Tables 14.3-1 thru 14.3-10	Right-hand column labeled "SSAR Value" to "Tier 2 Value".	2e	NRC DCD Guidance

## Differences Between ABWR DCD and SSAR

## Chapter 15

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	15.1-5	15.1.2.1.2.2	Replaced "less than once per 10,000 years. It". with "so low that it."	5	Industry Initiative
2	15.1-8	15.1.3.1.1	Removed "(less than $7 \times 10^{-5}$ failure per reactor year)" in next to last sentence.	5	Industry Initiative
3	15.1-8	15.1.3.1.2.1	Replaced "less than 0.0088 times a year" with "very low frequency".	5	Industry Initiative
4	15.1-8	15.1.3.1.2.2	Replaced "less than once per 10,000 years" with "extremely low".	5	Industry Initiative
5	15.2-1	15.2.1.1.1	Deleted "less than $7 \times 10^{-5}$ failures per reactor year)" from last sentence.	5	Industry Initiative
6	15.2-1	15.2.1.1.2.1	Deleted "(0.0088 failures per reactor year)".	5	Industry Initiative
7	15.2-2	15.2.1.1.2.2	Replaced "less than $7 \times 10^{-5}$ per year" with "extremely low".	5	Industry Initiative
8	15.2-5	15.2.2.1.1	Deleted "(less than one failure every 11 years)" from next to last sentence.	5	Industry Initiative
9	15.2-5	15.2.2.1.2.3	Removed probability numbers (4 places)	5	Industry Initiative
10	15.2-9	15.2.3.1.2.3	Modified paragraph and removed probability numbers (4 places)	5	Industry Initiative
11	15.3-5	15.3.2.1.1	Replaced "(less than $7 \times 10^{-5}$ failures per year)" with "very low" in second paragraph.	5	Industry Initiative
12	15.3-5	15.3.2.1.2.1	Replaced "about 0.0088 failures per reactor year" with "very low".	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 15 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
13	15.3-8	15.4.5.1.1	Replaced "(less than $7 \times 10^{-5}$ failures per reactor year)" with "very low".	5	Industry Initiative
14	15.3-8	15.4.5.1.2.1	Replaced "about 0.0088 failure per reactor year" with "very low".	5	Industry Initiative
15	15.4-11	15.4.7.1.2	Replaced numerical value of probability with "expected frequency is low".	5	Industry Initiative
16	15.4-13	15.4.8.1.2	Removed probability numbers (3 places)	5	Industry Initiative
16a	15.6-7	15.6.4.5.1.2	Changed "12,868 kg" to "12,870kg" and "21,949 kg" with "21,953".	1	NRC Comment, inconsistent with Table 15.6-5.
16b	15.6-26	Table 15.6-4	Changed " $\leq 5$ " to " $\leq 5.5$ ".	1	NRC Comment, inconsistent with text and Table 15.6-5.
17/17a	15.6-27	Table 15.6-5	Changed "5.0s" to "5.5s" under isolation valve closure time. Changed "Isolation valve closure time" to "MSIV closure time(break time until fully closed)" under Revision 1.	4/1	Inconsistency with text/NRC Comment
18/18a	15.6-30	Table 15.6-8	Changed "12" to "2" under item IE particulate. Changed "6.1L/min" to "66.1 L/min" under item IIA in Revision 1.	4/1	Correction/NRC Comment
19	15B-17 thru 15B-20 and 15B-41/42	15B.4	Rewrote introduction to more firmly, reference chapter 19 and detected subsections 15B.4.1 through 15B.4.4.2 and Figure 15B-8.	5	Industry Initiative
20	15D-2	15D.3.1	Removed "(processor failure rate = $10^{-5}/h$ )" from the end of item (4)	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 15 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
21	15D-2	15D.3-2 and 15D.4	Revised text to eliminate probability.	5	Industry Initiative
22	15D-3 15D-5 thru 15D-8	Table 15D-1 and Figures 15D-2 thru 15D-5	Eliminated figure/table contents and referred to SSAR.	5	Industry Initiative
23	15E-15	Tables 15E-12 thru 15E-15	Replaced "kg/cm <sup>2</sup> g" with "MPaG" all places.	4	SSAR unit conversion incomplete.

# Differences Between ABWR DCD and SSAR

## Chapter 16

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	Mult	Mult	The header and footer on each page are changed as follows: The GE document number in the header from the SSAR, 23A6100 Rev. x, is deleted. The SSAR amendment number in the footer is replaced with "Rev. 0, Design Control Document/ Tier 2".	1	NRC comment
2	Mult	Mult	Where the phrase "of the SSAR" is used to describe information in the SSAR, it is replaced with the phrase "of the DCD Tier 2".	1	NRC comment
3	Mult	4.0 5.0	Where the phrase "of the SSAR" is used to describe the applicant's SSAR, it is replaced with the phrase "of the FSAR".	2e	DCD NRC Guidance
4	Mult	Mult	Where the phrase "in the SSAR, Chapter (or Section) x" is used to point to the section of the SSAR, it is replaced with the phrase "in DCD Tier 2, Chapter (or Section) x".	2	NRC comment
5	Mult	Mult	Where the phrase "ABWR SSAR analysis" is used to describe the safety analyses in the SSAR, it is replaced with the phrase "ABWR safety analysis".	1	DCD internal consistency
6	Mult	Mult	Where the phrase "transient or accident analysis in the ABWR SSAR" is used with no specific chapter or section reference, it is replaced with the phrase "transient or accident analysis for the ABWR".	1	DCD internal consistency



# Differences Between ABWR DCD and SSAR

## Chapter 16 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
7	Mult	B 3.8	Where the phrase "described in the SSAR" is used to refer to Chapter 8 of the SSAR, it is replaced with the phrase "described in DCD Tier 2, Chapter 8".	2e	NRC DCD Guidance
8	Mult	Mult	Where the phrase "requirement of Section x of the SSAR" is used to refer to certain requirement specified in the SSAR, it is replaced with the phrase "requirements of DCD Tier 2, Section x".	2e	NRC DCD Guidance
8a*	3.3-1, 3.3-2, B3.3-61 through B3.3-64	3.3	Numbering of Required Action for Condition A of LCO 3.3.1.1 "A.2.1" changed to "A.2.1.1", "A.2.2" changed to "A.2.1.2", "A.2.3" changed to "A.2.2.1", and "A.2.4" changed to "A.2.2.2".	1	Renumbering was necessary to reflect the proper use of Logical Connectors.
8b*	3.3-1, 3.3-2, 3.3-3, 3.3-6, 3.3-6, 3.3-18, 3.3-19, 3.3-21, 3.3-28, 3.3-29, 3.3-47, 3.3-48, 3.3-53, 3.3-68, 3.3-69	3.3	The Logical Connectors (AND, OR) were aligned to be consistent with the convention defined in Section 1.2, Logical Connectors.	1	Proper indentation of logical connectors.

## Differences Between ABWR DCD and SSAR

## Chapter 16 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
8c*	3.3-42	3.3	Changed unit of SR 3.3.2.1.3 from "HZ" to "cps".	3	Inconsistent unit. "Cps" used here is neutron counts per second, not cycles per second.
8d*	3.5-2, B3.5-9, B3.5-10	3.5	Numbering of Required Action for Condition C of LCO 3.5.1 was changed from "C.1.1" to "C.1.1.1", "C.1.2" changed to "C.1.1.2", "C.2" changed to "C.1.2", and "C.3" changed to "C.2".	1	Renumbering was necessary to reflect the proper use of Logical Connectors.
8e*	3.6-41	3.6	Logical connector AND in Required Action for Condition D of LCO 3.6.4.3 was re-aligned.	3	Proper indentation of logical connectors.
8f*	3.7-4	3.7	Logical AND for Required Action for Condition B of LCO 3.7.2 was added.	3	Logical connector was missing.
9	3.7-3, 3.7-4, 3.7-8, and B3.7-4	3.7.1.3, 3.7.2.3, 3.7.3.3, and B3.7.1	Changed UHS temperature from "37.8°C" to "35°C".	3	UHS temperature of subsection 9.2.5 changed from 37.8°C to 35°C.
10	B 3.3-51	B 3.3.1.1	In Item 19, Main Steam Pressure-Low, Applicable Safety Analyses, LCO, and Applicability, the use of the term "100°F/hour" is changed to "55°C/h"; the use of the term "785 psig" is changed to "5.41 MPaG". In Item 22, Main Steam Tunnel Temperature-High, the term "25 gpm" is changed to "95 L/min".	3	Inconsistent unit

\* Includes FAXs from C. Tang (GE) to N Giles (NRC) dated November 22 and 23, 1994.

## Differences Between ABWR DCD and SSAR

## Chapter 16 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
11	B3.3-146	B3.3.2.1	From third line in last paragraph removed "one bypassed channel in each division and one"	4	Correction
12	B 3.3-167	B 3.3.4.1	In Item 3, SB&PC Reactor Steam Dome Pressure-High, Applicable Safety Analysis, LCO, and Applicability, the term "1500 psig" is changed to "10.34 MPaG".	3	Inconsistent unit
13	B 3.3-237	B 3.3.8.2	In Background section, the term "135 psig" is changed to "0.93 MPaG".	3	Inconsistent unit

# Differences Between ABWR DCD and SSAR

## Chapter 17

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	17.0-1	17.0	Deleted "of this Standard Safety Analysis Report" from first sentence.	2e	NRC DCD Guidance
1a	17.3-6	17.3.11.1	Changed "8.6 MPa" to "8.6 MPaG"	1	NRC Comment

# Differences Between ABWR DCD and SSAR

## Chapter 18

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1/1a	18E-1	18E.1	Added italicized second paragraph and footnote. Added "Staff" after "NRC" in third line of second paragraph in Revision 1.	2a/3	NRC DCD Guidance/ Clarification
2	18E-1 thru 18E-5	18E.2 and 18E.3	Italicized entire sections and added footnote.	2a	NRC DCD Guidance
3	18E-7 thru 18E-28	Table 18E-1	Italicized entire table and added footnote	2a	NRC DCD Guidance
3a	18E-23	Table 18E-1	Added item xiii (NUREG-0800)	1	NRC Comment
4	18E-29 thru 18E-35	Attachment 1 to Table 18E-1	Italicized entire attachment and added footnote	2a	NRC DCD Guidance
5	18E-36 thru 18E-40	Table 18E-2 thru Table 18E-4	Italicized entire tables and added footnote	2a	NRC DCD Guidance
5a	18A.6-8 18F-5 18F-6 18F-7 18F-10 18F-12	Table 1 Table 18F	Changed "SGTS(A)" to "SGTS(B)", "SGTS(B)" to "SGTS(C)", "FCS(A)" to "FCS(B)", and "FCS(B)" to "FCS(C)"	3	Inconsistent with P&IDs

# Differences Between ABWR DCD and SSAR

## Chapter 19

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	19.1-2	19.1.2	Deleted numerical probabilities (4 places). Substituted word values (2 places).	5	Industry Initiative
2	19.2-1 and 19.2-2	19.2.2 and 19.2.3.1	Replaced this SSAR" with "Tier 2"	2e	NRC DCD Guidance
3	19.3-1	19.3.1.1	Removed "two events per year. This total consists of one planned reactor shutdown and one transient which results in reactor scram. The expected number of planned shutdowns is" from the second paragraph. Removed "are the same as those used in the GESSARII PRA (Reference 19.3.3) and" from the third paragraph	5	Industry Initiative
4	19.3-1	19.3.1.2	Deleted Subsection 19.3.1.2.1 through 19.3.1.2.3 and inserted statement "not part of DCD (refer to SSAR)".	5	Industry Initiative
5	19.3-12	19.3.1.5	Eliminated probability values in first paragraph.	5	Industry Initiative
6	19.3-18	19.3.2.6	Replaced "no more than 10%" with "a small percentage" in last paragraph.	5	Industry Initiative
7	19.3-20	19.3.2.12	Replaced "of 1.6E-7 per year" with "is extremely small".	5	Industry Initiative
8	19.3-23, 19.3-29 thru 19.3-31	Tables 19.3-1, 19.3-4 thru 19.3-6	Deleted frequencies and added footnote referring to SSAR.	5	Industry Initiative
9	19.3-33	Figure 19.3-2	Deleted body of figure and added footnote referring to SSAR.	5	Industry Initiative



# Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
10	19.4-3	19.4.2	Removed probabilities in three places and inserted word values in two places.	5	Industry Initiative
11	19.4-5	19.4.3.1.1	Removed "of the SSAR" two places.	2e	Industry Initiative
12	19.4-11	19.4.4	Removed last two sentences of second paragraph.	5	Industry Initiative
13	19.4-12	19.4.4	Eliminated two probability values in last paragraph.	5	Industry Initiative
14	19.4-12 and 19.4-13	19.4.5	Eliminated six probability values.	5	Industry Initiative
15	19.4-13	19.4-6	Replaced "10-7 per year" with "very small".	5	Industry Initiative
15a	19.5-1	19.5-1	Replaced "LPCI" with "RHR".	4	Industry Initiative
15b	19.5-3/4	19.5.3	Deleted "Examining the data in Table 19.3-6, the CCFP PI is 0.007. Therefore," from the fourth paragraph.		
16	19.6-1	19.6.2 and 19.6.3	Eliminated probability values in 5 places.	5	Industry Initiative
17	19.6-3	19.6.5	Eliminated probability values in 2 places in the next to last paragraph	5	Industry Initiative
18	19.6-4 thru 19.6-5	19.6.7, 19.6.8, 19.6.8.1, 19.6.8.3, and 19.6.9	Eliminated probability values in ten places.	5	Industry Initiative
19	19.7-1	19.7.3	Replaced two numerical probabilities with word values.	5	Industry Initiative

## Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
20	19.8-1	19.8	Replaced "the Certified Design Material (Section 14.3)" with "Tier 1". Inserted "important" in front of "features are addressed by ITAAC...". Modified last sentence of second paragraph.	2e	NRC DCD Guidance
21	19.8-2 thru 19.8-24	19.8	Eliminated all probability values	5	Industry Initiative
22	19.8-24	19.8.7	Changed "Section" to "Attachment" and deleted "of the ABWR SSAR" under vessel depressurization".	2e	NRC DCD Guidance
23/23a	19.8-35	Table 19.8-4	Change "(2.15.210)" to "(2.15.10" under blowout panels.	4/1	Correction/NRC Comment
24	19.8-41/42	Table 19.8-7	Changed "2% per 100°F" to "2% per 55.6°C"	4	Conversion
25	19.9-7	9.9.10	Replaced "(i.e., less than one foot) and also prevent accumulation in one area flowing to "with in" under item (3) (b).	4	Clarification
26	19.9-7	19.9.11(8)	Removed "with an unavailability of 1E-3 per demand or less".	5	Industry Initiative
27	19.10-3	19.10.5	Deleted second sentence.	5	Industry Initiative
28	19.10-3 and 19.10-4	19.10.7	Deleted "as 0.99" in second sentence, and deleted from third sentence on.	5	Industry Initiative
29	19.13-3	19.3.5	Deleted second sentence in first paragraph.	5	Industry Initiative
30	19A-1	19A.1	Replaced "SSAR" with "Tier 2" in 2 places.	2e	NRC DCD Guidance

# Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
31	19A-21 thru 19A-23/24	Table 19A-1	Changed "SSAR" to "Tier 2" in right hand column	2e	NRC DCD Guidance
32	19B-1 thru 19B-7	Safety Issues Index	Changed "SSAR" to "Tier 2" in right hand column.	2e	NRC DCD Guidance
33	19B-8, 19B-11, 19B-80, 19B-83	19B.2.2 and 19B.2.45	Replaced "SSAR" with "Tier 2"	2e	Incomplete units conversion
34	19B-77	19.B.2.43	Changed "2.3E+0.4 Kg (23 Tonnes)" to "2.26+05N".	3	NRC DCD Guidance
35	19B-119	19B.2.68	Removed "For the SSAR"	2e	NRC DCD Guidance
36	19C-1/2	19C	Replaced "Safeguards information provided under separate cover" with "This section is not part of the DCD (refer to SSAR)."	2d	NRC DCD Guidance
37	19D-1/2	19D	Removed entire Appendix 19D and replaced with "This section not part of the DCD (refer to SSAR)."	5	Industry Initiative
38	19E.1-1/2	19E.1	Deleted "primarily" in front of the word deterministic in the first line	5	Industry Initiative
39	19E.2-11 thru 19E.2-13	19E.2.1.2.3, 19E.2.1.2.3.1.1, 19E.2.1.2.3.1.2 19E.2.1.2.3.1.3	Modified statement pertaining to probabilities.	5	Industry Initiative
40	19E.2-15 19E.2-19	19E.2.1.2.3.2.1 19E.2.1.2.3.3	Replaced "LPCI" with "LPFL".	4	Correction

## Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
41	19E.2-19	19E.2.1.2.3.3(2)	Deleted "of the SSAR"	2e	NRC DCD Guidance
42	19.E.2-22	19E.2.1.2.3.3(10)	Added "exceed" in front of "0.46 MPa".	4	Correction
43	19E.2-25	19E.2.1.3.3	Modified second sentence to eliminate failure rate and melded the second and third sentence for clarification.	5	Industry Initiative
44	19E.2-32 thru 19E.2-36	19E.2.1.5.2.7, 19E.2.1.5.2.13, 19E.2.1.5.3.1, 19E.2.1.5.3.2, 19E.2.1.5.3.3	Eliminated probability values and replaced them with word values.	5	Industry Initiative
45	19E-36 19E-37 19E-44 19E-46 19E-48 19E-49	19E.2.2 19E.2.2.1 19E.2.2.2	Eliminated probability values and replaced them with word values.	5	Industry Initiative
46	19E-52 19E-54 19E-55 19E-56 19E-57 19E-60 19E-61	19E.2.2.3 19E.2.2.5 19E.2.2.6 19E.2.2.8	Replaced probability values with word values.	5	Industry Initiative
47	19E.2-73 19E.2-77	19E.2.3.3.1	Replaced numerical values of probability with word values	5	Industry Initiative

## Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
48	19E.2-82 19E.2-83 19E.2-84	19E.2.3.3.3(2)	Eliminated numerical probabilities in items (a), (b), (e), (f), (g), (h), (i), and (k).	5	Industry Initiative
49	19E.2-85	19E.2.3.3.3(4)	Modified first paragraph to eliminate probabilities.	5	Industry Initiative
50	19E.2-86 19E.2-87 19E.2-88 19E.2-89	19E.2.3.3.4	Modified items (1) and (2) to eliminate probabilities.	5	Industry Initiative
51	19E.2-101	19E.2.3.5.3.4	Deleted "the ABWR SSAR" from the first sentence.	2e	NRC DCD Guidance
52	19E.2-105 19E.2-107	19E.2.3.6.1 19E.2.3.6.4	Replaced numerical values of probability with word values.	5	Industry Initiative
53	19E.2-108	19E.2.4	Replaced "no" with "early" in second sentence.	4	Clarification
54	19E.2-128 19E.2-129 19E.2-131 19E.2-132 19E.2-137 19E.2-138 19E.2-140 19E.2-141	19E.2.6.5.2 19E.2.6.7 19E.2.6.9 19E.2.6.10 19E.2.7.2 19E.2.7.3 19E.2.8.1 19E.2.8.1.1	Replaced numerical values of probabilities with word values.	5	Industry Initiative



# Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
54 (cont)	19E.2-142 19E.2-143 19E.2-144 19E.2-146 19E.2-152 19E.2-153	19E.2.8.1.2 19E.2.8.1.4 19E.2.8.1.7 19E.2.8.2.7			
55	19E.2-174 19E.2-175 19E.2-184 19E.2-185	Table 19E.2-20 19E.2-21 19E.2-26 19E.2-27 19E.2-28	Eliminated probabilities and added note "probabilities not part of DCD (refer to SSAR)".	5	Industry Initiative
56	19E.3-259 thru 19E.2-274	Figures 19E.2-19a thru 19E.2-22	Removed information from body of figures and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
57	19E.3-1	19E.3.1.1	Replaced "98.6%" with "a very large percentage" in second paragraph.	5	Industry Initiative
58	19E.3-3	19E.3.2.2	Replaced "the SSAR" with "Tier 2" in first paragraph.	2e	NRC DCD Guidance
59	19E.3-6 19E.3-9 19E.3-10	Table 19E.3-1, 19E.3-6 and 19E.3-7	Removed probabilities and added note "Probabilities not part of DCD (refer to SSAR)".	2c	Industry Initiative
60	19E.3-11	Figure 19E.3-1	Removed body of figure and added note "Figure is not part of DCD (refer to SSAR)".	5	Industry Initiative



# Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
61	19EA-5 19EA-7 19EA-9 19EA-10 19EA-11	19EA.2.1.3 19EA.2.1.5 19EA.2.1.6	Removed numerical probabilities and, where applicable, replaced with word values.	5	Industry Initiative
62	19EA-24 19EA-27 19EA-28	19EA.3.5.2 19EA-4.1 19EA-4.2 19EA-4.2.1	Removed numerical probabilities and, where applicable, replaced with word values.	5	Industry Initiative
63	19EA-32 thru 19EA-37, 19EA-39 19EA-40 19EA-45 19EA-46	Figures 19EA-1 thru 19EA-6, 19EA-8 and 19EA-9 19EA-14 19EA-15	Deleted body of figures and added note "Figures not part of DCD (refer to SSAR)". (Included deleting body of Figure 19EA-2 in Revision 1).	5/1	Industry Initiative/NRC DCD Guidance
64	19EB-2 19EB-3	19EB.1.1	Replaced numerical probabilities with word values.	5	Industry Initiative
65	19EC-4	19EC.2.1.1	Removed probabilities and added note "Probabilities not part of DCD (refer to SSAR)".	5	Industry Initiative

## Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
66	19EC-5 thru 19EC-14	19EC.2.1.2 19EC.2.1.3 19EC.2.1.5 19EC.2.1.6 19EC.2.1.7 19EC.2.2.2 19EC.2.2.3 19EC.2.2.4 19EC.2.2.5	Removed numerical probabilities and, where applicable, replaced with word values.	5	Industry Initiative
67	19EC-29 19EC-30 19EC-36	Figures 19EC-1 19EC-2 18EC-8	Removed body of figures and added note "Probabilities not part of DCD (refer to SSAR)".	5	Industry Initiative
68	18EE-3 19EE-5 19EE-6	19EE.2.1 19EE.2.2 19EE.2.3	Removed vacuum breaker related probabilities	5	Industry Initiative
69	19EE-11 19EE-12 19EE-13	19EE.4.1 19EE.4.4 19EE.5	Replaced numerical probabilities with word values.	5	Industry Initiative
70	19EE-17	Table 19EE-2	Removed probabilities and added note "Probabilities not part of DCD (refer to SSAR)".	5	Industry Initiative
71	19EE-16 19EE-17/18	Figures 19EE-1 and 19EE-2	Removed body of figures and added note "Probabilities not part of DCD (Refer to SSAR)".	5	Industry Initiative
72	19FA-1/2	19FA	Removed attachment 19FA and added note "This attachment is not part of the DCD (refer to SSAR)."	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
73	19H-14	19H.3.3	Deleted last sentence of first paragraph.	5	Industry Initiative
74	19H-15	19H.4.2	Deleted last sentence of last paragraph and last sentence of fourth to last paragraph.	5	Industry Initiative
75	19H-17	19H.5.1	Changed "the SSAR" to "Tier 2" and "ITAAC" to "Tier 1".	2e	Industry Initiative
76	19H-23	Table 19H-1	Changed "probability" to "fragility" in footnote 1 and modified footnote 5 eliminate specific values.	5	Industry Initiative
77	19H-24 thru 19H-32	Table 19H-2 thru 19H-10	Removed fragilities and added note "Fragility not part of DCD. Refer to SSAR".	5	Industry Initiative
78	19I-2 19I-3 19I-4 19I-5 19I-8 19I-9 19I-10	19I.2 19I.3.2 19I.3.3 19I.4 19I.5.2 19I.6 19I.7	Removed fragilities and corresponding probabilities.	5	Industry Initiative
79	19I-11 19I-12 19I-13	Table 19I-1	Removed fragilities and HCLPF values from table and extended note to read "Fragilities and HCLPF values are not part of DCD (refer to SSAR)".	5	Industry Initiative
80	19I-14	Table 19I-2	Remove body of tables and added note "This table is not part of DCD (refer to SSAR)".	5	Industry Initiative

## Differences Between ABWR DCD and SSAR

## Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
81	19I-15	Table 19I-3	Fragilities and HCLPF values deleted from table and added note "Fragilities and HCLPF values are not part of DCD (refer to SSAR)."	5	Industry Initiative
82	19I-16	Table 19I-4	Body of table deleted and added note "This table is not part of DCD (refer to SSAR)".	5	Industry Initiative
83	19I-17/18	Figures 19I-1 thru 19I-25	Deleted figures and added note "Figures 19I-1 through 19I-25 are not part of DCD (refer to SSAR)".	5	Industry Initiative
84	19K-2 19K-5 19K-8 19K-12 19K-17	19K.3 19K.5 19K.11.1 19K.11.5 19K.11.14	Replaced numerical probability values with word values.	5	Industry Initiative
85	19K-19 thru 19K-21	Tables 19K-1, 19K-2 and 19K-3	Removed numerical values from tables and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
86	19K-22 thru 19K-31/32	Table 19K-4	Removed numerical values in right hand column and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
87	19L-1	19L.3	Replaced "the ABWR Safety Analysis Report (SSAR)" with "Tier 2".	2e	Industry Initiative
88	19L-2	189L.3	Replaced numerical probability value with word value.	5	Industry Initiative
89	19L-3	19L.4.2	Removed "SSAR".	2e	NRC DCD Guidance
90	19L-8	19L.5.3	Removed last sentence from item (3).	4	Clarification/correction

Differences Between ABWR DCD and SSAR

Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
91	19L-8	19L.5.3	Removed probability statement in last paragraph.	5	Industry Initiative
92	19L-8	15L.5.4	Changed "third" to "second" in first item (1).	4	Correction
93	19L-20	19L.7.3	Changed "one" to "two" diesel generations at end of first paragraph and deleted "one" under item (b).	4	Correction
94	19L-21	19L.7.3	Deleted probabilities in second paragraphs.	5	Industry Initiative
95	19L-21/22	19L.8.2 19L.8.3	Deleted "SSAR".	2e	NRC DCD Guidance
96	19L-23 19L-24	19L.8.4 19L.9.2	Replaced numerical values of probabilities with word values.	5	Industry Initiative
97	19M-1 19M-2 19M-3 19M-7 19M-8	19M.1 19M.3 19M.4.1.1 19M.4.2.5	Replaced numerical probability values with word values.	5	Industry Initiative
97a	19M-1	19M.1	Changed "small margin" to "small criterion" in Revision 1	1	NRC Comment
98	19M-9 19M-10	19M.5.2	Removed frequencies and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
99	19M-10 19M-11 19M-12	19M.6.2	Replaced numerical values of probabilities with word values.	5	Industry Initiative

Differences Between ABWR DCD and SSAR

Chapter 19 (Continued)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
100	19M-13 19M-33 thru 19M-35	Table 19M-1 19M-11 19M-12 19M-13 19M-14	Removed frequencies and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
101	19M-16 thru 19M-33	Table 19M-3 thru Table 19M-5	Deleted body of tables and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
102	19M-38 thru 19M-48	Figure 19M-3 thru 19M-13	Deleted body of figures and added note "Not a part of DCD (refer to SSAR)".	5	Industry Initiative
103	19N-1 19N-12 19N-13	19N.1 19N.5.1	Removed numerical probabilities.	5	Industry Initiative
104	19N-15 19N-17 19N-18	19N.5.4.2 19N.6 19N.7	Replaced numerical probabilities with word values.	5	Industry Initiative
105/105a	19P-1/2	19P	Removed Appendix 19P in its entirety and added note "This section is not part of the DCD (Refer to Attachment A of the Technical Support Document for the ABWR) . Attachment A of the Technical Support Document for the ABWR is not incorporated by reference in the DCD."	5	Industry Initiative
106	19Q-2	19Q.2	In last paragraph replaced "the SSAR" with "Tier 2" and replaced "the Inspections, Test, Analysis, and Acceptance Criteria (ITAAC Requirement)" with "Tier 1".	2e	NRC DCD Guidance



# Differences Between ABWR DCD and SSAR

## Chapter 19 (Cont.)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
107	19Q-3 19Q-4	19Q.3	Replaced numerical probability values with word values.	5	Industry Initiative
108	19Q-21 19Q-23 19Q-25 19Q-26 19Q-31 19Q-33	19Q.6 19Q.7.2 19Q.7.3 19Q.7.5 19Q.7.9.1 19Q.7.9.3 19Q.7.9.4 19Q.7.9.5	Replaced numerical probability values with word values.	5	Industry Initiative
109	19Q-45	19Q.12.4	Removed unavailability values from table and added note "Not a part of DCD (refer to SSAR)."	5	Industry Initiative
110	19Q-57 thru 19Q-75/76	Figures 19Q-1 thru 19Q-19	Removed all figures and replaced with note "Figures 19Q-1 through 19Q-19 are not part of DCD (refer to SSAR)".	5	Industry Initiative
111	19QA-1 thru 19QA-412	Figures 19QA-1a thru 19QA-20 ck	Removed all figures and replaced with note "Figures 19A-1a through 19QA-20 ck are not part of DCD (refer to SSAR)".	5	Industry Initiative
112	19QB-5 19QB-6	Tables 19QB-3 19QB-4	Removed probabilities and added note "Not part of DCD (refer to SSAR)".	5	Industry Initiative
113	19QC-29	Table 19QC-2	Removed "ABWR" in fifth column under Susquehanna 1 entry.	4	Correction
114	19R-1 19R-2 19R-3	19R.1	Replaced numerical values of probability with word values.	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 19 (Cont.)

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
115	19R-4 19R-24	19R4.4 19.R.5.4.2	Replaced "SSAR" with "Tier 2".	5	Industry Initiative
116	19R-9	19R.4.3	Replaced "2 hours" with "several hours" in fourth paragraph.	5	Industry Initiative
117	19R-21 19R-22 19R-25 19R-27 19R-28 19R-29 19R-30 19R-31	19R.5.3 19R.5.4.1 19R.5.4.2 19R.5.5.1 19R.5.5.2 19R.6.1 19R.6.4 19R.6.6	Replaced numerical probabilities with word values.	5	Industry Initiative
118	19R-31	19R.6.5	Deleted reliability goals and added note "Not a part of DCD (refer to SSAR)".	5	Industry Initiative
118a	19R-33	Table 19R-1	Changed "(200,00 gal)" to "(200,000 gal)" under feedwater.	1	NRC Comment
119	19R-35 thru 19R-37	Tables 19R-3 thru 19R-6	Frequency/probability deleted and added note "Not a part of DCD (refer to SSAR)".	5	Industry Initiative
120	19R-47 thru 19R-53/54	Figures 19R-7 thru 19R-13	Removed body of figures and added note "Note a part of DCD (refer to SSAR)".	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 20

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	20.1-1	20.0	Added new paragraph on relationship of SSAR and Tier 2 "names" in Chapter 20.	2e	NRC DCD Guidance
2	20.3.8-37	Response 420.69	Italicized item (1) and added footnote.	2a	NRC DCD Guidance
3	20.3.8-51 and 20.3.8-52	Response 420.92	Italicized third and last paragraphs of response and added footnotes.	2a	NRC DCD Guidance
4	20.3.12-5	Response 725.66	Removed event/frequency table from end of response.	5	Industry Initiative
5	20.3.15-37 thru 20.3.15-39	Responses 910.17 thru 910.15	Changed notation "Response to this question is provided under separate cover" to "Safeguards Information not part of DCD (see SSAR Subsection 20.3.15)".	2d	NRC DCD Guidance
6	20.3.9-1 thru 20.3.9-15/16	Responses 725.1 thru 725.61	Deleted responses and added "Response to Chapter 19" questions not part of DCD (see SSAR Subsection 20.3.9)".	5	Industry Initiative
7	20.3.11-10 thru 20.3.11-11/12	Responses 420.131 thru 420.135	Deleted responses and added "Response to Chapter 19 questions not part of DCD" (See SSAR Subsystem 20.3.11).	5	Industry Initiative
8	20.3.12-1 thru 20.3.12-9/10	Responses 725.62 thru 725.94	Deleted responses and added "Response to Chapter 19 questions not part of DCD" (see SSAR Subsection 20.3.12).	5	Industry Initiative
9	20.3.14-29 thru 20.3.14-32	Responses 621.1 through 621.11	Deleted responses and added "Response to Chapter 19 questions not part of DCD" (see SSAR Subsection 20.3.14).	5	Industry Initiative

# Differences Between ABWR DCD and SSAR

## Chapter 21

Item No.	DCD Pages	DCD Section	Difference	Cat.	Reason
1	21-35 and 21-26	Figures 1.2-25, 1.2-26	Changed figure to show 3 TCW heat exchangers and pumps.	3	Figure 1.2-25 inconsistent with text and Figure 9.2-6a.
2	21-103 and 21-127	Figures 5.4-10 (Sheet 1) and 6.3-7 (Sheet 1)	Italicized note 32 and 29, respectively and added footnotes.	2a	NRC DCD Guidance
3	21-516	Figure 9.2-1 Sheet 9	Removed RCW from lower right-hand of figure.	3	Conflicting figures show TGSC cooled by both RWC system and condensate feedwater system. Traditional is with condensate feedwater system and agrees with URD requirements.
3a	21-543 21-544 21-545	Figure 9.4-4 Sheets 1,2 and 3	Replaced "Essential" with "Safety-Related" in title.	1	NRC Comment

# ATTACHMENT 4

## ABWR Design Control Document Revision 1- Page Change Instruction

The following pages have been changed, please make the changes in your copy of the Design Control Document. Pages are listed below as page pairs (front and back), except Chapter 16, which is single-sided pages only.

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<u>Chapter 20</u>			
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The following chapter 20 pages are being reissued as Rev. 0 because of an assembly error in the previous revision.

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<u>Chapter 21 Drawings</u>			
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Replace the TOC page in volumes 26 through 31

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