

**ESBWR DCD Tier 2 Sections 3G – 3L**  
**26A6642AN Revision 5 to Revision 6 Change List**

<b>Item</b>	<b>Location</b>	<b>Description of Change</b>
1.	Entire Chapter	Global chapter editorial changes to correct misspelling and grammar, spell out or integrate acronyms where appropriate, and update references as needed and where required.
2.	S3G, entire section	Designated section as Tier 2* information in response to RAI 3.8-128. Unit conversions added to tables as applicable. “Note: All dimensions are in mm unless otherwise noted” added to figures as applicable.
3.	S3G, 1 <sup>st</sup> para., last sentence	Sentence revised in response to RAI 3.8-41 S06.
4.	S3G, 1 <sup>st</sup> para., new last sent.	Added sentence pointing to new S3G.6 for critical dimensions and acceptable tolerances. Sentence also supports response to RAI 3.8-125 S01.
5.	S3G.1.3.1.1, 1 <sup>st</sup> para., 1 <sup>st</sup> bullet	Bullet revised in response to RAI 3.8-121 S02.
6.	S3G.1.4.1, 1 <sup>st</sup> para., new 6 <sup>th</sup> through 8 <sup>th</sup> sentences	Sentences added in response to RAI 3.8-41 S06.
7.	S3G.1.5.2.1.2, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Sentence deleted in response to RAI 2.3-4 S05.
8.	S3G.1.5.2.1.6, new last para.	Paragraph added in response to RAI 6.2-180 S01.
9.	S3G.1.5.2.1.8, 1 <sup>st</sup> para., new 2 <sup>nd</sup> sent.	Sentence added in response to RAI 3.8-41 S07.
10.	S3G.1.5.2.1.9, 1 <sup>st</sup> para., new 2 <sup>nd</sup> sent.	Sentence added in response to RAI 3.8-41 S07.
11.	S3G.1.5.2.1.13, new 2 <sup>nd</sup> para.	New second paragraph added in response to RAI 3.8-41 S05.
12.	S3G.1.5.2.1.13, new 2 <sup>nd</sup> para., 1 <sup>st</sup> sent.	Added “and the RPV pedestal” in response to RAI 3.8-41 S07.
13.	S3G.1.5.2.1.13, new 2 <sup>nd</sup> para., last 4 sent.	Last four sentences added in response to RAI 3.8-41 S07.
14.	S3G.1.5.2.3.3, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Sentence deleted in response to RAI 3.8-121 S02.

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15.	S3G.1.5.4.1.2, 1 <sup>st</sup> para.	Paragraph revised in response to RAI 6.2-180 S01 (R1).
16.	S3G.1.5.4.3.3, 1 <sup>st</sup> and 2 <sup>nd</sup> para.	Paragraphs revised in response to RAI 3.8-121 S02. Second paragraph further revised in response to RAI 6.2-180 S01 (R1).
17.	S3G.1.5.4.3.4	Paragraph revised in response to RAI 6.2-180 S01 (R1).
18.	S3G.1.5.5, 2 <sup>nd</sup> para., new 3 <sup>rd</sup> sent.	Sentence added in response to RAI 3.8-96 S04.
19.	S3G.1.5.5, 2 <sup>nd</sup> para., old 3 <sup>rd</sup> sentence	Sentence deleted in response to RAI 3.8-96 S03.
20.	S3G.1.5.5.3, 2 <sup>nd</sup> para.	Paragraph revised in response to RAI 3.8-93 S03.
21.	T3G.1-2, 5 <sup>th</sup> row	Row revised in response to RAI 2.3-4 S05.
22.	T3G.1-2, last row	Deleted entry in response to RAI 2.3-4 S06.
23.	T3G.1-2, Note **	Note revised in response to RAI 2.3-4 S05.
24.	T3G.1-2, Note**	Note, including text previously added for RAI 2.3-4 S05, revised in response to RAI 2.3-4 S06.
25.	T3G.1-4	Revised buffer pool gate weight and added remarks and footnote in response to RAI 3.8-41 S06.
26.	T3G.1-6	Table revised in response to RAI 6.2-180 S01 (R1).
27.	T3G.1-12	Table footnote added in response to RAI 3.8-120 S01. Top Slab information added in response to RAI 6.2-180 S01 (R1).
28.	T3G.1-13 to -15, -18 to -21, -24, -26, -27, -30, -32, -33, -47 & -49	Tables revised in response to RAI 6.2-180 S01 (R1).
29.	T3G.1-50	Reinforcement revised in response to RAI 3.8-121 S02. Table further revised in response to RAI 6.2-180 S01 (R1).

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30.	T3G.1-51 to T3G.1-56	Tables revised in response to RAI 3.8-121 S02. Table 3G.1-56 markups attached to RAI 3.8-121 S02 response contain inadvertent changes to the results for all elements in sections 18, 19 and 20 and for element 123062 in section 29. These element results should not have been changed from DCD Revision 5. Tables 3G.1-53, -55 & -56 further revised in response to RAI 6.2-180 S01 (R1).
31.	T3G.1-57	Revised the actual sliding factor of safety for the “D+H+E” load combination in response to RAI 3.8-96 S03. Actual sliding factor of safety further revised in response to RAI 3.8-96 S04.
32.	T3G.1-58	Table title revised and Bearing Pressure values revised in response to RAI 3.8-94 S03. Bearing pressure values further revised in response to RAI 3.8-94 S04.
33.	T3G.1-58, Title	Changed “Stress” to “Pressure” in response to RAI 3.8-94 S04.
34.	F3G.1-1	Added hidden line for shear keys in response to RAI 3.8-96 S04.
35.	F3G.1-2	Figure revised as a result of design change.
36.	F3G.1-4, -5, and -6	Revised pool gate wall thickness in response to RAI 3.8-41 S06. Figure 3G.1-4 further revised in response to RAI 6.2-180 S01 (R1).
37.	F3G.1-6 and -7	Added shear keys in response to RAI 3.8-96 S04. Figure 3G.1-7 further revised in response to RAI 6.2-180 S01 (R1).
38.	F3G.1-42	Figure revised in response to RAI 6.2-180 S01 (R1).
39.	F3G.1-44 and F3G.1-46	Figures revised in response to RAI 3.8-41 S06. Figures further revised in response to RAI 6.2-180 S01 (R1).
40.	F3G.1-47	Figure revised in response to RAI 3.8-121 S02. Figure further revised in response to RAI 6.2-180 S01 (R1).
41.	F3G.1-57	Revised vent wall spillover hole elevation in response to RAI 21.6-103.
42.	F3G.1-65	Figure deleted in response to RAI 3.8-96 S03.
43.	F3G.1-69	Figure revised in response to RAI 6.2-180 S01 (R1).

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44.	S3G.2.5.2.1.2, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Sentence deleted in response to RAI 2.3-4 S05.
45.	S3G.2.5.5, 2 <sup>nd</sup> para., 3 <sup>rd</sup> sentence	Sentence deleted in response to RAI 3.8-96 S03.
46.	T3G.2-26	Revised the actual sliding factor of safety for the “D+H+E” load combination in response to RAI 3.8-96 S03. Actual sliding factor of safety further revised in response to RAI 3.8-96 S04.
47.	T3G.2-27	Table title revised and Bearing Pressure values revised in response to RAI 3.8-94 S03. Bearing pressure values further revised in response to RAI 3.8-94 S04.
48.	T3G.2-27, Title	Changed “Stress” to “Pressure” in response to RAI 3.8-94 S04.
49.	F3G.2-17	Figure deleted in response to RAI 3.8-96 S03.
50.	S3G.3.5.2.1, 1 <sup>st</sup> para., new 3 <sup>rd</sup> sent.	Sentence added in response to RAI 3.8-41 S07.
51.	S3G.3.5.2.1.2, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Sentence deleted in response to RAI 2.3-4 S05.
52.	T3G.3-3	Footnote added in response to RAI 3.8-113.
53.	S3G.4.5.2.1.2, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Sentence deleted in response to RAI 2.3-4 S05.
54.	S3G.4.5.4	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.
55.	S3G.4.5.4.1	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.
56.	S3G.4.5.4.2	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.
57.	S3G.4.5.4.3	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.

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58.	S3G.4.5.4.4	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.
59.	S3G.4.5.5, 2 <sup>nd</sup> para., last sentence	Sentence deleted in response to RAI 3.8-96 S03.
60.	T3G.4-10, Heading	Corrected typographical errors.
61.	T3G.4-11 thru T3G.4-21	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC.
62.	T3G.4-22	Revised the actual sliding factor of safety for the “D+H+E” load combination in response to RAI 3.8-96 S03.
63.	T3G.4-23	Table title revised, added $V_s$ values and revised Bearing Pressure values in response to RAI 3.8-94 S03.
64.	T3G.4-23, Title	Changed “Stress” to “Pressure” in response to RAI 3.8-94 S04. Figure further revised in response to RAI 3.8-96 S04.
65.	F3G.4-1	Incorporated the effects of hydrodynamic pressures induced by the vertical component of the SSE on the firewater storage tank, which were inadvertently omitted in the original stress analysis for the FWSC. Modified shear keys in response to RAI 3.8-96 S04.
66.	F3G.4-11	Figure deleted in response to RAI 3.8-96 S03.
67.	S3G.5, New Section, Tables and Figures	Added Section, Tables and Figures in response to RAI 6.2-180 S01. S3G.5 updated in response to RAI 6.2-180 S01 (R1).
68.	S3G.6, New Section, Tables and Figures	Added to support critical dimensions and tolerances in Tier 1 and responses to RAIs 3.8-125 S01 and 6.2-180 S01 (R1).
69.	S3H.2.1, 2 <sup>nd</sup> para.	Revised to be consistent with response to RAI 3.11-23. This change was superseded for clarification.
70.	S3H.2.1, 2 <sup>nd</sup> para., last sentence	Deleted redundant sentence that references undefined zones for clarification.
71.	S3H.3.2.1, bullets	Revised to be consistent with latest analysis.

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72.	S3H.3.2.1, Results, 4 <sup>th</sup> para.	Revised to be consistent with latest analysis.
73.	T3H-2 1 <sup>st</sup> Col	Removed undefined zone numbers for clarity
74.	T3H-3 2 <sup>nd</sup> Col	Removed unnecessary units from “Pressure” column heading for clarity
75.	T3H-4	Revised to be consistent with Table 9.4-1.
76.	T3H-4 2 <sup>nd</sup> Col	Removed unnecessary units from “Pressure” column heading for clarity
77.	T3H-4 2 <sup>nd</sup> Col	Added note to “Pressure” column heading for clarity
78.	T3H-5 1 <sup>st</sup> Col	Removed undefined zone numbers for clarity
79.	T3H-5 “Beta” Cols	Footnote (4) applied to “Beta” columns for clarity instead of only one occurrence at “Negl.”
80.	T3H-5 Note 2	Footnote updated to include integrated dose for clarity
81.	T3H-8	Revised to be consistent with response to RAI 6.2-180 S01.
82.	T3H-8 1 <sup>st</sup> Col	Removed undefined zone numbers for clarity
83.	T3H-10	Revised to be consistent with latest analysis.
84.	T3H-10 3 <sup>rd</sup> & 4 <sup>th</sup> Cols	Added “Positive” to CRHA pressure for clarity
85.	T3H-11	Table revised in response to RAI 3.11-23.
86.	T3H-11 1 <sup>st</sup> Col	Removed undefined zone numbers for clarity
87.	T3H-12	Table revised in response to RAI 6.4-21 and to be consistent with latest analysis.
88.	T3H-12 1 <sup>st</sup> Col	Added footnote to reference figures for room locations for consistency
89.	T3H-12, “Rooms” column, CRHA row, Remarks column	Remarks updated in reponse to RAI 6.4-21.
90.	T3H-14	Table revised in response to RAI 6.4-21 and to be consistent with latest analysis.
91.	T3H-14 2 <sup>nd</sup> & 3 <sup>rd</sup> Cols	“Chapter 6” changed to “Section 6.2” for clarity
92.	T3H-14, 7 <sup>th</sup> row	Analytical and Design values updated in response to RAI 6.4-21.
93.	T3H-15	Table revised to be consistent with latest analysis.

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94.	T3H-15 1 <sup>st</sup> Col	Added footnote to reference figures for room locations for consistency
95.	T3H-15 3 <sup>rd</sup> & 4 <sup>th</sup> Cols	“Chapter 6” changed to “Section 6.2” for clarity
96.	T3H-15, 5 <sup>th</sup> Col	Column heading revised for clarity per NRC request (phone call 08/19/2009).
97.	T3H-15, 5 <sup>th</sup> row from bottom	Updated 72 hours and 168 hours column entries in response to RAI 6.4-21.
98.	F3H-1	“Main Control Room” title corrected in figure legend
99.	F3H-2	Figure revised to be consistent with latest analysis.
100.	F3H-2	Figure revised in response to RAI 6.4-21.
101.	F3H-2	Defined dotted line for clarity – “Max Allowable Temp”
102.	F3H-3	Figure added to be consistent with latest analysis.
103.	S3I.1, item (c), 3 <sup>rd</sup> para.	Changed “Paragraph 4.4.2.5.3.6” to “Paragraph 4.4.2.5.3.b” for accuracy.
104.	S3I.2, item (a), 2 <sup>nd</sup> para.	Changed “Paragraph 4.4.2.5.1(a)” to “Paragraph 4.4.2.5.2(b)” for accuracy.
105.	S3I.6	Changed “Paragraph 4.4.2.5.7” to “Paragraph 4.4.2.5.8” for accuracy.
106.	S3I.10, 1 <sup>st</sup> para., last sentence	Changed “Paragraph 4.4.2.a(6)” to “Paragraph 4.2.2.a(6)” for accuracy.
107.	S3K – General	Revised to remove references to “upgrading” piping system design since ISLOCA issues are addressed in the initial plant design.
108.	S3K.4	Revised wording for clarification.
109.	S3K.7, 1 <sup>st</sup> bullet	Deleted second and third sentences because details such as pressure class are not shown on the system drawings in the DCD.
110.	S3K.10	Reworded last two sentences because details such as pressure class are not shown on the system drawings in the DCD.
111.	S3KA.1.1, 1st para	Revised to eliminate line sizes, which are beyond the level of detail of the DCD.
112.	S3KA.1.3, 1st paragraph	Added US customary units in parentheses.

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113.	S3K.A.2.1, 2 <sup>nd</sup> sentence	Revised to eliminate line sizes, which are beyond the level of detail of the DCD.
114.	S3KA.3.3	Added “URS” before “pressure” for clarification.
115.	S3KA.4.1, LPCI Connections, last sentence	Replaced “Feedwater line” with “two.” There are two check valves that prevent backflow; however, only one is in the Feedwater line. The other check valve is in the branch line.
116.	S3K.A.4.2, 1 <sup>st</sup> and 4 <sup>th</sup> bullets	Deleted reference to valve and operator types, which are beyond the level of detail of the DCD.
117.	S3L.3.3, 2 <sup>nd</sup> para., 1 <sup>st</sup> sentence	Added US customary units in parentheses.
118.	S3L.4.1, last para, 2 <sup>nd</sup> to last sentence	Revised in response to RAI 3.9-134 S02.
119.	S3L.4.4, 3 <sup>rd</sup> and 4 <sup>th</sup> para	Revised in response to RAI 3.9-246 S01.
120.	S3L.4.6, 1 <sup>st</sup> para., 1 <sup>st</sup> bullet	Bullet revised in response to RAI 3.9-137.
121.	S3L.4.6, 2 <sup>nd</sup> para., 1 <sup>st</sup> sentence	Sentence revised in response to RAI 3.9-137.
122.	S3L.4.6, 3 <sup>rd</sup> para., 3 <sup>rd</sup> to 4 <sup>th</sup> sentences	Sentences revised in response to RAI 3.9-137.
123.	S3L.4.6, 4 <sup>th</sup> para., 1 <sup>st</sup> sentence	Sentence revised in response to RAI 3.9-137.
124.	S3L.4.6, 5 <sup>th</sup> para., 1 <sup>st</sup> and 4 <sup>th</sup> sentences	Sentences revised in response to RAI 3.9-137.
125.	S3L.4.6, 6 <sup>th</sup> para., new last sentence	Added in response to rAIs 3.9-138 S02 and 3.9-144 S02.
126.	S3L.4.6, 7 <sup>th</sup> para.	Added in response to RAIs 3.9-138 S02 and 3.9-144 S02.
127.	S3L.4.6, 11 <sup>th</sup> para.	Added last eight sentences in response to RAIs 3.9-138 S02 and 3.9-144 S02.
128.	S3L.4.6, new 12 <sup>th</sup> para., last sentence	Changed “non-prototype ESBWRs” to “follow-on ESBWR units” and “prototype ESBWR” to “initial steam dryer” for clarification.
129.	S3L.4.6, new 12 <sup>th</sup> para.	Added paragraph in response to RAI 3.9-64 S01.



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130.	S3L.5.4.1, 2 <sup>nd</sup> para, 3 <sup>rd</sup> sentence	Changed “four” to “six” and added “0 - 80 Hz” and “80 - 200 Hz” for completeness and consistency with Table 3L-5.
131.	S3L.5.5.3	Corrected Young’s modulus from 178 MPa to $1.78 \times 10^5$ MPa.
132.	S3L, 8 <sup>th</sup> para., 1 <sup>st</sup> sentence	Added “and angularity” for clarification, in response to an NRC audit comment.
133.	S3L.6, Reference 3L-9	Added reference in response to RAIs 138 S02 and 3.9-144 S02.
134.	T3L-1	Added US Customary units to table.
135.	T3L-5	Changed Frequency Bandwidth for Steam Dryer Skirt from 0-100 Hz to 0-200 Hz in response to RAI 3.9-133 S02.