

DCD Tier 2 Chapter 3 Revision 3 to Revision 4 Change List
(Appendices 3G – 3L)

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	Acronym List	Updated to list only the acronyms used in Appendices 3G thru 3L.
2.	Generic	Spelled out acronyms where appropriate.

Tier 2 Appendix 3G Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3G, General	Replaced “Section” with “Subsection” and vice versa where appropriate.
2.	S3G, 1 st sent.	Replaced “...and Fuel Building...” with “...Fuel Building and Fire Water Service Complex”...
3.	S3G, last sent.	Rewritten for clarity.
4.	S3G.1.4.2, 1 st para., 1 st bullet	Added “(1000 ft/s)”.
5.	S3G.1.4.2, 1 st para., 2 nd bullet	Replaced “(2.00 t/m ³)” with “(125 lbf/ft ³)”.
6.	S3G.1.4.2, 1 st para., 3 rd bullet	Replaced “1.835x10 ⁴ t/m ² ” with “26110 psi”.
7.	S3G.1.5.2.1.1, 1 st para, 1 st bullet	Added “(150 lbf/ft ³)”.
8.	S3G.1.5.2.1.1, 1 st para., 2 nd bullet	Added “(143 lbf/ft ³)”.
9.	S3G.1.5.2.1.1, 1 st para., 3 rd bullet	Added “(490 lbf/ft ³)”.
10.	S3G.1.5.2.1.1, 3 rd para.	Added “and roof” after “...RB floor”.
11.	S3G.1.5.2.1.6, last para.	Added “(60°F)” after “15.5°C”.
12.	S3G.1.5.3, 1 st sent.	Editorial change: replaced “...foundations shall have...” with “...foundation has...”
13.	S3G.1.5.4.1.1, 1 st para., 2 nd thru last sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
14.	S3G.1.5.4.1.1, 2 nd para., 1 st sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
15.	S3G.1.5.4.1.1, 3 rd para., 1 st sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
16.	S3G.1.5.4.1.1, 4 th para., 2 nd sent.	Replaced “0.0044” with “0.0045” due to reanalysis reflecting the change of hydrodynamic load.
17.	S3G.1.5.4.1.1, last para., last sent.	Added U.S. customary units.
18.	S3G.1.5.4.1.2, 1 st para., 3 rd thru last sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions.
19.	S3G.1.5.4.1.2, 2 nd para., 1 st sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions.
20.	S3G.1.5.4.1.3, 1 st para., 3 rd sent.	Revised the maximum stresses evaluated by reanalysis incorporating updated design conditions.
21.	S3G.1.5.4.1.4, 2 nd para., 1 st sent.	Replaced “798 MPa” with “797 MPa” due to reanalysis reflecting the change of hydrodynamic load.
22.	S3G.1.5.4.1.4, 2 nd para., Item (1)	Replaced “394 MPa (57.1 ksi)” with “393 MPa (57.0 ksi)” due to reanalysis reflecting the change of hydrodynamic load.
23.	S3G.1.5.4.1.4, 2 nd para., Item (2), 3 rd sent.	Replaced “156 MPa (22.6 ksi) from Table 5-2” with “152 MPa (22.0 ksi) from Table 2A of ASME B & PV Code, Sec II, Part D” for correction.
24.	S3G.1.5.4.1.4, 2 nd para., Item (2), 4 th sent.	Replaced “798 MPa” with “797 MPa” due to reanalysis reflecting the change of hydrodynamic load.
25.	S3G.1.5.4.1.4, 2 nd para., Item (3), S _a formula	Replaced “1995 MPa (290 ksi)” with “1993 MPa (289 ksi)” due to reanalysis reflecting the change of hydrodynamic load.
26.	S3G.1.5.4.1.4, 2 nd para., Item (3), E ₂ description	Replaced “340°F (170°C)” with “340°F (171°C)” for correction.
27.	S3G.1.5.4.1.4, 2 nd para., Item (3), S _a ’ formula	Replaced “2138 MPa (310 ksi)” with “2131 MPa (309 ksi)” due to reanalysis reflecting the change of hydrodynamic load.
28.	S3G.1.5.4.1.4, 2 nd para., Last para. of Item (3)	Replaced “2138 MPa (310 ksi)” with “2131 MPa (309 ksi)” and “37” with “38” due to reanalysis reflecting the change of hydrodynamic load.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
29.	S3G.1.5.4.1.4, 2 nd para., Item (6), 1 st sent.	Replaced “SA-516 Gr. 483 MPa (70 ksi)” with “SA-516 Gr. 70” for correction.
30.	S3G.1.5.4.2.1, 2 nd para., 2 nd & 3 rd sent.	Editorial changes: replaced “have been” with “are”.
31.	S3G.1.5.4.2.2, 2 nd para., 2 nd & 3 rd sent.	Editorial changes: replaced “have been” with “are”.
32.	S3G.1.5.4.2.4, 2 nd para., 2 nd & 3 rd sent.	Editorial changes: replaced “have been” with “are”.
33.	S3G.1.5.4.2.5, 2 nd para., 1 st sent.	Editorial change: replaced “have been” with “are”.
34.	S3G.1.5.4.3.1	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions.
35.	S3G.1.5.4.3.2, 2 nd thru last sent.	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions.
36.	S3G.1.5.4.3.3, 2 nd para.	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions.
37.	S3G.1.5.4.3.4	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions.
38.	S3G.1.5.5	Added the following sentence after the 2 nd paragraph: “Maximum soil bearing stress is found to be 699 kPa (14600 psf) due to dead plus live loads.” This sentence was accidentally deleted in DCD Tier 2 Appendix 3G Revision 3.
39.	S3G.1.5.5.2, 2 nd sent.	Editorial change.
40.	S3G.1.5.5.4, 3 rd sent.	Revised to read “The relative displacement between two corners along the longest dimension of the building basemat calculated under linearly varying soil stiffness is 77 mm (3.0 in).”
41.	S3G.1.5.5.4	Added following sentence at the end of paragraph: “These values are specified as maximum settlements in Table 2.0-1.”
42.	S3G.1.5.6, 1 st sent.	Replaced “and concrete spalling” with “concrete spalling and scabbing” per current analysis.
43.	S3G.1.5.6, 2 nd sent.	Replaced “1000 and 700 mm” with “1000 mm (39.4 in) and 700 mm (27.6 in)”.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
44.	T3G.1-2, 2 nd column, 4 th & 5 th row	Inserted “plant” before “grade”.
45.	T3G.1-2, 5 th row	Inserted “(or Tsunami)” after “Maximum Flood”.
46.	T3G.1-2, 6 th row	Inserted “(100-year recurrence interval)” after “...Snow Load”.
47.	T3G.1-2, 7 th row	Deleted “(0% exceedance values)” and inserted “Exterior” after “Design” for clarity (no technical changes).
48.	T3G.1-2, 12 th row	Inserted “(3-sec gust)” after “...interval” to be consistent with DCD Tier 2 Table 2.0-1.
49.	T3G.1-2, 17 th , 19 th & 20 th row	Deleted “Maximum”.
50.	T3G.1-2, 21 st row	Replaced “Spectrum” with “Spectra”.
51.	T3G.1-2, new line item	Added “48-hour Winter Rainfall, cm (in) 91.4 (36)” after the 23 rd row to be consistent with DCD Tier 2 Table 2.0-1.
52.	T3G.1-2	Replaced “(mi/hr)” with “mph” and additional editorial changes.
53.	T3G.1-2, Note *	Replaced “speed” with “wind speed (3-sec gust)”.
54.	T3G.1-2, Note **, 4 th sent.	Revised to read “The roof scuppers and drains are designed independently to handle the PMP or 48-hour probable maximum winter precipitation (PMWP) with no more than 100 mm (4 in) of water accumulation on the roof.” to be consistent with DCD Tier 2 Table 2.0-1.
55.	T3G.1-2, Note **, 5 th sent.	Revised to read “The roof is designed for 2873 Pa (60 psf) as live load category on all Seismic Category I structures and accommodates design roof snow load and 48-hour PMWP.”
56.	T3G.1-9, new Note*	Added new note “The difference between the modeled elevation 52.4 m and the actual elevation 52.7 m at the RB roof is negligibly small.”
57.	T3G.1-16 thru T3G.1-18, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
58.	T3G.1-19 thru T3G.1-20	Revised incorporating results of NASTRAN reanalysis performed for the updated design conditions.
59.	T3G.1-23 thru T3G.1-26	Revised incorporating results of NASTRAN reanalysis performed for the updated design conditions.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
60.	T3G.1-28 thru T3G.1-34	Revised incorporating results of section design calculations performed for the updated design conditions.
61.	T3G.1-35, Strain of Cylinder at Abnormal; LOCA	Replaced “-0.0035” with “-0.0036” due to reanalysis reflecting the change of hydrodynamic load.
62.	T3G.1-35, Strain of Cylinder at Abnormal/Extreme Environment	Replaced “0.0013” with “0.0014” and “-0.0044” with “-0.0045” due to reanalysis reflecting the change of hydrodynamic load.
63.	T3G.1-35, Strain of WW Bottom at Abnormal; LOCA	Replaced “-0.0022” with “-0.0023” due to reanalysis reflecting the change of hydrodynamic load
64.	T3G.1-35, Strain of WW Bottom at Abnormal/Extreme Environment	Replaced “0.0010” with “0.0011” due to reanalysis reflecting the change of hydrodynamic load.
65.	T3G.1-35, Strain of Pedestal Thick Plate at Normal Operation	Replaced “0.0003” with “0.0002” due to reanalysis reflecting the change of hydrodynamic load.
66.	T3G.1-36, Calculated Stress of PL at Service Level A, B	Replaced “81 MPa” with “82 MPa” due to reanalysis reflecting the change of hydrodynamic load.
67.	T3G.1-36, Calculated Stress of PL+Pb at Service Level A, B	Replaced “81 MPa” with “82 MPa” due to reanalysis reflecting the change of hydrodynamic load.
68.	T3G.1-36, Calculated Stress of PL+Pb+Q at Service Level A, B	Replaced “798 MPa” with “797 MPa” due to reanalysis reflecting the change of hydrodynamic load.
69.	T3G.1-37, Stress of Bottom Plate σ_{\max}	Replaced “-202 MPa” with “202 MPa” for correction of error.
70.	T3G.1-37, Stress of Tangential Web Plate τ_{\max}	Replaced “99 MPa” with “100 MPa” due to reanalysis reflecting the change of hydrodynamic load.
71.	T3G.1-37, Note *1	Editorial change.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
72.	T3G.1-38, Design Load of Bottom Plate	Replaced “294 kN/deg” with “337 kN/deg” due to reanalysis reflecting the change of hydrodynamic load.
73.	T3G.1-38, Design Load of Girder Radial Web Plate	Replaced “3799 kN” with “3885 kN” due to reanalysis reflecting the change of hydrodynamic load.
74.	T3G.1-38, Design Load of Girder Bottom Flange	Replaced “1191 kN” with “1255 kN” due to reanalysis reflecting the change of hydrodynamic load.
75.	T3G.1-39, Calculated Stress of Inner Cylinder σ_{\min}	Replaced “-238 MPa” with “-239 MPa” due to reanalysis reflecting the change of hydrodynamic load.
76.	T3G.1-39, Calculated Stress of Radial Web Plate σ_{\min}	Replaced “-297 MPa” with “-299 MPa” due to reanalysis reflecting the change of hydrodynamic load.
77.	T3G.1-39, Calculated Stress of Radial Web Plate τ_{\max}	Replaced “168 MPa” with “170 MPa” due to reanalysis reflecting the change of hydrodynamic load.
78.	T3G.1-40, Calculated Stress of RSW Cylindrical Shell σ_{\min}	Replaced “-263 MPa” with “-264 MPa” due to reanalysis reflecting the change of hydrodynamic load.
79.	T3G.1-41, Stress of Horizontal Plate σ_{\max}	Replaced “78 MPa” with “77 MPa” due to reanalysis reflecting the change of hydrodynamic load.
80.	T3G.1-41, Stress of Vertical Plate σ_{\min}	Replaced “-116 MPa” with “-115 MPa” due to reanalysis reflecting the change of hydrodynamic load.
81.	T3G.1-41, Stress of Vertical Plate τ_{\max}	Replaced “104 MPa” with “105 MPa” due to reanalysis reflecting the change of hydrodynamic load.
82.	T3G.1-41, Note *1	Deleted Note *1 due to the change of dominant stress and renumbered remaining note.
83.	T3G.1-42, Design Load of Vent Wall	Replaced “1697 kN/deg” with “1710 kN/deg” due to reanalysis reflecting the change of hydrodynamic load.
84.	T3G.1-42, Design Load of RPV Support Bracket	Replaced “35457 kN” with “35653 kN” due to reanalysis reflecting the change of hydrodynamic load.

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85.	T3G.1-42, Total Capacity of RPV Support Bracket	Replaced “691780” with “69178” for correction of error.
86.	T3G.1-43, 2 nd row, 4 th column	Replaced σ_{\min} value “-374 MPa” with “-385 MPa” and τ_{\max} value “218 MPa” with “220 MPa” due to reanalysis reflecting the change of hydrodynamic load.
87.	T3G.1-43, 3 rd column, 3 rd , 4 th & 6 th rows	Replaced “Severe” with “Abnormal/Extreme” due to reanalysis reflecting the change of hydrodynamic load.
88.	T3G.1-43, 3 rd row, 4 th column	Replaced “0.74” with “0.80” and “85 MPa” with “103 MPa” due to reanalysis reflecting the change of hydrodynamic load.
89.	T3G.1-43, 3 rd row, 6 th column	Replaced “S” with “1.6S” due to reanalysis reflecting the change of hydrodynamic load. (Governing Load Combination is changed.)
90.	T3G.1-43, 4 th row, 1 st column	Added *1 due to reanalysis reflecting the change of hydrodynamic load.
91.	T3G.1-43, 4 th row 2 nd column	Replaced “750x750x65” with “800x800x65” due to reanalysis reflecting the change of hydrodynamic load.
92.	T3G.1-43, 4 th row, 4 th column	Replaced “0.96” with “0.95” and “61 MPa” with “97 MPa” due to reanalysis reflecting the change of hydrodynamic load.
93.	T3G.1-43, 4 th row, 5 th column	Replaced “174 MPa” with “243 MPa” due to reanalysis reflecting the change of hydrodynamic load. (Governing Load Combination is changed.)
94.	T3G.1-43, 4 th row, 6 th column	Replaced top “S” with “1.6S” and bottom “S” with “1.4S”, due to reanalysis reflecting the change of hydrodynamic load. (Governing Load Combination is changed.)
95.	T3G.1-43, 5 th row, 4 th column	Replaced “0.83” with “0.86” and “48 MPa” with “51 MPa” due to reanalysis reflecting the change of hydrodynamic load.
96.	T3G.1-43, 6 th row, 4 th column	Replaced “0.75” with “0.81” and “34 MPa” with “36 MPa” due to reanalysis reflecting the change of hydrodynamic load.
97.	T3G.1-43, 6 th row, 6 th column	Replaced “S” with “1.6S” due to reanalysis reflecting the change of hydrodynamic load. (Governing Load Combination is changed.)
98.	T3G.1-43, Note *1	Editorial change.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
99.	T3G.1-44, 3 rd column	Replaced “738” with “503” and “700” with “609” due to reanalysis reflecting the change of hydrodynamic load.
100.	T3G.1-46 thru T3G.1-49	Revised incorporating results of NASTRAN reanalysis performed for the updated design conditions.
101.	T3G.1-50, Locations 21, 28, 29 & 30	Revised incorporating changes of rebar arrangement required for the updated design conditions.
102.	T3G.1-51 thru T3G.1-56	Revised incorporating results of section design calculations performed for the updated design conditions.
103.	T3G.1-57, 5 th column	Replaced “1.17” with “1.41” per RAI 3.8-96 S2.
104.	T3G.1-58	Added shear wave velocities “V _s ” to the Site Condition column headings as follows: 300 m/sec (Soft), 800 m/sec (Medium) and greater than or equal to 1700 m/sec (Hard), in response to RAI 3.8-94 S2.
105.	T3G.1-58, Note*	Added “For site specific application, use the larger value or a linearly interpolated value of the applicable range of shear wave velocities at the foundation level.” in response to RAI 3.8-94 S2.
106.	F3G.1-1 thru F3G.1-7	Revised incorporating changes of General Arrangement required for the updated design conditions.
107.	F3G.1-20, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
108.	F3G.1-20	Replaced “EL 52400” with “EL 52700” per changes of General Arrangement.
109.	F3G.1-33 thru F3G.1-35, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
110.	F3G.1-36 & F3G.1-37	Revised incorporating results of NASTRAN reanalysis performed for the updated design conditions.
111.	F3G.1-41	Deleted a rebar note for the RPV Pedestal that was repeated unintentionally. The deleted note read “E-W ADD’L BARS 1-#11@200”.
112.	F3G.1-43 & F3G.1-44	Corrected editorial errors
113.	F3G.1-46	Revised incorporating changes of rebar arrangement required for the updated design conditions.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
114.	F3G.1-47	Corrected editorial errors.
115.	F3G.1-52	Replaced figure to reflect updated equipment hatch design due to reanalysis reflecting the change of hydrodynamic load.
116.	F3G.1-54	Replaced figure to reflect updated personnel airlock design due to internal review.
117.	F3G.1-59	Replaced figure to reflect updated GDCS pool design due to reanalysis reflecting the change of hydrodynamic load.
118.	F3G.1-65	Replaced figure with higher resolution.
119.	F3G.1-65, Note	Added “The gap is completely filled with compacted engineered backfill material.” in response to RAI 3.8-96 S2 and additional editorial change.
120.	S3G.2.4.1, 1 st para., 2 nd sent.	Deleted “triangular” as a result of the CB NASTRAN model change (making entire CB Seismic Category I).
121.	S3G.2.4.1, 1 st para., 3 rd sent.	Deleted “and triangular” as a result of the CB NASTRAN model change (making entire CB Seismic Category I).
122.	S3G.2.4.1, 1 st para., 5 th sent.	Replaced “3G.2-9” with “3G.2-11”.
123.	S3G.2.4.2, 1 st para., 1 st bullet	Added “(1000 ft/s)”.
124.	S3G.2.4.2, 1 st para., 2 nd bullet	Replaced “2.00 t/m ³ ” with “125 lbf/ft ³ ”.
125.	S3G.2.4.2, 1 st para., 3 rd bullet	Replaced “1.835x10 ⁴ t/m ² ” with “26110 psi”.
126.	S3G.2.5.2.1.1, 1 st para., 1 st bullet	Added “(150 lbf/ft ³)”.
127.	S3G.2.5.2.1.1, 1 st para., 2 nd bullet	Added “(490 lbf/ft ³)”.
128.	S3G.2.5.2.1.1, last para.	Inserted “and roof” after “...CB floor”.
129.	S3G.2.5.2.1.3, 2 nd sent.	Replaced “Figure 3G.2-10” with “Figure 3G.2-12”.
130.	S3G.2.5.2.1.6, 1 st para., 2 nd sent.	Replaced “Figure 3G.2-11” with “Figure 3G.2-13”.

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131.	S3G.2.5.2.1.6, 2 nd para.	Added “(60°F)”.
132.	S3G.2.5.2.1.7, 1 st para., 1 st bullet	Replaced “Figure 3G.2-12” with “Figure 3G.2-14”.
133.	S3G.2.5.2.1.7, last para.	Replaced “Figure 3G.2-13” with “Figure 3G.2-15”.
134.	S3G.2.5.4, 2 nd para., 1 st sent.	Replaced “9” with “11”.
135.	S3G.2.5.4, 2 nd para., 4 th sent.	Replaced “Figure 3G.2-14” with “Figure 3G.2-16”.
136.	S3G.2.5.4.1	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
137.	S3G.2.5.4.2	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
138.	S3G.2.5.4.2, 1 st sent.	Replaced “slab at EL –2000” with “roof at EL 13800” and “CB-3” with “CB-9”.
139.	S3G.2.5.4.3	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
140.	S3G.2.5.5, 2 nd para., last sent.	Replaced “Figure 3G.2-15” with “Figure 3G.2-17”.
141.	S3G.2.5.5, 3 rd para., 1 st sent.	Replaced “256 kPa” with “292 kPa (6100 psf)” as a result of making entire CB Seismic Category I.
142.	S3G.2.5.5.1, 2 nd sent.	Replaced “11 mm (0.4 in.)” with “12 mm (0.5 in.)”.
143.	S3G.2.5.5.1, 3 rd sent.	Revised to read “The relative displacement between two corners along the longest dimension of the building basemat calculated under linearly varying soil stiffness is 14 mm (0.6 in.)” for clarity and to reflect the CB design change (making entire CB Seismic Category I).
144.	S3G.2.5.5.1	Added following sentence at the end of paragraph: “These values are specified as maximum settlements in Table 2.0-1.”

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145.	S3G.2.5.6, 1 st sent.	Replaced “and concrete spalling” with “concrete spalling and scabbing”.
146.	T3G.2-2	Replaced “Non 1E” with “Nonsafety-related”.
147.	T3G.2-3, 1 st column	Replaced “13,500” with “13,800” to reflect the CB design change (making entire CB Seismic Category I).
148.	T3G.2-4	Revised entire table to reflect the CB design change (making entire CB Seismic Category I).
149.	T3G.2-5	Revised entire table to reflect the CB design change (making entire CB Seismic Category I).
150.	T3G.2-7 thru T3G.2-15	Revised tables incorporating results of NASTRAN reanalysis performed for the CB design change (making entire CB Seismic Category I).
151.	T3G.2-8, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
152.	T3G.2-11, Title	Replaced “Downward” with “Upward”.
153.	T3G.2-16	Revised table due to the CB design change (making entire CB Seismic Category I).
154.	T3G.2-17 thru T3G.2-25	Revised tables incorporating results of section design calculations performed for the CB design change (making entire CB Seismic Category I).
155.	T3G.2-26, 3 rd row	Replaced “86.1” with “62.5” and “1.13” with “1.16” to reflect the CB design change (making entire CB Seismic Category I).
156.	T3G.2-26, 4 th row	Replaced “1.66” with “1.85” to reflect the CB design change (making entire CB Seismic Category I).
157.	T3G.2-27	Added shear wave velocities “ V_s ” to the Site Condition column headings as follows: 300 m/sec (Soft), 800 m/sec (Medium) and greater than or equal to 1700 m/sec (Hard), in response to RAI 3.8-94 S2.
158.	T3G.2-27	The following changes are due to the CB design change (making entire CB Seismic Category I). 2 nd column: Replaced “2.2” with “2.8”. 3 rd column: Replaced “2.2” with “2.5”. 4 th column: Replaced “2.7” with “2.4”.

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159.	T3G.2-27, Note *	Added “For site specific application, use the larger value or a linearly interpolated value of the applicable range of shear wave velocities at the foundation level.” in response to RAI 3.8-94 S2.
160.	F3G.2-1 thru F3G.2-3	Revised figures incorporating results of section design calculations performed for the CB design change (making entire CB Seismic Category I).
161.	F3G.2-4 thru F3G.2-9	Revised figures to reflect the CB design change (making entire CB Seismic Category I).
162.	F3G.2-10 & F3G.2-11, new	Added new Figure 3G.2-10 and 3G.2-11 to reflect the CB design change (making entire CB Seismic Category I).
163.	F3G.2-10	Renumbered to “Figure 3G.2-12”.
164.	F3G.2-11	In the title, replaced “Temperature” with “Thermal” for consistency of expression. Renumbered to “Figure 3G.2-13” and revised figure to reflect the CB design change (making entire CB Seismic Category I).
165.	F3G.2-12	Renumbered to “Figure 3G.2-14” and revised figure to reflect the CB seismic analysis result incorporating the CB design change (making entire CB Seismic Category I).
166.	F3G.2-13	Renumbered to “Figure 3G.2-15” and revised to reflect the CB seismic analysis result incorporating the CB design change.
167.	F3G.2-14, Title	Renumbered to “Figure 3G.2-16”.
168.	F3G.2-15, Title	Renumbered to “Figure 3G.2-17”.
169.	F3G.2-15, Note	Added “The gap is completely filled with compacted engineered backfill material.” in response to RAI 3.8-96 S2 and additional editorial change.
170.	S3G.3.5.2.1.1, 1 st para., 1 st bullet	Added “(150 lbf/ft ³)”.
171.	S3G.3.5.2.1.1, 1 st para., 2 nd bullet	Added “(490 lbf/ft ³)”.
172.	S3G.3.5.2.1.1, last para.	Inserted “and roof” after “...FB floor”.
173.	S3G.3.5.2.1.6, last para.	Added “(60°F)”.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
174.	S3G.3.5.3	Rewritten for clarity and added reference to Subsection 3G.1.5.5.
175.	S3G.3.5.4.1	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
176.	S3G.3.5.4.2, 1 st sent.	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
177.	S3G.3.5.4.2, last sent.	Added “(2.74 kips/in)” after “0.48 MN/m” and “(24.9 kips/in)” after “4.36 MN/m”.
178.	S3G.3.5.4.3	Revised the maximum stresses and shear forces evaluated by reanalysis incorporating updated design conditions and added U.S. customary units.
179.	S3G.3.5.6, 1 st sent.	Replaced “and concrete spalling” with “concrete spalling and scabbing”.
180.	S3G.3.5.6, last sent.	Replaced “1000 and 700 mm” with “1000 mm (39.4 in) and 700 mm (27.6 in)”.
181.	T3G.3-6, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
182.	T3G.3-7, T3G.3-8, T3G.3-11 & T3G.3-12	Revised tables incorporating results of NASTRAN reanalysis performed for the updated design conditions.
183.	T3G.3-14 thru T3G.3-17	Revised tables incorporating results of section design calculations performed for the updated design conditions.
184.	F3G.3-1, Title	Replaced “Temperature” with “Thermal” for consistency of expression.
185.	F3G.3-4	F3 wall dimensions: Replaced “2638” with “2640” and “7862” with “7860” based on Table 2.16.7-1 of Tier 1.
186.	F3G.3-5	F3 wall thickness: Replaced “3638” with “3640” based on Table 2.16.7-1 of Tier 1.
187.	S3G.4, new	Added new section for Fire Water Service Complex due to the Seismic Category I FWSC being added to DCD Tier 2 Section 3.8.

Tier 2 Appendix 3H Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3H.1, 1 st para., 1 st sent.	Editorial change: replaced “are to be” with “is”.
2.	S3H.1 2 nd para 2 nd sent.	Replaced sentence for clarity.
3.	S3H.1, 3 rd para	Added wording for clarification.
4.	S3H.2.1, 2 nd para., last sent.	Corrected radiation zone properties.
5.	S3H.2.2, 2 nd para., 3 rd sent.	Replaced “1E” with “safety-related”.
6.	S3H.2.2 2 nd para 3 rd sentence	Added units to elevation.
7.	S3H.3.1	Corrected Table references.
8.	S3H.3.2	Added wording for clarification.
9.	S3H.3.3, last bullet	Rewritten for clarity.
10.	S3H.3.4 Entire Section	Added section to replace former COL section and re add deleted table reference.
11.	S3H.3.5, new	Added section to reference mild environment table.
12.	S3H.3.6 Entire Section	States that there is no COL information.
13.	S3H.4-3 Reference	Deleted unused reference.
14.	S3H.4-7 Reference	Added relevant reference.
15.	T3H-1	Replaced “Room Zone” with “Building”.
16.	T3H-1 last 2 rows	Added to reference tables.
17.	T3H-1 Note (1)	Deleted note 1 as part of COL update; covered by EQ program.
18.	T3H-2, Pressures	Updated pressures to be consistent with Table 6.2-2.
19.	T3H-2, Note (2)	Changed tense from future to present.
20.	T3H-3	Replaced “Div I, II, III and IV” with “Div 1, 2, 3 and 4”.
21.	T3H-3, 9 th Row	Replaced “1E” with “Safety-related”.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
22.	T3H-3, 13 th Row	Replaced “SBLC” with “SLC”.
23.	T3H-3 Pressure Column	Added wording for more detail.
24.	T3H-3 Note (1)	Deleted “Positive or negative pressure”.
25.	T3H-3 Note (2)	Deleted note 2 as part of COL update; covered by EQ program.
26.	T3H-4, 2 nd Row	Replaced “Safety” with “Safety-related”.
27.	T3H-4, last row	Replaced “Division I, II, III and IV” with “Div 1, 2, 3 and 4” and “1EDCIS” with “Safety-related DCIS”.
28.	T3H-4 Pressure Column	Added wording for more detail.
29.	T3H-4 Note	Deleted unneeded note that is already contained in the table.
30.	T3H-5 Note (1)	Added wording for clarification.
31.	T3H-6	Replaced “Div I, II, III and IV” with “Div 1, 2, 3 and 4”.
32.	T3H-6, 9 th Row	Replaced “1 EDCIS” with “Safety-related DCIS”.
33.	T3H-6, 13 th Row	Replaced “SBLC” with “SLC”.
34.	T3H-6 Note	Wording change for clarification.
35.	T3H-6 and T3H-7 title	Updated title for consistency.
36.	T3H-7, 2 nd Row	Replaced “Safety” with “Safety-related”.
37.	T3H-7, last Row	Replaced “Division I, II, III and IV” with “Div 1, 2, 3 and 4” and “1EDCIS” with “Safety-related DCIS”.
38.	T3H-8	Updated data to be consistent with Section 6.2.
39.	T3H-9	Replaced “Div I, II, III and IV” with “Div 1, 2, 3 and 4”.
40.	T3H-9, 9 th & 11 th Rows	Replaced “1 EDCIS” with “Safety-related DCIS”.
41.	T3H-9, 13 th Row	Replaced “SBLC” with “SLC”.
42.	T3H-9 Battery room temp	Updated per RAI response 8.5-14 S01.
43.	T3H-9 Electrical division room temp	Added temperature that was not present. Added note to clarify environment condition.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
44.	T3H-9 Pressure column	Added wording for clarification.
45.	T3H-9 Note 3	Added wording for clarification.
46.	T3H-10, 2 nd Row	Replaced “Safety” with “Safety-related”.
47.	T3H-10, last Row	Replaced “Division I, II, III and IV” with “Div 1, 2, 3 and 4” and “1EDCIS” with “Safety-related DCIS”.
48.	T3H-10, Pressure Column	Added wording for clarification.
49.	T3H-10, CRHA temperature block	Added wording for clarification.
50.	T3H-10, CRHA pressure	Changed psig pressure from a fraction for consistency.
51.	T3H-10, DCIS panel row	Corrected °F conversion.
52.	T3H-11 Note 2	Deleted note 2 as part of COL update; covered by EQ program.
53.	T3H-12 Header	Deleted COL header on table as part of COL update; covered by EQ program.
54.	T3H-12, 5 th Row	Replaced “N1E” with “nonsafety-related”.
55.	T3H-12 room 1311, 1321, 1331, 1341 heat loads	Added heat loads for these rooms that was not present.
56.	T3H-13	Added table to describe mild environments.

Tier 2 Appendix 3I Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3I.8, Item (1)	Editorial change: replaced “safety” with “safety-related” for consistency.

Tier 2 Appendix 3J Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3J.1, 1 st para.	Editorial changes.
2.	S3J.1, 2 nd para.	Deleted 2 nd and 3 rd sentences. Any exceptions will be addressed by COL.
3.	S3J.1, 3 rd para, Item (3)	Inserted “as appropriate” after “...dynamic analysis” and replaced “the stresses in the penetration pipe” with “if applicable, the stresses in the piping in the penetration area”.
4.	S3J.1, 5 th para.	Editorial changes.
5.	S3J.2.1, last sent.	Editorial changes.
6.	S3J.2.2,	Editorial changes.
7.	S3J.2.3	Replaced “Determine” with “Determination of”.
8.	S3J.3.1, Title	Deleted “Make”.
9.	S3J.3.2, Title	Replaced “Prepare” with “Preparation of”.
10.	S3J.3.2	Editorial changes.
11.	S3J.3.3, Title	Replaced “Run Pipe” with “Piping”.
12.	S3J.3.3, 1 st sent.	Editorial changes.
13.	S3J.3.4, Title	Replaced “Select” with “Selection of”.
14.	S3J.3.4, 2 nd para.	Editorial changes.
15.	S3J.4.1, 1 st para., 1 st sent.	Editorial change.
16.	S3J.5, Title	Replaced “ESSENTIAL” with “SAFETY-RELATED”.
17.	S3J.5, 3 rd para., 1 st sent.	Editorial change.
18.	F3J-1	Replaced BUILT-IN” with “FIXED-END”.
19.	F3J-2	Replaced figure with higher resolution to meet NRC requirements.

Tier 2 Appendix 3K Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3K, General	Spelled out acronyms the first time used in this section.
2.	S3K.3, 1 st bullet, 4 th sent.	Editorial changes.
3.	S3K.3, 1 st bullet, last sent.	Inserted “coolant system” after “...static reactor” and “piping in the” after “...contained by the”.
4.	S3K.7, Item (1), 2 nd sent.	Replaced “accomplished” with “shown” and deleted “to the design pressure”.
5.	S3K.10, 3 rd sent.	Editorial changes.
6.	S3KA.1.1, 2 nd para., 1 st sent.	Replaced “of URS section” with “in Section 3K.3”.
7.	S3KA.1.3	Editorial change.
8.	S3KA.3.1, 3 rd sent.	Replaced “is provided” with “there is”.
9.	S3K.A.4.1, 2 nd sent.	Replaced “Figure 9.1-A” with “Figure 9.1-1”.
10.	S3KA.6.1, 2 nd & 4 th para.	Replaced “LOCK OPEN” with “LOCKED OPEN”.
11.	S3K.A.6.3	Replaced “LOCK OPEN” with “LOCKED OPEN”.

Tier 2 Appendix 3L Revision 3 to Revision 4 Change List

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3L.1, 1 st & 3 rd sent.	Changed tense from future to present in two locations.
2.	S3L.2, 1 st para.	Editorial changes three places.
3.	S3L.2.1, 1 st para., 1 st bullet	Changed “critical to safety” to “safety-related” for consistency.
4.	S3L.2.1, 2 nd para., 5 th thru 8 th bullets	Editorial changes, 8 th bullet changed “critical to safety” to “safety-related” for consistency.
5.	S3L.2.1, 4 th para.,	Revised paragraph in response to RAI 3.9-133S01
6.	S3L.2.1, 7 th para.,	Revised first sentence for clarity.
7.	S3L.2.1, 8 th para., 3 rd & last sent.	Editorial changes.
8.	S3L.2.2	Editorial changes and tense changes from future to present. Changed “a supplemental report” to “a revision to reference 3L-1”, 2 places.
9.	S3L.2.2, 1 st para. 5 th item, 2 nd para.	Added additional details in response to RAI 3.9-133 S01.
10.	S3L.3.1, 4 th , 6 th & last sent.	Editorial changes.
11.	S3L.4.1	Editorial changes throughout to change tense from future to present.
12.	S3L.4.2	Editorial changes throughout to change tense from future to present.
13.	S3L.4.3, 1 st sent.	Changed tense from future to present.
14.	S3L.4.4	Added “(these frequency ranges are approximate)”. Rewrote steam dryer acoustic load definition and other related changes.
15.	S3L.4.5, 1 st para.	Editorial changes to change tense from future to present, and 1 st paragraph, 2 nd sentence changed to update load definition statement. Last sentence corrected reference from 3L.5.5.1.5 to 3L.5.5.1.3.
16.	S3L.4.5, last para.	Corrected the reference and changed tense from future to present.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
17.	S3L.4.6	Editorial changes throughout to change tense from future to present.
18.	S3L.4.6	1 st paragraph, 1 st sentence removed “prototype”. Last paragraph revised for clarity.
19.	S3L.5, 1 st sent.	Changed tense from future to present.
20.	S3L.5.3, 2 nd para., 3 rd sent.	Changed tense from future to present.
21.	S3L.5.4	Editorial change in 5 th sentence, and tense change in last sentence.
22.	S3L.5.5.1	1 st sentence removed “prototype”.
23.	S3L.5.5.1.1, 1 st sent.	Editorial change.
24.	S3L.5.5.1.2, 2 nd para., 2 nd sent.	Changed tense from future to present.
25.	S3L.5.5.1.2, last para, last sent.	Editorial change.
26.	S3L.5.5.1.4, last sent.	Editorial change.
27.	S3L.5.5.2	Changes throughout to delete Method III since it was not used in the 3L tables. Subsections were no longer needed.
28.	S3L.5.5.2, 1 st para.	Changed “non safety” to “nonsafety-related”.
29.	S3L.5.5.2, formula (5), 3 rd sent.	Tense change from future to present.
30.	S3L.5.5.2, formulas (6) and (7)	Editorial changes regarding text books.
31.	S3L.5.5.2, formula (7), sentences after formula	Tense changes from future to present. Reworded method I and II differences for clarity.
32.	3L.6, ref. 3L-3	Replaced specific version information with “applicable revision”.
33.	T3L-2 for TSV, LOCA8 & LOCA9	Changed tense from future to present.
34.	T3L-4	Added note 1 for clarification in response to RAI 3.9-133 S01.

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
35.	T3L-5	Changed tense in note from future to present and added note 2 for clarification and line item for accelerometers for the steam dryer skirt in response to RAI 3.9-133 S01.
36.	T3L-6	Changed tense in note from future to present.