

### Revision 0 to Revision 1 Change List – Appendix 3A

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
1.	S3A.1, 1 <sup>st</sup> para., 4 <sup>th</sup> sent.	Editorial
2.	S3A.3.2, 1 <sup>st</sup> sent.	Editorial
3.	S3A.4.1, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Editorial
4.	S3A.5, 5 <sup>th</sup> para., 1 <sup>st</sup> sent.	Added “solved by direct integration” at the end of sentence.
5.	S3A.5, 5 <sup>th</sup> para.	Added new sentence after 1 <sup>st</sup> sentence. “The numerical integration time step is 0.002 sec. for the generic site cases and 0.001 sec. for the North Anna site cases.”
6.	S3A.7.1, definition of Vertical Axial Area (Sa), 2 <sup>nd</sup> sent.	Editorial
7.	S3A.8, 5 <sup>th</sup> para., 2 <sup>nd</sup> sent.	Replaced sent. with “As shown in these tables, the results of generic medium or stiffer sites govern the seismic responses of the RBFB complex structure, except for relatively stiff structures such as the RPV support for which the moment response is controlled by the North Anna site due to the high-frequency content in its input ground motion. The results of generic hard rock or North Anna sites govern the seismic responses of the CB structure.”
8.	S3A.9.2, 2 <sup>nd</sup> bullet	Deleted “obtained in Step 1”.
9.	S3A.9.2, 3 <sup>rd</sup> bullet	Replaced “result of Step 2” with “site envelope response spectra”
10.	S3A.9.2, 2 <sup>nd</sup> para., 2 <sup>nd</sup> sent.	Editorial
11.	T3A.3-1	Added note (1) and (2) designations.
12.	T3A.9-3, title	Replaced “PED” with “Pedestal”
13.	T3A.9-5	Editorial

### Revision 0 to Revision 1 Change List – Appendix 3B

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
1.	Appendix 3B	Replaced the entire appendix. Appendix changed from stating the methodology that supports the load definition to simply stating the load definitions applied in the structural evaluation.

### Revision 0 to Revision 1 Change List – Appendix 3C

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
1.	S3C.3.2, 1 <sup>st</sup> para.	Added “ANACAP-U Program validation documentation is available at ANATECH Corp.” at the end of paragraph.
2.	S3C.3.2, 1 <sup>st</sup> para., 3 <sup>rd</sup> sentence.	Editorial
3.	S3C.6.2	Editorial
4.	S3C.7.1.3	Editorial

### Revision 0 to Revision 1 Change List – Appendix 3D

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
1.	S3D.4.3, 1 <sup>st</sup> para., 2 <sup>nd</sup> sent.	Deleted “, 1974 Edition”
2.	S3D.4.6	Added new section 3D.4.6.3 “CALESPW Computer Program”
3.	S3D.4.6	Added new section 3D.4.6.4 “SFT Computer Program”
4.	S3D.4.6.2	Editorial

### Revision 0 to Revision 1 Change List – Appendix 3E

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
1.	S3E.1.2	Editorial
2.	S3E.2.1	Added at the end of section “For terminology see References 3E-1 through 3E-3 and 3E-9.”
3.	S3E.2.1, Equation 3E-3	Replaced “G” with “G <sub>e</sub> ”
4.	S3E.2.2 through S3E.5	Added metric units where necessary.
5.	S3E.5, 2 <sup>nd</sup> para., last sent.	Replaced last sentence with “The Technical Specifications (TS) limit on the identified leak rate is 114 Liters/min (25 gpm).”
6.	S3E.5, 3 <sup>rd</sup> para., 2 <sup>nd</sup> sent.	Replaced 2 <sup>nd</sup> sentence with “As specified in subsection 5.2.5.2, the detection capability for unidentified leak rate is 3.8 Liters/min (1gpm).”
7.	S3E.5, 3 <sup>rd</sup> para., 3 <sup>rd</sup> sent.	Replaced “Reference 3E-28” with “Reference 3E-24”
8.	S3E.5, 3 <sup>rd</sup> para. Last sent.	Replaced “10 gpm” with “37.85 L/min (10 gpm)”
9.	S3E.6 Reference 3E-10	Deleted “1980”
10.	S3E.6 Reference 3E-20	Deleted “1986 Edition”
11.	S3E.6	Added two new references at the end of list.
12.	T3E-2 through T3E-5	Added metric units where necessary.

### Revision 0 to Revision 1 Change List – Appendix 3F

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
1.	S3F.1, 3 <sup>rd</sup> sent.	Replaced 3 <sup>rd</sup> sent. with “The containment loads considered for structural dynamic response analysis are (1) Hydrodynamic Loads which are Condensation Oscillation(CO), Pool Chugging (CH), Horizontal Vent Chugging (HVL), Local Condensation Oscillation (LCO) and Safety Relief Valve discharge (SRV) in the Suppression Pool (SP), and (2) Pipe Break Loads which consist of Annulus Pressurization (AP) in the annulus between the Reactor Shield Wall (RSW) and Reactor Pressure Vessel (RPV), nozzle jet, jet impingement and pipe whip restraint loads.”
2.	S3F.2.1, 1 <sup>st</sup> para., 1 <sup>st</sup> sent.	Replaced “hydrodynamic” with “containment”
3.	S3F.2.1,	Inserted “(1) Hydrodynamic Loads in the SP: The loads included in this group are SRV loads and LOCA related loads such as CO, CH, HVL and LCO. Depending on the distribution of these loads in the pool, they can be further classified as:” before 1 <sup>st</sup> bullet.
4.	S3F.2.1	Deleted 1 <sup>st</sup> bullet and added “, or” at the end of 2 <sup>nd</sup> bullet.
5.	S3F.2.1	Inserted “(2) Pipe break loads due to Main Steam (MS), Reactor Water Cleanup (RWCU) or Feedwater (FW) line break. The loads included in this group are pressure loads AP and concentrated loads which are nozzle jet, jet impingement and pipe whip restraint loads.” after the last bullet.
6.	S3F.2.2, item 1, 2 <sup>nd</sup> sent.	Replaced 2 <sup>nd</sup> sent. with “The beam model to be used for the pipe break load analysis is illustrated in Figure 3F-1.”
7.	S3F.2.2, item 1, 3 <sup>rd</sup> sent.	Replaced 3 <sup>rd</sup> sent. with “The hydrodynamic load analysis model of the building structure is illustrated in Figure 3F-2, which is coupled with the RPV model shown in Figure 3F-3. This coupled model is used for symmetric and asymmetric load cases.”

Item	Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
8.	S3F.2.3, item 1	Inserted “where” in the line after equation (3F-2)
9.	S3F.2.3, item 1 definition	Replaced “1” with “0”
10.	S3F.2.3, item 1, last para., 1 <sup>st</sup> sent.	Replaced “constant force” with “constant forces”
11.	S3F.2.3, item 2, 1 <sup>st</sup> para., 4 <sup>th</sup> sent.	Replaced “is” with “are”
12.	S3F.2.3, item 2, last para., 2 <sup>nd</sup> sent.	Replaced 2 <sup>nd</sup> sent. with “In asymmetric load case, 3 horizontal frequencies, 5 Hz (SRV-H1), 8.83 Hz (SRV-H2) and 12 Hz (SRV-H3), of the structure satisfying the above selection criteria are adopted as bubble frequencies.”
13.	S3F.2.3, item 3, title	Replaced “HV” with “HVL”
14.	S3F.2.3, item 4, 1 <sup>st</sup> sent.	Replaced 1 <sup>st</sup> sent. with “From a comparison of the natural frequencies of the structure and the frequency contents in the Fourier spectra of the time histories of CH and CO loads, 7 critical pressure time histories out of 16 for CH and 5 out of 5 for CO, are selected for dynamic analysis.”
15.	S3F.2.4, item 1 title	Deleted “Nozzle”
16.	S3F.2.4, item 1, 2 <sup>nd</sup> sent.	Replaced 2 <sup>nd</sup> sent. with “The $\alpha$ mass matrix and $\beta$ stiffness matrix multipliers are used for the damping matrix.”
17.	S3F.2.4, item 2, 1 <sup>st</sup> para., last sent.	Replaced last sent. with “The constant (frequency-independent) stiffness for each material is used. The damping matrix is obtained as follows: $[C] = \sum_{j=1}^{N_m} \frac{2}{\Omega} \beta_j [K_j] \quad (3F-3)$ where $N_m$ = Number of materials $\Omega$ = circular excitation frequency $[K_j]$ = structural stiffness matrix $[C]$ = structural damping matrix

<b>Item</b>	<b>Location</b> (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	<b>Description of Change</b>
		$\beta_j$ = constant damping stiffness matrix coefficient”
18.	S3F.3, Title	Replaced “HYDRODYNAMIC LOAD” with “CONTAINMENT LOADS”
19.	S3F.3, 2 <sup>nd</sup> para., 1 <sup>st</sup> sent.	Replaced “HV” with “HVL”
20.	T3F-1 through T3F-4	Replaced with new Tables.
21.	T3F-2 and T3F-4, 4 <sup>th</sup> location	Replace “centre” with “center”
22.	F3F-4 through F3F-22	Replaced with new Figures.