

ESBWR DCD Appendix 9A

Revision 0 to Revision 1 Change List

Note: Changes in blue or sidebars indicate changes made as a result of verification review.

Location (e.g., subsection with paragraph/sentence/item, table with column/row, or figure)	Description of Change
Cover Page	Changed Date from December 2005 to January 2006
Cover Page	Changed Revision from “0” to “1”
Cover Page	Replaced “Contains Sensitive Unclassified Information” with “Contains Security-Related Information – Withhold Under 10 CFR 2.390”
Cover Page	Deleted statement on conditional release.
All pages except cover page	Changed page header from “..Rev. 00” to “..Rev. 01”
Whole Document	Replaced all instances of the word “impact” with either “affect” or “effect” as appropriate.
List of Tables	Inserted page break before List of Illustrations
Global Abbreviations And Acronyms List	Added Term “FBFPHV” and Definition “Fuel Building Fuel Pool Area HVAC”
Global Abbreviations And Acronyms List	Added Term “FBGAHV” and Definition “Fuel Building General Area HVAC”
Global Abbreviations and Acronyms Table	Deleted “(non seismic Category I)” from entry “NS”
S9A.1, 1 st para.	Deleted text “This appendix supplements Subsection 9.5.1.3 (Safety Evaluation).”
S9A.1, 2 nd para 1 st sentence	Replaced “analysis identifies” with “fire hazards analysis (FHA) establishes and evaluates” and expanded list of buildings evaluated in the analysis. Deleted “Service Water” before “Pump House”
S9A.1, 2 nd para 2 nd sentence	Text expanded to read “Plan and elevation view drawings of the buildings as listed in Table 9A.2-3 are utilized to depict the resulting fire area boundaries, fire barriers, and fire suppression systems.”

S9A.1, 2 nd para 3 rd sentence	Text expanded to read “Fire areas containing safe shutdown equipment are identified and evaluated to confirm that a sufficient number of safety-related safe shutdown systems remain available during and following a design basis fire to achieve hot shutdown and maintain safe shutdown.”
S9A.1, 2 nd para, last two sentences	Deleted text “Service Building are defined in this appendix because these structures are site specific. The COL applicant shall establish fire hazard design acceptance criteria for the Service Water Pump Building and Service Building.”
S9A.1, New 2 nd para, 1 st sent.	Changed “Materials” to “All materials” and changed “this appendix” to “Tables 9A.5-1 through 9A.5-7”
S9A.1, New 2 nd para, 2 nd sent.	Deleted “zone are provided in Section 9A.5. The design acceptance criteria for the Service Water Pump House and” and replaced with “area are identified in Tables 9A.5-1 through 9A.5-7.”
S9A.1, 3 rd para, 1 st sent.	Replaced “be designed and constructed to operate” with “operate and shutdown”
S9A.1, 3 rd para, 2 nd sent.	Replaced “can be safely shut down and maintained in” with “plant shall be capable of safely shutting down and maintaining”
S9A.1, 3 rd para, 2 nd sent.	Replaced “can” with “shall” and added “capable of being”
S9A.1, 4 th para,	Replaced “This analysis addresses” with “This FHA identifies and evaluates” and added text “This FHA does not evaluate the overall fire protection program for an ESBWR, since many of an effective program’s elements are administrative or procedural in nature, but rather assumes that an ESBWR”
S9A.1, 5 th para,	Deleted paragraph including all five bulleted items. Replaced with text “Owner will have an effective fire protection program in place. As described in Regulatory Guide 1.189, the primary objectives of a fire protection program at a nuclear plant are to minimize both the probability of occurrence and the consequences of fire. To meet these objectives, the fire protection program shall be designed to provide reasonable assurance, through defense in depth, that a fire will not prevent the performance of necessary safe shutdown functions and that radioactive releases to the environment in the event of a fire will be minimized.”
S9A.2.1, 1 st sent.	Change “in” to “into” and replaced “Reference” with “Standard”
S9A.2.1, 2 nd sent.	Added “may” before “differ slightly from”
S9A.2.1, 2 nd sent.	Replaced “CMEB” with “SPLB”
S9A.2.1, new last sent.	Added sentence “Tables 1.9-21, 1.9-22, and 1.9-23 identify the relevant edition for each applicable code and standard.”

9.A.2.2, 1 st para.	Replaced “and Electrical Building are included as Figures 9A.2-1 through 9A.2-32.” with “Electrical Building, and Yard are identified in the List of Illustrations”
9.A.2.2, 1 st para.	Replaced “The COL applicant shall include drawings” with “Drawings”
9.A.2.2, 1 st para.	Deleted text “features for the Yard” and replaced with “within the Yard buildings (such as within the”
9.A.2.2, 1 st para.	Deleted “Service Water” before “Pump House” and added text “House, Guard House, Hot Machine Shop, Service Water/Water Treatment Building, Cold Machine Shop, Warehouse, Training Center, Service Building, Auxiliary Boiler Building, and Administration Building) will be added later when detailed arrangements within those buildings are available.”
9.A.2.2, new 2 nd para.	Added text “The fire protection water supplies and mains are shown schematically in Figure 9.5-1.”
9.A.2.3, 1 st para.	Replaced “Area portion” with “Area – that portion (aggregate floor area)”
9.A.2.3, 1 st para.	Replaced “that is separated from other areas by rated fire barriers.” With “enclosed and bounded by fire walls, fire barriers, exterior walls, fire-resistance rated horizontal assemblies of a building, or other means in order to contain fire within that area.”
9.A.2.3, 2 nd para. 1 st sent.	Replaced “Barrier - components of construction (i.e., walls floors and ceilings) that are used to prevent the spread of fire.” With “Barrier – a continuous vertical or horizontal fire-resistance rated construction assembly designed and constructed to limit the spread of heat and fire and to restrict the movement of smoke. “
9.A.2.3, 2 nd para. 2 nd sent.	Replaced “i.e.” with “e.g.”
9.A.2.3, 2 nd para. New 3 rd sent.	Added text “Fire barriers that define the boundaries of a fire area should have a fire-resistance rating of at least 3 hours. All openings (doors, windows, penetrations, ductwork, etc) through fire barriers should be properly protected, sealed, and qualified by fire endurance testing to a fire resistance rating as required by the applicable codes, up to the same fire resistance rating of the fire barrier itself.”
9A.2.3, 3 rd para. 2 nd sent.	Added “,” after “portable extinguishers”
9A.2.3, 3 rd para. 3 rd sent.	Added text: “sprinkler systems or low-pressure carbon dioxide system.” at end of sentence.

9.A.2.3, 4 th para.	Replaced “Zones - subdivisions of fire areas containing fire suppression systems designed to combat particular types of fires.” With “Wall – a fire-resistance rated wall having protected openings, which restricts the spread of fire and extends continuously from the foundation to or through the roof, with sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall.”
9.A.2.3, new 5 th para.	Added text: “Fire Zones - subdivisions of a fire area based on the fire hazards analysis that demonstrate that the fire protection systems and features within the fire zones provide an appropriate level of protection for the associated hazards.”
9A.2.3, 5 th para. 1 st bullet	Added text “this includes wet resin in tanks or other similar potentially combustible materials that are continuously immersed in water are not considered a viable combustible for exposure fires due to the significant amount of heating that would be required to dry out the material before combustion could occur;”
9A.2.3, 6 th para.	Deleted text ““Method of Test of Surface Burning Characteristics of Building Materials.””
9A.2.3, 8 th para. Last sent.	Deleted text ““Standard for the Installation of Sprinkler Systems.””
9A.2.3, 8 th para. 5 th bullet	Changed “Dry-Pipe” to “Dry-pipe”
9A.2.3, 11 th para. 1 st sent.	Deleted text ““Standpipe and Hose Systems.””
9A.2.3, 11 th para. 2 nd sent.	Changed “wet pipe system” to “wet standpipe system” and replaced “hose reels” with “fire hoses”
9A2.4, item 2, 1 st sent.	Deleted “wet pipe”
9A2.4, item 2, new 3 rd sent.	Added text: “Control of combustible transient materials is assumed to comply with Regulatory Guide 1.39 for housekeeping requirements.”

9A2.4, item 2, new 2 nd para.	Added text: “As described in Appendix 9B, the combustible loading limit for electrical areas has been conservatively determined as 1400 MJ/m ² and the combustible loading limit for all other indoor areas has been conservatively determined as 700 MJ/m ² ; rooms that exceed these limits require automatic fire suppression. This approach conservatively assumes that all combustible material within a fire area instantaneously releases its net heat content upon ignition of the fire. Due to the considerable separation and fire barriers provided in the ESBWR plant layout, a detailed analysis or modeling of fire damage and plume temperatures resulting from any given fire was not considered necessary and has not been performed. This type of analysis could be performed later for an individual fire area if needed, but then could also include consideration of room height and volume, spatial location of combustibles and equipment, incomplete combustion, time-weighted heat release rates, thermal inertia of the structure, ventilation effects, response of installed automatic fire detection, response of installed fire suppression, and other relevant factors.”
9A2.4, item 3, 3 rd sent.	Replaced “Stairwells” with “Corridors and stairwells” Deleted “, and corridors” after “safety-related divisions” Added “minimum” after “2-hour”
9A2.4, item 4, new 2 nd para.	Added text: “The use of 1.5-hour fire rated elevator doors in 3-hour fire-rated barriers does not compromise the fire barrier. Rather, section 6-1.2.2 of NFPA 804-1995 specifically allows 1.5-hour fire-rated doors in elevator shafts. No other applicable codes (IBC, NFPA 80, NFPA 101, NFPA 252, or ASME A17.1) require elevator doors to have a fire rating of more than 1.5 hours. None of the applicable codes address 3-hour fire-rated elevator shafts. It is not unusual for a door in a fire-rated wall to have a lower fire rating than the applicable fire wall, because the area on both sides of the door will normally be kept free of combustible material to ensure use of the door. Personnel evacuating from a fire are warned by signage at each elevator to use stairs (protected by 3-hour firewalls and doors) and not elevators during a fire.”
9A2.4, item 5, 2 nd sent.	Deleted “, utilizing gypsum board,” after “The required fire rating”
9A2.4, item 6	Changed “ASTM-E84” to “ASTM E84”
9A2.4, item 7	Replaced “has been” with “is”
9A2.4, item 11, 1 st sent.	Deleted “cable or” after “except within the containment and where the” Changed “located in a single fire area” to “located within a single fire area”

9A2.4, item 11, 2 nd sent.	Replaced “documented” with “evaluated”
9A2.4, item 12, 3 rd paragraph	Replaced “estimated at the maximum design fill to contain between 41.3 and 56.3 kg of insulation per square meter (8.5 and 11.5 lbm/ft ²) of tray.” With “assumed to have the maximum (40%) design fill; actual cable fills may be lower.”
9A2.4, item 14, item j	Changed “Class ABC” to “class ABC”
9A2.4, item 14, item k	Changed “CO2” to “carbon dioxide class BC”
9A2.4, item 14, new item l	Added “Portable class D fire extinguishers.”
9A2.4, item 15, 2 nd sent	Replaced “Safe Shutdown Earthquake (SSE)” with “SSE”
9A2.4, item 15, 3 rd sent	Added text “which supply fire water to hose stations covering safety-related equipment” Replaced “building” with “concrete stairwells or dedicated concrete chases,”
9A2.4, item 17, 1 st sent.	Deleted “a” from “handle both a leakage” and replaced “from” with “simultaneous operation of”
9A2.4, item 19, 2 nd sent.	Deleted entire sentence.
S9A.2.5	Changed section title from “Systems Required in the Case of Fire to Achieve Safe Shutdown” to “Systems Required to Achieve Safe Shutdown in the Event of Fire”
9A.2.5, 1 st para	Added “a design basis” after “In case of”
9A.2.5, 3 rd para.	Replaced “In case of fire, the” with “The”
9A.2.5, 3 rd para., 5 th bullet	Added text “and”
9A2.5, new 4 th para	Added text “Instrumentation automatically activates the safe shutdown systems or provides signals to the Main Control Room operators.”

9A.2.6, new subsection	<p>Added text “9A.2.6 Redundant Nonsafety Systems and Equipment</p> <p>In case of a design basis fire, no nonsafety-related systems are required to achieve hot shutdown and maintain safe shutdown. Nonetheless, certain nonsafety-related systems and equipment include redundancy to provide operational flexibility and robustness. In general terms, the redundant components within a nonsafety-related system are referred to as Train A and Train B (and in some cases, Train C). To maintain the redundancy and robustness for these, fire-rated separation is provided between the redundant Train A and Train B (and Train C, where applicable) components for these certain nonsafety-related systems.</p> <p>The initial design of the ESBWR has included redundancy within the following nonsafety-related systems:</p> <ul style="list-style-type: none"> • Reactor Water Cleanup / Shutdown Cooling System; • Reactor Component Cooling Water System; • Plant Service Water System • Fuel and Auxiliary Pool Cooling System; • RB and CB sumps in the Equipment and Floor Drains System; • RB HVAC System; • FB HVAC System; • CB HVAC System; • Non-IE DCS System; • Instrument Air System; • Chilled Water System; • Seismic category I firepumps within the Fire Protection System; • Off-site power supplies (transformers); • On-site power supplies (diesel-generators and auxiliary equipment); <p>Electrical power distribution to all of the above.</p>
T9A.2-1, Table Title	<p>Added text “Refer to Tables 1.9-21, 1.9-22, and 1.9-23 for applicable editions.” below title of table.</p>
T9A.2-1,	<p>Updated to reflect current and correct names of the fire codes and standards.</p>

T9A.2-2	Changed table title from “Systems Required in the Event of Fire to Achieve Safe Shutdown” to “Systems Required to Achieve Safe Shutdown in the Event of Fire”
T9A.2-2, ICS B	In Remarks column added text “Closed loop to and from reactor vessel.”
T9A.2-2, ICS C	In Remarks column added text “Closed loop to and from reactor vessel.”
T9A.2-2, ICS D	In Remarks column added text “Closed loop to and from reactor vessel.”
T9A.2-2, ADS	Deleted entire row for “ADS” and added four separate rows for “ADS A”, “ADS B”, “ADS C,” and “ADS D”
T9A.2-2, Row: ADS A	Added text as follows: “Function” Column: “2” “Reactor Condition” Column: “Isolated” “Division” Column: “I” “Backup System” Column: “ADS B, C, D” and “ICS B, C, D” “Tier 2 Ref.” Column: “6.3.3”
T9A.2-2, Row: ADS B	Added text as follows: “Function” Column: “2” “Reactor Condition” Column: “Isolated” “Division” Column: “II” “Backup System” Column: “ADS A, C, D” and “ICS A, C, D” “Tier 2 Ref.” Column: “6.3.3”
T9A.2-2, Row: ADS C	Added text as follows: “Function” Column: “2” “Reactor Condition” Column: “Isolated” “Division” Column: “III” “Backup System” Column: “ADS A, B, D” and “ICS A, B, D” “Tier 2 Ref.” Column: “6.3.3”
T9A.2-2, Row: ADS D	Added text as follows: “Function” Column: “2” “Reactor Condition” Column: “Isolated” “Division” Column: “IV” “Backup System” Column: “ADS A, B, C” and “ICS A, B, C” “Tier 2 Ref.” Column: “6.3.3”

T9A.2-2, PCC A	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
T9A.2-2, PCC B	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
T9A.2-2, PCC C	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
T9A.2-2, PCC D	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
T9A.2-2, PCC E	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
T9A.2-2, PCC F	In Remarks column added text “Closed piping connections to GDCS and suppression pools.”
All Figures	Replaced text “Sensitive unclassified information provided under separate submittal per 10 CFR 2.390.” with “Security-Related Information - Withhold Under 10 CFR 2.390.”
F9A.2-1	Replaced figure based on detailed fire zone drawings.
F9A.2-2	Replaced figure based on detailed fire zone drawings.
F9A.2-3	Replaced figure based on detailed fire zone drawings.
F9A.2-4	Replaced figure based on detailed fire zone drawings.
F9A.2-5	Replaced figure based on detailed fire zone drawings.
F9A.2-6	Replaced figure based on detailed fire zone drawings.
F9A.2-7	Replaced figure based on detailed fire zone drawings.
F9A.2-8	Replaced figure based on detailed fire zone drawings.
F9A.2-9	Replaced figure based on detailed fire zone drawings.
F9A.2-10	Replaced figure based on detailed fire zone drawings.
F9A.2-11	Replaced figure based on detailed fire zone drawings.
F9A.2-12	Replaced figure based on detailed fire zone drawings.
F9A.2-13	Replaced figure based on detailed fire zone drawings.
F9A.2-14	Replaced figure based on detailed fire zone drawings.
F9A.2-15	Replaced figure based on detailed fire zone drawings.
F9A.2-16	Replaced figure based on detailed fire zone drawings.
F9A.2-17	Replaced figure based on detailed fire zone drawings.
F9A.2-18	Replaced figure based on detailed fire zone drawings.
F9A.2-19	Replaced figure based on detailed fire zone drawings.
F9A.2-20	Replaced figure based on detailed fire zone drawings.
F9A.2-21	Replaced figure based on detailed fire zone drawings.

F9A.2-22	Replaced figure based on detailed fire zone drawings.
F9A.2-23	Replaced figure based on detailed fire zone drawings.
F9A.2-24	Replaced figure based on detailed fire zone drawings.
F9A.2-25	Replaced figure based on detailed fire zone drawings.
F9A.2-26	Replaced figure based on detailed fire zone drawings.
F9A.2-27	Replaced figure based on detailed fire zone drawings.
F9A.2-28	Replaced figure based on detailed fire zone drawings.
F9A.2-29	Replaced figure based on detailed fire zone drawings.
F9A.2-30	Replaced figure based on detailed fire zone drawings.
F9A.2-31	Replaced figure based on detailed fire zone drawings.
F9A.2-32	Replaced figure based on detailed fire zone drawings.
F9A.2-23, new figure	Added figure for Site Fire Zones.
S9A.3.1, 1 st para.	Changed “safe shutdown analysis” to “fire hazards analysis”
S9A.3.1, 1 st para.	Added text: “area, using the defense in depth approach from NFPA 804 and Regulatory Guide 1.189. Defense in depth is defined as a principle aimed at providing a high degree of fire protection by inclusion of these three concepts: 1) preventing potential fires from starting; 2) quickly detecting those fires that occur, and promptly controlling and extinguishing fires to limit damage; and, 3) providing structural protection (such as fire-rated barriers) for buildings, equipment, and circuits so that a fire that is not promptly extinguished will not prevent safe shutdown, cause loss of life, or result in radioactive release in excess of 10 CFR 20 limits. None of the defense in depth concepts is complete by itself.”
S9A.3.1, new 2 nd para.	Added “The” at beginning of sentence Deleted “Service Water” before “Pump House” Replaced “Yard and the” with “Yard, as well as the overall” Expanded list of buildings to include “Guard House, Hot Machine Shop,” and “[Service] Water/Water Treatment Building, Cold Machine Shop, Warehouse, Training Center, Service Building, Auxiliary Boiler Building, and Administration [Building]”
S9A.3.1, item 3, 1 st sent.	Added “or rooms” after “surrounding a specific room” Added “or rooms” after “allow classifying the room” Replaced “zone” with “area”

S9A.3.1, item 6, new 2 nd sent.	Added sent.: “. Note that fire detection will also be installed within HVAC ductwork as required by NFPA 90A but is not credited in the fire hazards analysis for early detection of any fire within a single fire area”
S9A.3.1, item 7, 2 nd sent.	Replaced “Main Control Room, and” with “control room or” Replaced “and the” with “as well as for equipment covered by” Added comma in “safe shutdown, see Subsection 9.5.1”
S9A.3.1, item 12	Changed “barrier” to “zone”
S9A.3.2, 2 nd sent.	Added “and” in “including the walls, floors, and ceilings.”
S9A.3.4, 1 st sent.	Replaced “Two Drywell Inerting” with “The Drywell Inerting” Replaced “(two 350 mm (14 in.)) and exhaust (one 350 mm (14 in.) and one 400 mm (16 in.)) lines” with “ductwork (piping)” Replaced “do not have fire dampers” with “passes through a fire barrier but does not have fire dampers”
S9A.3.4, new 2 nd sent.	Added text: “These consist of two supply lines (each 350 mm (14 in.) nominal diameter) and two exhaust lines (one 350 mm (14 in.) nominal diameter and one 400 mm (16 in.) nominal diameter).”
S9A.3.4, 2 nd sent.	Replaced “There are two containment isolation valves for each supply and exhaust.” with “There are two containment isolation valves for each supply and exhaust piping penetration.”
S9A.3.4, 3 rd sent.	Changed “The valves” to “The isolation valves”
S9A.3.4, 3 rd sent.	Replaced text “interruption, if a fire occurs. The drywell spray function would be initiated at a temperature substantially below the threshold of damage for the penetration assembly, if required to suppress the fire.” with “interruption if a fire occurs”
S9A.3.5, 3 rd para., 1 st sent.	Replaced “0.15 meter (6 in.)” with “0.15-meter (6-in)” Replaced “0.30 meter (12 in.)” with “0.30-meter (12-in)” Replaced “0.016 meter (5/8 in.)” with “0.016-meter (5/8-in)”
S9A.3.5, 3 rd para., 3 rd sent.	Replaced “to meet the seismic requirements” with “to meet higher seismic requirements”
S9A.3.5, 4 th para., 1 st sent.	Replaced “0.15 meter (6 in.)” with “0.15-meter (6-in)” Replaced “0.30 meter (12 in.)” with “0.30-meter (12-in)” Replaced “0.15 meter (6 in.)” with “0.15-meter (6-in)” Replaced “(4 ft)” with “(4-ft)”
S9A.3.5, 4 th para., 2 nd sent.	Replaced “0.016 meter (5/8 in.)” with “0.016-meter (5/8-in)” Replaced “0.013 meter (1/2 in.)” with “0.013-meter (1/2-in)” Replaced “0.016 meter (5/8 in.)” with “0.016-meter (5/8-in)”

S9A.3.6, new 2 nd para.	Added text: “The use of 1.5-hour fire rated elevator doors in 3-hour fire-rated barriers does not compromise the fire barrier. Rather, section 6-1.2.2 of NFPA 804-1995 specifically allows 1.5-hour fire-rated doors in elevator shafts. No other applicable codes (IBC, NFPA 80, NFPA 101, NFPA 252, or ASME A17.1) require elevator doors to have a fire rating of more than 1.5 hours. None of the applicable codes address 3-hour fire-rated elevator shafts. It is not unusual for a door in a fire-rated wall to have a lower fire rating than the applicable fire wall, because the area on both sides of the door will normally be kept free of combustible material to ensure use of the door. Personnel evacuating from a fire are warned by signage at each elevator to use stairs (protected by 3-hour firewalls and doors) and not elevators during a fire.”
S9A.3.7, added new section	Added text: “9A.3.7 Basemats In general, concrete basemats are not required to be fire-rated because of the lack of any fire hazard in the ground beneath the basemats. The substantial thickness of concrete basemats would provide a large fire rating, if so required.”
S9A.3.8, renumbered from S9A.3.7, 1st sent.	Changed “Subsection 9.5.1.2.9” to “Subsection 9.5.1.11” Added “in safety-related buildings.” at end of sentence.
S9A4, Title	Retitled from “SAFE SHUTDOWN ANALYSIS BY FIRE AREA” to “FIRE HAZARD AND SAFE SHUTDOWN ANALYSIS SUMMARY”
S9A4, new 1st para	Added text: “For fire hazard and safe shutdown analysis for each individual fire area (assuming that automatic and manual fire suppression equipment does not function), see Tables 9A.5-1 through 9A.5-7.”
S9A4.1, 5 th para, new 1 st and 2 nd sent.	Added text: “Damage from a fire in the lower drywell is also limited to one train of safe shutdown components because of the separation of redundant components, low combustible loading, and primary containment inerting during power operation; and therefore exceptions are justified. Redundant valves are spatially separated and are designed to fail safe on loss of actuation power.”

S9A.4.1, 5 th para, 1 st sent.	Added “both” before “Control Rod Drive” Moved “(CRD)” in front of “System” Capitalized “Hydraulic Control Unit” Replaced “Drywell, the damage does prevent the control rods from inserting into the reactor. The postulated fire assumes loss of function that results in a reactor scram” with “lower drywell during a plant outage, there would be no impact to plant safe shutdown because all control rods would already have been inserted into the reactor vessel at the onset of the outage and prior to removing the inerting environment.”
S9A.4.1, 5 th para, last sent.	Rewritten as follows: “Further backup of reactor scram capability [and maintenance of safe shutdown] can be provided [by] other [systems] (such as Standby Liquid Control) [that are located in other fire areas of the plant].”
S9A.4.1, new 8 th para.	Text added: “A preaction sprinkler system is provided throughout the CRD pump room to provide personnel protection, allow egress, and limit the spread of the fire.”
S9A.4.1, 8 th para., 1 st bullet	Replaced “drywell and” with “fire” Replaced “spray piping, which is normally empty of water.” with “system piping;”
S9A.4.1, 8 th para., 2 nd bullet	Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 3 rd bullet	Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 4 th bullet	Replaced “helps” with “to” Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 5 th bullet	Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 6 th bullet	Deleted “floor drains” from “Provision of floor drains” Added “floor drains, curbs, equipment bases, and flood containment boundaries” after “adequately sized” Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 7 th bullet	Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., 8 th bullet	Replaced period with semicolon at end of sentence.
S9A.4.1, 8 th para., new 9 th bullet	Text added: “Use of watertight doors, where required, to protect equipment.”

S9A.4.1, new 9 th para	Added text: “Post-fire recovery for a design basis fire contained to a single Reactor Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional radiological, security access, and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in safety-related and nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Reactor Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Reactor Building fire area is considered better than currently operating nuclear plants.”
S9A.4.1, new 10 th para. and bullets	<p>Added text: “Fire protection within the Reactor Building is not affected by naturally occurring hazards due to the following reasons:</p> <ul style="list-style-type: none"> • Fire barriers are an integral part of the Reactor Building, designed and installed to withstand a Safe Shutdown Earthquake (SSE); • Fire suppression system piping in the Reactor Building is designed and installed to withstand an SSE and remain operational; • Fire detection and alarm in the Reactor Building is seismically mounted to not collapse; repair or restoration of fire detection and alarm would only require replacement of individual failed components from stored spares; <p>Protection of the fire protection system in the Reactor Building from design-basis storms, tornados, and floods is provided by the Reactor Building structure itself.”</p>
S9A.4.2, 1 st sent.	Replaced “safety division” with “redundant train of nonsafety-related equipment.” at end of sentence.
S9A.4.2, 2 nd sent.	Replaced “This arrangement allows any combination of the remaining three divisions” with “The Fuel Building does not contain any safety-related or safe shutdown components, and as such, a fire in the Fuel Building does not affect any of the four divisions used”
S9A.4.2, 3 rd para, 1 st bullet	<p>Replaced “helps” with “to”</p> <p>Replaced period with semicolon at end of sentence.</p>

S9A4.2, 3 rd para, 2 nd bullet	Replaced period with semicolon at end of sentence.
S9A4.2, 3 rd para, 3 rd bullet	Deleted “floor drains” from “Provision of floor drains” Added “floor drains, curbs, equipment bases, and flood containment boundaries” after “adequately sized” Replaced period with semicolon at end of sentence.
S9A4.2, 3 rd para, 4 th bullet	Replaced period with semicolon at end of sentence.
S9A4.2, new 4 th para.	Added text: “Post-fire recovery for a design basis fire contained to a single Fuel Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional radiological, security access, and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in safety-related and nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Fuel Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Fuel Building fire area is considered better than currently operating nuclear plants.”
S9A.4.2, new 5 th para and bullets	<p>Added text: “Fire protection within the Fuel Building is not affected by naturally occurring hazards due to the following reasons:</p> <ul style="list-style-type: none"> • Fire barriers are an integral part of the Fuel Building, designed and installed to withstand a Safe Shutdown Earthquake (SSE); • Fire suppression system piping in the Fuel Building is designed and installed to withstand an SSE and remain operational; • Fire detection and alarm in the Fuel Building is seismically mounted to not collapse; repair or restoration of fire detection and alarm would only require replacement of individual failed components from stored spares; <p>Protection of the fire protection system in the Fuel Building from design-basis storms, tornados, and floods is provided by the Fuel Building structure itself.</p>

S9A.4.3, new 2 nd para.	Added text: “The nonsafety-related MCR HVAC has redundant air handling units, but uses common ductwork. Where the common ductwork for one air handling unit could be exposed to fire involving the other redundant air handling unit, the HVAC ductwork will be wrapped or encapsulated in 3-hour fire rated material.”
S9A.4.3, new 5 th para.	Added text: “Manual water spray systems are provided internal to each of the charcoal filters, to provide property protection and limit the spread of the fire.”
S9A.4.3, 5 th para, 1 st bullet	Replaced “helps” with “to” Replaced period with semicolon at end of sentence.
S9A.4.3, 5 th para, 2 nd bullet	Replaced period with semicolon at end of sentence.
S9A.4.3, 5 th para, 3 rd bullet	Deleted “floor drains” from “Provision of floor drains” Added “floor drains, curbs, equipment bases, and flood containment boundaries” after “adequately sized” Replaced period with semicolon at end of sentence.
S9A.4.3, 5 th para, 4 th bullet	Replaced period with semicolon at end of sentence.
S9A.4.3, new 6 th para.	Text added: “Post-fire recovery for a design basis fire contained to a single Control Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional security access and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in safety-related and nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Control Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Control Building fire area is considered better than currently operating nuclear plants.”

S9A.4.3, new 7 th para. and bullets	<p>Text added: “Fire protection within the Control Building is not affected by naturally occurring hazards due to the following reasons:</p> <ul style="list-style-type: none"> • Fire barriers are an integral part of the Control Building, designed and installed to withstand a Safe Shutdown Earthquake (SSE); • Fire suppression system piping in the Control Building is designed and installed to withstand an SSE and remain operational; • Fire detection and alarm in the Control Building is seismically mounted to not collapse; repair or restoration of fire detection and alarm would only require replacement of individual failed components from stored spares; • Protection of the fire protection system in the Control Building from design-basis storms, tornados, and floods is provided by the Control Building structure itself.”
S9A.4.4, new para. 3 through 9	<p>Text added: “An automatic deluge system is provided in the open steam tunnel, as a water curtain to provide the separation between Reactor and Turbine Buildings equivalent to a 3-hour fire-rated concrete barrier, and to limit the spread of the fire.</p> <p>A wet-pipe sprinkler system is provided throughout the areas below the turbine that could be exposed to spreading oil, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>Preaction sprinkler systems are provided throughout the feedwater pump room and on the steam turbine bearings, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>A dry-pipe sprinkler system is provided throughout the main equipment access bay, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>Dry-pilot deluge systems are provided on the EHC skid and seal oil units, to provide property protection and limit the spread of the fire.</p> <p>A foam deluge system is provided throughout the lube oil tank room, to provide property protection and limit the spread of the fire.</p> <p>Manual water spray systems are provided internal to each of the off-gas charcoal adsorbers, to provide property protection and limit the spread of the fire.”</p>
S9A.4.4, 5 th (10 th) para, 1 st bullet	Replaced period with semicolon at end of sentence.
S9A.4.4, 5 th (10 th) para, 2 nd bullet	<p>Replaced “helps” with “to”</p> <p>Replaced period with semicolon at end of sentence.</p>

S9A.4.4, 5 th (10 th) para, 3 rd bullet	Replaced “drains and flood” with “floor drains, curbs, equipment bases, and floor” after “adequately sized floor” Replaced period with semicolon at end of sentence.
S9A.4.4, 5 th (10 th) para, 4 th bullet	Replaced period with semicolon at end of sentence.
S9A.4.4, new 11 th para.	Text added: “Post-fire recovery for a design basis fire contained to a single Turbine Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional radiological, security access, and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Turbine Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Turbine Building fire area is considered better than currently operating nuclear plants.”
S9A.4.4, new 12 th para and bullets	Text added: “The following features minimize or mitigate the impact of naturally occurring hazards on fire protection within the Turbine Building: <ul style="list-style-type: none"> • Fire barriers are an integral part of the Turbine Building, designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Fire suppression system piping in the Turbine Building is designed and installed to meet NFPA 13 seismic requirements; Protection of the fire protection system in the Turbine Building from design-basis storms, tornados, and floods is provided by the Turbine Building structure itself.”

S9A.4.5, new para. 2 through 4	<p>Added text: “A wet-pipe sprinkler system is provided throughout the radwaste handling portion of the Radwaste Building, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>A manual water spray system is provided internal to the charcoal filter, to provide property protection and limit the spread of the fire.</p> <p>Although the Radwaste Building contains radiological materials, fire within any given fire area does not create a radiological release in excess of 10 CFR 20 limits.”</p>
S9A.4.5, 2 nd (5 th) para., 1 st bullet	<p>Replaced “helps” with “to”</p> <p>Replaced period with semicolon at end of sentence.</p>
S9A.4.5, 2 nd (5 th) para., 2 nd bullet	<p>Replaced “drains and flood” with “floor drains, curbs, equipment bases, and floor” after “adequately sized floor”</p> <p>Replaced period with semicolon at end of sentence.</p>
S9A.4.5, 2 nd (5 th) para., 3 rd bullet	<p>Replaced period with semicolon at end of sentence.</p>
S9A.4.5, 6 th para	<p>Text added: “Post-fire recovery for a design basis fire contained to a single Radwaste Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional radiological, security access, and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Radwaste Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Radwaste Building fire area is considered better than currently operating nuclear plants.”</p>

S9A.4.5, 7 th para and bullets	<p>Text added: The following features minimize or mitigate the impact of naturally occurring hazards on fire protection within the Radwaste Building:</p> <ul style="list-style-type: none"> • Fire barriers are an integral part of the Radwaste Building, designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Fire suppression system piping in the Radwaste Building is designed and installed to meet NFPA 13 seismic requirements; <p>Protection of the fire protection system in the Radwaste Building from design-basis storms, tornados, and floods is provided by the Radwaste Building structure itself.”</p>
S9A.4.6, 4 th para.	Deleted entire paragraph.
S9A.4.6, new para. 6 through 10	<p>Text added: “A wet-pipe sprinkler system is provided throughout the Technical Support Center Complex to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>Wet-pipe sprinkler systems are provided throughout each of the cable spreading rooms, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>Preaction foam sprinkler systems are provided throughout each of the diesel-generator rooms, to provide personnel protection, allow egress, and limit the spread of the fire.</p> <p>Foam deluge systems are provided throughout each of the day tank rooms, to provide property protection and limit the spread of the fire.</p> <p>Manual water spray systems are provided internal to each of the charcoal filters, to provide property protection and limit the spread of the fire.”</p>
S9A.4.6, 7 th (11 th) para, 1 st bullet	Replaced period with semicolon at end of sentence.
S9A.4.6, 7 th (11 th) para, 2 nd bullet	<p>Replaced “helps” with “to”</p> <p>Replaced period with semicolon at end of sentence.</p>
S9A.4.6, 7 th (11 th) para, 3 rd bullet	<p>Replaced “drains and flood” with “floor drains, curbs, equipment bases, and floor” after “adequately sized floor”</p> <p>Replaced period with semicolon at end of sentence.</p>
S9A.4.6, 7 th (11 th) para, 4 th bullet	Replaced period with semicolon at end of sentence.

S9A.4.6, new 12 th para	Added text: “Post-fire recovery for a design basis fire contained to a single Electrical Building fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional security access and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The inclusion of equipment access paths and hatches for all areas of the Electrical Building not only facilitates original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Electrical Building fire area is considered better than currently operating nuclear plants.”
S9A.4.6, new 13 th para and bullets	Text added: “The following features minimize or mitigate the impact of naturally occurring hazards on fire protection within the Electrical Building: <ul style="list-style-type: none"> • Fire barriers are an integral part of the Electrical Building, designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Fire suppression system piping in the Electrical Building is designed and installed to meet NFPA 13 seismic requirements; • Protection of the fire protection system in the Electrical Building from design-basis storms, tornados, and floods is provided by the Electrical Building structure itself.”
S9A.4.7, 1 st para, 1 st sent.	Added “the” after “all portions of”
S9A.4.7, new 2 nd para.	Text added: “This FHA includes a simple evaluation of the Pump House, Guard House, Hot Machine Shop, Service Water/Water Treatment Building, Cold Machine Shop, Warehouse, Training Center, Service Building, Auxiliary Boiler Building, and Administration Building. A more detailed evaluation of the Service Water/Water Treatment Building and Service Building will be added during the Combined Construction and Operating License (COL) application for a specific site. A more detailed evaluation of the other buildings will be added as needed during detailed design for each building.”
S9A.4.7, 2 nd para	Added: “as well as Site fire zone drawing (Figure 9A.2-33)” before comma.

S9A.4.7, new para 4 through 8	<p>Added: “Foam deluge systems shall be provided on each fuel oil storage tank and the lube oil storage area, to provide property protection and limit the spread of fire.</p> <p>Automatic deluge systems shall be provided on each Main, Unit Auxiliary, and Reserve Auxiliary transformer, to provide property protection and limit the spread of fire.</p> <p>Wet-pipe sprinkler systems shall be provided throughout each of the cable tunnels, the diesel firepump room, and the Administration Building, to provide personnel and property protection, allow egress, and limit the spread of the fire.</p> <p>A dry-pipe sprinkler system shall be provided throughout the Warehouse, to provide personnel and property protection, allow egress, and limit the spread of the fire.</p> <p>A preaction sprinkler system shall be provided throughout the Training Center, to provide personnel and property protection, allow egress, and limit the spread of the fire.’</p>
S9A.4.7, 3 rd (9 th) para. 1 st bullet	Replaced period with semicolon at end of sentence.
S9A.4.7, 3 rd (9 th) para. 2 nd bullet	Replaced period with semicolon at end of sentence.
S9A.4.7, new 10 th para.	<p>Added paragraph: “Post-fire recovery for a design basis fire contained to a single Yard fire area would involve all the components (restoration and replenishment of fire protection equipment, forensic investigation, overhaul and salvage, demolition, reconstruction to original design, and testing of restored systems to original requirements) typical of a major industrial fire, as well as the additional security access and quality assurance controls unique to a nuclear plant. However, the resources needed to perform this restoration should be no more than that required for a major plant refueling outage. Redundancy provided in nonsafety-related systems allows quicker restoration of plant operation, even if at a reduced power level. The outdoor nature of equipment in the Yard facilitates original not only original plant construction but also major equipment replacement. Due to these factors, the potential for post-fire recovery for a design basis fire contained to a single Yard fire area is considered better than currently operating nuclear plants.</p>

S9A.4.7, new 11 th para. and bullets	<p>Added: “The following features minimize or mitigate the impact of naturally occurring hazards on fire protection for the Yard:</p> <ul style="list-style-type: none"> • Fire barriers shall be an integral part of the buildings, designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Outdoor fire barriers shall be designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Fire suppression system piping in the buildings and in the Yard shall be designed and installed to meet NFPA 13 seismic requirements; • Protection of the fire protection system in the buildings from design-basis storms, tornados, and floods shall be provided by the building structure itself. • Outdoor electrical components in the fire protection system shall be weatherproof or protected against moisture intrusion; • Dry-pipe systems shall be used for all outdoor fire protection piping; • Outdoor piping, conduit, and components in the fire protection system shall have the required corrosion protection coatings; <p>All outdoor fire protection piping and conduit shall be electrically grounded.”</p>
S9A.4.8 switched with S9A.4.9	
S9A.4.8 (Service Building) 8 th para, 1 st bullet	<p>Replaced “helps” with “to”</p> <p>Replaced period with semicolon at end of sentence.</p>
S9A.4.8 (Service Building) 8 th para, 2 nd bullet	<p>Changed “Provision of adequately sized floor drains to handle the suppression flow.” to “Provision of adequately sized floor drains, curbs, equipment bases, and flood containment boundaries to handle the suppression flow;”</p>
S9A.4.8 (Service Building) 8 th para, 3 rd bullet	<p>Replaced period with semicolon at end of sentence.</p>
S9A.4.8 (Service Building) 8 th para, new 4 th bullet	<p>Added sentence: “Provisions for curbs around open hatches.”</p>

S9A.4.8 (Service Building) new 9 th para. and bulleted items	<p>Text added: “The following features minimize or mitigate the impact of naturally occurring hazards on fire protection within the Service Building:</p> <ul style="list-style-type: none"> • Fire barriers are an integral part of the Service Building, designed and installed as required by the IBC for applicable seismic, wind, hydrodynamic, etc, conditions; • Fire suppression system piping in the Service Building is designed and installed to meet NFPA 13 seismic requirements; <p>Protection of the fire protection system in the Service Building from design-basis storms, tornados, and floods is provided by the Service Building structure itself.”</p>
S9A.4.9 (Service Water/Water Treatment Building)	Re-titled “Service Water Pump House” to “Service Water/Water Treatment Building”
S9A.4.9 (Service Water/Water Treatment Building) new 3 rd para.	Added paragraph: “A wet-pipe sprinkler system shall be provided throughout the diesel firepump room, to provide personnel and property protection, allow egress, and limit the spread of the fire.”
S9A.4.9 (Service Water/Water Treatment Building) 1 st bullet	Replaced “helps” with “to”
S9A.4.9 (Service Water/Water Treatment Building) 2 nd bullet	Replaced “Provision of adequately sized floor drains to handle the suppression flow.” with “Provision of adequately sized floor drains, curbs, equipment bases, and flood containment boundaries to handle the suppression flow;”
S9A.5 2 nd para, 1 st bullet	Changed “No effect” to “No impact”
S9A.5 new 3 rd para.	Added text and sketch describing room numbering of fire zones.
S9A.5.2, 2 nd para.	Updated sentence to reflect list of drawings, which actually show the Fuel Building fire zones.
S9A.5.3, 2 nd para.	Updated sentence to reflect list of drawings, which actually show the Control Building fire zones.
S9A.5.7	Updated list of Figures for the Yard fire drawings.
S9A.5.8	Switched to 9A.5.9 (Service Water Pump House)
S9A.5.9	Switched to 9A.5.8 (Service Building)

T9A.5 ALL TABLES, Top right-hand quadrant	Replaced field “contains safe shutdown divisional equipment or cables” with two fields “Safety-related divisional equipment or cables” and “Nonsafety-related redundant trains or equipment or cables”. Applicable information added to the two new fields throughout all tables.
T9A.5 ALL TABLES, Bottom left-hand quadrant	Replaced “Assuming operation of fire suppression systems, effect of fire upon:” with “Assuming operation of installed fire extinguishing equipment, impact of fire upon:”
T9A.5 ALL TABLES, Bottom right-hand quadrant	Replaced “Assuming all fire suppression systems inoperable, effect of design basis fire on safe shutdown:” with “ Assuming automatic & manual FP equipment does not function, impact of design basis fire on safe shutdown:”
T9A.5 ALL TABLES	Changed heading “Secondary” to “Backup” for Fire Detection and Fire Suppression columns.
T9A.5 ALL TABLES	Additional editorial changes made throughout tables, which may not be explicitly identified in this change list.
T9A.5-1 Fire Area 1104	Deleted elevations -6400, -1000, 4650, and 9060 from “EI” column Replaced “A17.2” with “A17.1” in the “applicable codes” box Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1105	Deleted elevations -6400, -1000, 4650, and 9060 from “EI” column Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1110	Deleted “Electrical Equipment” from “Potential Combustibles” column Replaced “CO2 fire extinguishers” with “Hose racks (in nearby stairwell)” in Fire Suppression – Primary column Replaced “Hose racks (in nearby stairwell)” with “ABC fire extinguishers” in Fire Suppression – Secondary column Replaced “<1400” with “<700” in Anticipated combustible load field Replaced “1400” with “700” in Unsprinklered combustible load limit field Added text “ redundant train A” after “results in loss of only” Deleted “all” before “other systems” Added text “and redundant train B” after “divisions of safe shutdown”

T9A.5-1 Fire Area 1120	<p>Changed description from “HCU C” to “HCU B”</p> <p>Deleted “Electrical Equipment” from “Potential Combustibles” column</p> <p>Expanded “Cable insulation” to cover Elevations –11500, -9100, -6400 and Room 1120</p> <p>Replaced “CO2 fire extinguishers” with “Hose racks (in nearby stairwell)” in Fire Suppression – Primary column</p> <p>Replaced “Hose racks (in nearby stairwell)” with “ABC fire extinguishers” in Fire Suppression – Secondary column</p> <p>Replaced “<1400” with “<700” in Anticipated combustible load field</p> <p>Replaced “1400” with “700” in Unsprinklered combustible load limit field</p> <p>Added text “ redundant train B” after “results in loss of only”</p> <p>Deleted “all” before “other systems”</p> <p>Added text “and redundant train A” after “divisions of safe shutdown”</p>
T9A.5-1 Fire Area 1130	<p>Changed description from “HCU B” to “HCU C”</p> <p>Deleted “Electrical Equipment” from “Potential Combustibles” column</p> <p>Expanded “Cable insulation” to cover Elevations –11500, -9100, -6400 and Room 1130</p> <p>Replaced “CO2 fire extinguishers” with “Hose racks (in nearby stairwell)” in Fire Suppression – Primary column</p> <p>Replaced “Hose racks (in nearby stairwell)” with “ABC fire extinguishers” in Fire Suppression – Secondary column</p> <p>Replaced “<1400” with “<700” in Anticipated combustible load field</p> <p>Replaced “1400” with “700” in Unsprinklered combustible load limit field</p> <p>Added text “ redundant train A” after “results in loss of only”</p> <p>Deleted “all” before “other systems”</p> <p>Added text “and redundant train B” after “divisions of safe shutdown”</p>

<p>T9A.5-1 Fire Area 1140</p>	<p>Deleted “Electrical Equipment” from “Potential Combustibles” column</p> <p>Expanded “Cable insulation” to cover Elevations –11500, -9100, -6400 and Room 1120</p> <p>Replaced “CO2 fire extinguishers” with “Hose racks (in nearby stairwell)” in Fire Suppression – Primary column</p> <p>Replaced “Hose racks (in nearby stairwell)” with “ABC fire extinguishers” in Fire Suppression – Secondary column</p> <p>Replaced “<1400” with “<700” in Anticipated combustible load field</p> <p>Replaced “1400” with “700” in Unsprinklered combustible load limit field</p> <p>Added text “ redundant train B” after “results in loss of only”</p> <p>Deleted “all” before “other systems”</p> <p>Added text “and redundant train A” after “divisions of safe shutdown”</p>
<p>T9A.5-1 Fire Area 1150</p>	<p>Moved Room 1100 into its own row and added “Electrical Equipment” to the list of Potential Combustibles and “CO2 fire extinguishers” to the list of Fire Suppression Backup</p> <p>Deleted “safe” from 1st instance of “safe shutdown”</p> <p>Added “, as well as loss of redundant train A” after “equipment and circuits”</p> <p>Added “and redundant train B” after “divisions of safe shutdown”</p> <p>Added new last sentence “Both A and B nonsafety-related on-site power sources are unaffected by fire and are operable.”</p>
<p>T9A.5-1 Fire Area 1152</p>	<p>Deleted “safe” from 1st instance of “safe shutdown”</p> <p>Added “, as well as loss of redundant train A” after “equipment and circuits”</p> <p>Added “and redundant train B” after “divisions of safe shutdown”</p> <p>Added new last sentence “Both A and B nonsafety-related on-site power sources are unaffected by fire and are operable.”</p>

T9A.5-1 Fire Area 1160	<p>Moved Room 1103 to its own row and added “Electrical equipment” to the list of potential combustibles and “CO2 fire extinguishers” to the list of “Fire Suppression Backup”.</p> <p>Deleted “safe” from 1st instance of “safe shutdown”</p> <p>Added “, as well as loss of redundant train B” after “equipment and circuits”</p> <p>Added “and redundant train A” after “divisions of safe shutdown”</p> <p>Added new last sentence “Both A and B nonsafety-related on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-1 Fire Area 1162	<p>Deleted “safe” from 1st instance of “safe shutdown”</p> <p>Added “, as well as loss of redundant train B” after “equipment and circuits”</p> <p>Added “and redundant train A” after “divisions of safe shutdown”</p> <p>Added new last sentence “Both A and B nonsafety-related on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-1 Fire Area 1170	Delete Room 1170 from EI 4650
T9A.5-1 Fire Area 1190	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1191	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1192	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1193	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1194	<p>Replaced “negligible” with “<700” in Anticipated combustible load field</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-1 Fire Area 1195	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1196	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1197	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1198	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-1 Fire Area 1203	<p>Added “over entire area” to Fire Suppression Primary column for El. – 6400.</p> <p>Moved Room 1307 into its own row and added “Electrical Equipment” to the list of potential combustibles and “CO2 fire extinguishers,” to the list of fire suppression backup.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “redundant nonsafety-related CRD pumps A and B, but does not affect any safety-related equipment; all safety divisions and both A and B nonsafety-related on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-1 Fire Area 1210	Replaced “Division I safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division I equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1220	Replaced “Division II safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division II equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1230	Replaced “Division III safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division III equipment; remaining three safety divisions and both redundant A and B equipment”

T9A.5-1 Fire Area 1240	Replaced “Division IV safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division IV equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1262	<p>Changed “None” to “Process indication” in Fire Detection Backup column.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train B equipment; all safety divisions and train A equipment are unaffected by fire and operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-1 Fire Area 1311	<p>Moved Room 1710 to its own row and added “Electrical Equipment” to the list of potential combustibles and “CO2 fire extinguishers,” to the list of fire suppression primary.</p> <p>Replaced “Division I safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division I equipment; remaining three safety divisions and both redundant A and B equipment”</p>
T9A.5-1 Fire Area 1321	Replaced “Division II safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division II equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1331	Replaced “Division III safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division III equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1341	Replaced “Division IV safe shutdown equipment and circuits; remaining three divisions of safe shutdown” with “Safety Division IV equipment; remaining three safety divisions and both redundant A and B equipment”
T9A.5-1 Fire Area 1450	<p>Added NFPA 24 to list of applicable codes.</p> <p>Changed “Group D” to “Group B” in the electrical classification box.</p> <p>Added “16m3” before “Hydrogen” in the potential combustible column and “(outside room)” after “Manual pull” in Fire Detection Backup column.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A equipment and no safety-related equipment; all safety divisions and redundant train B are operable. Both A and B on-site power sources are unaffected by fire and operable.”</p>

T9A.5-1 Fire Area 1460	<p>Added NFPA 24 to list of applicable codes.</p> <p>Changed “Group D” to “Group B” in the electrical classification box.</p> <p>Added “16m3” before “Hydrogen” in the potential combustible column and “(outside room)” after “Manual pull” in Fire Detection Backup column.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B equipment and no safety-related equipment; all safety divisions and redundant train A are operable. Both A and B on-site power sources are unaffected by fire and operable.”</p>
T9A.5-1 Fire Area 1600	<p>Deleted “None” from rows 17500 and 27000 in the Fire Detection Primary column and expanded “Area-wide linear heat” to cover these rows.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A and B equipment, but does not affect any safety-related equipment; all safety divisions are unaffected by a fire and are operable. Both A and B on-site power sources are unaffected by fire and operable.”</p>
T9A.5-1 Fire Area 1770	<p>Changed “part of 4393” to “part of 4293” and left 4393 as an entire room.</p> <p>Replaced “safe shutdown equipment is unaffected by the fire and is operable.” with “safety-related equipment and both redundant train A and B equipment are unaffected by the fire and are operable.”</p>
T9A.5-2 Fire Area 2100	<p>Deleted Rooms 2103 and 2104.</p> <p>Added Rooms 2150 and 2160.</p> <p>Replaced “None” with “Area-wide linear heat” for Rooms 21P0, 21P1 and 21P2, in the Fire Detection Primary column.</p> <p>Added “Electrical Equipment” to list of potential combustibles for Elevations –6400 and –1000.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable” with “results in loss of only redundant train A and B equipment; all safety-related and safe shutdown equipment is unaffected by fire and are operable.”</p> <p>Added new sentences: “Makeup water capability to the Spent Fuel Pool from the FP system is unaffected by fire and is operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>

T9A.5-2 Fire Area 2192	<p>Replaced “safe shutdown divisional equipment or circuits” with “safety-related or safe shutdown equipment”</p> <p>Replaced “safe shutdown divisional equipment is operable” with “safety divisions and both redundant trains A and B are operable”</p>
T9A.5-2 Fire Area 2193	<p>Replaced “safe shutdown divisional equipment or circuits” with “safety-related or safe shutdown equipment”</p> <p>Replaced “safe shutdown divisional equipment is operable” with “safety divisions and both redundant trains A and B are operable”</p>
T9A.5-2 Fire Area 2490	<p>Replaced “safe shutdown divisional equipment or circuits” with “safety-related or safe shutdown equipment”</p> <p>Replaced “safe shutdown divisional equipment is operable” with “safety divisions and both redundant trains A and B are operable”</p>
T9A.5-2 Fire Area 2600	Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train A; all safety divisions and train B equipment are unaffected by fire and operable. Both A and B on-site power sources are unaffected by fire and are operable.”
T9A.5-2 Fire Area 2601	Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train B; all safety divisions and train A equipment are unaffected by fire and operable. Both A and B on-site power sources are unaffected by fire and are operable.”
T9A.5-3 Fire Area 3100	<p>Split Room 3100 into two rows adding the text “over sump” to one of the rows and adding “Area-wide photoelectric” to the Fire Detection Primary column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-3 Fire Area 3101	<p>Added “Class A combustibles” to the list of potential combustibles.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-3 Fire Area 3110	<p>Replaced “Hose racks (in nearby stairwells)” with “CO2 fire extinguishers” in the Fire Suppression Primary column for Rooms 3110 “below access floor” and 3250.</p> <p>Replaced “ABC fire extinguishers” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column for Rooms 3110 “below access floor” and 3250.</p> <p>Replaced “Insulation” with “None” in the list of potential combustibles for room 3251.</p> <p>Added text: “The nonsafety-related MCR HVAC has redundant air handling units, but uses common ductwork. Where the common ductwork for one air handling unit could be exposed to fire involving the other redundant air handling unit, the HVAC ductwork will be wrapped or encapsulated in 3-hour fire rated material.”</p> <p>Deleted “and” between “equipment” and “circuits”</p> <p>Added text “, as well as redundant train A non-safety equipment” after “circuits”</p> <p>Added text “and redundant train B equipment” after “remaining three divisions of safe shutdown”</p>
T9A.5-3 Fire Area 3120	<p>Deleted “and” between “equipment” and “circuits”</p> <p>Added “and redundant trains A and B equipment” after “three divisions of safe shutdown”</p>
T9A.5-3 Fire Area 3130	<p>Replaced “Hose racks (in nearby stairwells)” with “CO2 fire extinguishers” in the Fire Suppression Primary column for Rooms 3130 “below floor” and 3260.</p> <p>Replaced “ABC fire extinguishers” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column for Rooms 3130 “below floor” and 3260.</p> <p>Added text “The nonsafety-related MCR HVAC has redundant air handling units, but uses common ductwork. Where the common ductwork for one air handling unit could be exposed to fire involving the other redundant air handling unit, the HVAC ductwork will be wrapped or encapsulated in 3-hour fire rated material.”</p> <p>Deleted “and” between “equipment” and “circuits”</p> <p>Added text “as well as redundant train B non-safety equipment” after “circuits”</p> <p>Added text “and redundant train A equipment” after “remaining three divisions of safe shutdown”</p>

T9A.5-3 Fire Area 3140	Deleted “and” between “equipment” and “circuits” Added text “and redundant trains A and B equipment” after “remaining three divisions of safe shutdown”
T9A.5-3 Fire Area 3190	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-3 Fire Area 3191	Replaced “Hose racks (in nearby stairwell)” with “ABC fire extinguishers (outside Elev at each landing)” in the Fire Suppression Primary column for Room 3191. Replaced “ABC fire extinguishers (outside Elev at each landing)” with “Hose racks (in nearby stairwell)” in the Fire Suppression Primary column for Room 3191. Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-3 Fire Area 3192	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-3 Fire Area 3270	Deleted NFPA 90A from list of applicable codes. Deleted Room 3272 from EI –1400. Moved Rooms 3201 and 3202 to their own row with only “Class A combustibles” listed in the potential combustibles column and “Area-wide photoelectric” added to the Fire Detection Primary column. Replaced “, which isolates MCR circuits” with “All safety-related circuits and train A and B redundant circuits are optically isolated outside this fire area, so all safety divisional equipment both redundant trains A and B are operable”
T9A.5-3 Fire Area 3302	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown equipment; all safety divisions and both redundant trains A and B are operable.”

T9A.5-4 Fire Area 4100	<p>Deleted “south end at F1770 (water curtain sprinklers)” from list “except” box.</p> <p>Moved Rooms 4180, 4181, and 4182 into a separate room.</p> <p>Moved “Area-wide photoelectric into same row as Rooms 4180, 4181, and 4182.</p> <p>Replaced “Hose racks (in nearby stairwells)” with “ABC fire extinguishers” in the Fire Suppression Primary column at Elevation – 1400.</p> <p>Replaced “ABC fire extinguishers” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column for all rooms except the Generator housing and Exciter housing.</p> <p>Moved Rooms 4281 and 4282 into a new row and added “< 28m3 Hydrogen” and “Class IIIB lubricants” to the list of potential combustibles and “Area-wide spot heat” to the Fire Detection Primary column.</p> <p>At Elevation 4650, replaced “Hose racks (in nearby stairwells)” with “ABC fire extinguishers” in the Fire Suppression Primary column and “ABC fire extinguishers” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column.</p> <p>Added new elevation “8200” to table.</p> <p>At Elevation 20000, H2 seal oil unit, added “< 11,000 L Class IIIA seal oil” to list of potential combustibles.</p> <p>At Elevation 28000, Turbine generator bearings, in the Fire Suppression Primary column changed “12.2 L/min” to “16.3 L/min per m2 over entire area”</p> <p>At Elevation 28000, Generator housing and Exciter housing, added “<56m3” before “Hydrogen” in list of combustibles.</p> <p>For Room 4505 added, “Filter media” to list of potential combustibles.</p> <p>In the box for “Anticipated combustible load” added distinguishing statement regarding > or < 700.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety-related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable. Fire-related failure of safety-related instrumentation may cause reactor scram or containment isolation. See Subsections 9A.6.4.1 and 9A.6.4.2”</p>
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T9A.5-4 Fire Area 4103	<p>Split Rooms 4103 and 4104 into separate rows.</p> <p>Room 4104 added "< 28m3 Hydrogen" to list of potential combustibles and changed Primary Fire Detection from "Area-wide ionization" to "Dry-pilot detection"</p> <p>Room 4183 removed "Filter media" from list of potential combustibles.</p> <p>Room 4292 changed Fire Suppression Primary and Backup from Hose racks and ABC fire extinguishers to Preaction Sprinkler and hose racks, respectively.</p> <p>Replaced "no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable." with "up to all four redundant FW pumps, but affects no safety-related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable."</p>
T9A.5-4 Fire Area 4108	<p>Room 4108 and 4386 replaced "Hose racks (in nearby stairwells)" with "ABC fire extinguishers" in the Fire Suppression Primary column and "ABC fire extinguishers" with "Hose racks (in nearby stairwells)" in the Fire Suppression Backup column.</p> <p>Replaced "safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable." with "safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable."</p>
T9A.5-4 Fire Area 4190	<p>Room 4190 replaced "Hose racks (in nearby stairwells)" with "ABC fire extinguishers" in the Fire Suppression Primary column and "ABC fire extinguishers" with "Hose racks (in nearby stairwells)" in the Fire Suppression Backup column.</p> <p>Replaced "safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable." with "safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable."</p>
T9A.5-4 Fire Area 4191	<p>Replaced "safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable." with "safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable."</p>

T9A.5-4 Fire Area 4192	<p>Room 4192 replaced “Hose racks (in nearby stairwells)” with “ABC fire extinguishers (outside Elev at each landing)” in the Fire Suppression Primary column and “ABC fire extinguishers (outside Elev at each landing)” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4193	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4194	<p>Room 4194 replaced “Hose racks (in nearby stairwells)” with “ABC fire extinguishers (outside Elev at each landing)” in the Fire Suppression Primary column and “ABC fire extinguishers (outside Elev at each landing)” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4195	<p>Replaced “4650” with “8200” in Elevation column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4196	<p>Room 4196 replaced “Hose racks (in nearby stairwells)” with “ABC fire extinguishers (outside Elev at each landing)” in the Fire Suppression Primary column and “ABC fire extinguishers (outside Elev at each landing)” with “Hose racks (in nearby stairwells)” in the Fire Suppression Backup column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4197	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-4 Fire Area 4250	<p>Added “Reactor Component” in front of existing description in top right hand quadrant.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train A equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train B equipment are operable.”</p>
T9A.5-4 Fire Area 4260	<p>Added “Reactor Component” in front of existing description in top right hand quadrant.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train B equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train A equipment are operable.”</p>
T9A.5-4 Fire Area 4307	<p>Replaced “~1000 L” with “< 3500L”</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4308	<p>Replaced “~48,000 L” with “< 50,000L”</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-4 Fire Area 4350	<p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train A equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train B equipment are operable.”</p>
T9A.5-4 Fire Area 4360	<p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train B equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train A equipment are operable.”</p>
T9A.5-4 Fire Area 4550	<p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train A equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train B equipment are operable.”</p>

T9A.5-4 Fire Area 4560	Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train B equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train A equipment are operable.”
T9A.5-4 Fire Area 4651	Added “Surge” to description in top right hand quadrant. Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train A equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train B equipment are operable.”
T9A.5-4 Fire Area 4661	Added “Surge” to description in top right hand quadrant. Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “affects only redundant train B equipment and no safety-related or safe shutdown divisional equipment; all safety division and redundant train A equipment are operable.”
T9A.5-5 Fire Area 6101	Elevation –9350 and –2350, added “Transient combustibles” and “Class A combustibles” to list of potential combustibles. Replaced “12.2 L/min per m2” with “8.1 L/min per m2 over 140 m2” Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6102	Fire Area changed from 6102 to 6170. Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6190	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6191	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”

T9A.5-5 Fire Area 6192	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6193	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6194	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6270	<p>In top right hand quadrant, changed “around” to “between.” and added room 6287 to the box.</p> <p>Elevation –2350 Room 6270, deleted “raised” in “6270 below raised floor”</p> <p>Rooms 6287 and 6382, deleted “Transient combustibles” from list of potential combustibles.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-5 Fire Area 6290	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-5 Fire Area 6301	<p>Room 6490, replaced “Insulation” with “None” in Potential Combustibles column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5100	<p>Elevation 30000, changed Room 5702 to 5703.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-6 Fire Area 5150	<p>Changed “IBC 302.1.1” to “IBC 307.9.11” in the “building code occupancy classification.” field.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5154	<p>Deleted NFPA 14 and added NFPA 16, 24 and 37 to list of applicable codes.</p> <p>Added “over entire area” to description of Fire Suppression Primary for Elevation 4650.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5255	<p>Deleted NFPA 14 and added NFPA 15, 16, 24, 30, and 37 to list of applicable codes.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5156	<p>Hyphenated “D-G” in description field</p> <p>Deleted NFPA 14 and added NFPA 24 to the list of applicable codes.</p> <p>Deleted “Class IIIB lubricants” from list of potential combustibles.</p> <p>Changed “> 700” to “> 1400” in the field “Anticipated combustible load”</p> <p>Changed “700” to “1400” in the field “Unsprinklered combustible load limit”</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site power and related equipment are operable.”</p>

T9A.5-6 Fire Area 5160	<p>Added NFPA 75 to list of applicable codes.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5164	<p>Deleted NFPA 14 and added NFPA 16, 24 and 37 to list of applicable codes.</p> <p>Added “over entire area” to description of Fire Suppression Primary for Elevation 4650.</p> <p>Changed Fire Suppression Backup from “Hose racks (in nearby stairwell)” with “Hydrants”</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5265	<p>Deleted NFPA 14 and added NFPA 15, 16, 24, 30, and 37 to list of applicable codes.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site power and related equipment are operable.”</p>
T9A.5-6 Fire Area 5166	<p>Hyphenated “D-G” in description field</p> <p>Deleted NFPA 14 and added NFPA 24 to the list of applicable codes.</p> <p>Deleted “Class IIIB lubricants” from list of potential combustibles.</p> <p>Changed “> 700” to “> 1400” in the field “Anticipated combustible load”</p> <p>Changed “700” to “1400” in the field “Unsprinklered combustible load limit”</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site power and related equipment are operable.”</p>

T9A.5-6 Fire Area 5180	<p>Added Room 5186C to list of rooms.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5188	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5190	<p>Room 5701 “Cable insulation” and “Electrical equipment” added to list of combustibles.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5191	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5192	<p>Room 5703 “Cable insulation” and “Electrical equipment” added to list of combustibles and “(outside room)” added to Fire Suppression Primary column.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5193	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5194	<p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-6 Fire Area 5250	<p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site and off-site power and related equipment are operable.”</p>

T9A.5-6 Fire Area 5260	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5301	Changed “IBC 302.1.1” to “IBC 307.9.11” in building code occupancy classification field. Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-6 Fire Area 5302	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-6 Fire Area 5303	Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”
T9A.5-6 Fire Area 5350	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5360	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5450	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5460	Changed Elevation from “18100” to “18000” Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site and off-site power and related equipment are operable.”

T9A.5-6 Fire Area 5550	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5560	Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site and off-site power and related equipment are operable.”
T9A.5-6 Fire Area 5650	Elevation 4650, added “Class IIIB lubricants”, “Cable Insulation”, and “Filter media” to list of combustibles. Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train A equipment; all safety divisions and train B equipment are unaffected by fire and operable.
T9A.5-6 Fire Area 5660	Deleted Room 5663 from Elevation 27000. Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train B equipment; all safety divisions and train A equipment are unaffected by fire and operable.
T9A.5-7 Fire Area 4201	Added NFPA 13, 15, 16, and 24 to list of applicable codes. Added “per IBC 312.1” to building code occupancy classification field. Revised DCD Fig to 9A.2-33 to reflect new Site Fire Zone drawing. Replaced blank Room # with “Lube Oil Storage” Changed Fire Detection Primary from “LO system instrumentation” to “Suppression flowswitch” and Fire Detection Backup from “Manual pull” to “Lube Oil system instrumentation” Changed Fire Suppression Primary from “Hydrants” to “Dry-pilot foam deluge 12.2 L/min per m2” and Fire Suppression Backup from “ABC fire extinguishers” to “Hydrants” Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit. Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”

T9A.5-7 Fire Area 4202	<p>Added NFPA 10, 24, and 72 to list of applicable codes.</p> <p>Added “per IBC 312.1” to building code occupancy classification field.</p> <p>Changed “N/A” in the electrical classification field to “Class I Div 2 Group B”</p> <p>Replaced blank Room # with “Hydrogen Storage”</p> <p>Added “860 m3” in front of “hydrogen” in Potential Combustibles column.</p> <p>Changed “HY” to “H2” in Fire Detection Primary column.</p> <p>Added text “(outside hazard)” to description in Fire Detection Backup column.</p> <p>Changed value of “<700” to “>700” in the box for Anticipated combustible load.</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4251	<p>Deleted NFPA 15 and 72 and added NFPA 10 and 24 to list of applicable codes.</p> <p>Revised DCD Fig to 9A.2-13 from 9A.2-25.</p> <p>Replaced blank Room # with “ASD A Transformer”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4252	<p>Deleted NFPA 15 and 72 and added NFPA 10 and 24 to list of applicable codes.</p> <p>Revised DCD Fig to 9A.2-13 from 9A.2-25.</p> <p>Replaced blank Room # with “ASD C Transformer”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-7 Fire Area 4261	<p>Deleted NFPA 15 and 72 and added NFPA 10 and 24 to list of applicable codes.</p> <p>Revised DCD Fig to 9A.2-13 from 9A.2-25.</p> <p>Replaced blank Room # with “ASD B Transformer”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4262	<p>Deleted NFPA 15 and 72 and added NFPA 10 and 24 to list of applicable codes.</p> <p>Revised DCD Fig to 9A.2-13 from 9A.2-25.</p> <p>Replaced blank Room # with “ASD D Transformer”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4271	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Replaced blank Room # with “Main Transformer A”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4272	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Replaced blank Room # with “Main Transformer B”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>

T9A.5-7 Fire Area 4273	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Replaced blank Room # with “Main Transformer C”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 4274	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Replaced blank Room # with “Spare Main Transformer”</p> <p>Replaced “safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “safety related or safe shutdown divisional equipment; all safety divisions and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 5157	<p>Deleted NFPA 15 and 72 and added NFPA 10 and 24 to list of applicable codes.</p> <p>Added figure 9A.2-27 to list of DCD figures.</p> <p>Replaced blank Room # with “Reserve Auxiliary Transformer A”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A off-site power and related equipment and no safety-related equipment; all safety divisions, train A on-site power and related equipment, and redundant train B equipment are operable.”</p>
T9A.5-7 Fire Area 5158	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Added figure 9A.2-27 to list of DCD figures.</p> <p>Replaced blank Room # with “Unit Auxiliary Transformer A”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A off-site power and related equipment and no safety-related equipment; all safety divisions, train A on-site power and related equipment, and redundant train B equipment are operable.”</p>

T9A.5-7 Fire Area 5159	<p>Added NFPA 24 to list of applicable codes.</p> <p>Revised DCD Fig to 9A.2-33 to reflect new Site Fire Zone drawing.</p> <p>Replaced blank Room # with “Fuel Oil Tank A”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train A on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train B on-site power and related equipment are operable.”</p>
T9A.5-7 Fire Area 5167	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Added figure 9A.2-27 to list of DCD figures.</p> <p>Replaced blank Room # with “Reserve Auxiliary Transformer B”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B off-site power and related equipment and no safety-related equipment; all safety divisions, train B on-site power and related equipment, and redundant train A equipment are operable.”</p>
T9A.5-7 Fire Area 5168	<p>Deleted NFPA 72 and added NFPA 24 to list of applicable codes.</p> <p>Added figure 9A.2-27 to list of DCD figures.</p> <p>Replaced blank Room # with “Unit Auxiliary Transformer B”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B off-site power and related equipment and no safety-related equipment; all safety divisions, train B on-site power and related equipment, and redundant train A equipment are operable.”</p>

T9A.5-7 Fire Area 5169	<p>Added NFPA 24 to list of applicable codes.</p> <p>Revised DCD Figure to 9A.2-33 to reflect new Site Fire Zone drawing.</p> <p>Replaced blank Room # with “Fuel Oil Tank B”</p> <p>Changed value of “700” to “N/A” in the box for Unsprinklered combustible load limit.</p> <p>Replaced “no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “only redundant train B on-site power and related equipment and no safety-related equipment; all safety divisions and redundant train A on-site power and related equipment are operable.”</p>
T9A.5-7 Fire Area 7100	New Fire Area added to table.
T9A.5-7 Fire Area 7150	<p>Changed description from “Diesel Fire Pump C” to “Nonseismic Diesel Fire Pump”</p> <p>Deleted NFPA 90A and added NFPA 24 and 37 to list of applicable codes.</p> <p>Changed building code occupancy classification from “H-3” to “F-1 per IBC 307.9.5”</p> <p>Revised DCD Figure to 9A.2-33 to reflect new Site Fire Zone drawing.</p> <p>Replaced “Class IB fuel” with “Class II fuel” in list of potential combustibles.</p> <p>Added text “over entire area” to description of Fire Suppression Primary.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only the nonseismic diesel-driven fire pump; remaining two (motor-driven and diesel-driven) Seismic Category I fire pumps are unaffected by fire and are operable. All safe shutdown equipment and both A and B on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 7180	New Fire Area added to table.
T9A.5-7 Fire Area 7200	New Fire Area added to table.
T9A.5-7 Fire Area 7300	New Fire Area added to table.
T9A.5-7 Fire Area 7400	New Fire Area added to table.

T9A.5-7 Fire Area 7500	New Fire Area added to table.
T9A.5-7 Fire Area 7600	New Fire Area added to table.
T9A.5-7 Fire Area 7700	New Fire Area added to table.
T9A.5-7 Fire Area 7800	New Fire Area added to table.
T9A.5-7 Fire Area 7900	New Fire Area added to table.
T9A.5-7 Fire Area 8151	<p>Fire Area changed from 8151 to 8110.</p> <p>Changed description from “Breathing Air Storage A” to “Breathing Air Storage Division I”</p> <p>Deleted NFPA 90A and added NFPA 24.</p> <p>Added Figures 9A.2-2 and 9A.2-11 to list of DCD figures.</p> <p>Changed Room # from “8151” to “8110”</p> <p>Deleted text “(outside stairwell)” from Fire Detection Backup.</p> <p>Replaced “Hose racks (in nearby stairwell)” with “Hydrants” in Fire Suppression Primary column.</p> <p>Replaced “remaining two divisions of breathing air are unaffected by fire and are operable.” with “Division II and III of breathing air and trains A and B are unaffected by fire and are operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 8152	<p>Fire Area changed from 8152 to 8120.</p> <p>Changed description from “Breathing Air Storage B” to “Breathing Air Storage Division II”</p> <p>Deleted NFPA 90A and added NFPA 24.</p> <p>Added Figures 9A.2-2 and 9A.2-11 to list of DCD figures.</p> <p>Changed Room # from “8152” to “8120”</p> <p>Deleted text “(outside stairwell)” from Fire Detection Backup.</p> <p>Replaced “Hose racks (in nearby stairwell)” with “Hydrants” in Fire Suppression Primary column.</p> <p>Replaced “remaining two divisions of breathing air are unaffected by fire and are operable.” with “Division I and III of breathing air and trains A and B are unaffected by fire and are operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>

T9A.5-7 Fire Area 8153	<p>Fire Area changed from 8153 to 8130.</p> <p>Changed description from “Breathing Air Storage C” to “Breathing Air Storage Division III”</p> <p>Deleted NFPA 90A and added NFPA 24.</p> <p>Added Figures 9A.2-2 and 9A.2-11 to list of DCD figures.</p> <p>Changed Room # from “8153” to “8130”</p> <p>Deleted text “(outside stairwell)” from Fire Detection Backup.</p> <p>Replaced “Hose racks (in nearby stairwell)” with “Hydrants” in Fire Suppression Primary column.</p> <p>Replaced “remaining two divisions of breathing air are unaffected by fire and are operable.” with “Division I and II of breathing air and trains A and B are unaffected by fire and are operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 8250	<p>Added NFPA 24 to list of applicable codes.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only the motor-driven fire pump; remaining two diesel-driven fire pumps (Seismic Category I and nonseismic) and all safe shutdown equipment are unaffected by fire and are operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 8260	<p>Deleted NFPA 90A and added NFPA 24 and 37 to list of applicable codes.</p> <p>Changed building code occupancy classification from “H-3” to “F-1 per IBC 307.9.5”</p> <p>Replaced “Class IB fuel” with “Class II fuel” in list of potential combustibles.</p> <p>Added text “over entire area” to description of Fire Suppression Primary.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only Seismic Category I diesel-driven fire pump; remaining two (motor-driven and nonseismic diesel-driven) fire pumps and all safe shutdown equipment are unaffected by fire and are operable. Both A and B on-site power sources are unaffected by fire and are operable.”</p>

T9A.5-7 Fire Area 9101	<p>Deleted NFPA 13 and 90A from list of applicable codes.</p> <p>Deleted “Insulation” from list of potential combustibles.</p> <p>Revised description of “Plant operation:” to include RB and CB.</p> <p>Deleted “divisional” after “no safe shutdown”</p> <p>Replaced “all safe shutdown divisional equipment is operable.” with “all safety-related equipment and both redundant trains A and B are operable.”</p>
T9A.5-7 Fire Area 9150	<p>Added figure 9A.2-25 to list of DCD figures.</p> <p>Changed “Preaction” to “Wet-pipe” in description of Fire Suppression Primary.</p> <p>Added “ABC fire extinguishers” to Fire Suppression Backup description.</p> <p>Changed “Property loss:” field from “Minor” to ‘Moderate’</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train A on-site power source and related equipment; all safety divisions and train B on-site power source and related equipment are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 9160	<p>Added figure 9A.2-25 to list of DCD figures.</p> <p>Changed “Preaction” to “Wet-pipe” in description of Fire Suppression Primary.</p> <p>Added “ABC fire extinguishers” to Fire Suppression Backup description.</p> <p>Replaced “affects no safe shutdown divisional equipment or circuits; all safe shutdown divisional equipment is operable.” with “results in loss of only redundant train B on-site power source and related equipment; all safety divisions and train A on-site power source and related equipment are unaffected by fire and are operable.”</p>
T9A.5-7 Fire Area 9201	<p>Deleted NFPA 13 and 90A from list of applicable codes.</p> <p>Deleted “Insulation” from list of potential combustibles.</p> <p>Revised “Plant operation:” to delete TB and RWB and add RB and FB.</p> <p>Deleted “divisional” after “no safe shutdown”</p> <p>Replaced “all safe shutdown divisional equipment is operable.” with “all safety-related equipment and both redundant trains A and B are operable.”</p>
S9A.6.1, 4 th sent.	Changed “COL licensee” to “COL license”

S9A.6.1, last sent.	Deleted entire sentence. Added new last sentence “Refer to Section 9A.7 for COL information.”
S9A.6.4.1 Title	Deleted “and MSIV Closure Circuits” from title
S9A.6.4.1 between 3 rd and 4 th para.	Added new subsection and title: “9A.6.4.2 MSIV Closure Circuits”
S9A.6.4.2, 1 st sent.	Added “tunnel” after “in the MSL”
S9A.6.4.4 5 th para., 1 st sent.	Changed “IEEE 279” to “IEEE 603”
S9A.6.4.5, RC&IS Cables	Changed semicolon to comma after “inside the pedestal”
S9A.6.4.8 1 st para., 1 st and 2 nd sent.	Replaced “train” with “loop” in each sentence.
S9A.6.4.8 1 st para., 4 th sent.	Replaced “effects” with “impacts” and “affected” with “impacted”
S9A.6.4.9 last para., 1 st sent.	Replaced “in” with “within close”
S9A.6.4.10, 5 th sent.	Deleted “be” from “inboard valve is not be involved”
S9A.6.4.11, 5 th sent.	Deleted “in” after “loss of all component functions”
S9A.6.5 (Underground Structures without Sprinkler Protection) moved to new subsection 9A.6.6.1	
S9A.6.5 added new section	Added new section text.
S9A.6.5.1 added new subsection	Added new subsection text.
S9A.6.5.2 added new subsection	Added new subsection text.
S9A.6.5.3 added new subsection	Added new subsection text.
S9A.6.5.4 added new subsection	Added new subsection text.
S9A.6.5.5 added new subsection	Added new subsection text.

S9A.6.5.6 added new subsection	Added new subsection text.
S9A.6.6 added new subsection	Added new subsection text.
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 1 st bullet	Added text: “in these buildings;” at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 2 nd bullet	Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 3 rd bullet	Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 4 th	Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 5 th	Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 6 th	Changed “nonsprinklered” to “unsprinklered” Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 7 th	Added text “ . these initiate a fire alarm signal to the constantly manned Control Room. ”

S9A.6.6.1 (Underground Structures without Sprinkler Protection) 8 th	Added semicolon at end of sentence
S9A.6.6.1 (Underground Structures without Sprinkler Protection) 9 th	Added period at end of sentence
S9A.6.6.2 added new subsection	Added new subsection text.
S9A.6.6.3 added new subsection	Added new subsection text.
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) moved to new subsection 9A.6.6.4	
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 1 st bullet	Added text: “in these buildings;” at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 2 nd bullet	Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 3 rd bullet	Added semicolon at end of sentence

S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 4 th bullet	Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 5 th bullet	Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 6 th bullet	Changed “nonsprinklered” to “unsprinklered” Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 7 th bullet	Added text “; these initiate a fire alarm signal to the constantly manned Control Room;”
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 8 th bullet	Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 9 th bullet	Added semicolon at end of sentence
S9A.6.6 (Lack of Fire Fighter Exterior Access Openings, without Sprinkler Protection) 10 th bullet	Added period at end of sentence

S9A.7.1	Deleted “The COL applicant shall establish fire hazard design acceptance criteria for the Service Water Pump Building and Service Building (Refer to 9A.1).” and replaced with “The COL applicant shall establish fire hazard design acceptance criteria for the Service Water/Water Treatment Building and Service Building (Refer to 9A.1).”
S9A.7.2	Deleted “The COL applicant shall include drawings showing the fire area separation and fire protection features for the Yard Service Water Pump Building and Service Building (Refer to 9A.2.2).” and replaced with “The COL applicant shall include drawings showing the fire area separation and fire protection features for the Yard buildings, Service Water/Water Treatment Building, and Service Building (Refer to 9A.2.2).”
S9A.7.4	Deleted “The COL applicant shall design the Service Water Pump Building fire protection features (Refer to 9A.4.8).” and replaced with “The COL applicant shall design the Service Building fire protection features (Refer to 9A.4.8).”
S9A.7.5	Deleted “The COL applicant shall design the Service Building fire protection features (Refer to 9A.4.9).” and replaced with “The COL applicant shall design the Service Water/Water Treatment Building fire protection features (Refer to 9A.4.9).”
S9A.7.6	Deleted “The COL licensee shall provide reliable design for piping penetration in the Reactor Building with equivalent construction to tested wall assemblies when rated fire barriers testing is required (Refer to 9A.6.1).” and replaced with “The COL holder shall provide detailed design for piping penetrations in the Reactor Building with equivalent construction to tested wall assemblies when penetrating rated fire barriers, or fire testing will be required. The COL licensee shall provide a reliable design for piping penetrations in the Reactor Building with equivalent construction to tested wall assemblies when rated fire barrier testing is required (Refer to 9A.6.1).”
S9A.7.7	Deleted “The COL licensee shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternative method” of fire protection for underground portions of the Reactor, Control and Fuel Buildings (Refer to 9A.6.5).” and replaced with “The COL holder shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternate method” of fire protection for the unsprinklered Reactor Building, involving underground levels (Refer to 9A.6.6.1), large fire areas (Refer to 9A.6.6.2), three or more stories above grade (Refer to 9A.6.6.3), and lack of exterior access openings for fire department personnel (Refer to 9A.6.6.4).”

S9A.7.8	Deleted “The COL licensee shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternative method” of fire protection for nonsprinkled Reactor, Control and Fuel Buildings involving lack of exterior access openings for fire department personnel (Refer to 9A.6.6).” and replaced with “The COL holder shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternate method” of fire protection for the unsprinklered Fuel Building, involving underground levels (Refer to 9A.6.6.1), large fire areas (Refer to 9A.6.6.2), and lack of exterior access openings for fire department personnel (Refer to 9A.6.6.4).”
S9A.7.9	New “The COL holder shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternate method” of fire protection for the unsprinklered Control Building, involving underground levels (Refer to 9A.6.6.1) and lack of exterior access openings for fire department personnel (Refer to 9A.6.6.4).”
S9A.7.10	New “The COL holder shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternate method” of fire protection for the partially sprinklered Turbine Building, involving large fire areas (Refer to 9A.6.6.2).”
S9A.7.11	New “The COL holder shall obtain approval from the appropriate authority having jurisdiction prior to construction for the “alternate method” of fire protection for the partially sprinklered Electrical Building, involving three or more stories above grade (Refer to 9A.6.6.3).”

