

## IP2 UFSAR

### CHAPTER 1 – INTRODUCTION AND SUMMARY

UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
1.1	1.1	Introduction	Modify	<p>This section is modified by eliminating discussions regarding the submittal of the FSAR, primary contractor and architect engineer, nuclear steam supply system, and plant power levels, and adding a discussion regarding the permanent shut down and defueling of IP2 and the compilation of the Defueled Safety Analysis Report (DSAR).</p> <p>In addition, the summary discussion of the contents of the Final Safety Analysis Report (FSAR) is replaced with a summary discussion of the contents of Section 1 of the DSAR. Also, the discussion regarding the General Design Criteria is modified to reflect the discussions that remain.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p> <p>The DSAR will be derived from Revision 27 of the IP2 Updated Final Safety Analysis Report (UFSAR). The DSAR will be developed as a licensing basis document that reflects the permanently defueled condition of IP2 and supersedes the UFSAR. The DSAR is intended to serve the same function during SAFSTOR and decommissioning that the UFSAR served during operation of the facility. An evaluation of the systems, structures and components (SSCs) described in the UFSAR will be performed to determine the function, if any, these SSCs will perform in a defueled condition.</p> <p>For the purposes of 10 CFR 50.59 screenings or other activities that reference the UFSAR, the DSAR will constitute the safety analysis report reflective of the permanently shut down and defueled facility following the docketing of the certifications required in 10 CFR 50.82(a)(1) in accordance with 10 CFR 50.82(a)(2). The term DSAR will be utilized in lieu of the term UFSAR. The DSAR will be updated consistent with the requirements of 10 CFR 50.71(e).</p>
1.2	1.2	Summary Plant Description	Modify	<p>The title of this section is modified to replace the word “Plant” with the word “Facility.” This is an administrative change to reflect that IP2 will be permanently shut down and defueled. As a result, power operations and electrical generation will no</p>

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				longer occur. The principal activities will be the safe storage of spent nuclear fuel and the management of radioactive wastes. Given that status, IP2 is better described as a facility versus a plant.
1.2.1	1.2.1	Site	Retain	No proposed changes
1.2.1.1	1.2.1.1	Meteorology	Modify	This section is modified by replacing the discussion regarding the application of meteorological conditions to an operating plant and the associated postulated accidents with a discussion of the meteorological conditions and how they apply to the postulated fuel handling accident (FHA) and release of gaseous wastes or radioactive liquids that will be described in Chapter 6 of the DSAR.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.
1.2.1.2	1.2.1.2	Geology and Hydrology	Modify	This section is modified to replace the references to “plant” with references to “facility” and update the discussion to reflect current conditions. These are administrative changes to reflect that IP2 will no longer be capable of power operations and electrical generation and the current status regarding groundwater contamination at the facility.
1.2.1.3	1.2.1.3	Seismology	Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” This is an administrative change to reflect that IP2 will no longer be capable of power operations and electrical generation.
1.2.1.4	1.2.1.4	Environmental Radiation Monitoring	Modify	This section is modified to update the discussion to reflect current conditions. This is an administrative change to reflect that IP2 was operated for several decades prior to it being permanently shut down and defueled.
1.2.1.5	1.2.1.5	Conclusions	Modify	This section is modified by eliminating the discussions regarding containment design and engineered safety features, replacing the reference to “plant” with a reference to “facility,” and updating the discussion to replace the discussion of safe operation of IP2 with a discussion of the safe storage and handling of spent fuel at IP2.

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				<p>Most of these changes are administrative changes to reflect that IP2 will no longer be capable of power operations and electrical generation and to denote the function of the facility in the permanently shut down and defueled condition. The elimination of the discussion of the containment design and engineered safety features reflects the revised licensing and design bases for IP2 in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). An FHA in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the reactor containment is no longer required to perform an active function and there are no engineered safety features in the permanently shut down and defueled state. The changes to the FSAR descriptions regarding the containment and the engineered safety features are discussed in more detail in the review tables for Chapters 5 and 6.</p>
1.2.2	1.2.2	Plant Description	Modify	<p>This section is modified by replacing the references to “unit” and “plant” with references to “facility,” eliminating the references to the nuclear steam supply system, turbine generator and their necessary auxiliaries, replacing the reference to “a complete and operable nuclear power plant are provided for the unit” with a</p>

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				<p>reference to “the safe storage and handling of spent fuel,” and replacing a reference to historical Figure 2.2-2 with a reference to facility drawing 504688 (Formerly Figure 2.2-2).</p> <p>Most of these changes are administrative changes to reflect that IP2 will no longer be capable of power operations and electrical generation and to denote the function of the facility in the permanently shut down and defueled condition. The elimination of the reference to the nuclear steam supply system, a turbine generator and their associated auxiliaries reflects the revised licensing and design bases for IP2 in the permanently shut down and defueled condition.</p> <p>The term “facility” better represents IP2 in the permanently shut down and defueled condition, because it will no longer generate electrical power,</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>In addition, the status of Figure 2.2-2 is changed from historical to active, and it is replaced with a reference to Plant Drawing 504668. It is referenced in the PDTs and the depicted exclusion boundary is expected to change during decommissioning; thus, it needs to be maintained and updated.</p>
1.2.2.1	1.2.2.1	Nuclear Steam Supply System (NSSS)	Modify	<p>This section is modified by eliminating the discussions of the nuclear steam supply system and support systems and retaining the discussions of the auxiliary systems necessary to support the safe storage of spent fuel and the management of liquid, gaseous, and solid wastes. In addition, the title of the section is changed to “Spent Fuel Storage” to reflect the remaining content.</p>

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1.2.2.2	NA	Reactor and Plant Control	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>This section is proposed to be deleted in its entirety.</p>
1.2.2.3	NA	Turbine and Auxiliaries	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor control systems are no longer required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is proposed to be deleted in its entirety.</p>
1.2.2.4	1.2.2.2	Electrical System	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Consequently, the turbine and its auxiliaries are no longer required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is modified by revising the description of the electrical system to reflect the changes to the system described in the review table for Chapter 8.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no</p>

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1.2.2.5	1.2.2.3	Control Room	Modify	<p>longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition. The review table for Chapter 8 provides additional discussion regarding the changes to the description of the electrical systems.</p> <p>This section is revised by replacing the reference to “plant” with a reference to “facility,” eliminating the reference to the reactor and turbine generator, replacing the discussion of the “operation of the plant under normal and accident condition” with a reference to “safe wet storage of spent fuel and management of radioactive waste processing systems,” and eliminating the requirement for the control room to possess adequate shielding and air conditioning facilities to permit occupancy during all operating or accident conditions.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids. Consequently, the term facility better describes IP2 in the permanently shut down and defueled condition.</p>

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1.2.2.6	1.2.2.4	Diesel Generators	Modify	<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, there is no requirement for the Control Room to be staffed to mitigate the FHA. The changes to UFSAR Section 9.9 regarding the Control Room ventilation system are discussed in more detail in the review table for Chapter 9.</p> <p>This section is modified by revising the description of the diesel generator to reflect the changes to the diesel generators described in the review table for Chapter 8.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition. The review table for Chapter 8 provides additional discussion regarding the changes to the description of the diesel generators.</p>

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1.2.2.7	1.2.2.5	Waste Disposal System	Modify	This section is modified by replacing the reference to “plant operation” and “plant site” with references to “facility activities” and “site,” respectively. These are administrative changes to reflect that IP2 will no longer be capable of power operations or generating electricity in the permanently shut down and defueled condition.
1.2.2.8	1.2.2.6	Fuel Handling System	Modify	<p>This section is proposed to be modified by eliminating the discussions regarding refueling activities, identifying that the fuel handling system will continue to supply the handling of spent fuel in the SFP, and replacing the reference to “operating personnel” with “facility personnel.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Consequently, refueling activities will no longer be performed.</p> <p>Additionally, the change in status regarding IP2 will result in changes to the IP2 staff. Thus, an administrative change is made to eliminate the reference to specific department (i.e., operating) personnel with a more generic reference.</p>
1.2.2.9	NA	Engineered Safety Features	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the</p>



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1.2.2.10	1.2.2.7	Structures	Modify	<p>dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition. The review table for Chapter 6 provides additional discussion regarding the changes to the description of the engineered safety systems.</p> <p>This section is modified by eliminating the discussion of the reactor containment interior components, replacing the reference to “plant drawings” with a reference to “facility drawings,” and other editorial changes.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids</p> <p>As previously discussed, the reactor containment no longer performs an isolation function in the permanently shut down and defueled condition. However, it will continue to be required to maintain its structural integrity to ensure that it does not have any impact on the safe storage of spent fuel in the SFP.</p> <p>Also, IP2 is better described as a facility in the permanently shut down and defueled condition, because it will no longer be capable of power operations and electrical generation.</p>
1.2.2.11	1.2.2.8	Containment	Modify	<p>This section is modified by eliminating the discussions of the capability of the containment to withstand internal pressure associated with a loss of coolant accident, to provide shielding for normal operation and accident conditions, and to be isolated in the event of a loss of coolant accident. In addition, the section is updated to reflect</p>

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				that the containment must maintain its structural integrity in the permanently shut down and defueled condition to ensure that it does not impact the safe storage of spent fuel.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.
				As previously discussed, the reactor containment no longer performs an isolation function in the permanently shut down and defueled condition, nor is it required to perform an active function following any of the remaining accidents. However, it will continue to be required to maintain its structural integrity to ensure that it does not have any impact on the safe storage of spent fuel in the SFP.
Figure 1.2-1	Figure 1.2-1	Indian Point Nuclear Generating Units 1 & 2 [Historical]	Retain	No proposed changes.
Figure 1.2-2	NA	Deleted	Delete	Previously deleted.
Figure 1.2-3	NA	Deleted	Delete	Previously deleted.
Figure 1.2-4	Figure 1.2-2	Cross Section of Plant [Historical]	Retain	No proposed changes
Figure 1.2-5	NA	Deleted	Delete	Previously deleted.
Figure 1.2-6	NA	Deleted	Delete	Previously deleted.
Figure 1.2-7	NA	Deleted	Delete	Previously deleted.
Figure 1.2-8	NA	Deleted	Delete	Previously deleted.
Figure 1.2-9	NA	Deleted	Delete	Previously deleted.
1.3	1.3	General Design Criteria (GDC)	Modify	The words “more recently” were deleted. These words are an unnecessary qualifier.
1.3.1	1.3.1	Overall Plant Requirements (GDC 1 – GDC 5)	Modify	This section is modified by replacing the references to “plant” and “nuclear electric plant” with references to “facility,” eliminating the discussion of GDC 4, eliminating

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the discussions of reactor operation, safe shutdown and isolation of the reactor, eliminating the discussion of the loss of coolant accident, revising the section to discuss the safe storage and handling of spent fuel, eliminating the references to the reactor coolant system, containment system structures, electrical systems, and emergency systems, eliminating the discussion of shared systems between IP2 and IP3, and eliminating the discussions of initial tests and operation.

The definitions of the Seismic Classes I, II, and III are modified to match the revised definitions that are provided in Section 1.11.1. See the discussion of that UFSAR Section for the justification of this change. In addition, conforming changes are made to reflect UFSAR Sections 7.7 and 9.6.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.

The review tables for Chapters 4, 5, 8, 9 and 13 provide additional discussion regarding the changes to the specific structures, systems, and components.

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1.3.2	NA	Protection by Multiple Fission Product Barriers (GDC 6 – GDC 10)	Delete	<p>Also, IP2 is better described as a facility in the permanently shut down and defueled condition, because it will no longer be capable of power operations and electrical generation.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids. Consequently, the reactor, reactor protection system, and reactor coolant system are no longer required to perform a function in the permanently shut down and defueled condition. The containment is required to remain structural sound, so as to not impact the safe storage of spent fuel in the SFP.</p>
1.3.3	1.3.2	Nuclear and Radiation Controls (GDC 11 – GDC 18)	Modify	<p>The review tables for Chapters 3, 4, 5, 7 and 14 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is modified by replacing the reference to “plant” with a reference to “facility,” eliminating the reference to GDC 12 through 16, eliminating the discussions regarding operation of the reactor and turbine generator, eliminating the discussions regarding shielding, ventilation control and filtration, and containment integrity, eliminating the discussion of instrumentation and controls to monitor and maintain neutron flux, reactor coolant pressure, flow rate, temperature and control rod positions, eliminating the discussions of instrumentation systems for the reactor coolant system, steam systems, and containment, denoting that instrumentation systems are only required to ensure the safe storage and handling of spent fuel and radioactive wastes, eliminating the discussion regarding monitoring the operational status of the reactor, eliminating the discussion regarding instrumentation and control systems for reactor protection and containment isolation and operation of engineered safety features equipment, eliminating the discussion regarding</p>

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				<p>instrumentation to monitor reactor coolant system leakage, eliminating the discussion regarding the radiation monitoring system and portable survey equipment to monitor leakage from the reactor containment under accident conditions, and eliminating the discussion of containment isolation systems.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>The review tables for Chapters 6, 7 and 9 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>Also, IP2 is better described as a facility in the permanently shut down and defueled condition, because it will no longer be capable of power operations and electrical generation.</p>
1.3.4	NA	Reliability and Testability of Protection Systems	Delete	This section is proposed to be deleted in its entirety.

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1.3.5	NA	Reactivity Control (GDC 27 – GDC 32)	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>The review tables for Chapters 7 and 8 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p>

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1.3.6	NA	Reactor Coolant Pressure Boundary (GDC 33 – GDC 36)	Delete	<p>The review tables for Chapters 3, 7 and 9 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p>
1.3.7	NA	Engineered Safety Features (GDC 37 – GDC 65)	Delete	<p>The review table for Chapter 4 provides additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p>

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				Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.
1.3.8	1.3.3	Fuel and Waste Storage Systems (GDC 66 – GDC 69)	Modify	<p>The review tables for Chapters 5, 6 and 8 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is modified by eliminating the reference to the new spent fuel storage racks, eliminating the discussion of refueling operations, refueling canal, reactor vessel head removal, and refueling system interlocks, denoting activities that are required for fuel handling activities, replacing the term “operating personnel” with the term “facility personnel,” and making a few editorial corrections or clarifications.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids. After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI.</p>
1.3.9	1.3.4	Plant Effluents (GDC 70)	Modify	<p>The review tables for Chapters 9 and 11 provide additional discussion regarding the changes to the specific structures, systems, and components.</p> <p>This section is modified to replace the reference to “plant” with a reference to “facility” and replace the reference to “normal operation” with “normal activities.” These are administrative changes to reflect that IP2 will be permanently shut down and defueled. IP2 is better described as a facility in the permanently shut down and defueled condition, because it will no longer be capable of power operations and electrical generation.</p>
1.4	1.4	Design Parameters and Plant Comparison	Modify	The title of this section is modified by eliminating the reference to “plant comparison.” This is an administrative change to reflect the elimination of Section 1.4.2 as discussed below.
1.4.1	NA	Design Highlights	Delete	This section is proposed to be deleted in its entirety.



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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI.</p>
1.4.1.1	NA	Power Level	Delete	<p>The majority of the systems associated with the original pressurized water reactor are no longer required to perform a function in the permanently shut down and defueled state. This section no longer serves a purpose.</p> <p>This section is proposed to be deleted in its entirety.</p>
1.4.1.2	NA	Reactor Coolant Loops	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur. Thus, a discussion of power level is no longer relevant.</p> <p>This section is proposed to be deleted in its entirety.</p>
1.4.1.3	NA	Peak Specific Power	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>This section is proposed to be deleted in its entirety.</p>

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1.4.1.4	1.4.1	Fuel Cladding	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur. Thus, a discussion of peak specific power is no longer relevant.</p> <p>This section is proposed to be modified by replacing the reference to “plant” with a reference to “facility,” and eliminating the comparisons of the fuel cladding to other plants.</p>
1.4.1.5	1.4.2	Fuel Assembly Design	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur.</p> <p>This section is proposed to be modified by eliminating the discussion regarding out-of-pile and in-pile tests and nuclear operating experience.</p>
1.4.1.6	NA	Moderator Temperature Coefficient of Reactivity	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur.</p>

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1.4.2	NA	IP2 – IP3 Design Differences	Delete	This section is proposed to be deleted in its entirety.  Given that IP2 will be permanently shut down and defueled, there will be substantial differences between the licensing and design bases between IP2 and IP3. IP3 will continue to operate. As a result, a comparison of IP2 and IP3 features is no longer appropriate.
1.5	NA	Research and Development Requirements	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur. Thus, the information in this section is obsolete.
1.6	NA	Identification of Contractors [Historical Information Only]	Delete	This section is proposed to be deleted in its entirety.  This section provided historical information regarding the contractors that constructed IP2. Given that IP2 will be permanently shut down and defueled, this information is no longer relevant.
1.7	NA	Project Reorganization – December 1969 [Historical Information Only]	Delete	This section is proposed to be deleted in its entirety.  This section provided historical information regarding the contractors that construed IP2. Given that IP2 will be permanently shut down and defueled, this information is no longer relevant.
Figure 1.7-1	NA	Functional Relationships [Historical]	Delete	This figure is proposed to be deleted. See the discussion for Section 1.7.
1.8	NA	Project Reorganization – March 1970 [Historical Information Only]	Delete	This section is proposed to be deleted in its entirety.  This section provided historical information regarding the contractors that construed IP2. Given that IP2 will be permanently shut down and defueled, this information is no longer relevant.
Figure 1.8-1	NA	Organization Chart WEDCO Reliability Group [Historical]	Delete	This figure is proposed to be deleted. See the discussion for Section 1.7.

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1.9	1.5	Supplements and Revisions to Original FSAR	Modify	An editorial change is made to include a hyphen in Off-Site.
1.9.1	1.5.1	Supplements	Retain	No proposed changes.
1.9.2	1.5.2	Revisions	Modify	This section is modified to discuss the latest revision of the IP2 UFSAR. This revision will establish the DSAR. In addition, historical information regarding Revision 2 of the UFSAR is deleted, because it is antiquated.
				For the purposes of 10 CFR 50.59 screenings or other activities that reference the UFSAR, the DSAR will constitute the safety analysis report reflective of the permanently shut down and defueled facility following the docketing of the certifications required in 10 CFR 50.82(a)(1) in accordance with 10 CFR 50.82(a)(2). The term DSAR will be utilized in lieu of the term UFSAR. The DSAR will be updated consistent with the requirements of 10 CFR 50.71(e).
1.10	1.6	Quality Assurance Program	Retain	No proposed changes
1.10.1	1.6.1	General	Modify	This section is modified to reflect that an IPEC Quality Assurance Program (QAP) specific to IP2 will be adopted once the facility is permanently shut down and defueled. This QAP will replace the Entergy QAP. The description is modified to state: “The IPEC Quality Assurance Program (QAP) for Indian Point Unit 2 is described in the IPEC Quality Assurance Program Manual (QAPM) and associated implementing documents provide for control of activities that affect the quality of safety-related nuclear plant structures, systems, and components. The QAP is also applied to certain quality-related equipment and activities that are not safety-related, and where other regulatory or industry guidance establishes program requirements.” The changes to the QAP will be made in accordance with 10 CFR 50.54(a).
1.10.2	1.6.2	Scope	Modify	The content of this section is replaced with the following: “The QAPM applies to all activities associated with structures, systems, and components that are safety related or controlled by 10 CFR 72. The QAPM also applies to transportation packages controlled by 10 CFR 71. The methods of implementation of the requirements of the QAPM are commensurate with the item’s or activity’s importance to safety. The applicability of the requirements of the QAPM to other items and activities is determined on a case-by-case basis. The QAPM implements 10 CFR 50 Appendix B, 10 CFR 71 Subpart H, and 10 CFR 72 Subpart G. All items and activities affecting safety addressed in Regulatory Guide 1.29 “Seismic Design Classification” revision 3, September 1978, are also governed by the Quality Assurance Program. A list of safety

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				related items is maintained. Elements of the Quality Assurance Program are also applicable to activities and items affecting safety as defined in Licensing commitments. (Reference 1)” The changes to the QAP will be made in accordance with 10 CFR 50.54(a).
1.10.3	1.6.3	Organization and Responsibilities	Modify	This section is modified to reflect that an IPEC Quality Assurance Program (QAP) specific to IP2 will be adopted once the facility is permanently shut down and defueled. This QAP will replace the Entergy QAP. The changes to the QAP will be made in accordance with 10 CFR 50.54(a).
Table 1.10-1	NA	Deleted	Delete	Previously deleted.
1.11	1.7	Design Criteria for Structures and Components	Retain	No proposed changes
1.11.1	1.7.1	Definition of Seismic Design Classifications	Modify	This section is modified by modifying the definitions of Seismic Classes I, II, and III, eliminating the structures, systems, and components that no longer perform a function in the permanently shut down and defueled condition and eliminating the discussions regarding loss of coolant accident, safe shutdown of the reactor, isolation of the reactor, reactor operation, chemical volume and control system, and waste disposal system.
				The chemical volume control system and waste disposal system classifications are defined in Section 1.11.2. The discussions provided in this section are no longer necessary, because these systems are no longer required to be classified as Seismic Class I. EC# #83553 provides the evaluation of the reclassifications of structures, systems, and components.
				The definitions of Seismic Class I, II, and III are modified to address the revised set of accident analysis provided in UFSAR Section 14 and the permanently shut down and defueled condition. The radioactivity dose release information quoted in Class I and Class II definitions of current IP2 UFSAR, Section 1.11.1 are based on the Technical Information Document (TID)-14844 dose methodology and Whole Body and thyroid dose criteria that is based on 10 CFR 100 guideline. The IP2 DSAR design basis radiological analyses were performed based on the AST dose methodology, and TEDE dose criteria -- based on 10 CFR 50.67 guideline. However, since the IP2 decommissioning design basis radiological analyses are based on the AST and TEDE

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				<p>criteria, not TID-14844, the dose release information given in the current IP2 UFSAR are not applicable for the DSAR Section 1.11.1.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p>
1.11.2	1.7.2	Classification of Particular Structures and Equipment	Modify	This section is modified by eliminating the reference to the containment penetrations, airlocks, concrete shield, liner and interior structures, modifying the seismic Classifications for numerous systems to reflect the licensing and design bases for a permanently shut down and defueled facility, eliminating the references to the reactor control and protection system, reactor vessel and its supports, rod cluster control assemblies and drive mechanism (including supporting and positioning members), incore instrumentation structure, reactor coolant system (including all of its components), main steam system, engineered safety features (including safety injection system, containment spray system, containment air recirculation cooling system), condensate storage tanks, pressurizer relief tank, residual heat removal loop, containment penetration and weld channel pressurization system, isolation valve seal water system, fuel transfer tube, control equipment, facilities and lines for Seismic

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				<p>Class I items, eliminating the reference to essential sections regarding the instrument air system, eliminating the reference to components of the waste disposal system and chemical volume and control system, renaming the emergency power supply system as the standby power supply system, updating the discussion of the diesel generator to reflect changes made in Chapter 8, and making editorial enhancements.</p> <p>The Seismic Classifications of structures, systems, and components are revised based on the evaluation provided in EC #83553.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>Changes regarding the specific structures, systems, and components are addressed in the review tables for Chapters 3 through 11 and 14.</p>
1.11.3	1.7.3	Design Criteria for Seismic Class I Structures and Equipment	Modify	This section is modified by eliminating the reference to active components (such as valves and relays), condensate storage tank, reactor coolant system and associated systems, and reactor vessel internals, eliminating the discussion of Generic Letter 87-

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1.11.3.1	1.7.3.1	Piping, Vessels and Supports	Modify	<p>11 regarding pipe whip restraints and jet impingement shields, eliminating the discussion of “leak before break,” and making editorial enhancements</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>Changes regarding the specific structures, systems, and components are addressed in the review tables for Chapters 3 through 11 and 14.</p> <p>This section is modified by eliminating the discussions of the nuclear steam supply system, safe operation of the nuclear reactor, shutting the plant down, maintaining the plan in a safe condition, main steam lines, reactor coolant pipe rupture, and adding a discussion regarding the capability to safely store and handle spent fuel</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>



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				<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>Changes regarding the specific structures, systems, and components are addressed in the review tables for Chapters 3 through 11 and 14.</p>
1.11.3.2, including subsections 1.11.3.2.1 and 1.11.2.2	NA	Reactor Vessel Internals	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p>
1.11.3.3	NA	Reactor Vessel	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p>

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1.11.4	1.7.4	Models and Methods for Seismic Class I Design	Modify	This section is modified by eliminating the discussion of the reactor and recirculating pumps.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.
1.11.4.1	1.7.4.1	Containment Building	Modify	This section is modified to denote that the Containment Building will be classified as seismic class III in the permanently shut down and defueled condition. However, the seismic class I discussion regarding the Containment Building is retained as bounding information.
1.11.4.1.1	1.7.4.1.1	Steel	Retain	No proposed changes.
1.11.4.1.2	1.7.4.1.2	Concrete	Retain	No proposed changes.
1.11.4.2	1.7.4.2	Control Building	Modify	This section is modified to reflect that the Control Building is no longer classified as seismic Class 1.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.  After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.

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1.11.4.3	1.7.4.3	Diesel Generator Building	Modify	<p>Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>This section is modified to reflect that the Diesel Generator Building is no longer classified as seismic Class 1.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p>
1.11.4.4	NA	Fan House	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
1.11.4.5	NA	Boric Acid Evaporator Building	Delete	<p>potential release of gaseous wastes or radioactive liquids. Consequently, the fan house is not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is proposed to be deleted in its entirety.</p>
1.11.4.6	1.7.4.4	Intake Structure	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids. Consequently, the boric acid evaporator building is not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is modified to reflect that the Intake Structure is no longer classified as seismic Class 1.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p>

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				Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.
1.11.4.7	1.7.4.5	Waste Holdup Tank Pit	Retain	No proposed changes.
1.11.4.8	1.7.4.6	Spent Fuel Pit	Retain	No proposed changes.
1.11.4.9	NA	Electrical Penetration Tunnel	Delete	This section proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.
				After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.
1.11.4.10	NA	Pipe Penetration Tunnel	Delete	This section is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
1.11.4.11	NA	Electrical Cable Tunnel	Delete	<p data-bbox="984 217 2003 282">Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p data-bbox="984 324 2003 672">After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p data-bbox="984 678 1604 704">This section is proposed to be deleted in its entirety.</p> <p data-bbox="984 753 2003 1029">After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p data-bbox="984 1071 2003 1417">After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p>

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1.11.4.12	NA	Shield Wall	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p>
1.11.4.13	NA	Retaining Wall at Equipment Enclosure	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the</p>

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				dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.
1.11.4.14	1.7.4.7	Primary Water Storage Tank and Refueling Water Storage Tank Foundation	Retain	No proposed changes.
1.11.4.15	NA	Condensate Water Storage Tank Foundation	Delete	This section is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Given the change in IP2 status, the only remaining accidents are the FHA and the potential release of gaseous wastes or radioactive liquids.
				After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.
1.11.4.16	1.7.4.8	Class I Piping Systems	Modify	This section is modified by eliminating the discussion of the reactor coolant loop, safety injection system, main steam system, residual heat removal system,



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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>accumulator discharge, and containment spray system and noting that the discussion regarding the service water system and component cooling water system are maintained for historical purposes.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p> <p>The service water system and component cooling water system continue to perform a support function to ensure the safe storage of spent fuel. However, it is no longer classified as Class I, because they are not required to mitigate any accidents.</p>
1.11.4.16.1	1.7.4.8.1	Design Approach	Retain	No proposed changes.
1.11.4.16.2	1.7.4.8.2	Analysis Approach	Modify	This section is modified by making editorial enhancements.
1.11.4.17	NA	Reactor Coolant System Analysis for Combination Loading of Design Basis Earthquake and Design Basis Accident [Historical Information Only]	Delete	<p>This section is proposed to be deleted in its entirety. It was previously identified as historical information.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
1.11.4.18	1.7.4.9	Service Water Lines	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. The reactor coolant system serves no purpose in the permanently shut down and defueled condition.</p> <p>This section is modified to indicate that the information is retained; however, the service water lines are no longer classified as Class I.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p>
				<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Consequently, no active structures, systems, or components that are electrically powered are required to mitigate an accident in the permanently shut down and defueled condition.</p>
1.11.4.19	NA	Seismic Evaluation of the Fan Cooler and Passive Hydrogen Recombiner Systems	Delete	<p>The services water lines continue to perform a support function to ensure the safe storage of spent fuel. However, it is no longer classified as Class I, because it is not required to mitigate any accidents.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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1.11.4.20	1.7.4.10	Masonry Walls	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. The fan house and passive hydrogen recombiner systems serve no purpose in the permanently shut down and defueled condition.</p> <p>This section is modified by eliminating the references to the boric acid evaporator building and the fan house and making an editorial correction to reflect a historical action.</p>
1.11.5	1.7.5	Wind Effects	Retain	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. The boric acid evaporator building and the fan house serve no purpose in the permanently shut down and defueled condition.</p> <p>No proposed changes.</p>
1.11.6	1.7.6	Structural Effects	Modify	<p>This section is modified by eliminating the discussion regarding the Class I structures (i.e., the control building, main steam piping, and feedwater piping) that could be endangered by the failure of Class III structures, eliminating the discussion that the failure of the fuel storage building crane could have on a safe and orderly shutdown, and eliminating the discussion of the Class III manipulator crane in the containment building.</p> <p>In addition, the name of the fuel storage building crane is revised to 40-ton fuel storage building overhead crane. There are several fuel storage building cranes; thus, it was necessary to specifically define the applicable crane.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p>

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				The discussions that are eliminated refer to postulated issues associated with the impact on power operations and associated postulated accidents. Thus, they may be eliminated from the DSAR.
1.11.6.1	1.7.6.1	Seismic Analysis of the Indian Point Unit 2 Turbine Building	Retain	No proposed changes.
1.11.6.2	1.7.6.2	Seismic Evaluation of the Fuel Storage Building Structure Above the Spent Fuel Pit	Retain	No proposed changes.
1.11.6.3, including subsections 1.11.6.3.1 through 1.11.6.3.3	1.7.6.3, including subsections 1.7.6.3.1 through 1.7.6.3.3	Seismic and Wind Analysis of the Superheater Stack of Indian Point Unit 1	Modify	This section is proposed to be modified by noting that the information is historical.  Failure of the superheater building and stack could not have an impact on storage of spent fuel in the spent fuel pit.
1.11.6.4	1.7.6.4	Seismic and Tornado Evaluation of the Superheater Building at Indian Point Unit 1	Modify	This section is proposed to be modified by noting that the information is historical.  Failure of the superheater building could not have an impact on storage of spent fuel in the spent fuel pit.
1.11.6.5	1.7.6.5	Evaluation of Structural Modifications	Modify	This section is modified by making editorial enhancements.
1.11.7	NA	Seismic Qualification for Safe Shutdown	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible. Consequently, there are no longer any requirements for IP2 to be able to achieve safe shutdown.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
1.11.8	NA	Protection from Flooding of Equipment Important to Safety	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p> <p>There is no longer the potential for flooding to impact the structures, systems, and components associated with the safe storage and handling of spent fuel. Thus, this section may be eliminated.</p>
Table 1.11-1	Table 1.7-1	Damping Factors	Modify	<p>This table is modified by eliminating the reference to the concrete support structure for the reactor vessel. After IP2 is permanently defueled, the reactor vessel will no longer be utilized for power operations. Fuel will no longer be placed in the reactor vessel.</p>
Table 1.11-2	Table 1.7-2	Loading Combinations and Stress Limits	Modify	<p>This table is modified by eliminating the column that provides the loading combinations and stress loads for vessels designed to ASME, Section III, Class A (or Class 1) rules.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and electrical generation can no longer occur and core related design basis accidents are no longer possible.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Table 1.11-3	NA	Deleted	Delete	Previously deleted.
Table 1.11-4	Table 1.7-3	Dynamic Characteristics of the Turbine Building	Retain	No proposed changes.
Table 1.11-5	Table 1.7-4	Relative Stiffness Percentages	Retain	No proposed changes.
Table 1.11-6	Table 1.7-5	Inertial Loads	Retain	No proposed changes.
Table 1.11-7	Table 1.7-6	Frequencies	Retain	No proposed changes.
Figure 1.11-1	Figure 1.7-1	Ten Percent of Gravity Response Spectra	Retain	No proposed changes.
Figure 1.11-2	Figure 1.7-2	Fifteen Percent of Gravity Response Spectra	Retain	No proposed changes.
Figure 1.11-3	Figure 1.7-3	Fuel Storage Building North-South Model [Historical]	Retain	No proposed changes.
Figure 1.11-4	Figure 1.7-4	Fuel Storage Building East-West Model [Historical]	Retain	No proposed changes.
Figure 1.11-5	Figure 1.7-5	Indian Point Unit 1 Superheater Building North-South Section	Retain	No proposed changes.
Figure 1.11-6	Figure 1.7-6	Indian Point Unit 1 Superheater Building East-West Section	Retain	No proposed changes.
Figure 1.11-7	Figure 1.7-7	Column Line “G”	Retain	No proposed changes.
Figure 1.11-8	Figure 1.7-8	Representation of Lumped Mass Model of Superheater Building Used in Dynamic Analysis	Retain	No proposed changes.
1.12, including subsections 1.12.1	NA	Inservice Inspection and Testing Programs	Delete	This section is proposed to be deleted in its entirety. The inservice inspection and testing program is no longer applicable in the permanently shut down and defueled condition.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
through 1.12.3 1.13	1.8	Control of Heavy Loads	Modify	This section is modified by simplifying the discussion. This section contains a reference to the DSAR section that addresses the control of heavy loads in the Fuel Storage Building. This is an administrative change to eliminate duplicative information.

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**CHAPTER 2 – SITE AND ENVIRONMENT**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
2.1	2.1	Summary and Conclusions	Modify	<p>This section is modified by replacing the reference to “FSAR” with a reference to “DSAR.” This change reflects that the IP2 UFSAR will be revised and re-issued as the Defueled Safety Analysis Report (DSAR).</p> <p>This section is modified to replace the references to “plant” with references to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.</p> <p>This section is modified to eliminate the statement that the leakage of plant water in to the ground is improbable. Ground water contamination has been detected at Indian Point; thus, this statement is no longer accurate.</p> <p>The section is modified to denote that the analysis performed regarding the gaseous discharges associated with the loss of coolant accident and site meteorology is maintained as a bounding, historical discussion. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
2.2	2.2	Location	Retain	No proposed changes.
2.2.1	2.2.1	General	Modify	This section is modified by making an editorial correction regarding the unit of measure “miles.”
2.2.2	2.2.2	Access	Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.
2.2.3	2.2.3	Site Ownership and Control	Modify	This section is modified by resolving a few grammatical errors associated with values. In addition, the status of Figure 2.2-2 is changed from historical to active, and it is replaced with a reference to Plant Drawing 504668. It is referenced in the PDTs and the depicted exclusion boundary is expected to change during decommissioning; thus, it needs to be maintained and updated.



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**CHAPTER 2 – SITE AND ENVIRONMENT**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
2.2.4	2.2.4	Activities on the Site	Retain	No proposed changes.
Figure 2.2-1	Figure 2.2-1	Aerial Photo of Indian Point Site and Surrounding Area [Historical]	Retain	No proposed changes.
Figure 2.2-2	Figure 2.2-2	Indian Point Building Identification [Historical]	Modify	The status of Figure 2.2-2 is changed from historical to active, and it is replaced with a reference to Plant Drawing 504688. It is referenced in the PDTS and the depicted exclusion boundary is expected to change during decommissioning; thus, it needs to be maintained and updated.
Figure 2.2-3	Figure 2.2-3	Algonquin Gas Transmission Pipeline Hudson River Crossing & Indian Point Nuclear Generation Facility Topography	Retain	No proposed changes.
2.3	2.3		Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.
Figure 2.3.-1	Figure 2.3.-1	Topographical Map of Indian Point and Surrounding Area [Historical]	Retain	This section is modified by resolving a grammatical error associated with a value. No proposed changes.
2.4	2.4	Population and Land Use	Retain	No proposed changes.
2.4.1	2.4.1	Overview	Retain	No proposed changes.
2.4.2	2.4.2	Population and Land Use	Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.
2.4.3	2.4.3	Low-Population Zone	Retain	No proposed changes.
2.4.4	2.4.4	Exclusion Area	Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.
2.4.5	2.4.5	Population Data Sources	Retain	No proposed changes.

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Table 2.4-1	Table 2.4-1	Sector and Zone Designators for Population Distribution Map	Modify	The table is modified by resolving typographical errors.
Table 2.4-2	Table 2.4-2	Population Estimates, 1990, For All Sectors	Retain	No proposed changes.
Table 2.4-3	Table 2.4-3	Population Estimates, 1990, for Sector A (North)	Retain	No proposed changes.
Table 2.4-4	Table 2.4-4	Population Estimates, 1990, for Sector B (North-Northeast)	Retain	No proposed changes.
Table 2.4-5	Table 2.4-5	Population Estimates, 1990, for Sector C (Northeast)	Retain	No proposed changes.
Table 2.4-6	Table 2.4-6	Population Estimates, 1990, for Sector D (East-Northeast)	Retain	No proposed changes.
Table 2.4-7	Table 2.4-7	Population Estimates, 1990, for Sector E (East)	Retain	No proposed changes.
Table 2.4-8	Table 2.4-8	Population Estimates, 1990, for Sector F (East-Southeast)	Retain	No proposed changes.
Table 2.4-9	Table 2.4-9	Population Estimates, 1990, for Sector G (Southeast)	Retain	No proposed changes.
Table 2.4-10	Table 2.4-10	Population Estimates, 1990, for Sector H (South-Southeast)	Retain	No proposed changes.
Table 2.4-11	Table 2.4-11	Population Estimates, 1990, for Sector J (South)	Retain	No proposed changes.
Table 2.4-12	Table 2.4-12	Population Estimates, 1990, for Sector K (South-Southwest)	Retain	No proposed changes.
Table 2.4-13	Table 2.4-13	Population Estimates, 1990, for Sector L (Southwest)	Retain	No proposed changes.
Table 2.4-14	Table 2.4-14	Population Estimates, 1990, for Sector M (West-Southwest)	Retain	No proposed changes.

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Table 2.4-15	Table 2.4-15	Population Estimates, 1990, for Sector N (West)	Retain	No proposed changes.
Table 2.4-16	Table 2.4-16	Population Estimates, 1990, for Sector P (West-Northwest)	Retain	No proposed changes.
Table 2.4-17	Table 2.4-17	Population Estimates, 1990, for Sector Q (Northwest)	Retain	No proposed changes.
Table 2.4-18	Table 2.4-18	Population Estimates, 1990, for Sector R (North-Northwest)	Retain	No proposed changes.
Table 2.4-19	Table 2.4-19	Estimated Land Use in 1960 and Projected Land Use in 1980 Within a 55-Mile Radius	Retain	No proposed changes.
Table 2.4-20	Table 2.4-20	Land Use Projection by County for 1980	Retain	No proposed changes.
Figure 2.4-1	Figure 2.4-1	Schematic Sector/Zone Diagram	Retain	No proposed changes.
Figure 2.4-2	Figure 2.4-2	Indian Point Station, Ten and Fifty Mile Radius Map	Retain	No proposed changes.
Figure 2.4-3	Figure 2.4-3	Five Mile Sector/Zone Diagram [Historical]	Retain	No proposed changes.
Figure 2.4-4	Figure 2.4-4	Ten Mile Sector/Zone Diagram [Historical]	Retain	No proposed changes.
Figure 2.4-5	Figure 2.4-5	Fifty Mile Sector/Zone Diagram [Historical]	Retain	No proposed changes.
Figure 2.4-6	Figure 2.4-6	Map and Description Showing Land Usage [Historical]	Retain	No proposed changes.
Figure 2.4-7	Figure 2.4-7	Map and Description of the Area Showing Public Utilities	Retain	No proposed changes.
Figure 2.4-8	Figure 2.4-8	Map and Description of the Area Showing Sewage Systems	Retain	No proposed changes.

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2.5	2.5	Hydrology	Modify	<p>This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.</p> <p>This section is modified to replace the phrases “normal plant operation” and “normal operations” with the phrase “the conduct of normal activities” and the phrase “will be operated” with the phrase “releases will be managed.” After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The new phrases better represent the site in a permanently shut down and defueled condition.</p>
Table 2.5-1	Table 2.5-1	Water Surface Elevation at Indian Point Resulting from Stated Flow and Elevation Conditions	Modify	The table is modified by resolving a typographical error.
Figure 2.5-1	Figure 2.5-1	Map & Description Showing Location of Sources of Potable & Industrial Water Supplies & Watershed Areas	Retain	No proposed changes.
Figure 2.5-2	Figure 2.5-2	Hudson River Drainage Basin	Retain	No proposed changes.
2.6	2.6	Meteorology	Retain	No proposed changes.
2.6.1	2.6.1	General	Modify	<p>This section is modified by replacing the reference to “FSAR” with a reference to “DSAR.” This change reflects that the IP2 UFSAR will be revised and re-issued as the DSAR.</p> <p>This section is modified by resolving a grammatical error.</p>
2.6.2	2.6.2	Application of Site Meteorology to Safety Analysis of Loss-Of-Coolant Accident	Modify	This section is modified to denote that the information is historical. It is retained for information, and eliminate the discussion regarding the application of the meteorology data to the loss-of-coolant accident, because that accident is no longer possible in the permanently shut down and defueled condition.

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				In addition, a reference to DSAR Section 6.2.1.4 is provided to address the application of meteorological data to the analysis of the FHA.
Figure 2.6-1	Figure 2.6-1	Diurnal Variation of Mean Vector Wind for Virtually Zero Pressure Gradient Conditions	Modify	The figure is modified to denote that the information is historical
Figure 2.6-2	Figure 2.6-2	Diurnal Variation of Mean Vector Wind for 24 Hr Periods of Weak Pressure Gradient Conditions	Retain	The figure is modified to denote that the information is historical
Figure 2.6-3	Figure 2.6-3	Steadiness of Wind as a Function of Time of Day for Indicated Pressure Gradient Conditions	Retain	The figure is modified to denote that the information is historical
2.7	2.7	Geology and Seismology	Modify	This section is modified by removing a reference to itself. This reference is unnecessary.
2.8	2.8	Environmental Radioactivity	Modify	This section is modified to replace the reference to “plant” with a reference to “facility.” The term plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.
Appendix 2A, including Sections 1.0 through 5.0	Appendix 2A, including Sections 1.0 through 5.0	Facility Safety Analysis Report (FSAR), Consolidated Edison Company of New York, Incorporated, Indian Point Nuclear Generating Unit No. 2, Meteorological Update, September, 1981	Retain	This section is modified to denote that the reference to previous plant releases are historical Unit 2 releases. This change clarifies the discussion. No proposed changes.
Appendix 2A, Table 1	Appendix 2A, Table 1	Tower and Instrumentation Record	Retain	No proposed changes.

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Appendix 2A, Table 2	Appendix 2A, Table 2	Valid Data Log	Retain	No proposed changes.
Appendix 2A, Table 3	Appendix 2A, Table 3	Comparison of Annual Percent Occurrence of Stability Categories	Retain	No proposed changes.
Appendix 2A, Table 4	Appendix 2A, Table 4	Summary of Trajectory End-Points	Retain	No proposed changes.
Appendix 2A, Table 5	Appendix 2A, Table 5	Summation of Trajectory End Points - August, 1978	Retain	No proposed changes.
Appendix 2A, Table 6	Appendix 2A, Table 6	Summation of Trajectory End Points - January, 1979	Retain	No proposed changes.
Appendix 2A, Table 7	Appendix 2A, Table 7	Summation Trajectory Occurrences South of Indian Point	Retain	No proposed changes.
Appendix 2A, Table 8	Appendix 2A, Table 8	Locations of Stations Relative to Indian Point	Retain	No proposed changes.
Appendix 2A, Table 9	Appendix 2A, Table 9	Valid Data for Trajectory Wind Sites	Retain	No proposed changes.
Appendix 2A, Table 10	Appendix 2A, Table 10	Frequency Distribution of 24 Hour Resultant Wind Directions	Retain	No proposed changes.
Appendix 2A, Table 11	Appendix 2A, Table 11	Summary of Two-Station Wind Correlations Piermont (Site 1), Referenced to Selected Monitoring Locations (Site 2)	Retain	No proposed changes.
Appendix 2A, Table 12	Appendix 2A, Table 12	Concurrence of Two-Station Wind Directions	Retain	No proposed changes.
Appendix 2A, Table 13	Appendix 2A, Table 13	Diurnal Distribution of Occurrences of Eight-Hour Trajectories with On Grid Reversals	Retain	No proposed changes.
Appendix 2A, Table 14	Appendix 2A, Table 14	Summary of Trajectory End-Point Counts	Retain	No proposed changes.

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Appendix 2A, Table 5	Appendix 2A, Table 5	Summary of Trajectory End-Points (Percent)	Retain	No proposed changes.
Appendix 2A, Table 16A	Appendix 2A, Table 16A	Historical Comparisons of Wind Frequency Distributions - March	Retain	No proposed changes.
Appendix 2A, Table 16B	Appendix 2A, Table 16B	Historical Comparisons of Wind Frequency Distributions - July	Retain	No proposed changes.
Appendix 2A, Table 16C	Appendix 2A, Table 16C	Historical Comparisons of Wind Frequency Distributions - December	Retain	No proposed changes.
Appendix 2A, Table 17	Appendix 2A, Table 17	Comparison of Percent Wind Frequency Distributions - Summer	Retain	No proposed changes.
Appendix 2A, Table 18	Appendix 2A, Table 18	Comparison of Percent Wind Frequency Distributions - Winter	Retain	No proposed changes.
Appendix 2A, Table 19	Appendix 2A, Table 19	Comparison of Diurnal Resultant Wind Directions	Retain	No proposed changes.
Appendix 2A, Table 20	Appendix 2A, Table 20	Indian Point (10M) Wind Speed (MPH) - Summer Season	Retain	No proposed changes.
Appendix 2A, Table 21	Appendix 2A, Table 21	Indian Point (10M) Wind Speed (MPH) - Winter Season	Retain	No proposed changes.
Appendix 2A, Table 22	Appendix 2A, Table 22	Indian Point (122M) Wind Speed (MPH) - Summer Season	Retain	No proposed changes.
Appendix 2A, Table 23	Appendix 2A, Table 23	Indian Point (122M) Wind Speed (MPH) - Winter Season	Retain	No proposed changes.
Appendix 2A, Table 24	Appendix 2A, Table 24	Maximum Diurnal Wind Speed (MPH)	Retain	No proposed changes.

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Appendix 2A, Table 25	Appendix 2A, Table 25	Annual Summary of Wind Direction Percent Frequency Distribution as a Function of Stability - 10M Level	Retain	No proposed changes.
Appendix 2A, Table 26	Appendix 2A, Table 26	Summary of Wind Direction Percent Frequency Distribution as a Function of Stability - Summer Season	Retain	No proposed changes.
Appendix 2A, Table 27	Appendix 2A, Table 27	Summary of Wind Direction Percent Frequency Distribution as a Function of Stability - Winter Season	Retain	No proposed changes.
Appendix 2A, Table 28	Appendix 2A, Table 28	Historical Comparisons of Percent Occurrence of Stability	Retain	No proposed changes.
Appendix 2A, Table 29	Appendix 2A, Table 29	Comparison of Percent Occurrence of Stability on 122 Meter Tower	Retain	No proposed changes.
Appendix 2A, Table 30	Appendix 2A, Table 30	Diurnal Variation of Stability Class and Wind Speed (10M)	Retain	No proposed changes.
Appendix 2A, Table 31	Appendix 2A, Table 31	Diurnal Variation of Stability Class and Wind Speed (122M)	Retain	No proposed changes.
Appendix 2A, Table 32	Appendix 2A, Table 32	Diurnal Variation of Stability Class and Wind Speed (Delta-T 400'-200')	Retain	No proposed changes.
Appendix 2A, Table 33	Appendix 2A, Table 33	Comparisons of Average Wind Speeds (MPH) as a Function of Stability	Retain	No proposed changes.
Appendix 2A, Figure 1	Appendix 2A, Figure 1	Ground Contours at Elevation 200 Feet	Retain	No proposed changes.
Appendix 2A, Figure 2	Appendix 2A, Figure 2	Ground Contours at Elevation 400 Feet	Retain	No proposed changes.



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Appendix 2A, Figure 3	Appendix 2A, Figure 3	Elevations in the Indian Point Region	Retain	No proposed changes.
Appendix 2A, Figure 4	Appendix 2A, Figure 4	Water Courses in the Indian Point Region	Retain	No proposed changes.
Appendix 2A, Figure 5	Appendix 2A, Figure 5	Existing and Historical Meteorological Towers at Indian Point	Retain	No proposed changes.
Appendix 2A, Figure 6	Appendix 2A, Figure 6	Indian Point Meteorological Site	Retain	No proposed changes.
Appendix 2A, Figure 7	Appendix 2A, Figure 7	Tower Configuration	Retain	No proposed changes.
Appendix 2A, Figure 8	Appendix 2A, Figure 8	Station Configuration	Retain	No proposed changes.
Appendix 2A, Figure 9	Appendix 2A, Figure 9	Indian Point - Meteorological Support Systems	Retain	No proposed changes.
Appendix 2A, Figure 10A	Appendix 2A, Figure 10A	Two Station Wind Correlation Data Period - October 1973	Retain	No proposed changes.
Appendix 2A, Figure 10B	Appendix 2A, Figure 10B	Two Station Wind Correlation Data Period - December 1973	Retain	No proposed changes.
Appendix 2A, Figure 11	Appendix 2A, Figure 11	Position of One Mile Grid in Relation to Topographic Features	Retain	No proposed changes.
Appendix 2A, Figure 12	Appendix 2A, Figure 12	Position of Wind Files on Grid	Retain	No proposed changes.
Appendix 2A, Figure 13	Appendix 2A, Figure 13	Average March, 1980 East and West Bank Diurnal Wind Distributions	Retain	No proposed changes.
Appendix 2A, Figure 14	Appendix 2A, Figure 14	Average June, 1980 East and West Bank Diurnal Wind Distributions	Retain	No proposed changes.

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Appendix 2A, Figure 15	Appendix 2A, Figure 15	Average December, 1980 East and West Bank Diurnal Wind Distributions	Retain	No proposed changes.
Appendix 2A, Figure 16	Appendix 2A, Figure 16	Locations of Monitoring Sites in Relation to One Mile Grid	Retain	No proposed changes.
Appendix 2A, Figure 17	Appendix 2A, Figure 17	Comparison of 10M Level Diurnal Wind Distributions	Retain	No proposed changes.
Appendix 2A, Figure 18	Appendix 2A, Figure 18	Comparison of 122M Level Diurnal and Wind Distribution	Retain	No proposed changes.
Appendix 2A, Figure 19	Appendix 2A, Figure 19	Diurnal Distribution of Wind Speeds	Retain	No proposed changes.
Appendix 2A, Figure 20	Appendix 2A, Figure 20	Percent Probability Distribution of Wind Speeds	Retain	No proposed changes.
Appendix 2B	Appendix 2B	Indian Point FSAR Update, Revised	Retain	No proposed changes.
Appendix 2B. Table 1	Appendix 2B. Table 1	Geologic Time Scale	Retain	No proposed changes.
Appendix 2B, Table 2	Appendix 2B, Table 2	Stratigraphic Correlation Chart	Retain	No proposed changes.
Appendix 2B, Table 3	Appendix 2B, Table 3	Geologic History in the Croton Falls Area	Retain	No proposed changes.
Appendix 2B, Figure 1	Appendix 2B, Figure 1	Location Map	Retain	No proposed changes.
Appendix 2B, Figure 2	Appendix 2B, Figure 2	Seismotectonic Map	Retain	No proposed changes.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
3.0	3.1	Description	Modify	<p>This section provides a summary description of the reactor core, fuel rods, fuel assemblies, rod cluster control assemblies, and control rod drive mechanisms. The title is changed from “Description” to “Nuclear Fuel.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>As a result, this section is modified by eliminating the discussion of the reactor core and the control rod drive mechanisms. The reactor vessel will never be loaded with fuel again. In addition, the control rod drive mechanisms perform no function in the defueled state.</p> <p>The information regarding the fuel rods, fuel assemblies, rod cluster control assemblies, and burnable poison rods will be retained, because they will continue to be stored in the Spent Fuel Pool (SFP) or the Independent Spent Fuel Storage Installation (ISFSI) until permanent removal from the site. The discussion is modified to denote that 15X15 upgraded fuel design assemblies were utilized in Cycles 17 through 24 to provide historical context regarding the fuel types utilized in the various operating cycles.</p> <p>In addition, editorial or typographical corrections are made. In addition, the title is changed to permit reorganization of the material into a consolidated Defueled Safety Analysis Report (DSAR).</p>
3.1	NA	Design Bases	Delete	<p>This header is deleted. There are no sub-sections other than 3.1.3.4.2 and 3.1.3.4.3. Subsections 3.1.3.4.2 and 3.1.3.4.3 will be incorporated into a separate section of the DSAR that addresses the fuel rods, fuel assemblies, and rod cluster control assemblies.</p>
3.1.1	NA	Performance Objectives	Delete	<p>This section provides the performance objectives for the reactor core.</p>

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.1.2	NA	Principal Design Criteria	Delete	This section provides the principal design criteria associated with the reactor core. It is proposed for deletion, because all of its' subsections are proposed for deletion.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.1.2.1	NA	Reactor Core Design	Delete	See the discussion above.
3.1.2.2	NA	Suppression of Power Oscillations	Delete	See the discussion above.
3.1.2.3	NA	Redundancy of Reactivity Control	Delete	See the discussion above.
3.1.2.4	NA	Reactivity Hot Shutdown Capability	Delete	See the discussion above.
3.1.2.5	NA	Reactivity Shutdown Capability	Delete	See the discussion above.
3.1.2.6	NA	Reactivity Holddown Capability	Delete	See the discussion above.
3.1.2.7	NA	Reactivity Control Systems Malfunction	Delete	See the discussion above.
3.1.2.8	NA	Maximum Reactivity Worth of Control Rods	Delete	See the discussion above.
3.1.3	NA	Safety Limits	Delete	This section provides the safety limits associated with the reactor core. It is proposed for deletion, because all of its' subsections, with the exception of subsections 3.1.3.4.2 and 3.1.3.4.3, are proposed for deletion. Subsections 3.3.1.4.2 and 3.3.1.4.3

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				will be incorporated into a separate section of the DSAR that addresses the fuel rods, fuel assemblies, and rod cluster control assemblies.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.1.3.1	NA	Nuclear Limits	Delete	See the discussion above.
3.1.3.2	NA	Reactivity Control Limits	Delete	See the discussion above.
3.1.3.3	NA	Thermal and Hydraulic Limits	Delete	See the discussion above.
3.1.3.4	NA	Mechanical Limits	Delete	See the discussion above.
3.1.3.4.1	NA	Reactor Internals	Delete	See the discussion above.
3.1.3.4.2	3.1.1	Fuel Assemblies	Modify	This section of the IP2 UFSAR provides information regarding the mechanical limits for the fuel assemblies. This section is modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.1.3.4.3	3.1.2	Rod Cluster Control Assemblies	Modify	This section provides the safety limits associated with the rod cluster control assemblies. It is modified to retain the information regarding the rod cluster control assemblies that is pertinent to their storage as part of the fuel assemblies in the SFP and the ISFSI.

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3.1.3.4.4	NA	Control Rod Drive Assembly	Delete	This section provides the safety limits associated with the control rod drive assemblies.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The control rod drive assemblies will not be required to perform a function in the permanently shut down and defueled condition.
3.2	NA	Reactor Design	Delete	This section of the IP2 UFSAR provides a description of reactor design, including nuclear design and evaluation, thermal and hydraulic design, and mechanical design and evaluation. The majority of its' subsections are proposed for deletion as discussed below, with the exception of specific information regarding fuel pellets, fuel rods, and fuel assemblies that will be reorganized into a section that addresses nuclear fuel.
3.2.1	NA	Nuclear Design and Evaluation	Delete	This section header is proposed to be deleted. This is an administrative change. This section of the IP2 UFSAR provides a description of the nuclear design of the reactor core. It is proposed for deletion.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and the discussions regarding reactor core design are obsolete.
3.2.1.1	NA	Nuclear Characteristics of the Design	Delete	See the discussion above.
3.2.1.1.1	NA	Reactivity Control Aspects	Delete	See the discussion above.
3.2.1.1.1.1	NA	Chemical Shim Control	Delete	See the discussion above.
3.2.1.1.1.2	NA	Control Rod Requirements	Delete	See the discussion above.

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3.2.1.1.1.3	NA	Total Power Reactivity Defect	Delete	See the discussion above.
3.2.1.1.1.4	NA	Operational Maneuvering Band	Delete	See the discussion above.
3.2.1.1.1.5	NA	Control Rod Bite	Delete	See the discussion above.
3.2.1.1.1.6	NA	Xenon Stability Control	Delete	See the discussion above.
3.2.1.1.1.7	NA	Excess Reactivity Insertion Upon Reactor Trip	Delete	See the discussion above.
3.2.1.1.1.8	NA	Calculated Rod Worths	Delete	See the discussion above.
3.2.1.2	NA	Reactor Core Power Distribution	Delete	See the discussion above.
3.2.1.2.1	NA	Definitions	Delete	See the discussion above.
3.2.1.2.2	NA	Radial Power Distributions	Delete	See the discussion above.
3.2.1.2.3	NA	Axial Power Distributions	Delete	See the discussion above.
3.2.1.2.4	NA	Local Power Peaking	Delete	See the discussion above.
3.2.1.2.5	NA	Limiting Power Distributions	Delete	See the discussion above.
3.2.1.2.6	NA	Power Distribution Anomalies	Delete	See the discussion above.
3.2.1.2.7	NA	Reactivity Coefficients	Delete	See the discussion above.
3.2.1.2.7.1	NA	Moderator Temperature Coefficient	Delete	See the discussion above.
3.2.1.2.7.2	NA	Moderator Pressure Coefficient	Delete	See the discussion above.
3.2.1.2.7.3	NA	Moderator Density Coefficient	Delete	See the discussion above.
3.2.1.2.7.4	NA	Doppler and Power Coefficients	Delete	See the discussion above.
3.2.1.3	NA	Nuclear Evaluation of Current Core	Delete	See the discussion above.
3.2.2	NA	Thermal and Hydraulic Design and Evaluation	Delete	This section of the IP2 UFSAR provides a description of the thermal and hydraulic design of the reactor core. It is proposed for deletion.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and the discussions regarding thermal and hydraulic design of the reactor core are obsolete.
3.2.2.1	NA	Thermal and Hydraulic Characteristics of the Design	Delete	See the discussion above.
3.2.2.1.1	NA	Central Temperature of the Hot Pellet	Delete	See the discussion above.
3.2.2.1.2	NA	Heat Flux Ratio and Data Correlation	Delete	See the discussion above.
3.2.2.1.3	NA	Definition of Departure from Nuclear Boiling Ratio	Delete	See the discussion above.
3.2.2.1.4	NA	Procedure for Using W-3 L grid Correlation	Delete	See the discussion above.
3.2.2.1.5	NA	The WRB-1 DN Correlation	Delete	See the discussion above.
3.2.2.1.6	NA	The W-3 DNB Correlation	Delete	See the discussion above.
3.2.2.1.7	NA	Film Boiling Heat Transfer Coefficient	Delete	See the discussion above.
3.2.2.2	NA	Hot Channel Factors	Delete	See the discussion above.
3.2.2.2.1	NA	Definition of Engineering Hot Channel Factor	Delete	See the discussion above.
3.2.2.2.2	NA	Heat Flux Engineering Subfactor, $F_Q^E$	Delete	See the discussion above.
3.2.2.2.3	NA	Enthalpy Rise Engineering Subfactor, $F_{\Delta H}^E$	Delete	See the discussion above.



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3.2.2.3	NA	Core Pressure Drop and Hydraulic Loads	Delete	See the discussion above.
3.2.2.4	NA	Thermal and Hydraulic Design Parameters	Delete	See the discussion above.
3.2.2.5	NA	Hydraulic Compatibility	Delete	See the discussion above.
3.2.2.5.1	NA	Transition Core Effects	Delete	See the discussion above.
3.2.2.5.2	NA	DNB Performance When Transitioning Cores	Delete	See the discussion above.
3.2.2.5.3	NA	Compatibility	Delete	See the discussion above.
3.2.2.6	NA	Effects of Rod Bow on DNBR	Delete	See the discussion above.
3.2.3	3.1.3 and 3.1.4	Mechanical Design and Evaluation	Modify	This section of the IP2 UFSAR provides information regarding the mechanical design limits for the reactor internals and core components. It will be modified to eliminate the discussions regarding the reactor internals and reactor operations.

The title of the section is changed from “Mechanical Design and Evaluation” to “Mechanical Design.” Another subsection entitled “Evaluation” is created. This is to permit reorganization of the remaining material into the DSAR.

The discussions regarding the fuel pellets, fuel rods, fuel assemblies, and rod cluster control assemblies will be retained, but are modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, the discussions regarding the reactor internals (with the exception of the fuel rods, fuel assemblies, and rod cluster control assemblies discussions) and reactor operations are obsolete.

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3.2.3.1	NA	Reactor Internals	Delete	See the discussion above.
3.2.3.1.1	NA	Design Description	Delete	See the discussion above.
3.2.3.1.1.1	NA	Lower Core Support Structure	Delete	See the discussion above.
3.2.3.1.1.2	NA	Upper Core Support Assembly	Delete	See the discussion above.
3.2.3.1.1.3	NA	Incore Instrumentation Support Structures	Delete	See the discussion above.
3.2.3.1.2	NA	Evaluation of Core Barrel and Thermal Shield	Delete	See the discussion above.
3.2.3.2	NA	Core Components	Delete	<p>This section of the IP2 UFSAR provides information regarding the core components. It will be eliminated, with the exception of subsection 3.2.3.2.1.1 regarding the fuel assemblies. This section header will be eliminated. The DSAR will include a section that will address the fuel rods and fuel assemblies.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>The elimination of this section header is an administrative change.</p>
3.2.3.2.1	NA	Design Description	Delete	See the discussion above.
3.2.3.2.1.1	3.1.3.1	Fuel Assembly	Modify	<p>This section of the IP2 UFSAR provides information regarding the mechanical limits for the fuel assemblies. It will be retained, but modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR. Editorial and typographical corrections and enhancements are made. In addition, information that is duplicative is removed, and additional references to Figures added.</p>

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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
3.2.3.2.1.2	3.1.3.2	Rod Cluster Control Assemblies	Modify	<p>This section provides the information regarding the rod cluster control assemblies. It is modified to retain the information regarding the rod cluster control assemblies that is pertinent to their storage as part of the fuel assemblies in the SFP and the ISFSI, and to designate specific information as historic. In addition, editorial or typographical corrections are made.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The rod cluster control assemblies will not be required to perform a function in the reactor core in the permanently shut down and defueled condition.</p>
3.2.3.2.1.3	3.1.3.3	Neutron Source Assemblies	Modify	<p>This section provides information regarding the neutron source assemblies. It is modified to retain the information regarding the neutron source assemblies that is pertinent to their storage as part of the fuel assemblies in the SFP and the ISFSI, and to designate specific information as historic.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The neutron source assemblies will not be required to perform a function in the permanently shut down and defueled condition.</p>

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3.2.3.2.1.4	3.1.3.4	Plugging Devices	Modify	This section provides information regarding plugging devices. It will be modified to retain the information regarding the plugging devices that is pertinent to their storage as part of the fuel assemblies in the SFP and the ISFSI.
3.2.3.1.5	3.1.3.5	Burnable Absorber Rods	Modify	This section provides information regarding the burnable absorber rods. It is modified to retain the information regarding the burnable absorber rods that is pertinent to their storage as part of the fuel assemblies in the SFP and the ISFSI, and to designate specific information as historic. In addition, a reference to Figures is added and editorial changes are made.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The burnable absorber rods will not be required to perform a function in the permanently shut down and defueled condition.
3.2.3.2.2	3.1.4	Evaluation of Core Components	Modify	This section of the IP2 UFSAR provides information regarding the core components. It will be eliminated, with the exception of subsection 3.2.3.2.2.1 regarding the fuel assemblies. This section header will be retitled as evaluation. The DSAR will include a section that will address the fuel rods and fuel assemblies.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.2.3.2.2.1	3.1.4.1	Fuel Evaluation	Modify	This section of the IP2 UFSAR provides information regarding an evaluation of the fuel. It will be modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.

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3.2.3.2.2.2	NA	Evaluation of Burnable Absorber Rods	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>This section of the IP2 UFSAR provides information regarding burnable absorber rods. It is proposed to be deleted in its entirety.</p>
3.2.3.2.2.3	NA	Effects of Vibration and Thermal Cycling on Fuel Assemblies	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The burnable absorber rods perform no function in the permanently shut down and defueled condition.</p> <p>Information that continues to apply with regards to the description is provided in other sections of the IP2 UFSAR.</p> <p>This section of the IP2 UFSAR provides information regarding the performance of fuel assemblies in the reactor core.</p>
3.2.3.3	NA	Transition Cores	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The only information that needs to be retained regarding the fuel assemblies is the information regarding fuel design that is applicable to storage in the SFP or the ISFSI.</p> <p>This section of the IP2 UFSAR provides information regarding transition cores.</p>

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3.2.3.4	NA	Control Rod Drive Mechanism Design Description	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. No discussion regarding reactor cores is required to be maintained in the DSAR.</p> <p>This section of the IP2 UFSAR provides information regarding control rod drive mechanisms. It will be eliminated.</p>
3.2.3.4.1, including subsections 3.2.3.4.1.1 through 3.2.3.4.1.7	NA	Full-Length Rods	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The control rod drive mechanisms perform no function in the permanently shut down and defueled condition.</p> <p>See the discussion above.</p>
3.2.3.4.2	NA	Part-Length Rods	Delete	<p>The information in this section was previously deleted. The placeholder for the section will be deleted in the DSAR. This is an administrative change.</p>
3.2.3.5	3.1.4.2	Fuel Assembly and Rod Cluster Control Assembly Mechanical Evaluation	Modify	<p>This section of the IP2 UFSAR provides information regarding a mechanical evaluation of the fuel assemblies and rod cluster control assemblies. It will be modified to eliminate the information regarding nuclear fuel operation and emplacement of fuel in the reactor vessel. Information regarding fuel design that is applicable to storage in the SFP or the ISFSI will be retained. Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.</p>

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.2.3.5.1	NA	One-Seventh Scale Mockup Tests	Delete	See the discussion above.
3.2.3.5.2	NA	Loading and Handling Tests	Delete	See the discussion above.
3.2.3.5.3	3.1.4.3	Axial and Lateral Bending Tests	Modify	This section provides information regarding axial and lateral bending tests for the fuel assemblies and the rod cluster control assemblies. It is retained, but modified by removing discussions of refueling operations. Given that the plant will be permanently shut down and defueled, the reactor will never be refueled.
				The title of the subsection is eliminated, because it is the only remaining subsection for Section 3.2.3.5. This permits consolidation of the information into the compiled DSAR.
3.2.4	NA	Fixed Incore Detectors	Delete	This section of the IP2 UFSAR provides a description of the fixed incore detectors.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. The fixed incore detectors do not perform a function in the permanently shut down and defueled condition.
3.2.4.1	NA	Core Monitoring	Delete	See the discussion above.
3.2.5	NA	Plant Computer	Delete	This section of the IP2 UFSAR describes the plant integrated computer system.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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3.2.6	NA	Current Operating Cycle	Delete	accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. The plant integrated computer system does not perform a function in the permanently shut down and defueled condition. This section of the IP2 UFSAR provides a summary of the methodology utilized regarding the reactor core in cycle 24.
Table 3.2-1	NA	Nuclear Design Data Cycle 1 Values	Delete	It will be eliminated, because the information is historical and not required to be retained in the DSAR. This table provides a summary of nuclear design data for cycle 1.
Table 3.2-1A	NA	Nuclear Design Data Cycle 24 Values	Delete	It will be eliminated, because the information is historical and not required to be retained in the DSAR. This table provides a summary of nuclear design data for cycle 24.
Table 3.2-2	NA	Reactivity Requirements for Control Rods for Cycle 1	Delete	It will be eliminated, because the information is historical and not required to be retained in the DSAR. This table provides a summary of reactivity requirements for control rods for cycle 1.
Table 3.2-3	NA	Calculated Rod Worths, $\Delta\rho$ for Cycle 1	Delete	It will be eliminated, because the information is historical and not required to be retained in the DSAR. This table provides a summary of rod worth requirements for cycle 1.
Table 3.2-4	NA	Deleted	Delete	It will be eliminated, because the information is historical and not required to be retained in the DSAR. This table was previously deleted. The deletion of the placeholder is an administrative change.
Table 3.2-5	NA	Deleted	Delete	This table was previously deleted. The deletion of the placeholder is an administrative change.
Table 3.2-6	NA	Thermal and Hydraulic Design Parameters	Delete	The references to this table in subsections 3.2.2.1.1, 3.2.2.4, and 3.2.3.2.2.1 have been deleted.
Table 3.2-7	Table 3.1-1	Core Mechanical Design Parameters	Modify	The information in this table regarding the fuel assemblies, fuel rods, rod cluster control assemblies, burnable poison rods is retained. The information regarding the fuel pellets and integral fuel burnable absorber rods is eliminated, because they only address the fuel pellets and integral fuel burnable absorber rods for the last core. In



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				<p>addition, the information regarding the number of fuel assemblies, fuel rods, rod cluster control assemblies in a core, the core structure, and the number and pellet stack length for the wet annular burnable absorber rods is eliminated, because the information is representative of the core design or the information is only reflective of the last cycle. Administrative changes are made to eliminate unnecessary notes. Editorial changes are made.</p> <p>In addition, a correction is made to define that the VANTAGE+ fuel assemblies may have 12 or 13 grids per assembly. This is consistent with information in the text of the UFSAR.</p>
Figure 3.2-1	NA	Typical Power Peaking Factor Versus Axial Offset	Delete	See the discussion for subsection 3.2.1.1.1.6.
Figure 3.2-2	NA	Rod Cluster Groups – Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.1.1.1.8.
Figure 3.2-3	NA	Assembly Average Power & Burnup, Cycle 1 Calculations, BOL, Unrodded Core [Historical]	Delete	See the discussion for subsection 3.2.1.2.2.
Figure 3.2-4	NA	Assembly Average Power & Burnup, Cycle 1 Calculations, EOL, Unrodded Core [Historical]	Delete	See the discussion for subsection 3.2.1.2.2.
Figure 3.2-5	NA	Assembly Average Power Distribution Cycle 1 Calculations, BOL, Group C4 Inserted [Historical]	Delete	See the discussion for subsection 3.2.1.2.2.
Figure 3.2-6	NA	Assembly Average Power Distribution Cycle 1 Calculations, BOL Part-Length Rods In [Historical]	Delete	See the discussion for subsection 3.2.1.2.2.

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Figure 3.2-7	NA	Cycle 1 Maximum FQ X Power Versus Axial Height During Normal Operation [Historical]	Delete	See the discussion for subsection 3.2.1.2.5.
Figure 3.2-7A	NA	Deleted	Delete	Previously deleted
Figure 3.2-8	NA	Burnable Poison & Source Assembly Locations - Cycle	Delete	See the discussion for subsection 3.2.1.2.7.1.
Figure 3.2-9	NA	Burnable Poison Rod Locations - Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.1.2.7.1.
Figure 3.2-10	NA	Moderator Temperature Coefficient Vs Moderator Temperature - EOL, Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.1.2.7.1.
Figure 3.2-11	NA	Moderator Temperature Coefficient Vs Moderator Temperature - BOL, Cycle 1 Full Power [Historical]	Delete	Previously deleted.
Figure 3.2-12	NA	Moderator Temperature Coefficient Vs Moderator Temperature - BOL, Cycle 1 Zero Power [Historical]	Delete	Previously deleted.
Figure 3.2-13	NA	Doppler Coefficient Vs Effective Fuel Temperature - Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.1.2.7.4.
Figure 3.2-14	NA	Power Coefficient Vs Percent Power - Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.1.2.7.4.
Figure 3.2-15	NA	Power Coefficient - Closed Gap Model	Delete	See the discussion for subsection 3.2.1.2.7.4.
Figure 3.2-16	NA	Deleted	Delete	Previously deleted.
Figure 3.2-17	NA	Deleted	Delete	Previously deleted.

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Figure 3.2-18	NA	Deleted	Delete	Previously deleted.
Figure 3.2-19	NA	Deleted	Delete	Previously deleted.
Figure 3.2-20	NA	Deleted	Delete	Previously deleted.
Figure 3.2-21	NA	Deleted	Delete	Previously deleted.
Figure 3.2-22	NA	Deleted	Delete	Previously deleted.
Figure 3.2-23	NA	Deleted	Delete	Previously deleted.
Figure 3.2-24	NA	Deleted	Delete	Previously deleted.
Figure 3.2-25	NA	Deleted	Delete	Previously deleted.
Figure 3.2-26	NA	Deleted	Delete	Previously deleted.
Figure 3.2-27	NA	Deleted	Delete	Previously deleted.
Figure 3.2-28	NA	Deleted	Delete	Previously deleted.
Figure 3.2-29	NA	Deleted	Delete	Previously deleted.
Figure 3.2-30	NA	Deleted	Delete	Previously deleted.
Figure 3.2-31	NA	Deleted	Delete	Previously deleted.
Figure 3.2-32	NA	Deleted	Delete	Previously deleted.
Figure 3.2-33	NA	Deleted	Delete	Previously deleted.
Figure 3.2-34	NA	Deleted	Delete	Previously deleted.
Figure 3.2-35	NA	Deleted	Delete	Previously deleted.
Figure 3.2-36	NA	Deleted	Delete	Previously deleted.
Figure 3.2-37	NA	Deleted	Delete	Previously deleted.
Figure 3.2-38	NA	Typical Thermal Conductivity of UO <sub>2</sub>	Delete	See the discussion for subsection 3.2.2.1.1.
Figure 3.2-39	NA	High Power Fuel Rod Experimental Program	Delete	See the discussion for subsection 3.2.2.1.1.
Figure 3.2-40	NA	Typical Comparison Of W-3 Prediction and Uniform Flux Data	Delete	See the discussion for subsection 3.2.2.1.2.
Figure 3.2-41	NA	Typical W-3 Correlation Probability Distribution Curve	Delete	See the discussion for subsection 3.2.2.1.2.
Figure 3.2-42	NA	Comparison of "L" Grid Typical and Thimble Cold	Delete	See the discussion for subsection 3.2.2.1.2.

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Figure 3.2-43	NA	Wall Cell Rod Bundle DNB Data for Non-Uniform Axial Heat Flux With Predictions of W-3 $X F'_{SL}$ Typical Comparison of W-3 Correlation with Rod Bundle	Delete	See the discussion for subsection 3.2.2.1.2.
Figure 3.2-44	NA	DNB Data (Simple Grid without Mixing Vane) Typical Comparison of W-3 Correlation with Rod Bundle	Delete	See the discussion for subsection 3.2.2.1.2.
Figure 3.2-44A	NA	DNB Data (Simple Grid with Mixing Vane) Typical Measured Versus Predicted Critical Heat Flux-WRB-1 Correlation	Delete	See the discussion for subsection 3.2.2.1.5.
Figure 3.2-45	NA	Typical Stable Film Boiling Heat Transfer Data and Correlation	Delete	See the discussion for subsection 3.2.2.1.7.
Figure 3.2-46	NA	Core Cross Section	Delete	See the discussion for subsection 3.2.3.
Figure 3.2-47	NA	Reactor Vessel Internals	Delete	See the discussion for subsections 3.2.3 and 3.2.3.1.1.
Figure 3.2-48	NA	Core Loading Arrangement - Cycle 1 [Historical]	Delete	See the discussion for subsection 3.2.3 and 3.2.3.2.1.1.
Figure 3.2-49	Figure 3.1-1	Typical Rod Cluster Control Assembly	Retain	No proposed change.
Figure 3.2-50	Figure 3.1-2	Rod Cluster Control Assembly Outline	Retain	No proposed change.
Figure 3.2-51	NA	Core Barrel Assembly	Delete	See the discussion for subsection 3.2.3.1.1.1.
Figure 3.2-52	NA	Upper Core Support Structure	Delete	See the discussion for subsection 3.2.3.1.1.2.
Figure 3.2-53	NA	Guide Tube Assembly	Delete	See the discussion for subsection 3.2.3.1.1.2.

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Figure 3.2-54	Figure 3.1-3	Fuel Assembly and Control Cluster Cross Section - HIPAR, LOPAR, and OFA and VANTAGE+	Modify	The figure will be retained. The title will be modified to read Fuel Assembly and Control Cluster Cross Section - HIPAR, LOPAR, OFA and VANTAGE. This change removes an extra “and.” Other administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-55	Figure 3.1-4	HIPAR Fuel Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-56	Figure 3.1-5	LOPAR Fuel Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-56A	Figure 3.1-6	OFA Fuel Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-56B	Figure 3.1-7	VANTAGE+ Fuel Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-57	Figure 3.1-8	Guide Thimble to Bottom Nozzle Joint	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-58	Figure 3.1-9	LOPAR Top Grid to Nozzle Attachment	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-58A	Figure 3.1-10	OFA and VANTAGE+ Top Grid to Nozzle Attachment	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-59	Figure 3.1-11	Spring Clip Grid Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-60	Figure 3.1-12	Mid-Grid Expansion Joint Design Plan View	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-61	Figure 3.1-13	Elevation View - LOPAR Grid to Thimble Attachment	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-61A	Figure 3.1-14	Elevation View- VANTAGE+ Grid to Thimble Attachment	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-61B	Figure 3.1-15	Vantage+ Fuel Assembly with Performance+ Enhancements	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-61C	Figure 3.1-16	15x15 Upgraded Fuel Assembly	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.

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Figure 3.2-62	Figure 3.1-17	Cycle 1 - Neutron Source Locations [Historical]	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-63	Figure 3.1-18	HIPAR Burnable Poison Rod	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-64	Figure 3.1-19	LOPAR Burnable Poison Rod	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-65	NA	Control Rod Drive Mechanism Assembly	Delete	See discussion for subsection 3.2.3.4.1.
Figure 3.2-66	NA	Control Rod Drive Mechanism Schematic	Delete	See discussion for subsection 3.2.3.4.1.7.
Figure 3.2-67	NA	Thimble Location - Fixed Incore Detectors	Delete	See discussion for subsection 3.2.4.
Figure 3.2-68	NA	Cycle 14 Incore Detector, Thermocouple and Flow Mixing Device Locations	Delete	See discussion for subsections 3.2.4.1 and 3.2.6
Figure 3.2-68A	NA	Cycle 24 Region and Fuel Assembly Locations	Delete	See discussion for subsection 3.2.6.
Figure 3.2-68B	NA	Cycle 24 Core Components and Fresh IFBA Locations	Delete	See discussion for subsection 3.2.6.
Figure 3.2-69	Figure 3.1-20	Comparison of Borosilicate Glass Absorber Rod with WABA Rod	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
Figure 3.2-70	Figure 3.1-21	Wet Annular Burnable Absorber Rod	Retain	The figure will be retained. Only administrative changes are required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
3.3	NA	Tests and Inspections	Delete	This section discusses the inspections and tests that were conducted regarding the reactor internals, including the fuel assemblies and control rod drive mechanisms. It is proposed for deletion, with the exception of subsections 3.3.3.1 and 3.3.3.2. These subsections will be consolidated in the DSAR into a section that discusses the fuel.

This section is modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative changes are

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				required to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
3.3.1	NA	Reactivity Anomalies	Delete	<p>The elimination of this section header is an administrative change.</p> <p>This section discusses the process of normalization between the predicted relation between fuel burnup and the boron concentration. It is proposed for deletion.</p>
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, reactivity anomalies in the reactor core are no longer a concern in the permanently shut down and defueled state. Thus, the information regarding reactivity anomalies in the reactor core in the IP2 UFSAR is obsolete.
3.3.2	NA	Thermal and Hydraulic Tests and Inspections	Delete	<p>This section of the IP2 UFSAR provides a description of the thermal and hydraulic tests and inspections of the reactor internals, including the fuel assemblies and the control rod drive mechanisms. It is proposed for deletion.</p>
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and the discussions regarding thermal and hydraulic design of the reactor core are obsolete.

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3.3.3	NA	Core Component Tests and Inspections	Delete	<p>This section of the IP2 UFSAR provides a description of the core component tests and inspections. It is proposed for deletion.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and the discussions regarding core components are obsolete.</p>
3.3.3.1	3.1.5	Quality Assurance Program	Retain	No changes.
3.3.3.2	3.1.6	Quality Control	Modify	<p>This section discusses the quality control regarding the fuel. This section is modified to eliminate the information regarding nuclear fuel operation or emplacement in the reactor vessel and retain the information regarding fuel design that is applicable to storage in the SFP or the ISFSI. Other administrative and editorial changes are made to reflect the renumbering of the Sections, Tables, and Figures to create the IP2 DSAR.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
Appendix 3A	NA	Experimental Verification of Calculations for Boron Burnable Poison Rods	Delete	<p>This appendix provides data regarding experiments that were performed at the Westinghouse Reactor Evaluation Center to investigate the reactivity worth of Pyrex glass tubing that is similar to that employed in the IP2 reactor core as burnable poisons rods.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the</p>



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Table 3A-1	NA	Calculations and Burnable Poison Rod Worths	Delete	burnable poison rods are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the experimental studies regarding burnable poison rods in the IP2 UFSAR is obsolete. See the discussion above.
Appendix 3B	NA	Power Distribution Control	Delete	Appendix 3B is proposed for deletion in its entirety, because all of its Sections are proposed for deletion.
3B.1	NA	General	Delete	This appendix provides a summary of a Westinghouse investigation regarding the spatial stability of the xenon distribution in large Pressurized Water Reactors.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the information regarding analyzing, controlling, and monitoring power distribution in the reactor core in the IP2 UFSAR is obsolete.
3B.2, including Subsections 3B2.1 through 3B.2.4	NA	Spatial Xenon Stability	Delete	This section discusses axial xenon stability, diametral xenon stability, analytical techniques used to assess potential power distribution anomalies, and instrumentation and control to ensure that the reactor will be maintained within thermal limits.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the information regarding analyzing, controlling, and monitoring power distribution in the reactor core in the IP2 UFSAR is obsolete.

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3B.3	NA	Control Rod Positioning	Delete	<p>This section provides a discussion regarding control rod positioning that includes discussion regarding rod misalignment, rod position indication, and control rod mispositioning.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the control rods are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the control rods in the IP2 UFSAR is obsolete.</p>

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4.0	NA	General Description	Delete	<p>The reactor coolant system includes those systems and components that form the major portions of the nuclear system process barrier. These systems and components contained or transported the fluids coming from or going to the reactor core.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1	NA	Design Bases	Delete	This section is proposed for deletion, because all of its subsections are deleted.
4.1.1	NA	Performance Objectives	Delete	<p>This section provides the performance objectives of the reactor coolant system, including transferring heat from the core to the steam generators, achieving reactor core thermal-hydraulic performance, serving as a neutron moderator and reflector, serving as a solvent for the neutron absorber, providing a boundary for containing the coolant and radioactive materials, limiting the release of radioactivity to the secondary system, attenuating thermal transients, accommodating coolant volume changes, etc.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1.2, including Subsections 4.1.2.1 through 4.1.2.4	NA	General Design Criteria	Delete	<p>This section addresses the general design criteria that apply to the reactor coolant system. They are Quality Standards, Performance Standards, Records Requirements, and Missile Protection.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>

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4.1.3, including Subsections 4.1.3.1 through 4.1.3.5	NA	Principal Design Criteria	Delete	<p>This section addresses the principal design criteria that apply to the reactor coolant system. They are entitled Reactor Coolant Pressure Boundary, Monitoring Reactor Coolant Leakage, Reactor Coolant Pressure Boundary Capability, Reactor Coolant Pressure Boundary Rapid Propagation Failure Prevention, and Reactor Coolant Pressure Boundary Surveillance.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1.4, including Subsection 4.1.4.1 through 4.1.4.3	NA	Design Characteristics	Delete	<p>This section addresses the design criteria that apply to the reactor coolant system. They are Design Pressure, Design Temperature, and Seismic Loads.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1.5	NA	Cyclic Loads	Delete	<p>This section addresses the capability of the components of the reactor coolant system to withstand the effects of cyclic loads due to reactor system temperature and pressure changes.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1.6	NA	Service Life	Delete	<p>This section addresses the service life of the the reactor coolant system pressure components.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.1.7	NA	Codes and Classifications	Delete	<p>This section addresses the codes and standards that are applicable to the reactor coolant system.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>

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Table 4.1-1	NA	Reactor Coolant System Pressure Settings	Delete	See the discussion for the proposed deletion of Sections 4.1.4, 4.2.1, and 4.4.3.
Table 4.1-2	NA	Reactor Vessel Design Data	Delete	See the discussion for the proposed deletion of Section 4.2.1 and Subsection 4.2.2.1.
Table 4.1-3	NA	Pressurizer and Pressurizer Relief Tank Design Data	Delete	See the discussion for the proposed deletion of Section 4.2.1 and Subsections 4.2.2.2 and 4.2.2.6 and Section 4.2.3.
Table 4.1-4	NA	Steam Generator Design Data	Delete	See the discussion for the proposed deletion of Section 4.2.1 and Subsection 4.2.2.3.
Table 4.1-5	NA	Reactor Coolant Pumps Design Data	Delete	See the discussion for the proposed deletion of Section 4.2.1 and Subsection 4.2.2.4.
Table 4.1-6	NA	Reactor Coolant Piping Design Data	Delete	See the discussion for the proposed deletion of Section 4.2.1 and Subsection 4.2.2.7.
Table 4.1-7	NA	Reactor Coolant System Design Pressure Drop	Delete	See the discussion for the proposed deletion of Section 4.1.4.
Table 4.1-8	NA	Thermal and Loading Cycles	Delete	See the discussion for the proposed deletion of Sections 4.1.5, 4.1.6, and 4.2.6.
Table 4.1-9	NA	Reactor Coolant System – Design Code Requirements	Delete	See the discussion for the proposed deletion of Section 4.1.7.
4.2	NA	System Design and Operation	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.
4.2.1	NA	General Description	Delete	This section provides a general discussion regarding the system design and operation of the reactor coolant system.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.2	NA	Components	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.

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4.2.2.1	NA	Reactor Vessel	Delete	This section discusses the design and operation of the reactor vessel.  The reactor vessel is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor vessel in the IP2 UFSAR is obsolete.
4.2.2.2	NA	Pressurizer	Delete	This section discusses the design and operation of the pressurizer.  The pressurizer is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the pressurizer in the IP2 UFSAR is obsolete.
4.2.2.3	NA	Steam Generators	Delete	This section discusses the design and operation of the steam generators.  The steam generators are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam generators in the IP2 UFSAR is obsolete.
4.2.2.4	NA	Reactor Coolant Pumps	Delete	This section discusses the design and operation of the reactor coolant pumps.  The reactor coolant pumps are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant pumps in the IP2 UFSAR is obsolete.
4.2.2.5	NA	Reactor Coolant Pump Flywheel Integrity	Delete	This section discusses the design of the reactor coolant pump flywheels.  The reactor coolant pump flywheels are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant pump flywheels in the IP2 UFSAR is obsolete.
4.2.2.6	NA	Pressurizer Relief Tank	Delete	This section discusses the design and operation of the pressurizer relief tanks.  The pressurizer relief tank is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the pressurizer relief tank in the IP2 UFSAR is obsolete.

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4.2.2.7	NA	Piping	Delete	<p>This section discusses the design of the reactor coolant system piping.</p> <p>The reactor coolant system piping is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system piping in the IP2 UFSAR is obsolete.</p>
4.2.2.8	NA	Valves	Delete	<p>This section discusses the design of the reactor coolant system valves.</p> <p>The reactor coolant system valves are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system valves in the IP2 UFSAR is obsolete.</p>
4.2.2.9	NA	Component Supports	Delete	<p>This section discusses the design of the support structures for the reactor coolant components by referring to Appendix 4B and Chapter 5.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the support structures for the reactor coolant system components in the IP2 UFSAR is obsolete.</p>
4.2.3	NA	Pressure-Relieving Devices	Delete	<p>This section discusses the pressure-relieving devices that protect the reactor coolant system against overpressure.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the pressure-relieving devices that protect the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.2.4	NA	Protection Against Proliferation of Dynamic Effects	Delete	<p>This section discusses the methods employed to protect the reactor coolant system from dynamic effects and missiles. This includes missile shielding or segregation of redundant components.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, it is no longer required to be protected against dynamic effects and missiles. As a result, this information in the IP2 UFSAR is obsolete.</p>

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4.2.5	NA	Materials of Construction	Delete	This section discussion the materials of construction utilized in the reactor coolant system.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.6	NA	Maximum Heating and Cooling Rates	Delete	This section discussion the maximum heating and cooling rates for the reactor coolant system.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.7, including Subsections 4.2.7.1 through 4.2.7.3	NA	Leakage	Delete	This section and its subsections address the potential for leakage from the reactor coolant system to the containment, including maximum leak rates that are permitted, leakage prevention measures, and methods to identify leaks.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.8	NA	Water Chemistry	Delete	This section addresses water chemistry requirements for the reactor coolant system.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.9	NA	Reactor Coolant Flow Measurement	Delete	This section addresses methods for monitoring the reactor coolant system flow rate.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
4.2.10, including Subsections 4.2.10.1	NA	Reactor Coolant Vent System	Delete	This section and its subsections discuss the remote reactor coolant vent system that allows for remote manual venting of gases from the reactor vessel head should they accumulate there.



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through 4.2.10.4				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant vent system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant vent system in the IP2 UFSAR is obsolete.
4.2.11, including Subsections 4.2.11.1 and 4.2.11.2	NA	Reactor Vessel Level Indication System	Delete	This section and its subsections discuss the reactor vessel level indication system that provided a means for the reactor operators to diagnose the approach of inadequate cooling and assess the adequacy of responses taken to restore cooling.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor vessel level indication system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor vessel level indication system in the IP2 UFSAR is obsolete.
Table 4.2-1	NA	Materials of Construction of the Reactor Coolant System Components	Delete	See the discussion for the proposed deletion of Subsection 4.2.2.1 and Section 4.2.5
Table 4.2-2	NA	Identification of Indian Point Unit 2 Reactor Vessel Beltline Region Weld-Metal	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-3	NA	Chemical Composition of Reactor Vessel Beltline Region Weld Metal	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-4	NA	Mechanical Properties of Reactor Vessel Beltline Region Weld Metal	Delete	See the discussion for the proposed deletion of Section 4.2.5.

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Table 4.2-5	NA	Maximum 32 EFPY Fluence at Vessel Inner Wall Locations	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-6	NA	Identification of Reactor Vessel Beltline Region Plate Material	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-7	NA	Chemical Composition of Reactor Vessel Beltline Region Plate Material, Weight Percent	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-8	NA	Mechanical Properties of Reactor Vessel Beltline Region Plate Material	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-9	NA	Summary of Charpy V-notch and Drop Weight Tests	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Table 4.2-10	NA	Reactor Vessel Beltline Fluence	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Figure 4.2-1	NA	Reactor Coolant System Flow Diagram – Replaced with Plant Drawing 9321-2738	Delete	See the discussion for the proposed deletion of Sections 4.2.1 and 4.2.3.
Figure 4.2-2	NA	Reactor Coolant System Schematic Flow Diagram	Delete	See the discussion for the proposed deletion of Section 4.2.1 and 4.2.2.7.
Figure 4.2-3	NA	Reactor Vessel	Delete	See the discussion for the proposed deletion of Section 4.2.2.1.
Figure 4.2-4	NA	Pressurizer	Delete	See the discussion for the proposed deletion of Section 4.2.2.2.
Figure 4.2-5	NA	Steam Generator Assembly	Delete	See the discussion for the proposed deletion of Section 4.2.2.3.
Figure 4.2-6	NA	Reactor Coolant Pump	Delete	See the discussion for the proposed deletion of Section 4.2.2.4.
Figure 4.2-7	NA	Reactor Coolant Pump Estimated Performance Characteristics	Delete	See the discussion for the proposed deletion of Section 4.2.2.4.
Figure 4.2-8	NA	Flywheel	Delete	See the discussion for the proposed deletion of Section 4.2.2.5.
Figure 4.2-9	NA	Reactor Coolant Pump Flywheel Tangential Stress vs Radius	Delete	See the discussion for the proposed deletion of Section 4.2.2.5.
Figure 4.2-10	NA	Pressurizer Relief Tank	Delete	See the discussion for the proposed deletion of Section 4.2.2.6.

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Figure 4.2-11	NA	Identification & Location of Beltline Region Material for the Indian Point Unit 2 Reactor Vessel	Delete	See the discussion for the proposed deletion of Section 4.2.5.
Figure 4.2-12	NA	Reactor Vessel Level Instrumentation System Flow Diagram – Replaced with Plant Drawing 208798	Delete	See the discussion for the proposed deletion of Section 4.2.11.2.
4.3	NA	System Design Evaluation	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.
4.3.1, including Subsections 4.3.1.1 through 4.3.1.3	NA	Safety Factors	Delete	<p>This section addresses that the safety of the reactor vessel and all other reactor coolant system pressure-containing components and piping is dependent on several major factors including design and stress analysis, material selection and fabrication, quality control, and operations control.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.3.2	NA	Reliance on Interconnected Systems	Delete	<p>This section addresses the reliance of the reactor coolant system on other interconnected systems.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>

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4.3.3	NA	System Integrity	Delete	This section address tests that were conducted regarding the reactor vessel, steam generator, pressurizer, and reactor coolant pumps.
4.3.4, including Subsections 4.3.4.1 through 4.3.4.3	NA	Overpressure Protection	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>This section and its subsections discuss that the reactor coolant system is protected by an overpressure protection system.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the reactor coolant system overpressure protection system is no longer required and the information regarding it in the IP2 UFSAR is obsolete.</p>
4.3.5	NA	Incident Potential	Delete	<p>This section discusses the potential of the reactor coolant system to be the cause of accidents and refers to Sections 14.1 and 14.2.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer a potential source of accidents in the permanently shut down and defueled state. Thus, this information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.3.6	NA	Redundancy	Delete	<p>This section discusses the redundancy requirements for components of the reactor coolant system.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>

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Table 4.3-1	NA	Summary of Primary Plus Secondary Stress Intensity for Components of the Reactor Vessel	Delete	See the discussion of the proposed deletion of Section 4.3.1.1.
Table 4.3-2	NA	Summary of Cumulative Fatigue Usage Factors for Components of the Reactor Vessel	Delete	See the discussion of the proposed deletion of Section 4.3.1.1.
Table 4.3-3	NA	Deleted	Delete	Previously deleted.
Table 4.3-4	NA	Deleted	Delete	Previously deleted.
4.4	NA	Safety Limits and Conditions	Delete	This section is proposed to be deleted, because all of its subsections are proposed for deletion.
4.4.1	NA	System Heatup and Cooldown Rates	Delete	This section discusses the operating limits for the reactor coolant system heatup and cooldown rates.
4.4.2	NA	Reactor Coolant Activity Limits	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>This section discusses the limits for the reactor coolant system activity.</p>
4.4.3	NA	Maximum Pressure	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>This section discusses the limit for the reactor coolant system maximum pressure.</p>
4.4.4	NA	System Minimum Operating Conditions	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>This section discusses the minimum operating conditions for the reactor coolant system.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>

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4.5	NA	Inspections and Tests	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.
4.5.1	NA	Inspection of Materials and Components Prior to Operation	Delete	This section summarizes the nondestructive tests and inspections that were required by Westinghouse specifications on reactor coolant system components and materials prior to operation. This section is historical.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the historical information regarding the reactor coolant system tests and inspections in the IP2 UFSAR is obsolete.
4.5.2	NA	Reactor Vessel Surveillance Program	Delete	This section describes the reactor vessel surveillance program.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor vessel is no longer required to perform a function in the permanently shut down and defueled state. Thus, this information regarding the reactor vessel in the IP2 UFSAR is obsolete.
4.5.3	NA	Primary System Quality Assurance Program	Delete	This section summarizes the tests and inspections that were performed by equipment suppliers and material manufacturers on reactor coolant system components and materials prior to operation. This section is historical.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the historical information regarding the reactor coolant system tests and inspections in the IP2 UFSAR is obsolete.
4.5.4	NA	Inservice Inspection Considerations	Delete	This section addresses inservice inspection considerations for the reactor coolant system.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding inservice inspections of the reactor coolant system in the IP2 UFSAR is obsolete.

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4.5.5	NA	Reactor Coolant System Surveillance	Delete	<p>This section addresses a preoperational and inservice structural surveillance program for the reactor vessel and reactor coolant system boundary.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system, including the reactor vessel, is no longer required to perform a function in the permanently shut down and defueled state. Thus, this information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
4.5.6	NA	Reactor Coolant Vent System Testing	Delete	<p>This section addresses the testing of the reactor head vent and power operated relief valves system valves.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system, including the reactor vent heads and power operated relief valves systems, is no longer required to perform a function in the permanently shut down and defueled state. Thus, this information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
Table 4.5-1	NA	Reactor Coolant System Quality Assurance Program	Delete	See the discussion regarding the proposed deletion of Sections 4.5.1 and 4.5.3.
4.6	NA	Metal Impact Monitoring System	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.
4.6.1	NA	General	Delete	This section discusses the metal impact monitoring system. It is designed to enable early detection of any debris, detached internal structural items, and hardware present in the reactor coolant system.

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4.6.2	NA	Description	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the metal impact monitoring system will not be required to perform a function, and the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>This section discusses the metal impact monitoring system. It is designed to enable early detection of any debris, detached internal structural items, and hardware present in the reactor coolant system.</p>
Appendix 4A	NA	Determination of Reactor Pressure Vessel Nil-Ductility Transition Temperature (NDTT)	Delete	<p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the metal impact monitoring system will not be required to perform a function, and the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>This appendix establishes the NDTT for the reactor vessel.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor vessel is no longer required to perform a function in the permanently shut down and defueled state. Thus, this information regarding the reactor vessel in the IP2 UFSAR is obsolete.</p>
Appendix 4B	NA	Support Structures for Reactor Coolant System Components	Delete	<p>This appendix addresses the support structures for reactor vessel, steam generators, reactor coolant pumps, pressurizer, and piping. In addition, it addresses the applicability of the IP3 pipe break analyses to IP2 and the application of leak before break technology.</p> <p>The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>



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Appendix 4C	NA	Sensitized Stainless Steel	Delete	This appendix provides a summary of a Westinghouse evaluation regarding the use of sensitized stainless steel for reactor components in pressurized water reactors.  The reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete..
Figure 4C-1	NA	Primary Nozzle Combustion Engineering Reactor Vessel	Delete	See the discussion regarding the proposed deletion of Appendix 4C
Figure 4C-2	NA	Primary Nozzle Tampa Steam Generators	Delete	See the discussion regarding the proposed deletion of Appendix 4C
Figure 4C-3	NA	Spray or Surge Nozzle Tampa Pressurizer	Delete	See the discussion regarding the proposed deletion of Appendix 4C

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5.1	3.16	Containment Structures	Retain	No changes.
5.1.1	3.16.1	Design Basis	Modify	<p>This section addresses the design basis for the reactor containment. It is modified to reflect that the reactor containment will not have any active safety functions in the permanently shut down and defueled condition, but that it must remain capable of withstanding seismic events so that it will not fail and cause damage to Class I structures, systems, and components (SSCs).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). A Fuel Handling Accident (FHA) in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the reactor containment is no longer required to perform an active function in the permanently shut down and defueled state. However, it must remain capable of withstanding natural phenomenon, so that it does not damage any Class I SSC.</p>
5.1.1.1	3.16.1.1	Principal Design Criteria	Retain	No changes
5.1.1.1.1	3.16.1.1.1	Quality Standards	Modify	<p>This section addresses how the containment system satisfies General Design Criterion 1. It is modified to reflect that the reactor containment will not have any active safety functions in the permanently shut down and defueled condition, but that it must remain capable of withstanding seismic events so that it will not fail and cause damage to Class I SSCs. In addition, typographical errors are corrected in the section.</p>

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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
				<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p>
				<p>Consequently, the reactor containment is no longer required to perform an active function in the permanently shut down and defueled state. However, it must remain capable of withstanding natural phenomenon, so that it does not damage any Class I SSC.</p>
5.1.1.1.2	3.16.1.1.2	Performance Standards	Modify	The section is modified to reflect that the reactor containment has been re-classified as a Class III structure. See the discussion of the changes for Section 1.11.
5.1.1.1.3	3.16.1.1.3	Fire Protection	Modify	This section addresses how the containment system satisfies General Design Criterion 3. It is modified to eliminate the specific discussions regarding the containment liner thermal insulation and the reactor coolant pump motors and associated equipment. In addition, A typographical error is corrected in this section.
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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				<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. A FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the reactor containment and is no longer required to perform an active function in the permanently shut down and defueled state. However, it must remain capable of withstanding natural phenomenon, so that it does not damage any Class I SSC.</p>
5.1.1.1.4	3.16.1.1.4	Records	Modify	<p>This section was modified to add an exception to address a likely exemption regarding records requirements.</p>
5.1.1.1.5	3.16.1.1.5	Reactor Containment	Modify	<p>This section addresses how the containment system satisfies General Design Criterion 10. It is modified to reflect that the reactor containment will not have any active safety functions in the permanently shut down and defueled condition, but that it must remain capable of withstanding seismic events so that it will not fail and cause damage to Class I SSCs.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. A FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p>

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5.1.1.1.6	NA	Reactor Containment Design Basis	Delete	<p>Consequently, the reactor containment is no longer required to perform an active function in the permanently shut down and defueled state. However, it must remain capable of withstanding natural phenomenon, so that it does not damage any Class I SSC.</p> <p>This section addresses how the reactor containment structure satisfies General Design Criterion 49. This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
5.1.1.1.7		Nil-ductility Transition Temperature Requirement for Containment Material	Deleted	<p>Consequently, General Design Criterion 49 is not applicable in the permanently shut down and defueled state.</p> <p>This section addresses how the containment system satisfies General Design Criterion 50. It is deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The primary containment is not required to perform any function to mitigate an accident in the permanently shut down and defueled condition.</p>
5.1.1.2	NA	Supplementary Accident Criteria	Delete	<p>This section addresses requirements regarding the maintenance of the containment leakage boundary and the capability of pressure retaining components. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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				50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor containment is no longer required to be a leakage boundary, and there will no pressure-retaining components maintained in the containment.
5.1.1.3	3.16.1.2	Energy and Material Release	Modify	<p>This section described the impact on the design pressure of the containment regarding reactor transients and accidents. This section is modified to eliminate the discussions regarding reactor transients and accidents. In addition, the section is renamed as “Loadings” to reflect the remaining content.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents. Thus, structural loadings are the only remaining design basis consideration.</p>
5.1.1.4	NA	Engineered Safety Features Contribution	Delete	<p>This section provides a generic discussion regarding engineered safety features and refers to Chapters 6 and 14 of the IP2 UFSAR. It is proposed to be deleted in its entirety.</p> <p>This change is an administrative change, because the changes to Chapters 6 and 14 of the IP2 UFSAR will be addressed in the review tables for those Chapters. In addition, the IP2 UFSAR sections will be consolidated when the Defueled Safety Analysis Report (DSAR) is compiled.</p>
5.1.1.5	3.16.1.3	Codes and Standards	Modify	This section is modified to denote that the information is historical.
5.1.2	3.16.2	Containment Structure Design	Retain	No changes.
5.1.2.1	3.16.2.1	General Description	Modify	This section provides a general description of the containment structure design. It is modified to defined that the design objective of the containment structure is to retain

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				<p>its structural integrity during normal conditions and natural phenomenon events, eliminate references to historical IP2 UFSAR Figures, and to correct an editorial error.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents or contain radioactive material released as a result of those events. Structural loadings are the only remaining design basis consideration.</p> <p>The eliminated of the reference to historical IP2 UFSAR Figures and the editorial correction are administrative changes.</p>
5.1.2.2	3.16.2.2	Design Load Criteria	Modify	<p>This section describes the design load criteria for the containment structure. It is modified to eliminate the discussions regarding internal pressure transient and thermal expansion stresses due to a loss of coolant accident (LOCA).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA).</p>
5.1.2.3	3.16.2.3	Material Specifications	Modify	<p>This section describes the materials that were utilized to construct the containment structure and the specifications for these materials. It is modified to eliminate the discussions of reactor related transients and accidents (including the LOCA), identify the historical context of a previous evaluation of the protective coatings, eliminate a</p>

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				<p>historical discussions regarding changes to the liner insulation, and make several editorial corrections.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA), and it will no longer be subjected to operating temperatures and pressures.</p>
5.1.2.4	3.16.2.4	Design Stress Criteria	Modify	<p>This section presents the design stress criteria for the containment structure. It is retained, but modified to reflect that it is conservative with respect to the structure’s function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA). The analysis has been retained, because it is conservative with respect to the conditions that the containment structure may be subjected to in the permanently shut down and defueled condition.</p>
5.1.2.5, including Subsections 5.1.2.5.1 through	NA	Missile Protection	Delete	<p>This section describes the missile protection provided to various systems and components within the containment structure. It is proposed to be deleted in its entirety.</p>



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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the potential for energetic missiles resulting from reactor related transients and accidents are no longer possible.</p>
5.1.2.6, including subsections 5.1.2.6.1 through 5.1.2.6.3	3.16.2.5, including subsections 3.16.2.5.1 through 3.16.2.5.3	Quality Control	Modify	<p>This section describes the quality control program and applicable organizations regarding the containment structure design, construction, workmanship, materials, and performance. It is retained, but modified to reflect that the information is historical. This is an administrative change to reflect that the permanently shut down and defueled condition.</p>
5.1.3	3.16.3	Containment Stress Analysis	Retain	No changes.
5.1.3.1	3.16.3.1	General	Retain	No changes.
5.1.3.2	3.16.3.2	Method of Analysis	Modify	This section is modified to make an editorial correction. This is an administrative change.
5.1.3.3	3.16.3.3	Dome Analysis	Modify	<p>This section describes the stress analysis of the dome. It is retained, but modified to reflect that it is conservative with respect to the structure’s function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA). The analysis has been retained, because it is conservative with respect to the conditions that the</p>

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5.1.3.4	3.16.3.4	Cylinder Analysis	Modify	<p>containment structure may be subjected to in the permanently shut down and defueled condition.</p> <p>This section describes the stress analysis of the cylinder. It is retained, but modified to reflect that it is conservative with respect to the structure’s function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA). The analysis has been retained, because it is conservative with respect to the conditions that the containment structure may be subjected to in the permanently shut down and defueled condition.</p>
5.1.3.5	3.16.3.5	Base Mat Analysis	Modify	<p>This section describes the stress analysis of the base mat. It is retained, but modified to reflect that it is conservative with respect to the structure’s function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA). The analysis has been retained, because it is conservative with respect to the conditions that the containment structure may be subjected to in the permanently shut down and defueled condition.</p>

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5.1.3.6	3.16.3.6	Analysis of Liner and Reinforcing Steel	Retain	No changes.
5.1.3.7	3.16.3.7	Containment Interior Structure	Modify	<p>This section describes the stress analysis of the containment interior structures. It is retained, but modified to reflect that it is conservative with respect to the structure’s function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA). The analysis has been retained, because it is conservative with respect to the conditions that the containment structure may be subjected to in the permanently shut down and defueled condition.</p>
5.1.3.8	NA	Pressure Stresses	Delete	<p>This section header is deleted. As described below, subsection 5.1.3.8.1 will be eliminated and subsection 5.1.3.8.2 will be retained. Thus, the section header for the retained subsection is adequate to describe the discussion.</p>
5.1.3.8.1	NA	Accident Pressure	Delete	<p>This section describes the accident pressure effects on the containment structure. This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA).</p>
5.1.3.8.2	3.16.3.8	Soil Pressure	Retain	No changes.

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5.1.3.9	3.16.3.9	Thermal Stresses	Modify	<p>This section describes the analyses regarding temperature effects on the containment structure. It is modified by eliminating the discussions regarding the impacts of a rapid temperature rise on the liner due to accident conditions.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor containment is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA).</p>
5.1.3.10	3.16.3.10	Analysis of Openings	Retain	No changes.
5.1.3.11	3.16.3.11	Seismic and Wind Design	Retain	No changes.
5.1.3.12	3.16.3.12	Cathodic Protection	Modify	<p>This section is modified to identify that it is historical information. In addition, the reference to the safety-related service water piping is modified to denote that this is a historical classification. Service water no longer serves a safety-related purpose in the permanently shut down and defueled condition.</p>
5.1.3.13	3.16.3.13	Containment – Shear Crack	Retain	No changes.
5.1.4	NA	Containment Penetrations	Delete	<p>This section header will be deleted to reflect the proposed elimination of all of its subsections.</p>
5.1.4.1	NA	General	Delete	<p>This section provides a general discussion of the penetrations. It is proposed to delete this section in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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				<p>The discussions regarding penetrations are proposed for deletion as discussed below. The containment structure, including its penetrations, are no longer required to be leak tight to address reactor transients or accidents (including the LOCA). The fuel transfer canal will be isolated from the spent fuel pit via a welded shut valve.</p>
5.1.4.2	NA	Types of Penetration	Delete	<p>This section header will be deleted to reflect that all of the subsections are proposed to be eliminated.</p>
5.1.4.2.1	NA	Electrical Penetrations	Delete	<p>This section discusses the design of electrical penetrations. It is proposed to delete this section in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the electrical penetrations are not required to support an active function in the permanently shut down and defueled condition. The structural analysis of the containment, including the impact of openings, was previously discussed in the IP2 UFSAR.</p>
5.1.4.2.2	NA	Piping Penetrations	Delete	<p>This section discusses the design of piping penetrations. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the piping penetrations are not required to support an active function in the permanently shut down and defueled condition. The structural analysis of the containment, including the impact of openings, was previously discussed in the IP2 UFSAR.</p>

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5.1.4.2.3	NA	Equipment and Personnel Access Hatches	Delete	<p>This section discusses the design of the equipment and personnel access hatches. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the equipment and personnel access hatches are not required to support an active function in the permanently shut down and defueled condition. The structural analysis of the containment, including the impact of openings, was previously discussed in the IP2 UFSAR.</p>
5.1.4.2.4	NA	Special Penetrations	Delete	<p>This section provides a general discussion of the fuel transfer tube penetration, containment supply and exhaust purge ducts, and sump penetrations. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the containment supply and exhaust purge ducts and sump penetrations are not required to support an active function in the permanently shut down and defueled condition. The structural analysis of the containment, including the impact of openings, was previously discussed in the IP2 UFSAR. In addition, the fuel transfer tube will be isolated from the spent fuel pit via a welded shut valve; thus, it is no longer required to perform a function in the permanently shut down and defueled condition.</p>
5.1.4.3	NA	Design of Containment Penetrations	Delete	<p>This section header is proposed to be deleted, because all of its subsections are proposed to be deleted.</p>

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5.1.4.3.1	NA	Criteria	Delete	<p>This section provides a discussion regarding the effects of penetrations on the liner. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the liner is no longer required to withstand the impacts of any reactor transients or accidents (including the LOCA).</p>
5.1.4.3.2	NA	Materials	Delete	<p>This section discusses the materials for the piping, electrical, and access penetrations. It is proposed to delete this section in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the piping, electrical, and access penetrations are not required to support an active function in the permanently shut down and defueled condition. The structural analysis of the containment, including the impact of openings, was previously discussed in the IP2 UFSAR.</p>
5.1.4.4	NA	Leak Testing of Penetration Assemblies	Delete	<p>This section discusses pre-operational leak testing of penetration assemblies. It is proposed to delete this section in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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				accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
5.1.4.5	NA	Construction	Delete	<p>Consequently, the containment structure is no longer required to be isolated to address reactor transients or accidents.</p> <p>This section discusses the qualification of welding procedures and welders and the repair of defective welds.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
5.1.4.6	NA	Testability of Penetrations and Weld Seams	Delete	<p>Consequently, the containment structure is no longer required to be isolated to address reactor transients or accidents.</p> <p>This section discusses the testability of penetrations and weld seams. It is proposed to delete this section in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
5.1.4.7	NA	Accessibility Criteria	Delete	<p>Consequently, the containment structure is no longer required to be isolated to address reactor transients or accidents.</p> <p>This section discusses the accessibility criteria to the containment with the reactor at power or with the primary system at design pressure and temperature at hot shutdown. It is proposed to delete this section in its entirety.</p>



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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the reactor and reactor coolant system will never enter the modes and specified conditions of operations again. Thus, the discussion regarding containment accessibility during those times is obsolete.</p>
5.1.4.8, including its subsections 5.1.4.8.1 through 5.1.4.8.3	NA	Penetration Design - Computations	Delete	<p>This section provides a general discussion of the capability of penetrations to withstand loading. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. In addition, the fuel transfer tube will be isolated from the spent fuel pit via a welded shut valve; thus, it is no longer required to perform a function in the permanently shut down and defueled condition.</p>
5.1.5	NA	Primary System Supports	Delete	<p>This section provides an analysis of the dynamic effects of postulated accidents regarding primary system supports, including steam generators, reactor coolant pumps, pressurizer, and reactor vessel.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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				Consequently, the steam generators, reactor coolant pumps, pressurizer, and reactor vessel are not required to perform a function in the permanently shut down and defueled condition. The discussions regarding these components in the IP2 UFSAR is obsolete.
5.1.5.1	NA	Steam Generator	Delete	See the discussion above.
5.1.5.2	NA	Reactor Coolant Pump	Delete	See the discussion above.
5.1.5.3	NA	Pressurizer	Delete	See the discussion above.
5.1.5.4	NA	Reactor Vessel Support Girder	Delete	See the discussion above.
5.1.5.5	NA	Reactor Vessel Rupture	Delete	See the discussion above.
5.1.5.6	NA	Circumferential Cracking	Delete	See the discussion above.
5.1.5.7	3.16.5	Longitudinal Splitting	Modify	This section is modified to identify that the analysis of the accident condition is historical. It is retained, because it bounds the conditions that exist in the permanently shut down and defueled condition.
5.1.6	NA	Containment Structure Design Evaluation	Delete	This section header is deleted to reflect the changes to its subsections discussed below. The section header is superfluous, given that only one subsection will remain. This proposed change is an administrative change.
5.1.6.1	NA	Reliance on Interconnected Systems	Delete	This section discusses containment leakage and isolation provisions. This section is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Consequently, the containment is not required to be leak tight or to be capable of isolation. Thus, the discussions regarding these containment functions in the IP2 UFSAR are obsolete.
5.1.6.2	NA	System Integrity and Safety Factors	Delete	This section provides a summary of the penetration integrity following a pipe rupture, major component support structures, and containment structure components analyses.

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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment is not required to be leak tight or to be capable of isolation. Thus, the discussion regarding penetration integrity in the IP2 UFSAR is obsolete.</p> <p>The discussions regarding the major component support structures and containment structure components analyses are high level overviews of previously evaluated sections. This information is deleted to support consolidation of the IP2 UFSAR when the IP2 DSAR is compiled.</p>
5.1.6.3	3.16.6.1	Performance Capability Margin	Modify	<p>This section is modified by identifying that the evaluation of the containment structure is based on historical postulated accident loads.</p>
5.1.7	NA	Liner Insulation	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>This section identifies that insulation is provided on approximately the first 43 feet of the containment liner to limit the temperature rise in the liner under accident conditions. This section is proposed for deletion in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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5.1.8	NA	Minimum Operating Conditions (For Containment Integrity)	Delete	<p>Consequently, the liner insulation is not required to perform a function in the permanently shut down and defueled condition. Thus, this information is obsolete.</p> <p>This section states that containment integrity internal pressure limitations and leakage rate requirements are established in the facility Technical Specifications. This section is proposed to be deleted in its entirety.</p>
5.1.9, including Subsections 5.1.9.1 through 5.1.9.4	NA	Containment Structure - Inspection and Testing	Delete	<p>Following the implementation of the Permanently Defueled Technical Specifications, there will be no requirements regarding containment integrity in the Technical Specifications. Thus, this information is obsolete.</p> <p>This section addresses the initial and periodic containment leakage rate testing, provisions for testing of penetrations for leak tightness at the peak pressure, and provisions for testing isolation valves. This section is proposed for deletion in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
5.1.10 including Subsections 5.1.10.1 through 5.1.10.3	NA	Construction Tests	Delete	<p>Consequently, the containment is not required to be leak-tight or capable of being isolated (with the exception of the fuel transfer tube penetration) in the permanently shut down and defueled condition. Thus, the information in this section is obsolete.</p> <p>This section defines the inspections and texts that were performed during erection of the liner. This section is proposed for deletion in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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5.1.11	3.16.7	Preoperational Tests	Modify	<p>Consequently, the containment liner is not required to perform a function in the permanently shut down and defueled condition. Thus, the information in this section is obsolete.</p> <p>This section provides a summary of the preoperational tests performed for the containment building. It is retained, but modified to remove the discussion regarding the double barrier for the penetrations and the welds joining these penetrations to the containment liner and the liner seam welds and the capability to pressurize these barriers.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the containment is not required to be leak-tight in the permanently shut down and defueled condition.</p>
5.1.11.1	3.16.8	Strength Test	Retain	No changes.
5.1.11.2	NA	Integrated Leakage Rate Test: (Type A)	Delete	<p>This section discusses the initial Type A Integrated Leakage Rate Test.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the containment is not required to be leak-tight in the permanently shut down and defueled condition. Thus, the information in this section is obsolete.</p>
5.1.11.3	NA	Sensitive Leak Rate Test: (Type B)	Delete	<p>This section discusses the initial Type B Sensitive Leak Rate Test.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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5.1.11.4	NA	Containment Isolation Valve Test: (Type C)	Delete	<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, the containment is not required to be leak-tight in the permanently shut down and defueled condition. Thus, the information in this section is obsolete. This section discusses the initial Type C containment isolation valve tests.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
5.1.12	NA	Postoperational Tests	Delete	<p>Consequently, the containment is not required to be isolated post-accident in the permanently shut down and defueled condition. Thus, the information in this section is obsolete.</p> <p>This section discusses the post-operational containment integrated leakage rate tests, air lock tests, and containment isolation valve operability tests.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
Table 5.1-1	Table 3.16-1	Flooded Weights – Containment Building	Retain	<p>Consequently, the containment is not required to be leak tight or isolated post-accident in the permanently shut down and defueled condition. Thus, the information in this section is obsolete.</p> <p>No changes.</p>

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Table 5.1-2	NA	Containment Liner Insulation Properties	Delete	See the discussion above for Section 5.1.7.
Figure 5.1-1	Figure 3.16-1	Containment Structure	Retain	No changes.
Figure 5.1-2	NA	Containment Building General Arrangement Plans, Sheet 1 - Replaced with Plant Drawing 9321-2501	Delete	Previously deleted.
Figure 5.1-3	NA	Containment Building General Arrangement Plans, Sheet 2 - Replaced with Plant Drawing 9321-2502	Delete	Previously deleted.
Figure 5.1-4	NA	Containment Building General Arrangement Plans, Sheet 3 - Replaced with Plant Drawing 9321-2503	Delete	Previously deleted.
Figure 5.1-5	NA	Containment Building General Arrangement Elevation - Sheet 1 - Replaced with Plant Drawing 9321-2506	Delete	Previously deleted.
Figure 5.1-6	NA	Containment Building General Arrangement Elevation - Sheet 2 - Replaced with Plant Drawing 9321-2507	Delete	Previously deleted.
Figure 5.1-7	NA	Containment Building General Arrangement Elevation - Sheet 3 - Replaced with Plant Drawing 9321-2508	Delete	Previously deleted.
Figure 5.1-8	NA	Deleted	Delete	Previously deleted.
Figure 5.1-9	NA	Deleted	Delete	Previously deleted.
Figure 5.1-10	NA	Deleted	Delete	Previously deleted.

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Figure 5.1-11	Figure 3.16-2	Cylinder and Dome-Load Condition (A) - 1.5P	Retain	No changes.
Figure 5.1-12	Figure 3.16-3	Cylinder and Dome-Load Condition (B) - 1.25P	Retain	No changes.
Figure 5.1-13	Figure 3.16-4	Cylinder and Dome-Load Condition (C) - 1.0P	Retain	No changes.
Figure 5.1-14	Figure 3.16-5	Loading Diagram in Mat-Load Condition (A) - 1.5P	Retain	No changes.
Figure 5.1-15	Figure 3.16-6	Loading Diagram in Mat-Load Condition (B) - 1.25P	Retain	No changes.
Figure 5.1-16	Figure 3.16-7	Loading Diagram in Mat-Load Condition (C) - 1.0P	Retain	No changes.
Figure 5.1-17	Figure 3.16-8	Weld Stud Connection at Panel Low Point	Retain	No changes.
Figure 5.1-18	Figure 3.16-9	Weld Stud Connection at Panel Low Point	Retain	No changes.
Figure 5.1-19	Figure 3.16-10	Weld Stud Connection at Panel Center	Retain	No changes.
Figure 5.1-20	Figure 3.16-11	Wall Section	Retain	No changes.
Figure 5.1-21	Figure 3.16-12	Cylinder Base Slab Liner Juncture	Retain	No changes.
Figure 5.1-22	Figure 3.16-13	Typical Base Mat Liner Detail	Retain	No changes.
Figure 5.1-23	Figure 3.16-14	Base Slab Reinforcing Detail	Retain	No changes.
Figure 5.1-24	Figure 3.16-15	Reactor Cavity Pit	Retain	No changes.
Figure 5.1-25	Figure 3.16-16	Equipment Hatch Personnel Lock, Main Steam and Feedwater, Air Purge - Rebar	Retain	No changes.
Figure 5.1-26	Figure 3.16-17	Torsional Effects	Retain	No changes.



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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Figure 5.1-27	NA	Typical Electrical Penetration	Delete	See the discussion above.
Figure 5.1-28	NA	CONAX Penetrations – Outside Containment Weld	Delete	See the discussion above.
Figure 5.1-29	NA	CONAX Penetrations – Inside Containment Weld	Delete	See the discussion above.
Figure 5.1-30	NA	Typical Piping Penetration	Delete	See the discussion above.
Figure 5.1-31	NA	Fuel Transfer Tube Penetration (Conceptual Drawing)	Delete	This figure is proposed to be deleted. The fuel transfer tube will be isolated from the spent fuel pit via a welded shut valve; thus, it is no longer required to perform a function in the permanently shut down and defueled condition.
Figure 5.1-32	NA	Containment-Stresses on Penetrations and Liner - Sheet 6	Delete	See the discussion above for Section 5.1.4.8.
Figure 5.1-33	NA	Containment-Stresses on Penetrations and Liner - Sheet 7	Delete	See the discussion above for Section 5.1.4.8.
Figure 5.1-34	NA	Assumed Pipe Rupture Accident Break Locations	Delete	See the discussion above.
Figure 5.1-35	NA	Steam Generator Support-Section 1-1	Delete	See the discussion above.
Figure 5.1-36	NA	Steam Generator Support-Section 2-2	Delete	See the discussion above.
Figure 5.1-37	NA	Steam Generator Support-Section 3-3	Delete	See the discussion above.
Figure 5.1-38	NA	Steam Generator Support-Section 4-4	Delete	See the discussion above.
Figure 5.1-39	NA	Steam Generator Support-Plan Location Elevation 60 and 63	Delete	See the discussion above.
Figure 5.1-40	NA	Steam Generator Support-Plan Location Elevation 60 and 63	Delete	See the discussion above.
Figure 5.1-41	NA	Pump Support-Section 2-2 and 3-3	Delete	See the discussion above.

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Figure 5.1-42	NA	Pump Support-Section 3-3	Delete	See the discussion above.
Figure 5.1-43	NA	Isometric View-Steam Generator Support	Delete	See the discussion above.
Figure 5.1-44	NA	Isometric View-Reactor Coolant Pump Support	Delete	See the discussion above.
Figure 5.1-45	NA	Maximum Forces Acting on a Reactor Vessel Support	Delete	See the discussion above.
Figure 5.1-46	NA	Plan View 60 Ft-0 In.	Delete	See the discussion above.
Figure 5.1-47	NA	Typical Layer-Reactor Ring	Delete	See the discussion above.
Figure 5.1-48	NA	Section 5-5	Delete	See the discussion above.
Figure 5.1-49	NA	Section 18-18	Delete	See the discussion above.
Figure 5.1-50	NA	Plan View at Elevation 19 Ft- 7 In.	Delete	See the discussion above.
Figure 5.1-51	NA	Section A-A and Section B-B	Delete	See the discussion above.
Figure 5.1-52	NA	Deleted	Delete	Previously deleted.
Figure 5.1-53	NA	Containment Equipment Hatch Strain Gauge Test Locations	Delete	See the discussion above.
Figure 5.1-54	NA	Containment Temporary Opening in NW Quadrant Strain Gauge Test Locations	Delete	See the discussion above.
Figure 5.1-55	NA	Containment Strain Gauge Test Locations	Delete	See the discussion above.
Figure 5.1-56	NA	Containment Proof Test Gross Deformation Measurements	Delete	See the discussion above.
5.2	NA	Containment Isolation System	Delete	This section addresses the containment isolation system. This section is proposed to be deleted in its entirety.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
				<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. A FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the containment isolation system, with the exception of the fuel transfer tube penetration, is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment isolation system, with the exception of the information regarding the fuel transfer tube penetration in Subsection 5.2.2.6 and Table 5.2-1, in the IP2 UFSAR is obsolete. In addition, this change supports the consolidation of the information in the IP2 UFSAR when the IP2 DSAR is compiled.</p>
5.2.1	NA	Design Basis	Delete	See the discussion above.
5.2.2	NA	System Design	Delete	See the discussion above.
5.2.2.1	NA	Class 1, Outgoing Lines, Reactor Coolant System	Delete	See the discussion above.
5.2.2.2	NA	Class 2, Outgoing Lines	Delete	See the discussion above.
5.2.2.3	NA	Class 3, Incoming Lines	Delete	See the discussion above.
5.2.2.4	NA	Class 4, Missile Protected Lines	Delete	See the discussion above.
5.2.2.5	NA	Class 5, Normally Closed Lines Penetrating the Containment	Delete	See the discussion above.
5.2.2.6	NA	Class 6, Special Service Lines	Delete	<p>This section addresses the Class 6, Special Service Lines. This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, the fuel transfer tube will be isolated from the spent fuel pit by a welded shut valve. Thus, it will no longer serve a purpose in the permanently shut down and defueled condition.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. A FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the containment isolation system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment isolation system in the IP2 UFSAR is obsolete.</p>
5.2.2.7	NA	Class 7, Steam and Feedwater Lines	Delete	See the discussion above for Section 5.2.
5.2.3	NA	Isolation Valves and Instrumentation Diagrams	Delete	See the discussion above for Section 5.2.
5.2.4	NA	Valve Parameters Tabulation	Delete	See the discussion above for Section 5.2
5.2.5	NA	Valve Operability	Delete	See the discussion above for Section 5.2.
Table 5.2-1	NA	Containment Piping Penetrations and Valving	Delete	The table itemizes the containment piping penetrations and isolation valves. It is proposed to be deleted.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, the fuel transfer tube will be isolated from the spent fuel pit via a welded shut valve. Thus, the fuel transfer tube penetration will not be required in the permanently shut down and defueled condition.</p> <p>Consequently, the containment isolation system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment isolation system in the IP2 UFSAR is obsolete.</p>
Figure 5.2-1	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-2	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-3	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-4	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-5	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-6	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-7	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-8	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Figure 5.2-9	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-10	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-11	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-12	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-13	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-14	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-15	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-16	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-17	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-18	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-19	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Figure 5.2-20	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-21	NA	Containment Isolation System Penetration Schematics [Replaced with Plant Drawing 235296]	Delete	Previously deleted.
Figure 5.2-22	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-23	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-24	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-25	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-26	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-27	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-28	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
Figure 5.2-29	NA	Containment Isolation System Penetration Schematics	Delete	See the discussion above.
5.3	NA	Containment Heating, Cooling and Ventilation System	Delete	This section addresses the containment heating, cooling, and ventilation system. This includes the containment cooling and ventilation system, containment purge system, purge system isolation valves, and containment pressure relief line.

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. A FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, the containment heating, cooling, and ventilation system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment heating, cooling, and ventilation system in the IP2 UFSAR is obsolete.</p>
5.3.1	NA	Design Basis	Delete	See the discussion above.
5.3.1.1	NA	Performance Objectives	Delete	See the discussion above.
5.3.1.2	NA	Design Characteristics - Sizing	Delete	See the discussion above.
5.3.2	NA	System Design	Delete	See the discussion above.
5.3.2.1	NA	Piping and Instrumentation Diagram	Delete	See the discussion above.
5.3.2.2	NA	Containment Cooling and Ventilation System	Delete	See the discussion above.



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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
5.3.2.3	NA	Containment Purge System	Delete	See the discussion above.
5.3.2.4	NA	Purge System Isolation Valves	Delete	See the discussion above.
5.3.2.5	NA	Containment Pressure Relief Line	Delete	See the discussion above.
5.3.2.6	NA	Containment Purge and Pressure Relief Isolation Reset	Delete	See the discussion above.
Table 5.3-1	NA	Containment Cooling and Ventilation System - Principal Component Data Summary	Delete	See the discussion above.
Figure 5.3-1	NA	Containment Cooling and Ventilation System [Replaced with Plant Drawing 9321-4022]	Delete	Previously deleted.

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**CHAPTER 6 – ENGINEERED SAFETY FEATURES**

UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
6.0	NA	Introduction	Delete	<p>This section defines that the engineered safety features systems at IP2 as the containment system, safety injection system, containment spray system, containment air recirculation cooling system, isolation valve seal-water system, and the containment penetration and weld channel pressurization system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shut down and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). A Fuel Handling Accident (FHA) in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>The engineered safety features are no longer required to prevent the occurrence or to ameliorate the effects of an accident. Consequently, the engineered safety features are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the engineered safety features in the IP2 UFSAR is obsolete.</p> <p>The information in this chapter of the UFSAR regarding leakage detection systems for the component cooling water, service water, and circulating water systems that remains applicable in the defueled condition will be retained. However, this</p>

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**CHAPTER 6 – ENGINEERED SAFETY FEATURES**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
				information will be relocated to another section as part of the restructuring of the content to compile the Defueled Safety Analysis Report (DSAR).
6.1	NA	General Design Criteria	Delete	See the discussion above.
6.1.1, including Subsections 6.1.1.1 through 6.1.1.7	NA	Engineered Safety Features Criteria	Delete	See the discussion above.
6.1.2	NA	Related Criteria	Delete	See the discussion above.
6.2	NA	Safety Injection System	Delete	See the discussion above.
6.2.1, including Subsections 6.2.1.1 through 6.2.1.7	NA	Design Basis	Delete	See the discussion above.
6.2.2, including Subsections 6.2.2.1 through 6.2.2.5	NA	System Design and Operation	Delete	See the discussion above.
6.2.3, including Subsections 6.2.3.1 through 6.2.3.9	NA	Design Evaluation	Delete	See the discussion above.
6.2.4	NA	Minimum Operating Conditions	Delete	See the discussion above.

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6.2.5, including Subsections 6.2.5.1 through 6.2.5.3	NA	Inspections and Tests	Delete	See the discussion above.
Table 6.2-1	NA	Safety Injection System – Code Requirements	Delete	See the discussion above.
Table 6.2-2	NA	Instrumentation Readouts on the Control Board for Operator Monitoring During Recirculation	Delete	See the discussion above.
Table 6.2-3	NA	Quality Standards of Safety Injection System Components	Delete	See the discussion above.
Table 6.2-4	NA	Accumulator Design Parameters	Delete	See the discussion above.
Table 6.2-5	NA	Deleted	Delete	Previously deleted.
Table 6.2-6	NA	Refueling Water Storage Tank Design Parameters	Delete	See the discussion above.
Table 6.2-7	NA	Pump Design Parameters	Delete	See the discussion above.
Table 6.2-8	NA	Residual Heat Exchangers Design Parameters	Delete	See the discussion above.
Table 6.2-9	NA	Estimated External Recirculation Loop Leakage	Delete	See the discussion above.
Table 6.2-10	NA	Single Active Failure Analysis – Safety Injection System	Delete	See the discussion above.
Table 6.2-11	NA	Single Passive Failure Analysis (Loss of Recirculation Flow Path)	Delete	See the discussion above.
Table 6.2-12	NA	Shared Functions Evaluation	Delete	See the discussion above.
Table 6.2-13	NA	Accumulator Inleakage	Delete	See the discussion above.

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Table 6.2-14	NA	Residual Heat Removal System, Design, Operation, and Preoperational Test Conditions	Delete	See the discussion above.
Figure 6.2-1 Sh. 1	NA	Safety Injection System - Flow Diagram, Sheet 1 - Replaced with Plant Drawing 9321-2735	Delete	See the discussion above.
Figure 6.2-1 Sh. 2	NA	Safety Injection System - Flow Diagram, Sheet 2 – Replaced with Plant Drawing 235296	Delete	See the discussion above.
Figure 6.2-2	NA	Primary Auxiliary Building Safety Injection System Piping-Schematic Plan	Delete	See the discussion above.
Figure 6.2-3	NA	Primary Auxiliary Building Safety Injection System Piping-Schematic Elevations	Delete	See the discussion above.
Figure 6.2-4	NA	Containment Building Safety Injection System Piping-Plan	Delete	See the discussion above.
Figure 6.2-5	NA	Containment Building Safety Injection System Piping-Elevation	Delete	See the discussion above.
Figure 6.2-6	NA	Safety Injection Pump Performance	Delete	See the discussion above.
Figure 6.2-7	NA	Residual Heat Removal Pump Performance	Delete	See the discussion above.
Figure 6.2-8	NA	Recirculation Pump Performance	Delete	See the discussion above.
Figure 6.2-9	NA	Deleted	Delete	Previously deleted.

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6.3	NA	Containment Spray System	Delete	<p>The containment spray system’s primary purpose was to spray cool water into the containment atmosphere when appropriate in the event of a loss-of-coolant accident to ensure that containment pressure did not exceed its design value.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the containment spray system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment spray system in the IP2 UFSAR is obsolete.</p>
6.3.1, including Subsections 6.3.1.1 through 6.3.1.8	NA	Design Bases	Delete	See the discussion above.
6.3.2, including Subsections 6.3.2.1 through 6.3.2.2	NA	System Design and Operation	Delete	See the discussion above.
6.3.3, including Subsections 6.3.3.1 through 6.3.3.6	NA	Design Evaluation	Delete	See the discussion above.

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6.3.4	NA	Minimum Operating Conditions	Delete	See the discussion above.
6.3.5, including Subsections 6.3.5.1 through 6.3.5.3	NA	Inspections and Tests	Delete	See the discussion above.
Table 6.3-1	NA	Containment Spray System – Code Requirements	Delete	See the discussion above.
Table 6.3-2	NA	Containment Spray System Design Parameters	Delete	See the discussion above.
Table 6.3-3	NA	Deleted	Delete	Previously deleted.
Table 6.3-4	NA	Single Failure Analysis - Containment Spray System	Delete	See the discussion above.
Table 6.3-5	NA	Shared Functions Evaluation	Delete	See the discussion above.
Figure 6.3-1	NA	Containment Spray Pump Performance Objections	Delete	See the discussion above.
6.4	NA	Containment Air Recirculation Cooling System	Delete	The containment air recirculation cooling system’s purpose was to recirculate and cool the containment atmosphere in the event of a loss-of-coolant accident and thereby ensure that the containment pressure will not exceed its design value.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the

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6.4.1, including Subsections 6.4.1.1 through 6.4.1.9	NA	Design Basis	Delete	containment air recirculation cooling system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment air recirculation cooling system in the IP2 UFSAR is obsolete. See the discussion above.
6.4.2, including Subsections 6.4.2.1 and 6.4.2.2	NA	System Design and Operation	Delete	See the discussion above.
6.4.3, including Subsections 6.4.3.1 through 6.4.3.6	NA	Design Evaluation	Delete	See the discussion above.
6.4.4	NA	Minimum Operating Conditions	Delete	See the discussion above.
6.4.5, including Subsections 6.4.5.1 through 6.4.5.4	NA	Inspections and Testing	Delete	See the discussion above.
Table 6.4-1	NA	Single Failure Analysis – Containment Air Recirculation Cooling System	Delete	See the discussion above.



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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Table 6.4-2	NA	Shared Functions Evaluation	Delete	See the discussion above.
Figure 6.4-1	NA	Deleted	Delete	Previously deleted.
Figure 6.4-2	NA	Deleted	Delete	Previously deleted.
Figure 6.4-3	NA	Containment Building Air Recirculation Fan Cooler Filter Unit - Plan and Section, Replaced with Plant Drawing 9321-4026	Deleted	See the discussion above.
Figure 6.4-4	NA	Deleted	Delete	Previously deleted.
6.5	NA	Isolation Valve Seal-Water System	Delete	The isolation valve seal-water system's purpose was to ensure the effectiveness of those containment isolation valves that are located in lines connected to the reactor coolant system or that could be exposed to the containment atmosphere during any condition, which requires containment isolation, by providing a water seal (and in a few cases a gas seal) at the valves.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the isolation valve seal-water system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the isolation valve seal-water system in the IP2 UFSAR is obsolete.
6.5.1	NA	Design Bases	Delete	See the discussion above.
6.5.2, including Subsections 6.5.2.1	NA	System Design and Operation	Delete	See the discussion above.

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through 6.5.2.3 6.5.3, including Subsections 6.5.3.1 through 6.5.3.4 6.5.4	NA	Design Evaluation	Delete	See the discussion above.
6.5.5, including Subsections 6.5.5.1 through 6.5.5.4	NA	Minimum Operating Conditions Inspections and Tests	Delete	See the discussion above.
Table 6.5-1	NA	Isolation Valve Seal-Water Tank	Delete	See the discussion above.
Table 6.5-2	NA	Single Failure Analysis – Isolation Valve Seal-Water System	Delete	See the discussion above.
Table 6.5-3	NA	Shared Functions Evaluation	Delete	See the discussion above.
Figure 6.5-1	NA	Isolation Valve Seal – Water System – Flow Diagram – Replaced with Plant Drawing 9321-2746	Delete	See the discussion above.
Figure 6.5-2	NA	Double Disk Isolation Valve with Seal-Water Injection	Delete	See the discussion above.
6.6	NA	Containment Penetration and Weld Channel Pressurization System	Delete	The purpose of containment penetration and weld channel pressurization system was to continuously pressurize the positive pressure zones incorporated into the containment penetrations and the channels over the welds in the steel inner liner and certain containment isolation valves in the event of a loss-of-coolant accident.

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				<p>Although no credit is taken for operation of this system in the calculation of offsite accident doses as discussed in Section 14.3.6 of the UFSAR, it is designed as an engineered safety feature and provides assurance that the containment leak-rate in the event of an accident is lower than that assumed in the accident analysis.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the containment penetration and weld channel pressurization system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment penetration and weld channel pressurization system in the IP2 UFSAR is obsolete.</p>
6.6.1	NA	Design Bases	Delete	See the discussion above.
6.6.2, including 6.6.2.1 through 6.6.2.6	NA	System Design and Operations	Delete	See the discussion above.
6.6.3, including Subsections 6.6.3.1 through 6.6.3.4	NA	Design Evaluation	Delete	See the discussion above.
6.6.4	NA	Minimum Operating Conditions	Delete	See the discussion above.

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6.6.5, including Subsections 6.6.5.1 and 6.6.5.2	NA	Inspections and Tests	Delete	See the discussion above.
Table 6.6-1	NA	Containment Penetration and Weld Channel	Delete	See the discussion above.
Table 6.6-2	NA	Pressurization Air Receivers Single Failure Analysis	Delete	See the discussion above.
Table 6.6-3	NA	Containment Penetration and Weld Channel Pressurization System Shared Functions Evaluation	Delete	See the discussion above.
Figure 6.6-1	NA	Weld Channel and Penetration Pressurization System - Flow Diagram, Replaced with Plant Drawing 9321-2726	Delete	See the discussion above.
6.7	3.12	Leakage Detection and Provisions for the Primary and Auxiliary Coolant Loops	Modify	This section is modified to eliminate the references to primary coolant loops.  The information in this chapter of the UFSAR regarding leakage detection systems for the component cooling water, service water, and circulating water systems that remains applicable in the defueled condition will be retained. However, this information will be relocated to another section as part of the restructuring of the content to compile the DSAR.
6.7.1	NA	Leakage Detection Systems	Delete	This section provides a one-line introduction that defines the purpose of the leakage detections systems for the primary and auxiliary coolant loops.  The information in this chapter of the UFSAR regarding leakage detection systems for the component cooling water, service water, and circulating water systems that remains applicable in the defueled condition will be retained. However, this

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				information will be relocated to another section as part of the restructuring of the content to compile the DSAR.
6.7.1.1	3.12.1	Design Bases	Retain	This introductory statement is unnecessary, and will not be retained. This section will be retained in the DSAR.
6.7.1.1.1	NA	Monitoring Reactor Coolant Leakage	Delete	This section address monitoring reactor coolant leakage.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
6.7.1.1.2	3.12.1	Monitoring Radioactivity Releases	Modify	Consequently, the leakage detection system for the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the reactor coolant system in the IP2 UFSAR is obsolete. This section is modified to eliminate the discussions regarding the containment atmosphere, the ventilation exhaust from the residual heat removal pump compartments, the containment fan cooler service water discharge, the liquid phase of the secondary side of the steam generator, and the condenser air ejector exhaust anticipated transients, and accident conditions. In addition, a discussion of the Offsite Dose Calculation Manual is provided.  The component cooling loop liquid will continue to be monitored for radioactivity concentration during normal operation.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no

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6.7.1.1.3	NA	Principles of Design	Delete	<p>longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, no operational transients can occur.</p> <p>After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. A Fuel Handling Accident in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Consequently, there are no abnormal operations, transients or accidents that credit the containment for isolation. The ventilation exhaust from the residual heat removal pump compartments, the containment fan cooler service water discharge, the liquid phase of the secondary side of the steam generator, and the condenser air ejector exhaust are no longer required to be monitored in the permanently shut down and defueled condition. Thus, the information regarding the leakage detection system for the reactor coolant system in the IP2 UFSAR is obsolete.</p> <p>The discussion regarding the ODCM is added to directly address a portion of the GDC that was not previously addressed in this section. It duplicates information from UFSAR Section 11.1.2.</p> <p>This section provides a discussion of the leakage detection systems regarding the residual heat removal and high head safety injection pumps.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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6.7.1.2	3.12.2	Systems Design and Operation	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the leakage detection systems for the residual heat removal and high head safety injection pumps are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the residual heat removal and high head safety injection pumps in the IP2 UFSAR is obsolete.</p> <p>This section is modified by eliminating the discussions of Class I systems, the residual heat removal system and the auxiliary feedwater system and the reference to the reactor coolant system, and by utilizing leakage from the service water loop as an example instead of the residual heat removal pumps.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system, auxiliary feedwater system, and reactor coolant system are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the residual heat removal system and auxiliary feedwater system in the IP2 UFSAR is obsolete.</p> <p>There are no Class I systems outside of containment in the permanently shut down and defueled state.</p> <p>In addition, utilizing the service water loop as an example of how leakage would collect in sumps is appropriate given that the residual heat removal system will no longer be utilized in the permanently shut down and defueled condition.</p>
6.7.1.2.1, including Subsections	NA	Reactor Coolant System	Delete	<p>This section addresses leakage detection systems for the reactor coolant system.</p>

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6.7.1.2.1.1 through 6.7.1.2.1.4				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the leakage detection systems for the reactor coolant system are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the reactor coolant system in the IP2 UFSAR is obsolete.
6.7.1.2.2	NA	Containment Air Particulate Monitor	Delete	This section is proposed to be deleted.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment air particulate monitor is not required to perform any function in the permanently shut down and defueled condition. Thus, this information is obsolete.
6.7.1.2.3	NA	Containment Radioactive Gas Monitor	Delete	This section is proposed to be deleted.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment radioactive gas monitor is not required to perform any function in the permanently shut down and defueled condition. Thus, this information is obsolete.
6.7.1.2.4	NA	Humidity Detectors	Delete	This section addresses humidity detection instrumentation to detect leakage into the containment.



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6.7.1.2.5	NA	Condensate Measuring System	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, humidity detectors are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the humidity detectors in the IP2 UFSAR is obsolete.</p> <p>This section addresses leakage detection system for the condensate system.</p>
6.7.1.2.6	3.12.3.1	Component Cooling Liquid Monitor	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the leakage detection system for the condensate system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the condensate system in the IP2 UFSAR is obsolete.</p> <p>This section is modified to eliminate the discussions of the reactor coolant system, the recirculation loop, and the residual heat removal loop, add a reference to the SFP cooling system, and replace the references to safety related display console with references to display console.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and</p>

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6.7.1.2.7	NA	Condenser Air Ejector Gas Monitor	Delete	<p>core related design basis accidents are no longer possible. Consequently, the reactor coolant system, recirculation loop, and residual heat removal are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding those systems in the IP2 UFSAR is obsolete.</p> <p>The references to the safety related display console are replaced with a reference to the display console, because the console no longer serves a safety related function in the permanently shut down and defueled condition.</p> <p>This section addresses the condenser air ejector gas monitor.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the condenser air ejector gas monitor is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the condenser air ejector gas monitor in the IP2 UFSAR is obsolete.</p>
6.7.1.2.8	NA	Steam Generator Blowdown Liquid Sample Monitor	Delete	<p>This section addresses the steam generator blowdown liquid sample monitor.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the steam generator blowdown liquid sample monitor is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam generator blowdown liquid sample monitor in the IP2 UFSAR is obsolete.</p>

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6.7.1.2.9	NA	Residual Heat Removal Loop	Delete	<p>This section addresses leakage detection system for the residual heat removal loop.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the leakage detection system for the residual heat removal loop is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the residual heat removal loop in the IP2 UFSAR is obsolete.</p>
6.7.1.2.10	NA	Recirculation Loop	Delete	<p>This section addresses leakage detection system for the recirculation loop.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the leakage detection system for the recirculation loop is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the leakage detection system for the recirculation loop in the IP2 UFSAR is obsolete.</p>
6.7.1.2.11	3.12.3.2	Component Cooling Loop	Modify	<p>This section is modified by eliminating the discussion of component cooling loop leakage in the containment. The discussion regarding leakage of the component cooling loop outside containment is retained.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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6.7.1.2.12	3.12.3.3	Service Water System	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the component cooling loop will no longer provide cooling to systems or components within the containment in the permanently shut down and defueled state. Thus, the information regarding the detection of leakage from the component cooling loop within the containment in the IP2 UFSAR is obsolete.</p> <p>This section is modified by eliminating the discussion of service water system leakage in the containment from the containment fan coolers or the containment air recirculation cooling system. The discussion regarding leakage of the service water system outside containment is retained.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the service water system will no longer provide cooling to the containment fan coolers or the containment air recirculation cooling system in the permanently shut down and defueled state. Thus, the information regarding the detection of leakage from the service water system within the containment in the IP2 UFSAR is obsolete.</p>
6.7.1.2.13	NA	Containment Sump Level and Discharge Flow	Delete	<p>This section addresses the containment sump flow detection system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment sump flow detection system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment sump flow detection system in the IP2 UFSAR is obsolete.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
6.7.1.2.14	NA	Recirculation Sump Level	Delete	<p>This section addresses the control of recirculation sump level.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the recirculation sump is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the recirculation sump in the IP2 UFSAR is obsolete.</p>
6.7.1.2.15	NA	Reactor Cavity Pit Level	Delete	<p>This section addresses the control of reactor cavity pit level.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor cavity pit is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor cavity pit in the IP2 UFSAR is obsolete.</p>
6.7.2	3.12.4	Leakage Provisions	Retain	No changes.
6.7.2.1	3.12.4.1	Design Basis	Modify	<p>This section is modified by eliminating the reference to the reactor coolant system and eliminating the methods of controlling leakage of auxiliary coolant water that are no longer applicable (i.e., isolation of the leak by valves, utilization of relief valves, utilization of redundant equipment). The only discussions that will be retained address the component cooling loop and service water loop in Subsections 6.7.2.2.4 and 6.7.2.2.5. The modified sections simply identify that leaks from these systems will be collected in tanks or sumps and routed to the waste holdup tank.</p>

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6.7.2.2	3.12.4.2	Design and Operation	Modify	<p>This section is modified by removing the reference to the primary coolant loops.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
6.7.2.2.1	NA	Reactor Coolant System	Delete	<p>This section addresses the reactor coolant system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.</p>
6.7.2.2.2	NA	Residual Heat Removal Loop	Delete	<p>This section addresses the residual heat removal loop.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
6.7.2.2.3	NA	Recirculation Loop	Delete	<p>down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the residual heat removal loop is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the residual heat removal loop in the IP2 UFSAR is obsolete.</p> <p>This section addresses the recirculation loop.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the recirculation loop is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the recirculation loop in the IP2 UFSAR is obsolete.</p>
6.7.2.2.4	3.12.4.3	Component Cooling Loop	Modify	<p>This section is modified by eliminating the discussion of component cooling loop leakage in the containment. The discussion regarding leakage of the component cooling loop outside containment is retained.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the component cooling loop will no longer provide cooling to systems or components within the containment in the permanently shut down and defueled state. Thus, the information regarding the detection of leakage from the component cooling loop within the containment in the IP2 UFSAR is obsolete.</p>
6.7.2.2.5	3.12.4.4	Service Water System	Retain	No changes.

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6.7.3	NA	Minimum Operating Conditions	Delete	This section refers to the IP2 Technical Specifications regarding the limiting conditions regarding the operability of the leakage detection systems. The Defueled Technical Specifications will not include any limiting conditions for operation regarding leakage detection systems. Thus, this section is obsolete and may be deleted.
Table 6.7-1	NA	Class 1 Fluid Systems for Which No Special Leak Detection is Provided	Delete	<p>This table is eliminated, because the discussions regarding the residual heat removal system and auxiliary feedwater system and the reference to Class I systems are no longer relevant, and the references to UFSAR sections are not needed.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the residual heat removal system and auxiliary feedwater system are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the residual heat removal system and auxiliary feedwater system in the IP2 UFSAR is obsolete.</p>
6.8	NA	Post-Accident Hydrogen Control Systems	Delete	<p>There are no Class I systems outside of containment in the permanently shut down and defueled state.</p> <p>The hydrogen control system's purpose was to control the hydrogen generated within the containment following a LOCA.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the</p>



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				post-accident hydrogen control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the post-accident hydrogen control system in the IP2 UFSAR is obsolete.
6.8.1	NA	Design Basis	Delete	See the discussion above.
6.8.2 including Subsections 6.8.2.1 through 6.8.2.4	NA	System Design and Operation	Delete	See the discussion above.
6.8.3, including Subsections 6.8.3.1 through 6.8.3.4	NA	Post-Accident Hydrogen Generation	Delete	See the discussion above.
6.8.4, including Subsection 6.8.4.1	NA	Evaluation	Delete	See the discussion above.
6.8.5	NA	Inspections and Tests	Delete	See the discussion above.
6.8.6	NA	Minimum Operating Conditions	Delete	See the discussion above.
Figure 6.8-1	NA	Passive Hydrogen Recombiners	Delete	See the discussion above.
Figure 6.8-2	NA	Containment Hydrogen vs Time Post-LOCA - Replaced with Plant Drawings 9321- 2568 & 9321-2569	Delete	See the discussion above.

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Figure 6.8-3	NA	Post-accident Containment Venting System - Flow Diagram, Replaced with Plant Drawing 208879	Delete	See the discussion above.
Figure 6.8-4	NA	Post-accident Containment Sampling System – Flow Diagram, Replaced with Plant Drawing 208479	Delete	See the discussion above.
Appendix 6A, including Subsections 6A.1 through 6A.3	NA	Effectiveness of the Containment Spray System to Remove Airborne Activity Following a LOCA	Delete	<p>The containment spray system is one of the engineered safety features systems that would have been employed following a LOCA to reduce the pressure and temperature in the containment. It would have also removed both elemental iodine vapor and aerosols from the containment atmosphere.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment spray system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment spray system in the IP2 UFSAR is obsolete.</p>
Appendix 6B, including Subsections 6B.0 through 6B.3	NA	Primary System Leak Detection into Containment Vessel, Indian Point Unit 1	Delete	<p>This appendix provides historical information regarding primary system leakage into the reactor containment for Indian Point Unit No. 1. This operational experience was utilized to design the leakage detection systems for the IP2 reactor coolant system as described in Subsection 6.7.2.2.1 of the IP2 UFSAR.</p> <p>This historical information is not required to be maintained in the IP2 Defueled Safety Analysis Report. Reactor coolant system leakage will not be a concern, because IP2 will be permanently shut down and defueled.</p>
Appendix 6C, including	NA	Post Accident Containment Environment	Delete	This appendix provides a summary of an evaluation of the suitability of materials of construction for use in the reactor containment system.

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Subsections 6C.1 through 6C.9				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the reactor containment is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor containment system in the IP2 UFSAR is obsolete.
Table 6C-1	NA	Review of Sources of Various Elements in Containment and Their Effects on Materials of Construction	Delete	See the discussion above.
Table 6C-2	NA	Materials of Construction in Reactor Containment	Delete	See the discussion above.
Table 6C-3	NA	Inventory of Aluminum in Containment	Delete	See the discussion above.
Table 6C-4	NA	Corrosion of Aluminum Alloys in Alkaline Sodium Borate Solution	Delete	See the discussion above.
Table 6C-5	NA	Corrosion Products of Aluminum Following Design Basis Accident, Indian Point Unit 2	Delete	See the discussion above.
Table 6C-6	NA	Summary of Unit 2 Aluminum Corrosion Product Solubility Data	Delete	See the discussion above.
Table 6C-7	NA	Concrete Specimen Test Data	Delete	See the discussion above.

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Table 6C-8	NA	Evaluation of Sealant Materials for Use in Containment	Delete	See the discussion above.
Figure 6C-1	NA	Containment Atmosphere Temperature Design Bases Safety Injection	Delete	See the discussion above.
Figure 6C-2	NA	Indian Point Unit 2 Post-accident Containment Materials Design	Delete	See the discussion above.
Figure 6C-3	NA	Post-accident Core Materials Design Conditions	Delete	See the discussion above.
Figure 6C-4	NA	Indian Point Unit 2 Containment Atmosphere Direct Gamma Dose Rate	Delete	See the discussion above.
Figure 6C-5	NA	Indian Point Unit 2 Containment Atmosphere Integrated Gamma Dose Level	Delete	See the discussion above.
Figure 6C-6	NA	Titration Curve for TSP in Boric Acid Solution	Delete	See the discussion above.
Figure 6C-7	NA	Temperature-Concentration Relation for Caustic Corrosion of Austenitic Stainless Steel	Delete	See the discussion above.
Figure 6C-8	NA	Aluminum Corrosion in Design-Basis-Accident Environment	Delete	See the discussion above.
Figure 6C-9	NA	Aluminum Corrosion as a Function of pH	Delete	See the discussion above.
Figure 6C-10	NA	Solubility of Aluminum Corrosion Products as a	Delete	See the discussion above.

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Figure 6C-11	NA	Function of pH at 77°F And 150°F Boron Loss from Boron-Concrete Reaction Following a Design-Basis Accident	Delete	See the discussion above.
Figure 6C-12	NA	Containment Pressure Transient During Blowdown Phase Vs. Time	Delete	See the discussion above.
Appendix 6D	NA	Spray Materials Compatibility for Long-Term Storage of Sodium Hydroxide	Delete	This section is identified as historical information. It provided information regarding a compatibility review of the containment spray additive tank and associated equipment during long-term storage of sodium hydroxide.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. Consequently, the containment spray system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment spray system in the IP2 UFSAR is obsolete.
Table 6D-1	NA	Exposure Conditions	NA	See the discussion above.
Table 6D-2	NA	Component Materials	NA	See the discussion above.
Table 6D-3	NA	Corrosion Rates	NA	See the discussion above.
Figure 6D-1	NA	Temperature – Concentration Relations for Caustic Corrosion of Austenitic Stainless Steel	NA	See the discussion above.

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Figure 6D-2	NA	Effect of Carbon Dioxide on Corrosion of Iron in NaOH Solution	NA	See the discussion above.

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**CHAPTER 7 – INSTRUMENTATION AND CONTROL**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
7	NA	Instrumentation and Control	Delete	This section header will be deleted. The remaining sub-sections of Chapter 7 will be relocated to other sections of the Defueled Safety Analysis Report (DSAR).
7.1	NA	General Design Criteria	Delete	This summary description is no longer necessary. The information that remains in Section 7 will be relocated to other sections of the DSAR.
7.1.1	NA	Instrumentation and Control Systems Criteria	Delete	<p>This section is proposed to be deleted in its entirety. It addressed IP2 compliance with General Design Criteria 12 which requires: Instrumentation and controls shall be provided as required to monitor and maintain within prescribed operating ranges essential reactor facility operating variables.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>As a result, no instrumentation and controls are required to monitor and maintain neutron flux, primary coolant pressure, flow rate, temperature, and control rod positions within prescribed operating ranges.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). A Fuel Handling Accident (FHA) in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no instrumentation and control systems are required to mitigate the FHA.</p>
7.1.2	NA	Related Criteria	Delete	This section is proposed to be deleted in its entirety. It refers to Chapters 3, 4, 5, 6, and 9 of the IP2 UFSAR for discussions of compliance with specific general design criteria. A review table exists for each of those UFSAR Chapters that defines and justifies the changes to those sections. Thus, this section of the IP2 UFSAR is superfluous.

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7.1.3, including subsections 7.1.3.1 through 7.1.3.4	NA	Environmental Qualifications – Original Plant Design	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.  After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no instrumentation and control systems are required to mitigate the FHA. Thus, the requirements regarding environmental qualification for instrumentation and controls is obsolete.
7.1.4	NA	Environmental Qualifications	Delete	This section is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.
7.1.5	NA	Regulatory Guide 1.97 Compliance	Delete	This section is proposed to be deleted in its entirety. No instrumentation and control systems are required to mitigate the remaining DBAs. See the justification provided for Section 7.1.1
Table 7.1-1	NA	Postaccident Equipment (Inside Containment Operational and Testing Requirements)	Delete	This table is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.
Table 7.1-2	NA	Deleted	Delete	Previously deleted.
Table 7.1-3	NA	Deleted	Delete	Previously deleted.
Table 7.1-4	NA	Deleted	Delete	Previously deleted.
Table 7.1-5	NA	Deleted	Delete	Previously deleted.
Figure 7.1-1	NA	Environmental Conditions for Equipment Testing - Pressure Vs Time	Delete	This figure is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.



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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Figure 7.1-2	NA	Environmental Conditions for Equipment Temperature Vs Time	Delete	This figure is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.
Figure 7.1-3	NA	Instantaneous Gamma Dose Rate Inside the Containment as a Function of Time after Release - TID - 14844 Model	Delete	This figure is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.
Figure 7.1-4	NA	Integrated Gamma Dose Level Inside the Containment as a Function of Time after Release - TID - 14844 Model	Delete	This figure is proposed to be deleted in its entirety. See the justification provided for Section 7.1.3.
Figure 7.1-5	NA	Deleted	Delete	Previously deleted.
Figure 7.1-6	NA	Deleted	Delete	Previously deleted.
Figure 7.1-7	NA	Deleted	Delete	Previously deleted.
Figure 7.1-8	NA	Deleted	Delete	Previously deleted.
7.2	NA	Protection Systems	Delete	This section is proposed to be deleted in its entirety. It addresses the reactor protection system (RPS) and the engineered safety features (ESF).

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the RPS is no longer required to perform a function in the permanently shut down and defueled state.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate

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				the FHA. Consequently, ESF are no longer required to perform a function in the permanently shut down and defueled state.
				Given the above, the information regarding the RPS and the ESF in the IP2 UFSAR is obsolete.
7.2.1, including Subsections 7.2.1.1 through 7.2.1.11	NA	Design Bases	Delete	See the above discussion for Section 7.2.
7.2.2, including Subsections 7.2.2.1 through 7.2.2.14	NA	Principles of Design	Delete	See the above discussion for Section 7.2.
7.2.3	NA	System Design	Delete	See the above discussion for Section 7.2.
7.2.3.1	NA	Reactor Protection System Design	Delete	See the above discussion for Section 7.2.
7.2.3.2, including subsections 7.2.3.2.1 through 7.2.3.2.3 and subsections 7.2.3.2.3.1 through 7.2.3.2.3.9	NA	Engineered Safety Features Instrumentation Design	Delete	See the above discussion for Section 7.2.
7.2.4	NA	System Safety Features	Delete	See the above discussion for Section 7.2.
7.2.4.1, including subsections	NA	Separation of Redundant Protection Channels	Delete	See the above discussion for Section 7.2.

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7.2.4.1.1 through 7.2.4.1.7	NA	Electrical Equipment Design	Delete	See the above discussion for Section 7.2.
7.2.4.2, including subsections 7.2.4.2.1 and 7.2.4.2.2	NA	Reactor Trip Signal Testing	Delete	See the above discussion for Section 7.2.
7.2.4.3, including subsections 7.2.4.3.1 and 7.2.4.3.2	NA	Bypass Breakers	Delete	See the above discussion for Section 7.2.
7.2.4.4	NA	Engineered Safety Features Actuation Instrumentation Description	Delete	See the above discussion for Section 7.2.
7.2.4.5	NA	Engineered Safety Features Logic Testing	Delete	See the above discussion for Section 7.2.
7.2.4.6	NA	Protective Actions	Delete	See the above discussion for Section 7.2.
7.2.5	NA	Reactor Trip Description	Delete	See the above discussion for Section 7.2.
7.2.5.1, including subsections 7.2.5.1.1 through 7.2.5.1.20	NA	Rod Stops	Delete	See the above discussion for Section 7.2.
7.2.5.2, including subsections 7.2.5.2.1 through 7.2.5.2.3	NA	System Evaluation	Delete	See the above discussion for Section 7.2.
7.2.6	NA			

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7.2.6.1, including subsections 7.2.6.1.1 and 7.2.6.1.2	NA	Reactor Protection System and Departure from Nucleate Boiling	Delete	See the above discussion for Section 7.2.
7.2.6.2, including subsections 7.2.6.2.1 through 7.2.5.2.5	NA	Interaction of Control and Protection	Delete	See the above discussion for Section 7.2.
7.2.7	NA	Current Technical Specifications	Delete	See the above discussion for Section 7.2.
7.2.8	NA	References	Delete	See the above discussion for Section 7.2.
Table 7.2-1	NA	List of Reactor Trips and Causes for Reactor Trips	Delete	See the above discussion for Section 7.2.
Table 7.2-2	NA	Interlock and Permissive Circuits	Delete	See the above discussion for Section 7.2.
Table 7.2-3	NA	Rod Stops	Delete	See the above discussion for Section 7.2.
Figure 7.2-1	NA	Index and Symbols - Logic Diagram, Replaced with Plant Drawing 225094	Delete	See the above discussion for Section 7.2.
Figure 7.2-2	NA	Reactor Trip Signals - Logic Diagram, Replaced with Plant Drawing 225095	Delete	See the above discussion for Section 7.2.
Figure 7.2-3	NA	Turbine Trip Signals - Logic Diagram, Replaced with Plant Drawing 225096	Delete	See the above discussion for Section 7.2.
Figure 7.2-4	NA	6900 Volt Bus Automatic Transfer - Logic Diagram, Replaced with Plant Drawing 225097	Delete	See the above discussion for Section 7.2.

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Figure 7.2-5	NA	Nuclear Instrumentation Trip Signals - Logic Diagram, Replaced with Plant Drawing 225098	Delete	See the above discussion for Section 7.2.
Figure 7.2-6	NA	Nuclear Instrumentation Permissives And Blocks - Logic Diagram, Replaced with Plant Drawing 225099	Delete	See the above discussion for Section 7.2.
Figure 7.2-7	NA	Emergency Generator Starting - Logic Diagram, Replaced with Plant Drawing 225100	Delete	See the above discussion for Section 7.2.
Figure 7.2-8	NA	Safeguard Sequence - Logic Diagram, Replaced with Plant Drawing 225101	Delete	See the above discussion for Section 7.2.
Figure 7.2-9	NA	Pressurizer Trip Signal - Logic Diagram, Replaced with Plant Drawing 225102	Delete	See the above discussion for Section 7.2.
Figure 7.2-10	NA	Steam Generator Trip Signals - Logic Diagram, Replaced with Plant Drawing 225103	Delete	See the above discussion for Section 7.2.
Figure 7.2-11	NA	Primary Coolant System Trip Signals and Manual Trip - Logic Diagram, Replaced with Plant Drawing 225104	Delete	See the above discussion for Section 7.2.
Figure 7.2-12	NA	Safeguard Actuation Signals - Logic Diagram, Replaced with Plant Drawing 225105	Delete	See the above discussion for Section 7.2.
Figure 7.2-13	NA	Feedwater Isolation - Logic Diagram, Replaced with Plant Drawing 225106	Delete	See the above discussion for Section 7.2.
Figure 7.2-14	NA	Rod Stops and Turbine Loads Cutbacks - Logic Diagram,	Delete	See the above discussion for Section 7.2.

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		Replaced with Plant Drawing 225107		
Figure 7.2-15	NA	Safeguards Actuation Circuitry and Hardware Channelization, Replaced with Plant Drawing 243318	Delete	See the above discussion for Section 7.2.
Figure 7.2-16	NA	Simplified Diagram for Overall Logic Relay Test Scheme, Replaced with Plant Drawing 243319	Delete	See the above discussion for Section 7.2.
Figure 7.2-17	NA	Analog and Logic Channel Testing, Replaced with Plant Drawing 243320	Delete	See the above discussion for Section 7.2.
Figure 7.2-18	NA	Reactor Protection Systems - Block Diagram, Replaced with Plant Drawing 243321	Delete	See the above discussion for Section 7.2.
Figure 7.2-19	NA	Core Coolant Average Temperature Vs Core Power	Delete	See the above discussion for Section 7.2.
Figure 7.2-20	NA	Pressurizer Level Control and Protection System, Replaced with Plant Drawing 243313	Delete	See the above discussion for Section 7.2.
Figure 7.2-21	NA	Pressurizer Pressure Control and Protection System, Replaced with Plant Drawing 243314	Delete	See the above discussion for Section 7.2.
Figure 7.2-22	NA	Steam Flow $\Delta P$ Vs Power, Replaced with Plant Drawing 243315	Delete	See the above discussion for Section 7.2.
Figure 7.2-23	NA	Design Philosophy to Achieve Isolation Between Channels	Delete	See the above discussion for Section 7.2.
Figure 7.2-24	NA	Cable Tunnel - Typical Section, Replaced with Plant Drawing 243317	Delete	See the above discussion for Section 7.2.

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Figure 7.2-25	NA	Typical Analog Channel Testing Arrangement, Replaced with Plant Drawing 243322	Delete	See the above discussion for Section 7.2.
Figure 7.2-26	NA	Typical Simplified Control Schematic, Replaced with Plant Drawing 243323	Delete	See the above discussion for Section 7.2.
Figure 7.2-27	NA	Analog Channels, Replaced with Plant Drawing 243324	Delete	See the above discussion for Section 7.2.
Figure 7.2-28	NA	Analog System Symbols, Replaced with Plant Drawing 243311	Delete	See the above discussion for Section 7.2.
Figure 7.2-29	NA	Deleted	Delete	Previously deleted.
Figure 7.2-30	NA	Reactor Trip Breaker Actuation Schematic	Delete	See the above discussion for Section 7.2.
Figure 7.2-31	NA	Deleted	Delete	Previously deleted.
Figure 7.2-32	NA	Steam Generator Level Control and Protection System, Replaced with Plant Drawing 243328	Delete	See the above discussion for Section 7.2.
Figure 7.2-33 Sh. 1	NA	Illustrations of Overpower and Temperature $\Delta T$ Trips High Temperature Operation	Delete	See the above discussion for Section 7.2.
Figure 7.2-33 Sh. 2	NA	Illustrations of Overpower and Temperature $\Delta T$ Trips Low Temperature Operation	Delete	See the above discussion for Section 7.2.
Figure 7.2-34	NA	$T_{avg}/\Delta T$ Control and Protection System, Replaced with Plant Drawing 243330	Delete	See the above discussion for Section 7.2.
7.3	NA	Regulating Systems	Delete	This section is proposed to be deleted in its entirety. It addresses the reactor control system which was designed to limit nuclear plant transients for prescribed design load perturbations, under automatic control, within prescribed limits to preclude the possibility of a reactor trip in the course of these transients.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information in the IP2 UFSAR regarding the reactor control system is obsolete.
7.3.1	NA	Design Basis	Delete	See the above discussion for Section 7.3.
7.3.2, including subsections 7.3.2.1 (with subsections 7.3.2.1.1 through 7.3.2.1.7) and 7.3.2.2 (with subsections 7.3.2.2.1 through 7.3.2.2.6)	NA	System Design	Delete	See the above discussion for Section 7.3.
7.3.3, including subsections 7.3.3.1 through 7.3.3.5	NA	Evaluation Summary	Delete	See the above discussion for Section 7.3.
7.3.4, including subsections 7.3.4.1	NA	System Design Evaluation	Delete	See the above discussion for Section 7.3.



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through 7.3.4.5 Figure 7.3-1	NA	Simplified Block Diagram of Reactor Control Systems	Delete	See the above discussion for Section 7.3.
Figure 7.3-2	NA	[Deleted]	Delete	Previously deleted.
7.4	NA	Nuclear Instrumentation	Delete	This section is proposed to be deleted in its entirety. It addresses the nuclear instrumentation system which monitors the reactor power from source range through the intermediate range and power range up to 120-percent full power. The system provides indication, control, and alarm signals for reactor operation and protection.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the nuclear instrumentation system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information in the IP2 UFSAR regarding the nuclear instrumentation system is obsolete.
7.4.1, including subsection 7.4.1.1	NA	Design Basis	Delete	See the above discussion for Section 7.4.
7.4.2, including subsections 7.4.2.1 (with subsections 7.4.2.1.1 through 7.4.2.1.3) through 7.4.2.2 (with subsections	NA	System Design	Delete	See the above discussion for Section 7.4.

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7.4.2.2.1 through 7.4.2.2.5) 7.4.3, including subsections 7.4.3.1 through 7.4.3.4)	NA	System Evaluation	Delete	See the above discussion for Section 7.4.
Table 7.4-1	NA	Deleted	Delete	See the above discussion for Section 7.4.
Table 7.4-2	NA	Deleted	Delete	See the above discussion for Section 7.4.
Figure 7.4-1	NA	Neutron Detectors and Range of Operation	Delete	See the above discussion for Section 7.4.
Figure 7.4-2	NA	Nuclear Instrumentation System	Delete	See the above discussion for Section 7.4.
Figure 7.4-3	NA	Plan View Indicating Detector Location Relative to Core	Delete	See the above discussion for Section 7.4.
7.5	NA	Process Instrumentation	Delete	This section is proposed to be deleted in its entirety. The non-nuclear process instrumentation measures temperatures, pressures, flows, and levels in the RCS, steam system, reactor containment, and auxiliary systems required for the startup, operation, and shut down of the unit.

The parameters that are addressed in Table 7.5-1 are RCS temperature and flow, pressurizer pressure and level, main steam flow and pressure, feedwater flow, steam generator level, containment pressure, and steam header pressure. In addition, the section addresses instrumentation requirements for the ESF.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the parameters defined in Table 7.5-1 are no longer required to be

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				monitored. Thus, the information in the IP2 UFSAR regarding those parameters is obsolete.
				After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the ESF instrumentation are no longer required to perform a function in the permanently shut down and defueled state.
				Given the above, the information regarding the RPS and secondary system parameters and the ESF in the IP2 UFSAR is obsolete.
7.5.1	NA	Design Bases	Delete	See the above discussion for Section 7.5.
7.5.2	NA	System Design	Delete	See the above discussion for Section 7.5.
7.5.2.1, including subsections 7.5.2.1.1 through 7.5.2.1.18	NA	Engineered Safety Features		See the above discussion for Section 7.5.
7.5.3	NA	System Evaluation	Delete	See the above discussion for Section 7.5.
Table 7.5-1	NA	Process Instrumentation, Indication, and Safeguards Functions	Delete	See the above discussion for Section 7.5.
Figure 7.5-1	NA	Reactor Coolant Wide Range Pressure Instrument System – Flow Diagram	Delete	See the above discussion for Section 7.5.
7.6	NA	Incore Instrumentation	Delete	This section is proposed to be deleted in its entirety. It addresses incore instrumentation system which information on the neutron flux distribution and fuel assembly outlet temperatures at selected core locations.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the incore instrumentation is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information in the IP2 UFSAR regarding the incore instrumentation is obsolete.
7.6.1	NA	Design Basis	Delete	See the above discussion for Section 7.6.
7.6.2, including subsections 7.6.2.1 and 7.6.2.2	NA	System Design	Delete	See the above discussion for Section 7.6.
7.6.3	NA	System Evaluation	Delete	See the above discussion for Section 7.6.
7.6.4	NA	System Operation	Delete	See the above discussion for Section 7.6.
Figure 7.6-1	NA	Typical Arrangement of Moveable Miniature Neutron Flux Detector System, Replaced with Plant Drawing 1999MC3880	Delete	See the above discussion for Section 7.6.
Figure 7.6-2	NA	Arrangement of Incore Flux Detector, Replaced with Plant Drawing 1999MC3881	Delete	See the above discussion for Section 7.6.
Figure 7.6-3	NA	Incore Instrumentation – Details, Replaced with Plant Drawing 1999MC3882	Delete	See the above discussion for Section 7.6.
7.7	NA	Operating Control Stations	Delete	This section header is proposed to be deleted. The header will not be required in the Defueled Safety Analysis Report (DSAR).  Subsections 7.7.1 and 7.7.3 are proposed to be deleted in their entirety as discussed below.

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7.7.1	NA	Station Layout	Delete	<p>Subsections 7.7.2 and 7.7.4 will be retained and modified as discussed below. In addition, they will be relocated to a new chapter in the reformatted DSAR.</p> <p>This section is proposed to be deleted in its entirety. It discusses that the control station design and layout ensure that all controls, instrumentation displays, and alarms required for the safe operation and shutdown of the plant are readily available to the operators in the central control room.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>No actions are required to be taken from the control room to mitigate the FHA. Consequently, the information regarding the layout of the control room is no longer required to be maintained in the IP2 UFSAR.</p>
7.7.2	3.13	Information Display and Recording	Retain	No proposed changes
7.7.2.1	3.13	Operational Information	Modify	<p>The section header is eliminated, because the other subsection is deleted. Thus, it is no longer necessary.</p> <p>This section is modified to eliminate the displays, alarms, and annunciators regarding control rod position and group, nuclear instrumentation, secondary side operation, RCS operation, ESF, containment purge and exhaust, containment isolation valves, isolation valve seal water system, reactor building alarms, RCS hot let temperature, main steam line radiation monitors, high-range containment radiation monitors, high-</p>

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range noble gas monitors, containment sump level indication, hydrogen and oxygen containment air analyzers, containment high-range pressure indication, reactor vent valve position indication, reactor vent temperature monitor, reactor vessel level indication, power-operated relief valve block valve position indication, subcooling monitor system indications, and wide-range hot-leg RCS temperature indication.

In addition, the references to “the operators” and “operating plant” or “plant” are replaced with a reference to “site personnel” and “facility,” as appropriate. These are administrative changes to reflect the changes in staff that will occur in the permanently shut down and defueled condition and that IP2 will no longer be a plant that generates electricity.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.

Given the above, the displays, alarms, and annunciators for the control rod position and group, nuclear instrumentation, secondary side operation, RCS operation, ESF, containment purge and exhaust, containment isolation valves, isolation valve seal water system, reactor building alarms, RCS hot let temperature, main steam line radiation monitors, high-range containment radiation monitors, high-range noble gas monitors, containment sump level indication, hydrogen and oxygen containment air analyzers, containment high-range pressure indication, reactor vent valve position indication, reactor vent temperature monitor, reactor vessel level indication, power-

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7.7.2.2	NA	Safety Parameter Information	Delete	<p>operated relief valve block valve position indication, subcooling monitor system indications, and wide-range hot-leg RCS temperature indication are no longer required in the permanently shut down and defueled condition. Thus, the information regarding these displays, alarms, and annunciators in the IP2 UFSAR is obsolete.</p> <p>This section is proposed to be deleted in its entirety. It discusses the system that monitors safety parameter information in accordance with the requirements of NUREG-0737, Supplement 1. The critical safety functions that are monitored are reactivity control, reactor core cooling, RCS heat sink, RCS integrity, containment conditions, and RCS inventory control.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Given the above, the system for monitoring the safety parameter information is no longer required to perform a function in the permanently shut down and defueled condition. Thus, the information in the IP2 UFSAR regarding this system is obsolete.</p>
7.7.3, including subsections 7.7.3.1 (with subsections 7.7.3.1.1 through	NA	Emergency Shutdown Control	Delete	<p>This section is proposed to be deleted in its entirety. It discusses the features that are require to ensure that the functionality capacity of the central control room is maintained at all times inclusive of accident conditions. In addition, the section discusses the provisions that have been to ensure that the plant can be shut down and maintain in a safe condition by means of controls located outside the control room.</p>

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7.7.3.1.3), 7.7.3.2, and 7.7.3.3 (with subsections 7.7.3.3.1 through 7.7.3.3.7)				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>No actions are required to be taken from the control room to mitigate the FHA. In addition, the plant will be permanently shut down, so there is no longer a need to maintain the capability to shut down and maintain the plant outside of the control room. Consequently, the information regarding emergency shut down control of the plant from the control room and outside the control room is no longer required to be maintained in the IP2 UFSAR.</p>
7.7.4	3.14	Communications	Modify	<p>This section is modified by replacing the reference to “plant” with a reference to “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.</p> <p>This section is modified by replacing the reference to “system operators” with a reference to “site personnel” and the reference to “in-plant personnel throughout the plant” with “site personnel,” and eliminating the term safe shutdown.</p> <p>Replacing the references to “system operator” and “in-plant personnel throughout the plant” with the term “site personnel” are administrative changes that reflect the changes in staff that will occur in the permanently shut down and defueled condition.</p> <p>In addition, the term safe shutdown is no longer applicable, because IP2 is in a permanently shut down and defueled condition.</p>



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7.7.4.1	3.14.1	Central Control Room Communication Facilities	Modify	This section is modified by removing a reference to previously deleted material. This is an administrative change.
7.7.4.2	3.14.2	Radio Communication	Retain	No proposed changes.
7.7.4.3	3.14.3	Page/Party Line Communication	Modify	This section is modified by replacing the reference to “plant” with a reference to “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.
7.7.4.4	3.14.4	Emergency Backup Power for Communications	Modify	This section is modified by replacing the reference to “plant” with a reference to “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.

This section is modified by eliminating the replacing the reference to emergency backup power with a reference to backup power, and the reference to the emergency bus with a reference to a bus.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for any active components or operator actions to mitigate the consequences of the accident. As a result, the electrical power requirements regarding the communications systems are no longer considered to be emergency backup power, but simply backup power.

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7.7.4.5	3.14.5	In-house Radio System	Retain	This section is modified by replacing the reference to “in-plant personnel” with a reference to personnel at the “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.
Figure 7.7-1	NA	Deleted	Delete	Previously deleted.
7.8	NA	Limiting Safety System Settings and Limiting Conditions for Operation	Delete	This section defines that settings for reactor protection, engineered safety features, and other plant actuating actuation systems, and their associated plant interlocks and permissive circuits are provided in the IP2 Technical Specifications and the Technical Requirements Manual. This section is proposed to be deleted in its entirety.  The Permanently Defueled Technical Specifications do not include any limiting safety system settings of limiting conditions for operation regarding reactor protection, engineered safety features, and other plant actuating actuation systems, or their associated plant interlocks and permissive circuits. In addition, the Technical Requirements Manual will be incorporated as part of the DSAR. The review table for the Technical Requirements Manual defines and justifies the changes to it.
7.9	NA	Surveillance Requirements	Delete	This section provides a generic overview of the surveillance requirements for instrumentation channels that are covered in the IP2 Technical Specifications and the Technical Requirements Manual. This section is proposed to be deleted in its entirety.  The Permanently Defueled Technical Specifications do not include any operability requirements regarding instrumentation systems. In addition, the Technical Requirements Manual will be incorporated as part of the DSAR. The review table for the Technical Requirements Manual defines and justifies the changes to it.
7.10, including subsections 7.10.1 and 7.10.2	NA	Anticipated Transient Without Scram Mitigation System Actuation Circuitry	Delete	This section discusses the Anticipated Transient Without Scram (ATWS) mitigation system actuation circuitry (AMSAC). It provides a means, diverse from the reactor protection system, to trip the turbine, start the auxiliary feedwater pumps, and initiate closure of the steam generator blowdown isolation valves. This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and

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core related design basis accidents are no longer possible. Consequently, the AMSAC is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the feedwater control system in the IP2 UFSAR is obsolete.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
8.1	3.15	Design Bases	Modify	<p>This section is modified to reflect the simplified electrical requirements to support the safe storage of spent fuel in the permanently shut down and defueled condition. In addition, the section title is changed to Electrical Systems to support the consolidation into the Defueled Safety Analysis Report (DSAR).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). A Fuel Handling Accident (FHA) in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p>
8.1.1	NA	Principal Design Criteria	Delete	<p>This section is proposed to be deleted in its entirety, because all of its subsections are proposed for deletion. See the discussions below.</p>
8.1.1.1	NA	Performance Standards	Delete	<p>This section is proposed to be deleted in its entirety. As discussed above, no active or electric-powered structures, systems, or component are required to mitigate the FHA.</p>
8.1.1.2	NA	Emergency Power	Delete	<p>This section is proposed to be deleted in its entirety. As discussed above, no active or electric-powered structures, systems, or component are required to mitigate the FHA.</p>
8.1.2	NA	1980 Review of 10 CFR 50 Appendix A GDC 17 and GDC 18	Delete	<p>This section is proposed to be deleted. It provided a historical discussion regarding compliance with the general design criteria 17 and 18. This information is no longer relevant in the permanently shut down and defueled condition. As discussed above, no active or electric-powered structures, systems, or component are required to mitigate the FHA</p>

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**CHAPTER 8 – ELECTRICAL SYSTEMS**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
8.1.2.1	3.15	10 CFR 50 Appendix A General Design Criterion 17 - Electric Power Systems	Modify	<p>This section is modified by eliminating the discussion discussing general design criterion 17, defining the simplified electrical requirements required to support the safe storage of spent fuel in the permanently shut down and defueled condition as defined in the subsequent subsections of Chapter 8, and replacing the term “plant” with the term “facility.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced. The electrical power systems that were historically vital to plant safety are no longer required to be classified as Seismic Class 1.</p> <p>The term facility is a more accurate description of IP2 in the permanently shut down and defueled condition, because IP2 will no longer generate electricity. The facility will be maintained to ensure the safe storage of spent fuel.</p>
8.1.2.2	NA	10 CFR 50 Appendix A General Design Criterion 18 - Inspection and Testing of Electric Power Systems	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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**CHAPTER 8 – ELECTRICAL SYSTEMS**

UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p>
8.2	3.15.1	Electrical System Design	Retain	No proposed changes.
8.2.1	3.15.1.1	Network Interconnections	Modify	<p>This section is modified by eliminating the discussion regarding the startup and normal shutdown of the plant, eliminating the discussion of power generation by the plant, describing the simplified electrical requirements to support the safe storage of spent fuel in the permanently shut down and defueled condition, and replacing the term “plant” or “station” with the term “facility.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and power generation and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload,</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
8.2.1.1	3.15.1.1.1	Reliability Assurance	Modify	<p>the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>The term facility is a more accurate description of IP2 in the permanently shut down and defueled condition, because IP2 will no longer generate electricity. The facility will be maintained to ensure the safe storage of spent fuel.</p> <p>This section is modified by describing the simplified electrical requirements to support the safe storage of spent fuel in the permanently shut down and defueled condition, eliminating the discussion of the Appendix R fire or a loss of all AC (Station Blackout) power generation by the plant, eliminating the 72-hour (i.e., at least 3 days) requirement for fuel for the SBO/Appendix R Diesel, replacing the terms “operable” and “inoperable” with “functional” and “non-functional,” eliminating the reference to the 200,000-gallon storage tank located at the Buchanan substation site, and eliminating the discussion of the alternate safe shutdown power supply system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and power generation and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
				<p>Given that there is no requirement for electric-powered SSCs to mitigate an accident, the Appendix R / SBO Diesel Generator simply serves as a standby power source. Thus, there is no minimum run-time.</p> <p>Appendix R / Station Blackout requirements do not apply in the permanently shut down and defueled condition.</p> <p>Given that IP2 is permanently shut down and defueled, there is no need for an alternate safe shutdown power supply system.</p>
8.2.2	3.15.1.2	Station Distribution System	Modify	<p>This section is modified by replacing the term “station” with the term “facility,” eliminating the references to the main generator, and eliminating the term “plant” from the term “plant drawings.” Replacing the reference to the 345-kV system with a reference to the 13.8-kV system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and power generation and core related design basis accidents are no longer possible. Consequently, the main generator no longer performs a function in the permanently shut down and defueled condition.</p>
8.2.2.1	3.15.1.2.1	Unit Auxiliary, Station Auxiliary, and Station Service Transformers	Modify	<p>The term facility is a more accurate description of IP2 in the permanently shut down and defueled condition, because IP2 will no longer generate electricity. The facility will be maintained to ensure the safe storage of spent fuel.</p> <p>This section is modified by eliminating the discussions regarding the unit auxiliary and station auxiliary transformers, adding a discussion of the gas turbine autotransformer, eliminating the discussion of the plant turbine generator, and eliminating the discussion of plant startup, shutdown, and unit trip.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>



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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
8.2.2.2	3.15.1.2.2	6.9-kV System	Modify	<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and power generation and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>This section is modified by eliminating the discussions regarding the station auxiliary transformers, adding a discussion of the gas turbine autotransformer, and eliminating the discussion of the turbine generator trips.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and power generation and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are</p>

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8.2.2.3	3.15.1.2.3	480-Volt System	Modify	<p>required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>This section is modified by eliminating the discussions regarding the electrical requirements associated with engineered safety features, i.e., safeguards equipment, eliminating the discussions regarding the emergency diesel generator supply to those loads, eliminating the requirement for the 480-V switchgear buses to be safety-related, and revising the DC control power requirements.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p>
8.2.2.4	3.15.1.2.4	125-V DC Systems	Modify	<p>This section is modified by revising the description of the 125-V DC system DC system to reflect the alignment that will exist in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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8.2.2.5	3.15.1.2.5	118-V AC Instrument Supply Systems	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>This section is modified to describe the 118-V AC instrument supply system’s configuration in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the 118-V AC instrument supply systems is not required to perform a function in the permanently shut down and defueled condition.</p>

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8.2.2.6	3.15.1.2.6	Evaluation of Layout and Load Distribution	Modify	<p>This section is modified by rewriting the section to address the requirements that remain applicable to IP2 in the permanently shut down and defueled condition that will ensure the safe storage of spent fuel. This includes the elimination of discussions regarding electrical requirements during accidents, the station auxiliary, unit auxiliary, main transformers, surge arresters, automatic deluge systems for oil filled transformers, safety injection signal, unit trip, sequencing logic and emergency diesel generator start circuitry, trip of the 480-V breaker to the safeguards buses, DC control power, rod power supply M-G set, reactor trip breakers, 480-V motor control centers associated with the turbine generator auxiliary system, load separation on trains, shielded conductors of instrumentation cables, reactor containment vessel penetration cables, fire stops, seals and barriers for cable and cable trays passing through walls and flows, separation requirements for impulse lines and cables, dynamic affects of postulated primary loop ruptures, essential switchgear, cable insulation in the reactor building, and protections afforded the compressed instrument air system.</p> <p>In addition, the separation discussions are replaced with the following: “The Indian Point Unit 2 Cable Raceway System is comprised of 4 raceway systems. 6.9kV cables are routed in their own raceway system independent of the other raceway systems. 480 VAC and 125 VDC cable 350 mcm and larger are routed in the heave Power Raceway. Those cables smaller than 350 mcm and over 65VAC are routed in the Small Power and control Raceway. Instrument cables 65VAC and less are run in the Instrument Raceway. Instrument cables less than 65VAC are typically routed in the Instrument Raceway. On a case by case basis, cables have been routed in an alternate raceway however there is no mixing between the 6.9kV raceway and cables of lower voltages. Certain other cables such as thermocouple cable, public address, instrument power and fiber optics are routed in raceway as convenient.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component or engineered safety features are required to mitigate the FHA. Consequently, the electrical power and distribution requirements are significantly reduced in the permanently shut down and defueled states.

This section is modified by replacing the reference to operator with a reference to site personnel. This change reflects that the organization and number of personnel required to maintain a permanently shut down and defueled facility is substantially reduced as compared to that for an operating facility. A number of departments will be combined or eliminated. As a result, the generic term of site personnel is preferred over the use of the term operator.

This section is modified by replacing the reference to plant with facility. IP2 will be permanently shut down and defueled. Reactor operations and electric power generation will no longer occur. The use of the term facility is more appropriate in this condition.

In addition, the historical discussion regarding differences in cable raceway separation between IP2 and IP3. This discussion is not relevant to the permanently shut down and defueled condition for IP2. The licensing and design bases for a permanently defueled facility is substantially different than an operating plant (i.e., IP3).

The reference to UFSAR Figure 1.2-3 is eliminated, because the Figure was previously deleted from the UFSAR.

Other miscellaneous editorial changes are made in the section.

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8.2.3	3.15.1.3	Emergency Power	Modify	This section is modified by revising the title from “Emergency Power” to “Standby Power.” Given that there are no requirements for electric-powered SSCs to mitigate the FHA, there are no emergency power requirements in the permanently shut down and defueled condition.
8.2.3.1	3.15.1.3.1	Source Descriptions	Modify	This section is modified by rewriting the section to address the requirements that remain applicable to IP2 in the permanently shut down and defueled condition that will ensure the safe storage of spent fuel. The section is retitled as Standby Power. The changes include describing the remaining source of offsite power, defining that a single standby diesel generator will be maintained as functional in the permanently shut down and defueled condition, eliminating the requirement to automatically start the diesel generator, eliminating the discussion of the safety injection signal, and eliminating the minimum fuel volume requirements.

The change to the offsite power source was previously discussed in the changes to Section 8.2.1.1.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, there is no need to maintain more than one standby diesel generator, for the diesel generator to automatically start, or to define specific minimum fuel volumes.

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8.2.3.2	3.15.1.3.2	Emergency Fuel Supply	Modify	<p>This section is modified to reflect that there will only be a single standby diesel generator that is maintained as functional in the permanently shut down and defueled condition. In addition, the section is modified to eliminate the minimum fuel volume requirements.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, there is no need to maintain more than one standby diesel generator or to require specific fuel volumes.</p>
8.2.3.3	3.15.1.3.3	Emergency Diesel Generator Separation	Modify	<p>This section is modified by eliminating the discussion of three emergency diesel generators. In the permanently shut down and defueled condition, only a single standby diesel generator will be maintained as functional. Thus, there are no separation requirements regarding the diesel generators. As a result, the section of the title is changed to “Standby Diesel Generator Location.”</p> <p>In addition, the reference to 10 CFR 50.48 is modified to refer to 10 CFR 50.48(f). IP2 will be required to comply with 10 CFR 50.48(f) in the permanently shut down and defueled condition.</p>
8.2.3.4	3.15.1.3.4	Loading Description	Modify	<p>This section is modified by replacing the term “emergency diesel generator” with “standby diesel generator,” defining that the standby diesel generator will be started manually versus automatically, eliminating the discussion of a safety injection signal,</p>

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				<p>blackout conditions, automatic load sequencing, recirculation phase, loss of coolant accidents, cold shutdown, and technical specifications, and denoting that the deenergized buses may be connected locally.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the 118-V AC instrument supply systems is not required to perform a function in the permanently shut down and defueled condition.</p>
8.2.3.5	3.15.1.3.5	Batteries and Battery Chargers	Modify	<p>This section is modified to reduce the 125-V DC system alignment to a single battery, battery charger, and AC power panel, and simplify the discussion to reflect the minimum requirements regarding the 125-V DC system in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>



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8.2.3.6	3.15.1.3.6	Reliability Assurance	Modify	<p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the requirements for the 125-V DC system are significantly reduced in the permanently shut down and defueled condition.</p> <p>This section is modified by eliminating the discussions of ESF (i.e., safeguards equipment) and eliminating the requirements for the electrical system to be single-failure proof, eliminating the requirements for redundant trains to receive power from different sources or the emergency diesel generators, and eliminating the discussion regarding the battery installations associated with a loss of AC power incident.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Table 8.2-1	NA	Deleted	Delete	Previously deleted.
Table 8.2-2	NA	Diesel Generator Loads	Delete	<p>The table is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, the safety injection pumps, residual heat removal pumps, containment air recirculation cooling fans, auxiliary feedwater pumps, and containment spray pumps perform no function in the permanently shut down and defueled condition.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>The electrical loads will be manually supplied power by a diesel generator in the permanently shut down and defueled condition.</p>
Table 8.2-3	NA	Deleted	Delete	Previously deleted.
Table 8.2-4	NA	Deleted	Delete	Previously deleted.
Figure 8.2-1	Figure 13.2-1	Electrical One-Line Diagram, Replaced with Plant Drawing 250907	Retain	No proposed changes.

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Figure 8.2-2	Figure 13.2-2	Electrical Power System Diagram, Replaced with Plant Drawing 250907	Retain	No proposed changes.
Figure 8.2-3	Figure 13.2-3	Main One-Line Diagram, Replaced with Plant Drawing 208377	Retain	No proposed changes.
Figure 8.2-4	Figure 13.2-4	345-KV Installation at Buchanan	Retain	No proposed changes.
Figure 8.2-5	Figure 13.2-5	6900-V One-Line Diagram, Replaced with Plant Drawing 231592	Retain	No proposed changes.
Figure 8.2-6	Figure 13.2-6	480-V One-Line Diagram, Replaced with Plant Drawing 208088	Retain	No proposed changes.
Figure 8.2-7	Figure 13.2-7	Single Line Diagram 480-V Motor Control Centers 21, 22, 23, 25, 25A, Replaced with Plant Drawing 9321-3004	Retain	No proposed changes.
Figure 8.2-7a	Figure 13.2-7a	Single Line Diagram - 480-V Motor Control Centers 24 and 24A, Replaced with Plant Drawing 249956	Retain	No proposed changes.
Figure 8.2-8	Figure 13.2-8	Single Line Diagram - 480-V Motor Control Centers 27 and 27A, Replaced with Plant Drawing 9321-3005	Retain	No proposed changes.
Figure 8.2-9	Figure 13.2-9	Single Line Diagram - 480-V Motor Control Centers 28 and 210, Replaced with Plant Drawing 208507	Retain	No proposed changes.
Figure 8.2-9a	Figure 13.2-9a	Single Line Diagram - 480-V Motor Control Centers 29	Retain	No proposed changes.

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Figure 8.2-10	Figure 13.2-10	and 29A, Replaced with Plant Drawing 249955 Single Line Diagram - 480-V Motor Control Centers 28A and 211, Replaced with Plant Drawing 208241	Retain	No proposed changes.
Figure 8.2-11	Figure 13.2-11	Single Line Diagram - 480-V Motor Control Centers 26A and 26B, Replaced with Plant Drawing 9321-3006	Retain	No proposed changes.
Figure 8.2-11a	Figure 13.2-11a	Single Line Diagram - 480-V Motor Control Center 26C, Replaced with Plant Drawing 248513	Retain	No proposed changes.
Figure 8.2-12	Figure 13.2-12	Single Line Diagram - 480-V Motor Control Centers 26AA and 26BB and 120-V AC Panels No. 1 and 2, Replaced with Plant Drawing 208500	Retain	No proposed changes.
Figure 8.2-13	Figure 13.2-13	Single Line Diagram - 118-VAC Instrument Buses No. 21 thru 24, Replaced with Plant Drawing 208502	Retain	No proposed changes.
Figure 8.2-14	Figure 13.2-14	Single Line Diagram - 118-VAC Instrument Buses No. 21A thru 24A, Replaced with Plant Drawing 208503	Retain	No proposed changes.
Figure 8.2-15	Figure 13.2-15	Single Line Diagram - DC System Distribution Panels No. 21, 21A, 21B, 22, and 22A, Replaced with Plant Drawing 208501	Retain	No proposed changes.
Figure 8.2-16	Figure 13.2-16	Single Line Diagram - DC System Power Panels No. 21	Retain	No proposed changes.

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Figure 8.2-17	Figure 13.2-17	thru 24, Replaced with Plant Drawing 9321-3008 Single Line Diagram of Unit Safeguard Channeling and Control Train Development, Replaced with Plant Drawing 208376	Retain	No proposed changes.
Figure 8.2-18	Figure 13.2-18	Cable Tray Separations, Functions, and Routing, Replaced with Plant Drawing 208761	Retain	No proposed changes.
8.3	NA	Alternate Shutdown System	Delete	This section is proposed to be deleted in its entirety.
Figure 8.3-1	NA	Deleted	Delete	After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and core related design basis accidents are no longer possible. Consequently, there is no need for an alternate safe shutdown system. Previously deleted.
8.4	NA	Minimum Operating Conditions	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and core related design basis accidents are no longer possible. 10 CFR 50.65 is no longer applicable in this condition.  In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose

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8.5	3.15.3	Tests and Inspections	Modify	<p>limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.</p> <p>The Permanently Defueled Technical Specifications do not contain any operability requirements associated with electrical power. The Technical Requirements Manual will include any requirements regarding the functionality of the electrical power systems.</p> <p>This section is modified by replacing the term “Emergency Diesel Generator” with the term “Standby Diesel Generator,” replacing the reference to TS requirements with a reference to TRM requirements, eliminating the requirement to supply safeguards equipment automatically in the event of a loss of all normal 480-V AC station service power, eliminating the reference to 10 CFR 50.65, eliminating the testing requirements for the standby diesel generator and eliminating the discussion regarding the station batteries.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur, and core related design basis accidents are no longer possible. 10 CFR 50.65 is no longer applicable in this condition.</p> <p>In addition, after permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload,</p>

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the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Thus, no active or electric-powered structures, systems, or component are required to mitigate the FHA. As a result, the electrical power system requirements are substantially reduced.

The Permanently Defueled Technical Specifications do not contain any operability requirements associated with electrical power. The Technical Requirements Manual will include any requirements regarding the functionality of the electrical power systems.

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**CHAPTER 9 – AUXILIARY AND EMERGENCY SYSTEMS**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
Chapter 9	3.0	Auxiliary and Emergency Systems	Modify	The title is modified to “Auxiliary Systems.” This change is an administrative change to reflect the changes presented below. The summary will be incorporated into an overview section in Chapter 3 of the Defueled Safety Analysis Report (DSAR).
9.0	3.0	Introduction	Modify	This section provides a summary of auxiliary and emergency systems that support the safe operation of the reactor coolant system. This section is modified to reflect the systems that are required to support the storage of spent fuel in the spent fuel pit and to reflect their functions in that state. The discussion regarding the residual heat removal system are eliminated. In addition, the terms “reactor plant” and “plant” are replaced with the term “facility.”  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system and residual heat removal system, are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these systems in the IP2 UFSAR is obsolete.  The term reactor plant is no longer utilized, because IP2 will no longer generate electricity. The term facility better represents the permanently shut down and defueled condition.  In addition, the section is revised to reflect that several auxiliary systems will continue to support the storage of spent fuel. The title of the section is eliminated to support consolidation of information into the DSAR.
9.1	NA	General Design Criteria	Delete	This section header is deleted, because all of its subsections are proposed to be deleted as described below.
9.1.1	NA	Applicable Criteria	Delete	This section provides a generic discussion that refers to other sections regarding the various auxiliary and emergency systems. This section is proposed to be deleted in its entirety. The discussion adds no value, and its removal is an administrative change.



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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
				Any proposed changes to the specific subsections regarding the auxiliary and emergency systems will be described and justified in the discussions regarding their applicable subsections.
9.1.2	NA	Related Criteria	Delete	This section header is deleted, because all of its subsections are proposed to be deleted as described below.
9.1.2.1	NA	Reactivity Control System Malfunction	Delete	This section defines how IP2 complies with the general design criterion regarding a reactivity control system malfunction. This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, reactivity control system malfunctions are no longer possible. Thus, the information regarding reactivity control system malfunctions in the IP2 UFSAR is obsolete.
9.1.2.2	NA	Engineered Safety Features Performance Capability	Delete	This section defines how IP2 complies with the general design criterion regarding the performance capability for engineered safety features. This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.  After permanent shutdown and full core offload, all fuel will be in the spent fuel pit (SFP) or the Independent Spent Fuel Storage Installation (ISFSI). A Fuel Handling Accident (FHA) in the SFP is analyzed utilizing the Alternate Source Term (AST) methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident

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9.1.2.3	NA	Containment Heat Removal Systems	Delete	<p>were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>The engineered safety features are no longer required to prevent the occurrence or to ameliorate the effects of an accident. Consequently, the engineered safety features are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the engineered safety features in the IP2 UFSAR is obsolete.</p> <p>This section defines how IP2 complies with the general design criterion regarding the containment heat removal systems. This section is proposed to be deleted in its entirety.</p>
9.2	3.2	Chemical and Volume Control System	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. As a result, no accidents or transients can occur with the containment. The containment heat removal systems are no longer required to prevent the occurrence or to ameliorate the effects of an accident. Consequently, the engineered safety features are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the engineered safety features in the IP2 UFSAR is obsolete.</p> <p>This section is modified to define the function of the chemical and volume control system in the permanently shut down and defueled condition. It will be utilized to process liquid radwaste. It is no longer utilized to: 1) adjust the concentration of boric acid for nuclear reactivity control, (2) maintain the proper water inventory in the reactor coolant system, (3) provide the required seal water flow for the reactor coolant pump shaft seals, (4) maintain the proper concentration of corrosion inhibiting chemicals in the reactor coolant, (5) maintain the reactor coolant and</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
9.2.1, including Subsection 9.2.1.1 through 9.2.1.5	NA	Design Bases	Delete	<p data-bbox="982 217 2007 277">corrosion product activities within design levels, and (6) Fill and hydrostatically test the reactor coolant system.</p> <p data-bbox="982 323 2007 670">After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p> <p data-bbox="982 678 2007 992">This section is proposed to be deleted in its entirety. In the permanently shut down and defueled condition, the chemical and volume control system will be utilized to process liquid radwaste. It is no longer utilized to: 1) adjust the concentration of boric acid for nuclear reactivity control, (2) maintain the proper water inventory in the reactor coolant system, (3) provide the required seal water flow for the reactor coolant pump shaft seals, (4) maintain the proper concentration of corrosion inhibiting chemicals in the reactor coolant, (5) maintain the reactor coolant and corrosion product activities within design levels, and (6) Fill and hydrostatically test the reactor coolant system.</p> <p data-bbox="982 1036 2007 1385">After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
9.2.2, including Subsections 9.2.2.1, 9.2.2.2 (including Subsections 9.2.2.2.1 through 9.2.2.2.4), 9.2.2.3, 9.2.2.4 (including Subsections 9.2.2.4.1 through 9.2.2.4.5 (including its subsections), 9.2.2.4.7 through 9.2.2.4.20 , and 9.2.2.4.23 9.2.2.4.6	3.2.1	System Design and Operation	Modify	<p>This section is modified to define the function of the chemical and volume control system in the permanently shut down and defueled condition. It will be utilized to transfer and store liquid radwaste. It is no longer utilized to: 1) adjust the concentration of boric acid for nuclear reactivity control, (2) maintain the proper water inventory in the reactor coolant system, (3) provide the required seal water flow for the reactor coolant pump shaft seals, (4) maintain the proper concentration of corrosion inhibiting chemicals in the reactor coolant, (5) maintain the reactor coolant and corrosion product activities within design levels, and (6) Fill and hydrostatically test the reactor coolant system. In addition, other portions of the Waste Disposal System are discussed in this section.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>
9.2.2.4.21	3.2.1	Resin Fill Tank	Modify	<p>This section is modified to reflect that the resin fill tank will be utilized to process resins from the demineralizers. The title of this subsection is eliminated to support consolidation of information in the DSAR.</p>
	3.2.1	Valves	Modify	<p>This section is modified to reflect that the chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer</p>

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				<p>occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>
9.2.2.4.22	3.2.1	Piping	Modify	<p>The title of this subsection is eliminated to support consolidation of information in the DSAR</p> <p>This section is modified by eliminating the discussion regarding heat tracing for lines containing concentrated boric acid. The chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>
9.2.2.5	NA	Recycle Process	Delete	<p>The title of this subsection is eliminated to support consolidation of information in the DSAR</p> <p>This section is proposed to be deleted in its entirety. It contained a historical discussion of the boron recycle process. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state.</p>

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9.2.2.5.1	3.2.2	Purpose	Modify	<p>Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p> <p>This section is modified to reflect that the chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>
9.2.2.5.2	3.2.2	Holdup Tanks	Modify	<p>This section is modified to reflect that the chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.</p>
9.2.2.5.3	NA	Holdup Tank Recirculation Pump	Delete	<p>The title of this subsection is eliminated to support consolidation of information in the DSAR</p> <p>This section is proposed to be deleted in its entirety. The chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10</p>

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				CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.
9.2.2.5.4	3.2.2	Holdup Tank Transfer Pump	Modify	This section is modified to remove a historical discussion regarding the original purpose of the pump. This is an administrative change.
9.2.2.5.5	NA	Evaporator Feed (Cation) Ion Exchangers	Delete	The title of this subsection is eliminated to support consolidation of information in the DSAR This section is proposed to be deleted in its entirety. The chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.
9.2.2.5.6	NA	Ion Exchanger Filters	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.7	NA	Gas Stripper Equipment	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.8	NA	Boric Acid Evaporator Equipment	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.

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9.2.2.5.9	NA	Evaporator Condensate Demineralizers	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.10	NA	Condensate Filters	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.11	NA	Monitor Tanks	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.12	NA	Monitor Tank Pumps	Delete	This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.
9.2.2.5.13	3.3.2.3.6	Primary Water Storage Tank	Modify	This section describes the primary water storage tank. While the primary water storage tank will not be required to provide make-up to the reactor coolant system, it will continue to serve as the make-up source for the component cooling water system in the permanently shut down and defueled condition. This section is modified to reflect that function.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
9.2.2.2.5.13.1	3.3.2.3.6.1	Primary Water Storage Tank Level Measurement	Retain	No proposed changes.
9.2.2.2.5.13.2	3.3.2.3.6.2	Primary Water Storage Tank Temperature Control	Modify	This section is modified by eliminating the discussion regarding the reactor coolant pumps.

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				50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the reactor coolant system in the IP2 UFSAR is obsolete.
9.2.2.2.5.14	3.3.2.3.7	Primary Water Makeup Pumps	Modify	<p>This section describes the primary water makeup pumps. This section is modified to eliminate the discussion that the pumps are automatically controlled by the chemical and volume control system, and to replace the reference to “plant” with a reference to “facility.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, primary water makeup pumps are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these pumps in the IP2 UFSAR is obsolete.</p>
9.2.2.5.15	NA	Concentrates Filter	Delete	<p>The term “facility” better reflects IP2 in the permanently shut down and defueled condition, because IP2 will no longer be a plant that generates electricity.</p> <p>This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.</p>
9.2.2.5.16	NA	Concentrates Holding Tank	Delete	<p>This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.</p>
9.2.2.5.17	NA	Concentrates Holding Tank Transfer Pumps	Delete	<p>This section is proposed to be deleted in its entirety. This is an administrative change, because the discussion was historical to address equipment that was no longer utilized, retired in place or removed.</p>

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9.2.3, including Subsections 9.2.3.1 through 9.2.3.6	NA	System Design and Evaluation	Delete	This section is proposed to be deleted in its entirety. The chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.
9.2.4	NA	Minimum Operating Conditions	Delete	This section is proposed to be deleted in its entirety. There will no requirements regarding the chemical volume and control system presented in the Technical Requirements Manual.
9.2.5	NA	Tests and Inspections	Delete	This section is proposed to be deleted in its entirety. There will no testing, calibrating, or checking requirements regarding the chemical volume and control system presented in the Technical Requirements Manual.
Table 9.2-1	Table 3.2-1	Chemical and Volume Control System Code Requirements	Modify	This table is modified to reflect that the chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.
Table 9.2-2	NA	Chemical and Volume Control System Letdown Requirements	Delete	See the discussion for Section 9.2.2.

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Table 9.2-3	NA	Chemical and Volume Control System Principal Component Design Data Summary	Modify	This table is modified to reflect that the chemical and volume control system will continue to process liquid radwaste in the permanently shut down and defueled condition. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the chemical and volume control system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the chemical and volume control system, with the exception of the liquid radwaste processing function, in the IP2 UFSAR is obsolete.
Table 9.2-4	NA	Reactor Coolant System Activities (576°F)	Delete	See the discussion for Section 9.2.2.
Table 9.2-5	NA	Parameters Used in the Calculation of Reactor Coolant Fission Product Activation	Delete	See the discussion for Section 9.2.2.
Table 9.2-6	NA	Tritium Production in the Reactor Coolant System	Delete	See the discussion for Section 9.2.2.
Table 9.2-7	NA	Malfunction Analysis of Chemical and Volume Control System	Delete	See the discussion for Section 9.2.3.
Figure 9.2-1 Sh. 1	NA	Chemical and Volume Control System - Flow Diagram, Sheet 1, Replaced with Plant Drawing 9321-2736	Delete	See the discussion for Section 9.2.2.
Figure 9.2-1 Sh. 2	NA	Chemical and Volume Control System - Flow Diagram, Sheet 2, Replaced with Plant Drawing 208168	Delete	See the discussion for Section 9.2.2.
Figure 9.2-1 Sh. 3	NA	Chemical and Volume Control System - Flow Diagram, Sheet	Delete	See the discussion for Section 9.2.2.

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Figure 9.2-1 Sh. 4	NA	3, Replaced with Plant Drawing 9321-2737 Chemical and Volume Control System - Flow Diagram, Sheet 4, Replaced with Plant Drawing 235309	Delete	See the discussion for Section 9.2.2.
Figure 9.2-2	Figure 3.3-2	Primary Water Makeup System - Flow Diagram, Replaced with Plant Drawing 9321-2724	Retain	No proposed changes.
9.3	3.3	Auxiliary Coolant System	Retain	No proposed changes.
9.3.1	3.3.1	Design Basis	Modify	This section introduces the three loops of the auxiliary coolant system, i.e., the component cooling loop, the residual heat removal loop, and the spent fuel pit cooling loop. It is modified to eliminate the discussions regarding the residual heat removal loop.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.
9.3.1.1	3.3.1.1	Performance Objectives	Retain	No proposed changes
9.3.1.1.1	3.3.1.1.1	Component Cooling Loop	Modify	This section addresses the performance objectives for the component cooling loop. It is modified to reflect that it will continue to support the storage of spent fuel in the SFP, and eliminate the references to the reactor coolant system, chemical and volume control system, engineered safeguards components, and safe shutdown components. The requirement for the system to be redundant is eliminated. In addition, the term “primary plant” is replaced with the term “facility.”

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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system, chemical volume control system, engineered safeguards, and safe shutdown components are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these systems and components in the IP2 UFSAR is obsolete.</p>
9.3.1.1.2	NA	Residual Heat Removal Loop	Delete	<p>The term “facility” better represents IP2 in the shut down and defueled condition. This section addresses the residual heat removal loop. It is proposed to be deleted in its entirety.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p>
9.3.1.1.3	3.3.1.1.2	Spent Fuel Pit Cooling Loop	Retain	No proposed changes.
9.3.1.2	3.3.1.2	Design Characteristics	Retain	No proposed changes.
9.3.1.2.1	3.3.1.2.1	Component Cooling Loop	Modify	<p>This section addresses the performance objectives for the component cooling loop. It is modified to reflect that it will continue to support the storage of spent fuel in the SFP, and eliminate the references to components located in the reactor containment building and requirements following a loss of coolant accident (LOCA). In addition, the term “plant” is replaced with the term “facility.”</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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				50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the reactor coolant system, chemical volume control system, engineered safeguards, and safe shutdown components are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these systems and components in the IP2 UFSAR is obsolete.
				The term “facility” better represents IP2 in the permanently shut down and defueled condition.
9.3.1.2.2	NA	Residual Heat Removal Loop	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.1.2.3	3.3.1.2.2	Spent Fuel Pit Cooling Loop	Modify	This section is modified to eliminate the reference to TRM 3.9.A and to denote how it will be met in the permanently shut down and defueled condition. This requirement will be met prior to the implementation of the original version of the Defueled Technical Specifications and Defueled Safety Analysis Report. Thus, it will essentially be a historical requirement, because the facility will be permanently shut down and defueled.
9.3.1.3	3.3.1.3	Codes and Classification	Retain	An editorial change is made to correct the spelling of dependent. No proposed changes
9.3.2	3.3.2	System Design and Operation	Retain	No proposed changes
9.3.2.1	3.3.2.1	Component Cooling Loop	Modify	This section addresses the performance objectives for the component cooling loop. It is modified to eliminate the references to components of the residual heat removal system, reactor coolant system, chemical and volume control system, sampling system, reactor vessel support pads, and safety injection system. In addition, the section is revised to eliminate references to full power operation and plant shutdown.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual

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				heat removal system, reactor coolant system, chemical and volume control system, sampling system, reactor vessel support pads, and safety injection system are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these systems and components in the IP2 UFSAR is obsolete.
9.3.2.2	NA	Residual Heat Removal Loop	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.3	3.3.2.2	Spent Fuel Pit Cooling Loop	Modify	This section addresses the spent fuel pit cooling loop. It is modified by eliminating the discussions regarding the reactor containment, refueling activities, the fuel transfer tube, and the circulation of refueling water storage tank water.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and refueling activities can no longer occur and core related design basis accidents are no longer possible. The reactor containment and fuel transfer tube serve no purpose in the permanently shut down and defueled condition. Consequently, these structures are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these structures in the IP2 UFSAR is obsolete.
				In addition, the refueling water storage tank is no longer required to be purified in the permanently shut down and defueled condition.
9.3.2.4	3.3.2.3	Component Cooling Loop Components	Retain	No proposed changes.
9.3.2.4.1	3.3.2.3.1	Component Cooling Heat Exchangers	Retain	No proposed changes.
9.3.2.4.2	3.3.2.3.2	Component Cooling Pumps	Retain	No proposed changes.
9.3.2.4.3	NA	Auxiliary Coolant Water Pumps	Delete	This section discusses the auxiliary cooling water pumps function to supply the safety injection system during a LOCA with or without a loss of offsite power. This section is proposed to be deleted in its entirety.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the safety injection system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.
9.3.2.4.4	3.3.2.3.3	Component Cooling Surge Tank	Retain	No proposed changes.
9.3.2.4.5	3.3.2.3.4	Component Cooling Valves	Retain	No proposed changes.
9.3.2.4.6	3.3.2.3.5	Component Cooling Piping	Retain	No proposed changes.
9.3.2.5	NA	Residual Heat Removal Loop Components	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.5.1	NA	Residual Heat Exchangers	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.5.2	NA	Residual Heat Removal Pumps	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.5.3	NA	Residual Heat Removal Valves	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.5.4	NA	Residual Heat Removal Valves	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.5.5	NA	Low Pressure Purification System	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.2.6	3.3.2.4	Spent Fuel Pit Loop Components	Retain	No proposed changes.
9.3.2.6.1	3.3.2.4.1	Spent Fuel Pit Heat Exchanger	Retain	No proposed changes.
9.3.2.6.2	3.3.2.4.2	Spent Fuel Pit Pumps	Retain	No proposed changes.



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9.3.2.6.3	NA	Refueling Water Purification Pump	Delete	This section discusses the refueling water purification pump. This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the refueling water purification pump is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this pump in the IP2 UFSAR is obsolete.
9.3.2.6.4	3.3.2.4.3	Spent Fuel Pit Filter	Retain	No proposed changes.
9.3.2.6.5	3.3.2.4.4	Spent Fuel Pit Strainer	Retain	No proposed changes.
9.3.2.6.6	3.3.2.4.5	Spent Fuel Pit Demineralizer	Modify	This section is modified by eliminating the option to use the spent fuel pit demineralizer to purify the refueling water storage tank water.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the refueling water storage tank is no longer required to be purified in the permanently shut down and defueled condition.
9.3.2.6.7	NA	Spent Fuel Pit Skimmer [Deleted]	Delete	Previously deleted.
9.3.2.6.8	3.3.2.4.6	Spent Fuel Pit Valves	Retain	No proposed changes.
9.3.2.6.9	3.3.2.4.7	Spent Fuel Pit Piping	Retain	No proposed changes.

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9.3.3	3.3.3	System Evaluation	Modify	<p>This section provides a generic introduction regarding the evaluation of the auxiliary cooling system’s performance. It is modified to eliminate the reference to the operating modes and the loss of coolant accident.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
9.3.3.1	3.3.3.1	Availability and Reliability	Retain	No proposed changes.
9.3.3.1.1	3.3.3.1.1	Component Cooling Loop	Modify	<p>This section discusses the availability and reliability of the component cooling loop. It is modified by defining the portions of the system that is permanently isolated and the portions of the system that will remain in service. The section is revised to define the electrical power requirements in the permanently shut down and defueled condition and eliminate the discussion regarding the Station Blackout / Appendix R diesel generator and to define that the system and the structures that house it are no longer required to be seismic Class I.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system, reactor coolant system, and the majority of the chemical and volume control system (with the exception of waste processing components) are no longer required to perform a function in the permanently shut down and defueled state.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room</p>

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				isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for any active components to mitigate the consequences of the accident. As a result, the electrical power requirements regarding the component cooling loop are significantly reduced in the permanently shut down and defueled condition. In addition, there are no requirements for the component cooling water system or the structures that house it to remain classified as seismic Class I.
9.3.3.1.2	NA	Residual Heat Removal Loop	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.3.1.3	3.3.3.1.2	Spent Fuel Pit Cooling Loop	Retain	No proposed changes.
9.3.3.2	3.3.3.2	Leakage Provisions	Retain	No proposed changes.
9.3.3.2.1	3.3.3.2.1	Component Cooling Loop	Modify	This section addresses the leakage provisions for the component cooling loop. This section is modified by revising the discussion to reflect the remaining portions of the system that will perform a function in the permanently shut down and defueled condition.
				This section is modified to replace the reference to operator with a reference to site personnel. This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.
				It is modified by eliminating the discussions regarding leakage within containment, leakage from the chemical and volume control system, the sampling system, the reactor coolant system, and the residual heat removal system. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system, reactor coolant system, sampling system, and chemical and volume control system, are no longer required to perform a function in the permanently shut down and

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				defueled state. Thus, the information regarding these systems and their components in the IP2 UFSAR is obsolete.
				In addition, the references to the Technical Specifications are eliminated. The Permanently Defueled Technical Specifications do not contain any leakage requirements.
9.3.3.2.2	NA	Residual Heat Removal Loop	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.3.2.3	3.3.3.2.2	Spent Fuel Pit Cooling Loop	Modify	This section addresses the leakage control provisions of the spent fuel pit cooling loop. It is modified to eliminate the discussion regarding the transfer of fuel assemblies via the fuel transfer canal, and the capability to provide makeup water from the refueling water storage tank.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, refueling activities will no longer occur. Thus, all fuel assemblies will have been transferred from the reactor to the SFP, and the fuel transfer tube will serve no purpose in the permanently shut down and defueled condition. In addition, makeup water to the spent fuel pit cooling loop will no longer be supplied by the refueling water storage tank.
9.3.3.3	3.3.3.3	Incident Control	Retain	No proposed changes.
9.3.3.3.1	3.3.3.3.1	Component Cooling Loop	Modify	This section addresses various breaks on the component cooling loop inside and outside the containment. It is modified to eliminate the discussion of a component cooling water line break inside containment, references to containment isolation valves, components of the reactor coolant system, chemical volume and control system, sampling system, safety injection system, and residual heat removal system. In addition, the makeup source for the component cooling loop is changed from the reactor makeup water tank and primary makeup water pumps to the primary water storage tank and primary water pumps.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no

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				longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system, reactor coolant system, sampling system, safety injection system, the majority of the chemical and volume control system (with the exception of waste processing equipment) and containment isolation valves, are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding these systems and their components in the IP2 UFSAR is obsolete.
9.3.3.3.2	NA	Residual Heat Removal Loop	Delete	See the discussion for Subsection 9.3.1.1.2.
9.3.3.3.3	3.3.3.3.2	Spent Fuel Pit Cooling Loop	Modify	This section is modified by eliminating the discussion of the spent fuel transfer tube. It will be permanently isolated from the spent fuel pit in the permanently shut down and defueled condition. In addition, the section is modified by replacing references to the spent fuel storage pool or pool with references to the SFP. This is an administrative change to establish a consistent reference to the SFP.
9.3.3.4	3.3.3.4	Malfunction Analysis	Retain	No proposed changes.
9.3.4	NA	Minimum Operating Conditions	Delete	This section states that minimum operating conditions for the auxiliary coolant system are specified in the Technical Specifications. There are no requirements for the auxiliary coolant systems in the Permanently Defueled Technical Specifications.
9.3.5	NA	Tests and Inspections	Delete	This section provides a discussion of the tests and inspections of the auxiliary coolant system. It refers to the Technical Specifications and defines specific testing requirements for the residual heat removal system. It is proposed to be deleted in its entirety.

There are no testing requirements for the auxiliary coolant systems in the Permanently Defueled Technical Specifications.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system is no longer required to perform a function in the permanently

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Table 9.3-1	Table 3.3-1	Auxiliary Coolant System Code Requirements	Modify	<p>shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>This table provides the code requirements for auxiliary coolant system components. It is modified by eliminating the references to residual heat removal components.</p>
Table 9.3-2	Table 3.3-2	Component Cooling Loop Component Data	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the residual heat removal system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>This table provides data regarding various component cooling loop components. It is modified by eliminating the data regarding the auxiliary component cooling water pumps and the component cooling water circulating water pumps.</p>
Table 9.3-3	NA	Residual Heat Removal Loop Component Data	Delete	<p>See the previous discussion regarding Subsection 9.3.1.2.1.</p> <p>This table provides data regarding the residual heat removal system components. It is proposed to be deleted in its entirety.</p>
Table 9.3-4	Table 3.3-3	Spent Fuel Pit Cooling Loop Component Data	Modify	<p>See the discussion for Subsection 9.3.1.1.2.</p> <p>This table is modified to replace a reference to the spent fuel storage pool with a reference to spent fuel pit. This is an administrative change to provide a consistent reference regarding the SFP.</p> <p>This table is modified to eliminate references to the SFP skimmers, skimmer strainer, and skimmer filter that were previously deleted or retired in place. This is an administrative change.</p> <p>This table is modified to eliminate the reference to the refueling water purification pump. After certifications for permanent cessation of operations and permanent</p>

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				removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the refueling water purification pump is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this pump in the IP2 UFSAR is obsolete.
Table 9.3-5	Table 3.3-4	Failure Analysis of Pumps, Heat Exchangers, and Valves	Modify	This table addresses failures of components of the component cooling water loop. It is modified by eliminating the statement that two of the three pumps are need to carry the pumping load, replacing the reference to emergency core cooling during recirculation with a reference to SFP cooling and the discussion of long-term recirculation with a discussion of safe storage of spent fuel in the spent fuel pit.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
Figure 9.3-1 Sh. 1	Figure 3.3-1 Sh. 1	Auxiliary Coolant System - Flow Diagram, Sheet 1, Replaced with Plant Drawing 227781	Retain	No proposed changes.
Figure 9.3-1 Sh. 2	Figure 3.3-1 Sh. 2	Auxiliary Coolant System - Flow Diagram, Sheet 2, Replaced with Plant Drawing 9321-2720	Retain	No proposed changes.
Figure 9.3-1 Sh. 3	Figure 3.3-1 Sh. 3	Auxiliary Coolant System - Flow Diagram, Sheet 3, Replaced with Plant Drawing 251783	Retain	No proposed changes.
9.4	3.4	Sampling System	Retain	No proposed changes.
9.4.1	3.4.1	Design Basis	Retain	No proposed changes.

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9.4.1.1	3.4.1.1	Performance Requirements	Modify	<p>This section is modified by eliminating discussions of post-accident conditions, the containment atmosphere post-accident sampling system, the primary sampling system (with the exception of the references to the holdup tanks, chemical volume and control system (CVCS) holdup tank transfer and the chemical drain pump 21 discharge) , secondary sampling system, and the reference to NUREG-0737.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p> <p>In addition, the reference to “operator” is replaced with a reference to “site personnel.” This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.</p> <p>Other editorial and format changes are made to reflect the major rewrite to this subsection and other modifications to Section 9.4 subsections.</p>



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9.4.1.2	3.4.1.2	Design Characteristics	Modify	<p>This section is modified by eliminating the discussion of post-accident conditions, requirements to perform inline measurement of the reactor coolant system, cool and depressurize all high temperature-high pressure fluids, utilize shielded transfer casks, and separation of the sampling equipment for secondary and nonradioactive fluids from the equipment provided for reactor coolant samples.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p> <p>In addition, the reference to “operator” is replaced with a reference to “site personnel.” This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.</p> <p>Other editorial and format changes are made to reflect the major rewrite to this subsection and other modifications to Section 9.4 subsections.</p>

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9.4.1.3	3.4.1.3	Primary Sampling	Modify	<p>This section is modified by eliminating the discussion of the high temperature – high pressure RCS and steam generator blowdown samples.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p>
9.4.1.3.1	NA	High Pressure - High Temperature Samples	Delete	<p>Other editorial and format changes are made to reflect the major rewrite to this subsection and other modifications to Section 9.4 subsections.</p> <p>This section is proposed to be deleted in its entirety. It addresses the high pressure – high temperature sample connections.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
9.4.1.3.2	NA	Low Pressure – Low Temperature Samples	Delete	<p>Given the above, the high pressure – high temperature sample connections are not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is proposed to be deleted in its entirety. It addresses low pressure – low temperature sample connections for the letdown demineralizers inlet and outlet header, residual heat removal loop, volume control tank gas space, (safety injection</p>

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				<p>system) accumulators 21, 22, 23, and 24, and recirculation pumps 21 and 22 discharge.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the low pressure – low temperature sample connections discussed in this section are not required to perform a function in the permanently shut down and defueled condition.</p>
9.4.1.4	NA	Expected Operating Temperatures	Delete	<p>This section is proposed to be deleted in its entirety. It addresses that the high pressure – high temperature samples and the residual heat removal loop samples are cooled.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, samples the high pressure – high temperature samples and the residual heat removal loop are not required be taken in the permanently shut down and defueled condition. Thus, the need to cool those samples no longer exists.</p>
9.4.1.5	NA	Secondary Sampling	Delete	<p>This section is proposed to be deleted in its entirety. It addresses the secondary sampling system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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				accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
9.4.1.6	3.4.1.4	Codes and Standards	Modify	<p>Given the above, the secondary sampling system is not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is modified by revising the code requirements to reflect those that remain applicable in the permanently shut down and defueled condition. This includes eliminating the discussions regarding post-accident conditions, NUREG-0737, diverting stored sample fluid to the containment, and pressurized samples.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p>
9.4.2	3.4.2	System Design and Operation	Retain	No proposed changes.
9.4.2.1	3.4.2.1	Primary Sampling System	Modify	<p>This section is modified by rewriting the section to reflect the portions that will continue to perform a function in the permanently shut down and defueled condition. This includes the elimination of the discussions regarding post-accident conditions, reactor coolant system samples, mixed bed demineralizers, full power operations, cold shutdown conditions, steam samples, and steam generator blowdown samples.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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				accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.
9.4.2.1.1	3.4.2.1.1	Components	Modify	In addition, a reference to Figure 9.4-1 is added. This is an administrative change. This section header is retained, but the text in the section is eliminated. It refers to Table 9.4-2. The only component that this table refers to is the sample heat exchanger. As defined in the discussion for Subsection 9.4.2.1.1.1, this component no longer serves a function in the permanently shut down and defueled condition.
9.4.2.1.1.1	NA	Sample Heat Exchangers	Delete	This section is proposed to be deleted in its entirety. It discusses the sample heat exchangers.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Given the above, the sample heat exchangers are not required to perform a function in the permanently shut down and defueled condition.
9.4.2.1.1.2	NA	Delay Coil and Restriction Orifice	Delete	This section is proposed to be deleted in its entirety. It discusses the delay coil and restriction orifice in the high-pressure RCS sample line.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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9.4.2.1.2	3.4.2.1.1.1	Liquid Sampling Panel	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the delay coil and restriction orifice in the high-pressure RCS sample line are not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is modified by eliminating the discussion of the reactor coolant sampling module, specialized equipment for sampling under accident conditions (e.g., carts and shielded casks), RCS samples, post-accident samples, and routing of purge flow back to the containment.</p>
9.4.2.1.3	3.4.2.1.1.2	Isotopic Analyzer	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p> <p>In addition, editorial and grammatical corrections are made to improve legibility following incorporation of changes made to this subsection.</p> <p>This section is modified by eliminating the discussion of the reactor coolant sampling module, RCS samples, post-accident samples, and Ge(Li) detector gamma spectroscopy system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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9.4.2.1.4	3.4.2.1.1.3	Boron Analyzer	Modify	<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p> <p>In addition, editorial and grammatical corrections are made to improve legibility following incorporation of changes made to this subsection.</p> <p>This section is modified by eliminating the discussion of the reactor coolant sampling module, specialized equipment for sampling under accident conditions (e.g., carts and shielded casks), RCS samples, and post-accident samples.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p>
9.4.2.1.5	NA	Cart and Casks	Delete	<p>In addition, editorial and grammatical corrections are made to improve legibility following incorporation of changes made to this subsection.</p> <p>This section is proposed to be deleted in its entirety. It discusses carts and shielded casks that would be utilized during accident conditions.</p>

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9.4.2.1.6	NA	Chemical Analysis Panel	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the carts and shielded casks are not required to perform a function in the permanently shut down and defueled condition. However, there are portions of the primary sampling system that will continue to be maintained to support the storage and handling of spent fuel.</p> <p>This section is proposed to be deleted in its entirety. It discusses the chemical analysis panel that receives an undiluted liquid sample stream and stripped gas from the reactor coolant module.</p>
9.4.2.1.7	NA	Chemical Monitor Panel	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the chemical analysis panel is not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is proposed to be deleted in its entirety. It discusses the chemical monitor panel that supports the chemical analysis panel.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>



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9.4.2.1.8	NA	High Radiation Sampling System Collection Tank	Delete	<p>Given the above, the chemical monitor panel is not required to perform a function in the permanently shut down and defueled condition.</p> <p>This section is proposed to be deleted in its entirety. It discusses the high radiation sampling system collection tank.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the high radiation sampling system collection tank is not required to perform a function in the permanently shut down and defueled condition.</p>
9.4.2.1.8.1	3.4.2.1.1.4	Chemical Drain Tank	Retain	No proposed changes.
9.4.2.1.8.2	3.4.2.1.1.5	Piping and Fittings	Retain	No proposed changes.
9.4.2.1.8.3	3.4.2.1.1.6	Valves	Modify	<p>This section is modified by eliminating the discussions regarding remotely operated stop valves that are used to isolate sample points and route sample fluids and isolation valves that trip upon generation of the containment isolation signal.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Given the above, the remotely operated stop valves and isolation valves are not required to perform a function in the permanently shut down and defueled condition.</p>
9.4.2.2	NA	Secondary Sampling System	Delete	<p>This section is proposed to be deleted in its entirety. It discusses the secondary sampling system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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				50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Given the above, the secondary sampling system is not required to perform a function in the permanently shut down and defueled condition.
9.4.3	NA	System Evaluation	Delete	This section header is proposed to be deleted. This is an administrative change.
9.4.3.1	NA	Availability and Reliability	Delete	This section is proposed to be deleted in its entirety. This discusses the availability of the sampling system post-accident.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Given the above, the secondary sampling system and the primary sampling system are not required to perform a function in the permanently shut down and defueled condition during post-accident conditions.
9.4.3.2	NA	Leakage Provisions	Delete	This section is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
				Given the above, the secondary sampling system and the majority of the primary sampling system are not required to perform a function in the permanently shut down and defueled condition. Thus, the discussion regarding leakage provisions is no longer applicable.

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9.4.3.3	NA	Incident Control	Delete	<p>This section is proposed to be deleted in its entirety. It discusses the operation of the system of a continuous basis.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Thus, the information in this section of the IP2 UFSAR is obsolete.</p>
9.4.3.4	NA	Malfunction Analysis	Delete	<p>This section is proposed to be deleted in its entirety. It discusses an analysis of failures or malfunctions of the sampling system concurrent with a LOCA.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Thus, the information in this section of the IP2 UFSAR is obsolete.</p>
9.4.3.5	NA	High Radiation Sampling System Evaluation	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>
Table 9.4-1	Table 3.4-1	Sampling System Code Requirements	Modify	<p>Given the above, the high radiation sampling system is not required to perform during and following an accident or to monitor high radiation samples.</p> <p>This table is modified by eliminating the reference to the sample heat exchanger. As defined in the discussion for Subsection 9.4.2.1.1.1, this component no longer serves a function in the permanently shut down and defueled condition.</p>

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Table 9.4-2	NA	Primary Sampling System Components	Delete	This table is proposed to be deleted in its entirety. The only component addressed in the table is the sample heat exchanger. As defined in the discussion for Subsection 9.4.2.1.1.1, this component no longer serves a function in the permanently shut down and defueled condition.
Table 9.4-3	NA	Malfunction Analysis of Sampling System	Delete	This table is proposed to be deleted in its entirety. See the discussion for Subsection 9.4.3.4.
Figure 9.4-1 Sh. 1	Figure 3.4-1 Sh. 1	Primary Sampling System - Flow Diagram, Sheet 1, Replaced with Plant Drawing 9321-2745	Retain	No proposed changes.
Figure 9.4-1 Sh. 2	Figure 3.4-1 Sh. 2	Primary Sampling System - Flow Diagram, Sheet 2, Replaced with Plant Drawing 227178	Retain	No proposed changes.
Figure 9.4-2	NA	Secondary Sampling System - Flow Diagram, Replaced with Plant Drawing 9321-7020	Delete	See the discussion for Subsection 9.4.2.2.
9.5	3.5	Fuel Handling System	Modify	This section is modified by eliminating the discussions regarding the reactor cavity and the fuel transfer system and the reference to unirradiated fuel. The reference to “operating personnel” is replaced with a more generic reference to “personnel.” In addition, the term “plant” is replaced with the term “facility.”

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. In addition, there will no need for the plant to acquire any unirradiated fuel.

In the permanently shut down and defueled condition, the term “operating personnel” is obsolete; thus, utilizing a more generic term of personnel is appropriate. Also, the term facility better represents IP2 in the permanently shut down and defueled condition.

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9.5.1	3.5.1	Design Basis	Retain	No proposed changes.
9.5.1.1	3.5.1.1	Prevention of Fuel Storage Criticality	Modify	<p>This section is modified by eliminating the discussions regarding storage fuel in the reactor, utilization of new spent fuel racks, the reactor cavity, and the refueling canal.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The reactor cavity and refueling canal have no function in the permanently shut down and defueled condition. In addition, there will no need for the plant to acquire any unirradiated fuel.</p>
9.5.1.2	3.5.1.2	Fuel and Waste Storage Decay Heat	Modify	<p>This section is modified to replace the phrase “refueling water” with the phrase “spent fuel pit cooling water.” In the permanently shut down and defueled condition, the term “refueling” is obsolete; thus, utilizing referring to the water in the spent fuel pit as the spent fuel pit cooling water is appropriate.</p>
9.5.1.3	3.5.1.3	Fuel and Waste Storage Radiation Shielding	Modify	<p>This section is modified by eliminating the reference to reactor refueling. In addition, the reference to “operating personnel” is replaced with a more generic reference to “personnel.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI.</p> <p>In the permanently shut down and defueled condition, the term “operating personnel” is obsolete; thus, utilizing a more generic term of personnel is appropriate.</p>
9.5.1.4	3.5.1.4	Protection Against Radioactivity Release from Spent Fuel and Waste Storage	Modify	<p>This section is modified by eliminating the discussions regarding the reactor cavity, and refueling canal. In addition, the seismic classification for the waste disposal system is revised to match the re-classification provided in UFSAR Section 1.11.</p>

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9.5.2	3.5.2	System Design and Operation	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The reactor cavity and refueling canal have no function in the permanently shut down and defueled condition.</p> <p>This section is modified by eliminating the discussions regarding the reactor cavity, refueling canal, and new fuel storage. In addition, the reference to “operating personnel” is replaced with a more generic reference to “personnel.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The reactor cavity and refueling canal have no function in the permanently shut down and defueled condition. In addition, there will no need for the plant to acquire any unirradiated fuel.</p> <p>In the permanently shut down and defueled condition, the term “operating personnel” is obsolete; thus, utilizing a more generic term of personnel is appropriate.</p>
9.5.2.1	3.5.2.1	Major Structures Required for Fuel Handling	Retain	No proposed changes.
9.5.2.1.1	NA	Reactor Cavity	Delete	<p>This section describes the reactor cavity. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The reactor cavity has no function in the permanently shut down and defueled condition.</p>

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9.5.2.1.2	NA	Refueling Canal	Delete	<p>This section describes the refueling canal. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The refueling canal has no function in the permanently shut down and defueled condition.</p>
9.5.2.1.3	NA	Refueling Water Storage Tank	Delete	<p>This section describes the refueling water storage tank. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. The refueling water storage tank has no function in the permanently shut down and defueled condition.</p>
9.5.2.1.4	3.5.2.1.1	Spent Fuel Storage Pit	Retain	No proposed changes.
9.5.2.1.5	3.5.2.1.2	Storage Rack	Modify	<p>This section is modified by eliminating the reference to new fuel assemblies, and replacing references to “spent fuel storage pool” or “pool” with SFP.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. There will no need for the plant to acquire any new unirradiated fuel.</p>
9.5.2.1.6	NA	New Fuel Storage	Delete	<p>The change to the nomenclature regarding the SFP is to provide consistency in the language utilized in the DSAR. This is an administrative change.</p> <p>This section addresses the storage of new unirradiated fuel assemblies. It is proposed to be deleted in its entirety.</p>

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, spent fuel will be stored either in the SFP or the ISFSI. There will no need for the plant to acquire any new unirradiated fuel.
9.5.2.2	3.5.2.2	Major Equipment Required for Fuel Handling	Retain	No proposed changes.
9.5.2.2.1	NA	Reactor Vessel Stud Tensioner	Delete	This section describes the reactor vessel stud tensioner. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The reactor vessel stud tensioner has no function in the permanently shut down and defueled condition.
9.5.2.2.2	NA	Reactor Vessel Head Lifting Device	Delete	This section describes the reactor vessel head lifting device. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The reactor vessel head lifting device has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.2.2.3	NA	Reactor Internals Lifting Device	Delete	This section describes the reactor internals lifting device. It is proposed to be deleted in its entirety.



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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The reactor internals lifting device has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.2.2.4	NA	Manipulator Crane	Delete	This section describes the manipulator crane. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The manipulator crane has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.2.2.5	3.5.2.2.1	FSB Fuel Handling Bridge Crane	Modify	This section is modified by replacing the reference to spent fuel pool with a reference to spent fuel pit. This is administrative change that provides consistency regarding the references to the SFP.
9.5.2.2.6	NA	Fuel Transfer System	Delete	This section describes the fuel transfer system. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel, and all spent fuel will be stored in the SFP or the ISFSI. The fuel transfer system has no function in the permanently shut down and defueled condition.
9.5.2.2.7	NA	Rod Cluster Control Changing Fixture	Delete	This section describes the rod cluster control changing fixture. It is proposed to be deleted in its entirety.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The rod cluster control changing fixture has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.2.2.8	NA	Lower Internals Support Stand	Delete	This section describes the lower internals support stand. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The lower internals support stand has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.2.2.9	3.5.2.2.2	Shield Transfer Canister (STC) and HI-TRAC Transfer Cask	Modify	This section is modified by replacing the reference to “UFSAR” with a reference to “DSAR.” This change reflects that the IP2 UFSAR will be revised and re-issued as the Defueled Safety Analysis Report (DSAR).
9.5.3	3.5.3	System Evaluation	Modify	This section is modified by replacing the reference to “refueling operations” with “storage and handling” operations. This change reflects that the plant will be permanently shut down and defueled, with the spent fuel stored in the SFP or the ISFSI.
				In addition, the section is modified by eliminating the reference to the containment gamma radiation monitors, reactor neutron flux monitors, containment integrity, and reactor core.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and

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				core related design basis accidents are no longer possible. The reactor will no longer be utilized to store spent fuel. Consequently, the containment will not be required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the containment and the reactor core in the IP2 UFSAR is obsolete.
9.5.3.1	NA	Incident Protection	Delete	This section addresses communication between the control room and the refueling cavity manipulator crane. It is proposed to be deleted in its entirety.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The manipulator crane has no function in the permanently shut down and defueled condition with regards to fuel handling.
9.5.3.2	3.5.3	Malfunction Analysis	Modify	This section is modified by eliminating the discussion regarding drainage from the refueling cavity. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The reactor cavity has no function in the permanently shut down and defueled condition with regards to fuel handling.
				In addition, the section is modified to replace the term “fuel storage pool” with SFP to provide consistency and the section header is eliminated. These are administrative changes.
9.5.4	3.5.4	Minimum Operating Condition	Modify	This section is modified to eliminate the discussion regarding the Technical Specification requirement regarding the reactor coolant system temperature when fuel is in the reactor vessel and the reactor head bolts are less than fully tensioned. This requirement will no longer exist in the Defueled Technical Specifications.
9.5.5	NA	Tests and Inspections	Delete	This section describes a pre-operational test of the Presray seal that sealed the reactor vessel flange to the bottom of the reactor cavity. This section is proposed to be deleted in its entirety.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the reactor will no longer be utilized to store spent fuel. The Presray seal has no function in the permanently shut down and defueled condition.
9.5.6	3.5.5	Control of Heavy Loads	Retain	No proposed changes.
9.5.6.1	3.5.5.1	Introduction / Licensing Background	Retain	No proposed changes.
9.5.6.2	3.5.5.2	Safety Basis	Modify	This section is modified by eliminating the references to the auxiliary fuel pump building monorail, primary auxiliary building monorail, and containment polar crane. In addition, the discussion of the postulated drop of the reactor head onto the reactor vessel is eliminated.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the plant will be permanently shut down and defueled. As a result, auxiliary fuel pump building monorail, primary auxiliary building monorail, and containment polar crane cannot result in an accident involving fuel or have any impact on core cooling or the ability to maintain the plant in a safe shutdown configuration.
9.5.6.3	3.5.5.3	Scope of Heavy Load Handling Systems	Modify	This section is modified by eliminating the references to the containment polar crane, primary auxiliary building monorail, auxiliary fuel pump building monorail, and diesel generator building overhead crane.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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				accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the plant will be permanently shut down and defueled. As a result, the containment polar crane, primary auxiliary building monorail, auxiliary fuel pump building monorail, and diesel generator building overhead crane cannot result in an accident involving fuel or have any impact on core cooling or the ability to maintain the plant in a safe shutdown configuration.
9.5.6.4	3.5.5.3	Control of Heavy Loads Program	Modify	This section is merged with Section 9.5.6.3. This is an administrative change.
9.5.6.4.1	3.5.5.4	Response to NUREG 0612, Phase I Elements	Modify	<p>This section is modified by eliminating the discussions regarding the containment polar crane, auxiliary hoist of the polar crane, reactor vessel head lifting rig, internals lift rig, reactor vessel inservice inspection tool, auxiliary fuel pump building monorail, and primary auxiliary building monorail. The discussions regarding safe shutdown of the plant and movement of fresh fuel to the new fuel elevator are eliminated. In addition, the references to the term “operable” are replaced with references to the term “functional,” and the reference to “plant” is replaced with a reference to “facility.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the plant will be permanently shut down and defueled. As a result, the containment polar crane, auxiliary hoist of the polar crane, reactor vessel head lifting rig, internals lift rig, reactor vessel inservice inspection tool, auxiliary fuel pump building monorail, and primary auxiliary building monorail cannot result in an accident involving fuel or have any impact on core cooling or the ability to maintain the plant in a safe shutdown configuration.</p> <p>In the permanently shut down and defueled state, IP2 will no longer acquire new fuel and will be in a permanent state of safe shutdown with fuel removed from the reactor vessel and stored in the SFP and ISFSI.</p>

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9.5.6.4.2	NA	Reactor Pressure Vessel Head (RPVH) Lifting Procedures	Delete	<p>Additionally, the Permanently Defueled Technical Specifications will not contain any operability requirements. Thus, it is appropriate to replace the term “operable” with the term “functional.” Also, the term “facility” better represents IP2 in the permanently shut down and defueled condition.</p> <p>This section addresses the reactor pressure vessel head lifting procedures to ensure that core cooling will not be compromised and the core will remain covered.</p>
9.5.6.4.3	3.5.5.5	Single Failure Proof Cranes for Spent Fuel Casks	Retain	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Thus, a drop of the reactor pressure vessel head will have no impact on critical components, core cooling, or the reactor core.</p> <p>No proposed changes.</p>
9.5.6.5	3.5.5.6	Safety Evaluation	Modify	<p>This section is modified by eliminating the discussion regarding the risk to redundant trains of safe shutdown equipment during spent fuel transfer activities. In addition, the term “plant” is replaced with the term “facility.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the plant will be permanently shut down and defueled. As a result, no equipment is required to achieve or maintain safe shut down of the reactor.</p> <p>The term “facility” better represents IP2 in the permanently shut down and defueled condition.</p>

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9.5.7	3.5.6	Fuel Storage Building (FSB) Dry Cask Storage (DCS) Operations	Retain	No proposed changes.
9.5.7.1	3.5.6.1	FSB 110-Ton Ederer Single Failure Proof Gantry Crane	Retain	No proposed changes.
9.5.7.2	3.5.6.2	FSB Low Profile Transporter (LPT) System	Retain	No proposed changes.
9.5.8	3.5.7	Inter-Unit Spent Fuel Transfer Operations	Modify	This section is modified by replacing the reference to “UFSAR” with a reference to “DSAR.” This change reflects that the IP2 UFSAR will be revised and re-issued as the Defueled Safety Analysis Report (DSAR).
Table 9.5-1	Table 3.5-1	Fuel Handling System Data	Modify	This table is modified by eliminating the data regarding new fuel storage, the refueling canal, and the amount of water required for refueling.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, refueling operations will never occur again, and the spent fuel will be stored either in the SFP or the ISFSI. Additionally, IP2 will never have a need to acquire any new unirradiated fuel.
Table 9.5-2	Table 3.5-2	NUREG-0612 Compliance Matrix	Modify	This table is modified by removing the reference to the containment polar crane and its list of heavy loads. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the plant will be permanently shut down and defueled. As a result, a failure of the containment polar crane cannot result in an accident involving fuel.
Figure 9.5-1	NA	Fuel Transfer System	Delete	See the discussion provided for Subsection 9.5.2.2.6.
Figure 9.5-2	Figure 3.5-1	Spent Fuel Storage Rack Layout	Retain	No proposed changes.

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Figure 9.5-3	Figure 3.5-2	Spent Fuel Storage Cell Region 1	Retain	No proposed changes.
Figure 9.5-4	Figure 3.5-3	Region I Cell Cross-Section	Retain	No proposed changes.
Figure 9.5-5	Figure 3.5-4	Region II Cross-Section	Retain	No proposed changes.
9.6	3.6	Facility Service Systems	Retain	No proposed changes.
9.6.1	3.6.1	Service Water System	Retain	No proposed changes.
9.6.1.1	3.6.1.1	Design Basis	Modify	This section is modified to state the design basis for the service water system in the permanently shut down and defueled condition. In the permanently shut down and defueled condition, there is no need to maintain separate essential and non-essential headers; thus, these headers will be merged.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.

Given the above, the essential portion of the service water system is not required to mitigate the consequences of a design basis accident. Thus, the service water system is no longer required to be single failure proof, nor is there any need for the system to be operated in an automatic manner. However, there are portions of the service water system that will continue to be maintained to support the storage and handling of spent fuel. The operation of the service water system will be controlled manually.



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9.6.1.2	3.6.1.2	System Design and Operation	Modify	<p>In addition, the intake structure is no longer required to be maintained as seismic Class I.</p> <p>This section is modified to provide an evaluation for the service water system in the permanently shut down and defueled condition. The minimum flow requirements for the service water system are met by one or more pumps supplying at least 5000 gpm. This ensures that the following loads will be provided with sufficient cooling:</p> <ul style="list-style-type: none"> <li>• Spent fuel cooling via the CCW heat exchangers</li> <li>• TWS wash water and CWP bearing cooling</li> <li>• 22 Standby Diesel Generator</li> <li>• Condenser waterbox degassing pumps</li> <li>• Appendix R/SBO Diesel Generator</li> <li>• Zurn strainer blowdown</li> <li>• 13 FWCHX for CENTAC cooling</li> </ul> <p>In the permanently shut down and defueled condition, there is no need to maintain separate essential and non-essential headers; thus, these headers will be merged. In addition, the discussion is revised to denote that the standby diesel generator and Appendix R / SBO diesel generator will be supplied cooling water from the service water header on a manual basis. The evaluation regarding the containment fan cooler units and their associated service water piping susceptibility to water hammer or two-phase flow is eliminated.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
9.6.1.3	3.6.1.3	Design Evaluation	Modify	<p>isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Given the above, the essential portion of the service water system is not required to mitigate the consequences of a design basis accident. Thus, the service water system is no longer required to be single failure proof, nor is there any need for the system to be operated in an automatic manner. However, there are portions of the service water system that will continue to be maintained to support the storage and handling of spent fuel. The operation of the service water system will be controlled manually.</p> <p>This section is modified to eliminate the discussion regarding the essential portion of the service water system, and the discussion regarding compliance with NRC Generic Letter 96-06 as it pertains to the containment fan cooler units and their associated service water piping. The discussion is simplified to state that the system has sufficient pump capacity to support storage of spent fuel in the SFP.</p> <p>The essential portion of the service water system was designed to provide cooling water in the event of a single failure of any active component during the injection phase of the safety injection system. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, the containment fan cooler units are no longer required to mitigate the consequences of an accident.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p>

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9.6.1.4	3.6.1.4	Tests and Inspections	Modify	<p>Given the above, the essential portion of the service water system is not required to mitigate the consequences of a design basis accident. However, the non-essential portion is maintained as a support system for the storage and handling of spent fuel.</p> <p>This section is modified by eliminating the requirement to test electrical components of the service water system.</p>
9.6.2	3.6.2	Fire Protection	Modify	<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time.</p> <p>Given the above, the essential portion of the service water system is not required to mitigate the consequences of a design basis accident. However, the non-essential portion is maintained as a support system for the storage and handling of spent fuel. Given the operation of the system, there is no need to test the electrical components, because they no longer perform a safety function.</p> <p>This section is modified to reflect that the licensing basis for fire protection changes to 10 CFR 50.48(f) after the certifications required by 10 CFR 50.82(a)(1) are docketed in accordance with 10 CFR 50.82(a)(2).</p> <p>License Condition 2.K of Facility License DPR-26 for IP2 regarding the Fire Protection Program was eliminated in License Amendment No. XXX. This license condition is deleted to reflect the permanently defueled condition of the facility. After the certifications required by 10 CFR 50.82(a)(1) are docketed for IP2, the 10 CFR Part 50 license will no longer authorize operation of the reactor or placement or retention of fuel in the reactor vessel pursuant to 10 CFR 50.82(a)(2). As a result, the fire protection program will be revised to take into account the decommissioning facility conditions and activities. IP2 will continue to utilize the defense-in-depth concept, placing special emphasis on detection and suppression in order to minimize the potential for radiological releases to the environment.</p>

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				<p>This condition, which is based on maintaining an operational fire protection program in accordance with 10 CFR 50.48, with the ability to achieve and maintain safe shut down of the reactor in the event of a fire, will no longer be applicable at IP2. In addition, Appendix R of 10 CFR 50 will no longer be applicable to IP2. However, many of the elements that are applicable for the operating plant fire protection program continue to be applicable during facility decommissioning. During the decommissioning process, a fire protection program is required by 10 CFR 50.48(f) to address the potential for fires that could result in a radiological hazard.</p>
9.6.3	3.6.3	City Water System	Modify	<p>IP2 will no longer need to maintain the IP2 Safe Shutdown Analysis Report or systems credited to provide the safe shutdown capability including the Alternate Safe Shutdown System.</p> <p>This section is modified to: 1) eliminate the components that will no longer be served by the city water system in the permanently shut down and defueled condition. These components are the house service boilers, steam and water analysis station, expansion tanks of the diesel generator jacket water cooling system, expansion tank of the instrument air compressor closed cooling system, expansion tank of the instrument air compressor closed cooling system, isolation valve seal water supply tank, and the steam generator blowdown tank; and 2) eliminate the discussion regarding emergency city water connections to be used by the charging pumps, residual heat removal pumps, and safety injection pumps.</p>
9.6.4	3.6.4	Compressed Air Systems	Retain	<p>The elimination of the steam generator, safety injection system, containment isolation seal water system, chemical and volume control system, residual heat removal system, steam and water analysis station, and instrument air compressors is addressed in the discussions for UFSAR Sections 5.1.5.1, 6.2, 6.5, 9.2, 9.3.1.1.2, 9.4.2.2, 9.6.4, respectively.</p>
9.6.4.1	3.6.4.1	Instrument Air System	Modify	<p>No proposed changes.</p> <p>This section is modified to define that the instrument air system will be supplied by the IP1 service air system and to eliminate the reference to operating conditions.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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9.6.4.2	3.6.4.2	Station Air System	Modify	<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, the requirements for the instrument air system are substantially reduced in the permanently shut down and defueled condition. As a result, an operational decision was made to eliminate the IP2 instrument air system and utilize the IP1 service air system. This alternative previously existed and was described in the IP2 UFSAR.</p> <p>This section is modified to define that the station air system will be supplied by the IP1 service air system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. As a result, the requirements for the station air system are substantially reduced in the permanently shut down and defueled condition. As a result, an operational decision was made to eliminate the IP2 station air system and utilize the IP1 service air system. This alternative previously existed and was described in the IP2 UFSAR.</p>
9.6.5	3.6.5	Heating System	Modify	<p>This section discusses the heating systems for IP2. This section is modified by eliminating the requirement to heat the containment building and the air makeup steam tempering units.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The containment building environment is no longer required to be maintained in the permanently shut down and defueled condition. In addition, the steam supply to the air makeup steam tempering units is isolated; thus, they no longer serve a function.</p>

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9.6.6	NA	Plant Communications Systems	Delete	This section refers to Section 7.7.4 of the IP2 UFSAR for a discussion of the plant communications system. This section is proposed to be deleted in its entirety.
Table 9.6-1	NA	Minimum Essential Service Water Requirement Under Accident Conditions	Delete	<p>This is an administrative change, because the remaining information in the IP2 UFSAR will be consolidated in the DSAR. As a result, this section will serve no purpose in the DSAR.</p> <p>This table is proposed to be deleted in its entirety. The minimum flow requirements for the service water system are met by one or more pumps supplying at least 5000 gpm. This ensures that the following loads will be provided with sufficient cooling:</p> <ul style="list-style-type: none"> <li>• Spent fuel cooling via the CCW heat exchangers</li> <li>• TWS wash water and CWP bearing cooling</li> <li>• 22 Standby Diesel Generator</li> <li>• Condenser waterbox degassing pumps</li> <li>• Appendix R/SBO Diesel Generator</li> <li>• Zurn strainer blowdown</li> <li>• 13 FWCHX for CENTAC cooling</li> </ul> <p>This information has been incorporated in to Section 9.6.1.2. Therefore, Table 9.6-1 is superfluous and may be deleted.</p>
Figure 9.6-1 Sh. 1	Figure 3.6-1 Sh. 1	Service Water System - Flow Diagram, Sheet 1, Replaced with Plant Drawing 9321-2722	Retain	No proposed changes.
Figure 9.6-1 Sh. 2	Figure 3.6-1 Sh. 2	Service Water System - Flow Diagram, Sheet 2, Replaced with Plant Drawing 209762	Retain	No proposed changes.
Figure 9.6-2	NA	Deleted	Delete	Previously deleted.
Figure 9.6-3	NA	Deleted	Delete	Previously deleted.
Figure 9.6-4	NA	Deleted	Delete	Previously deleted.
Figure 9.6-5 Sh. 1	Figure 3.6-2 Sh. 1	City Water System - Flow Diagram, Sheet 1, Replaced with Plant Drawing 192505	Retain	No proposed changes.

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Figure 9.6-5 Sh. 2	Figure 3.6-2 Sh. 2	City Water System - Flow Diagram, Sheet 2, Replaced with Plant Drawing 192506	Retain	No proposed changes.
Figure 9.6-5 Sh. 3	Figure 3.6-2 Sh. 3	City Water System - Flow Diagram, Sheet 3, Replaced with Plant Drawing 193183	Retain	No proposed changes.
Figure 9.6-6	Figure 3.6-3	Instrument Air - Flow Diagram, Replaced with Plant Drawing 9321-2036	Retain	No proposed changes.
Figure 9.6-7	Figure 3.6-4	Station Air - Flow Diagram, Replaced with Plant Drawing 9321-2035	Retain	No proposed changes.
9.7	3.7	Equipment and System Decontamination	Retain	No proposed changes.
9.7.1	3.7.1	Design Basis	Modify	This section is modified by eliminating the references to normal plant operation, reactor cool-down, and reactor coolant system operation and maintenance and clarifying that the activity can occur from SFP components.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.
9.7.2	3.7.2	Methods of Decontamination	Modify	The term "plant" is replaced with the term "facility." This better represents IP2 in the permanently shut down and defueled condition.
9.7.3	3.7.3	Decontamination Facilities	Modify	This section is modified by eliminating the discussion regarding the decontamination of shipping casks. This change is appropriate, because IP2 will not receive any new fuel in the permanently shut down and defueled condition.
				In addition, the section is modified by correcting the locations of the decontamination facilities, decontamination shower and washroom, and personnel decontamination kits. These changes improve the accuracy of the IP2 UFSAR.

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9.8	3.8	Primary Auxiliary Building Ventilation System	Retain	No proposed changes.
9.8.1	3.8.1	Design Basis	Modify	<p>This section is modified by eliminating the references to filters and normal operation of the plant.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. The DBAs that remain applicable in the permanently shut down and defueled condition do not credit the use of any air filtration to ensure that the resultant dose consequences remain within limits. Thus, the filters in the primary auxiliary building ventilation system are no longer required to serve a purpose.</p>
9.8.2	3.8.2	System Design and Operation	Modify	<p>This section is modified by eliminating the reference to filters and the containment building purge system and revising the section to address only operation of the primary auxiliary building ventilation system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment building purge system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>The DBAs that remain applicable in the permanently shut down and defueled condition do not credit the use of any air filtration to ensure that the resultant dose consequences remain within limits. Thus, the filters in the primary auxiliary building ventilation system are no longer required to serve a purpose.</p>



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Table 9.8-1	Table 3.8-1	Primary Auxiliary Building Ventilation System Component Data	Modify	<p>In addition, the section is modified by eliminating a reference to previously deleted material, including Figure 5.3-1. This is an administrative change to clean-up the section.</p> <p>This table is modified by eliminating the references to filters and the containment building purge system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the containment building purge system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>The DBAs that remain applicable in the permanently shut down and defueled condition do not credit the use of any air filtration to ensure that the resultant dose consequences remain within limits. Thus, the filters in the primary auxiliary building ventilation system are no longer required to serve a purpose.</p> <p>In addition, the table is modified by eliminating references to previously deleted material. This is an administrative change to clean-up the table.</p>
9.9	3.9	Control Room Ventilation System	Retain	No proposed changes.
9.9.1	NA	Design Basis	Delete	<p>This section addressed the design basis requirements for the control room ventilation system that ensured that the control room would remain habitable. This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in</p>

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				<p>accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for the filtration of control room air to mitigate the consequences of the accident. In addition, there are no requirements to maintain the habitability of the control room, because the DBAs may be mitigated via actions taken outside of the control room.</p>
9.9.2	3.9.1	System Design and Operation	Modify	<p>This section is modified by eliminating the references to filters, the safety injection signal, and the need to maintain the control room envelope during a chemical release. In addition, the reference to Section 7.2 of the UFSAR is eliminated, because that section is deleted in its entirety (see the Review Table for Chapter 7).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Consequently, the safety injection system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding this system in the IP2 UFSAR is obsolete.</p> <p>After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of</p>

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				decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for the filtration of control room air to mitigate the consequences of the accident. In addition, there are no requirements to maintain the habitability of the control room, because the DBAs may be mitigated via actions taken outside of the control room.
Figure 9.9-1	Figure 3.9-1	Central Control Room HVAC (Heating, Ventilation, and Air Conditioning), Replaced with Plant Drawings 252665 & 138248	Retain	No proposed changes
9.10	3.10	Fuel Storage Building Ventilation System	Retain	No proposed changes.
9.10.1	3.10.1	Design Basis	Modify	<p>This section is modified by replacing reference to “spent fuel pool” with SFP, eliminating the discussions regarding air filtration, and eliminating the discussion regarding the two supply systems that had been retired in place.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for the filtration of fuel storage building air to mitigate the consequences of the accident.</p>

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				In addition, the elimination of the discussion of the two supply systems removes historical information regarding equipment that had been retired in place.
9.10.2	3.10.2	System Design and Operation	Modify	<p>The change to the nomenclature regarding the SFP is an administrative change to ensure consistent references throughout the DSAR.</p> <p>This section is modified by replacing reference to “spent fuel pool” with SFP and eliminating the discussions regarding air filtration. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for the filtration of fuel storage building air to mitigate the consequences of the accident.</p> <p>In addition, the change to the nomenclature regarding the SFP is an administrative change to ensure consistent references throughout the DSAR. Also, references to previously deleted material, including Figure 5.3-1, are deleted</p>
9.10.3	3.10.3	Limiting Conditions for Operation (Fuel Storage Building Air Filtration System)	Modify	<p>This section is modified by eliminating the reference to “Fuel Storage Building Air Filtration System” in the title. This is an administrative change.</p>
9.10.4	3.10.4	Surveillance Requirements (Fuel Storage Building Air Filtration System)	Modify	<p>This section is modified by eliminating the reference to “Fuel Storage Building Air Filtration System” in the title, the references to refueling operations, and the discussions regarding filtration requirements. In addition, the reference to the term “operable” is replaced with a reference to “functional.”</p>

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After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations and refueling activities can no longer occur and core related design basis accidents are no longer possible.

After permanent shut down and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for the filtration of fuel storage building air to mitigate the consequences of the accident.

Additionally, the Permanently Defueled Technical Specifications will not contain any operability requirements. Thus, it is appropriate to replace the term “operable” with the term “functional.”

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10.1	3.11	Design Basis	Modify	<p>This section is proposed for deletion, because the vast majority of the information in subsection 10.1.1, and all of the information in subsections 10.1.2 through 10.1.4 are proposed for deletion. The information regarding Condenser #22 will be located to a summary discussion regarding the circulating water system in Chapter 3 of the Defueled Safety Analysis Report (DSAR).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system, are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system in the IP2 UFSAR is obsolete.</p>
10.1.1	3.11	Performance Objectives	Modify	<p>This section defines over-arching performance objectives for the turbine-generator systems, steam and feedwater system, the electrical generator, radiation monitors, and the auxiliary feedwater pumps. Condenser #22 will continue to perform a function in the defueled condition, and the information regarding it in Table 10.1-1 will be retained.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system, are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
10.1.2	NA	Load Change Capacity	Delete	<p>In addition, the section header is eliminated to support consolidation of the information in the DSAR.</p> <p>This section addressed the capability of the reactor, reactor coolant system, and turbine bypass and steam systems to withstand various load changes.</p>
10.1.3	NA	Functional Limits	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear power and nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the reactor, reactor coolant system, and the turbine bypass and steam systems are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the load change capability of these systems in the IP2 UFSAR is obsolete.</p> <p>This section defines that the steam and power conversion system possess backup means (power relief and code safety valves) of heat removal under any loss of normal heat sink (e.g., condenser isolation, loss of circulating water flow) to accommodate reactor shutdown heat rejection requirements.</p>
10.1.4	NA	Secondary Functions	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system, are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion systems, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.</p> <p>This section identifies secondary functions of the steam and power conversion system including providing steam for the turbine-driven auxiliary feedwater pump and</p>

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				operation of the air ejectors, the capability of the turbine bypass system to dissipate the heat in the reactor coolant following a full-load trip.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.
Table 10.1-1	Table 3.11-1	Steam and Power Conversion System Component Design Parameters	Modify	See the discussion for Section 10.1.1. The information regarding Condenser #22 will be retained.  In addition, the table will be retitled as “Design Parameters for Condenser #22. This is an administrative change.
Figure 10.1-1	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-1a	NA	Uprate PEPSE Model with New HP Turbine High Pressure Turbine Expansion	Delete	See the discussion for Subsection 10.1.1.
Figure 10.1-1b	NA	Uprate PEPSE Model with New HP Turbine Moisture Separator Reheater Train A	Delete	See the discussion for Subsection 10.1.1.
Figure 10.1-1c	NA	Uprate PEPSE Model with New HP Turbine Moisture Separator Reheater Train B	Delete	See the discussion for Subsection 10.1.1.
Figure 10.1-1d	NA	Uprate PEPSE Model with New HP Turbine Low Pressure Turbine Expansion	Delete	See the discussion for Subsection 10.1.1.



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Figure 10.1-1e	NA	Uprate PEPSE Model with New HP Turbine Main Condensers	Delete	See the discussion for Subsection 10.1.1.
Figure 10.1-1f	NA	Uprate PEPSE Model with New HP Turbine Notes and Significant Results	Delete	See the discussion for Subsection 10.1.1.
Figure 10.1-2	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-2a	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-3	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-4	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-5	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-6	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.1-7	NA	Load Heat Balance Diagram at 1,034,072 kWe	Delete	See the discussion for Subsection 10.1.1
10.2 10.2.1, including Subsections 10.2.1.1 through 10.2.1.5	NA NA	System Design and Operation Main Steam System	Delete Delete	<p>This Section is deleted, because all of its Subsections are proposed for deleted.</p> <p>The main steam system conducted steam from the steam generators to the turbine generator unit.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the main steam system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the main steam system in the IP2 UFSAR is obsolete.</p>

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10.2.2	NA	Turbine Generator	Delete	<p>The turbine generator received steam from the main steam system and generated electrical power.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the turbine generator is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the turbine generator in the IP2 UFSAR is obsolete.</p>
10.2.3	NA	Turbine Controls	Delete	<p>This section describes the controls for the turbine generator.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the turbine generator is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the turbine generator and its' controls in the IP2 UFSAR is obsolete.</p>
10.2.4	3.11	Circulating Water System	Modify	<p>The circulating water system provided the condensers with a continuous supply of cooling water, for removing the heat rejected by the turbine generator, and the ability to inject sodium hypochlorite. The circulating water system will continue to be utilized in the permanently shut down and defueled state. The section is revised to reflect the new function to provide dilution flow for liquid waste discharges.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced</p>

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10.2.5	3.11	Condenser and Auxiliaries	Modify	<p>and electrical power cannot be generated. Consequently, the circulating water system function will be different and simplified in the permanently shut down and defueled condition.</p> <p>The condensers and their auxiliaries provided a heat sink for the turbine generator. Condenser #22 will continue to perform a function in the permanently defueled state. The section is modified to reflect the revised function for Condenser #22,</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the condensers, with the exception of Condenser #22, and their auxiliaries are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the condensers and their auxiliaries, with the exception of Condenser #22 and its auxiliaries, in the IP2 UFSAR is obsolete. The description of Condenser #22 is updated to reflect the simplified function for Condenser #22 in the permanently shut down and defueled condition.</p>
10.2.6	NA	Condensate and Feedwater System	Delete	<p>In addition, the section header is eliminated to support consolidation of information in the DSAR.</p> <p>The condensate and feedwater system provided feedwater to the four steam generators. It is composed of a condensate system, condensate makeup and surge system, heater drain system, feedwater system, and auxiliary feedwater system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the condensate and feedwater system is no longer required to perform a function in the permanently shut</p>

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10.2.6.1	NA	Condensate System	Delete	<p>down and defueled state. Thus, the information regarding the condensate and feedwater system in the IP2 UFSAR is obsolete.</p> <p>The condensate system transfers condensate and low-pressure heater drains from the condenser hotwell through five stages of feedwater heating to the suctions of the main feedwater pumps.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the condensate system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the condensate system in the IP2 UFSAR is obsolete.</p>
10.2.6.2	NA	Main Feedwater System	Delete	<p>The main feedwater system supplied feedwater to the steam generators to maintain water inventory.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the main feedwater system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the main feedwater system in the IP2 UFSAR is obsolete.</p>
10.2.6.3	NA	Auxiliary Feedwater System	Delete	<p>The auxiliary feedwater system supplied high-pressure feedwater to the steam generators to maintain water inventory. This was needed to remove decay heat energy from the reactor coolant system by secondary-side steam release in the event that the main feedwater system was inoperable.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
10.2.6.4	NA	System Chemistry	Delete	<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the auxiliary feedwater system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the auxiliary feedwater system in the IP2 UFSAR is obsolete.</p> <p>This section describes the system chemistry for the steam and power conversion system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.</p>
10.2.7	3.11	Codes and Classifications	Modify	<p>This section provides the codes and classifications for the steam and power conversion system. The information is retained as it pertains to the circulating water system and Condenser #22. The information regarding the steam generator vessel is eliminated.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, is no longer required to perform a function in the permanently shut down</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				and defueled state. Thus, the information regarding the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.
				In addition, the section header is eliminated to support consolidation of information in the DSAR.
Table 10.2-1	Table 3.11-2	Codes and Classifications	Modify	This table provides the codes and classifications for the steam and power conversion system. It is modified to eliminate the discussion of the steam generator vessel, turbine generator, crossover, crossunder, and lube oil piping, and feedwater heater extraction steam inlet nozzles. Information that pertains to Condenser #22 and its auxiliaries is maintained.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.
Figure 10.2-1 Sh. 1	NA	Main Steam Flow Diagram, Sheet 1, Replaced with Plant Drawing 227780	Delete	See the discussion for Subsection 10.2.1.
Figure 10.2-1 Sh. 2	NA	Main Steam Flow Diagram, Sheet 2, Replaced with Plant Drawing 9321-2017	Delete	See the discussion for Subsection 10.2.1.
Figure 10.2-1 Sh. 3	NA	Main Steam Flow Diagram, Sheet 3, Replaced with Plant Drawing 235308	Delete	See the discussion for Subsection 10.2.1.
Figure 10.2-2	NA	Turbine Generator Building General Arrangement,	Delete	This figure is not referred to in the IP2 UFSAR. Thus, the removal of the figure is an administrative change.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
		Operating Floor, Replaced with Plant Drawing 9321-2004		
Figure 10.2-3	NA	Turbine Generator Building General Arrangement, Cross Section, Replaced with Plant Drawing 9321-2008	Delete	This figure is not referred to in the IP2 UFSAR. Thus, the removal of the figure is an administrative change.
Figure 10.2-4	Figure 3.11-1	Condenser Air Removal and Water Box Priming – Flow Diagram, Replaced with Plant Drawing 9321-2025	Retain	No changes.
Figure 10.2-5 Sh. 1	NA	Condensate and Boiler Feed Pump Suction - Flow Diagram, Sheet 1, Replaced with Plant Drawing 9321-2018	Delete	See the discussion for Subsection 10.2.6.1.
Figure 10.2-5 Sh. 2	NA	Condensate and Boiler Feed Pump Suction Flow Diagram, Sheet 2, Replaced with Plant Drawing 235307	Delete	See the discussion for Subsection 10.2.6.1.
Figure 10.6 Sh. 1	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.2-6 Sh. 2	NA	Deleted	Delete	This Figure was previously deleted. Removal of the placeholder is an administrative change.
Figure 10.2-7	NA	Boiler Feedwater Flow Diagram, Replaced with Plant Drawing 9321-2019	Delete	See the discussion for Subsection 10.2.6.2.
Figure 10.2-8	NA	Steam Turbine-Driven Auxiliary Feedwater Pump Estimated Performance Characteristics	Delete	See the discussion for Subsection 10.2.6.3.
Figure 10.2-9	NA	Motor-Driven Auxiliary Feedwater Pump Estimated Performance Characteristics	Delete	See the discussion for Subsection 10.2.6.3.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
10.3	NA	System Evaluation	Delete	This section is deleted, because all of its' subsections are proposed to be deleted.
10.3.1	NA	Safety Features	Delete	<p>This section describes the trips, automatic control actions, and alarms for the steam and power conversion system that permit appropriate corrective action to be taken to protect the reactor coolant system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, is no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the steam and power conversion system, with the exception of Condenser #22 and the circulating water system, in the IP2 UFSAR is obsolete.</p>
10.3.2	NA	Secondary-Primary Interactions	Delete	<p>This section describes the secondary to primary interactions regarding a turbine trip, failure of a main feedwater pump, failure of both main feedwater pumps, main steam line pressure relief, and steam generator tube leaks.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the events described above cannot occur in the permanently shut down and defueled state. Thus, the information is obsolete.</p>
10.3.3	NA	Single Failure Analysis	Delete	<p>This section provides a single failure analysis of the auxiliary feedwater system, steam line isolation system, and the turbine bypass system.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no</p>



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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
Table 10.3-1 10.4	NA NA	Single Failure Analysis Tests and Inspections	Delete Delete	<p>longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, the auxiliary feedwater system, steam line isolation system, and the turbine bypass system are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding the auxiliary feedwater system, steam line isolation system, and the turbine bypass system in the IP2 UFSAR is obsolete.</p> <p>See the discussion for Subsection 10.3.3.</p> <p>This section defines the tests and inspections for the main steam isolation valves, auxiliary feedwater pumps, and piping and fittings in the extraction steam, turbine crossunder, heater drain pump discharge, condensate, feedwater and auxiliary feedwater systems.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, nuclear steam cannot be produced and electrical power cannot be generated. Consequently, systems and components described above are no longer required to perform a function in the permanently shut down and defueled state. Thus, the information regarding those systems and components in the IP2 UFSAR is obsolete.</p>

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**CHAPTER 11 – WASTE DISPOSAL AND RADIATION PROTECTION SYSTEM**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
11.1	4.1	Waste Disposal System	Retain	No proposed changes.
11.1.1	4.1.1	Design Bases	Modify	<p>This section is modified by eliminating the reference to “normal operation” and the discussion of the evaporators.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, normal operations of the primary system will no longer occur.</p>
11.1.2	4.1.2	System Design and Operation	Modify	<p>The waste evaporators were previously retired as identified in UFSAR Section 11.1.2.2.9. Thus, the information regarding the evaporators in the IP2 UFSAR is obsolete.</p> <p>This section is modified by eliminating discussions regarding normal operation of the primary system, replacing a reference to “primary plant” and “plant site” with a reference to “facility,” and correcting the title of the Annual Radioactive Effluent Release Report.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, normal operations of the primary system will no longer occur.</p> <p>In addition, referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.</p>
11.1.2.1	4.1.2.1	System Description	Retain	<p>The report title Annual Effluent and Waste Disposal Report was incorrect. The correct title is the Annual Radioactive Effluent Release Report.</p> <p>No proposed changes.</p>

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11.1.2.1.1	4.1.2.1.1	Liquid Processing	Modify	<p>This section is modified by eliminating the reference to “normal plant operation,” the discussions of steam generator blowdown, demineralizer regeneration, waste condensate pumps, and primary to secondary leakage. The discussions regarding the reactor coolant drain tank and the distillate storage tanks are revised to reflect how they will be operated and the remaining sources that will be collected in or transferred by the reactor coolant drain tank in the permanently shut down and defueled condition. In addition, the term “plant” is replaced with the term “facility,” the term “distillate” is replaced with “processed water,” and the term “technical specifications” with “ODCM.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, normal operations of the primary system will no longer occur. Consequently, steam generator blowdown and primary to secondary leakage will no longer be possible and the waste condensate pumps are no longer required to perform a function in the permanently shut down and defueled condition. Thus, the information regarding these processes and equipment in the IP2 UFSAR is obsolete.</p> <p>In addition, referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.</p> <p>IP2 no longer utilizes distillation for demineralizer water processing. Thus, the term “distillate” is replaced with the term “processed water” to improve the accuracy of the UFSAR.</p> <p>The reference to the technical specifications is replaced with a reference to the ODCM to correct a historical error.</p>
11.1.2.1.2	4.1.2.1.2	Gas Processing	Modify	<p>This section is modified by eliminating the references to “normal operation,” “plant operations,” and the discussions regarding degassing the reactor coolant, purging the volume control tank, and supplying hydrogen to the primary system. The section is revised to reflect how it will be utilized in the permanently shut down and defueled condition and replace the term “operator” with the term “site personnel.” In addition,</p>

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the section is revised to correct the reference to the Annual Radioactive Effluent Release Report and its contents.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, degassing the reactor coolant, purging the volume control tank, and supplying hydrogen to the primary system will no longer occur. Thus, the information regarding these processes in the IP2 UFSAR is obsolete.

In addition, replacing the term “operator” with the term “site personnel” is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.

The report title Annual Effluent and Waste Disposal Report was incorrect. The correct title is the Annual Radioactive Effluent Release Report. In addition, this report contains the actual amounts of gas activity (by isotope) released to the environment, not the maximum expected annual gaseous release by isotope.

11.1.2.1.3	4.1.2.1.3	Solids Processing	Modify	The term “plant” is replaced with the term “facility.” The term “facility” better reflects IP2 in the permanently shut down and defueled condition.
11.1.2.2	4.1.2.2	Components	Retain	No proposed changes.
11.1.2.2.1	NA	[Deleted]	Delete	Previously deleted.
11.1.2.2.2	4.1.2.2.1	Chemical Drain Tank	Retain	No proposed changes.
11.1.2.2.3	4.1.2.2.2	Reactor Coolant Drain Tank	Retain	No proposed changes.
11.1.2.2.4	4.1.2.2.3	Waste Holdup Tank	Retain	No proposed changes.
11.1.2.2.5	4.1.2.2.4	Sump Tank and Sump Tank Pumps	Retain	No proposed changes.
11.1.2.2.6	4.1.2.2.5	Spent Resin Storage Tank	Modify	The term “plant” is replaced with the term “facility.” The term “facility” better reflects IP2 in the permanently shut down and defueled condition.
11.1.2.2.7	4.1.2.2.6	Gas Decay Tanks	Modify	This section is modified by eliminating the references to “operation with 1 percent fuel defects,” “normal operation,” and “cold shutdown.” In addition, the term “operator” is replaced with the term “site personnel.”

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After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, the terms “operation with 1 percent fuel defects,” “normal operation,” and “cold shutdown” are no longer relevant.

In addition, replacing the term “operator” with the term “site personnel” is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.

11.1.2.2.8	4.1.2.2.7	Compressors	Modify	This section is modified by replacing the term “plant” with the term “facility.”
11.1.2.2.9	NA	Waste Evaporator Package	Delete	Referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate. This section is proposed to be deleted in its entirety, because the waste evaporator package was previously retired.
11.1.2.2.10	4.1.2.2.8	Distillate Storage Tanks	Retain	No proposed changes
11.1.2.2.11	NA	Waste Condensate Tanks	Delete	This section is proposed to be deleted in its entirety. The waste condensate tanks will not perform a function in the permanently shut down and defueled condition.
11.1.2.2.12	NA	Balers	Delete	This section is proposed to be deleted in its entirety, because the balers were previously retired and removed from the facility.
11.1.2.2.13	4.1.2.2.9	Nitrogen Manifold	Retain	No proposed changes.
11.1.2.2.14	NA	Hydrogen Manifold	Delete	This section is proposed to be deleted. Hydrogen was supplied to the volume control tank to maintain the hydrogen concentration in the reactor coolant.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, supplying hydrogen to the primary system will no longer be required. Thus, the information regarding the hydrogen manifold in the IP2 UFSAR is obsolete.

11.1.2.2.15	4.1.2.2.10	Gas Analyzer	Modify	This section is modified by replacing the term “operator” with the term “site personnel.” This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.
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11.1.2.2.16	4.1.2.2.11	Pumps	Retain	No proposed changes.
11.1.2.2.17	4.1.2.2.12	Piping	Retain	No proposed changes.
11.1.2.2.18	4.1.2.2.13	Valves	Retain	No proposed changes.
11.1.3	4.1.3	Design Evaluation	Retain	No proposed changes.
11.1.3.1	4.1.3.1	Liquid Wastes	Modify	This section is modified by replacing the term “plant” with the term “facility.” In addition, an editorial change is made and correcting the title for the Annual Radioactive Effluent Release Report.  Referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.  The report title Annual Effluent and Waste Disposal Report was incorrect. The correct title is the Annual Radioactive Effluent Release Report.
11.1.3.2	4.1.3.2	Gaseous Wastes	Modify	This section is modified by eliminating the discussions of gaseous waste sources that will no longer exist in the permanently shut down and defueled condition, and correcting the title of the Annual Radioactive Effluent Release Report.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, boron dilution of the reactor coolant, degassing the reactor coolant, and depressurizing the containment atmosphere will no longer occur. Thus, the information regarding these processes in the IP2 UFSAR is obsolete.  The term “plant” is replaced with the term “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.  The report title Annual Effluent and Waste Disposal Report was incorrect. The correct title is the Annual Radioactive Effluent Release Report.
11.1.3.3	4.1.3.3	Solid Wastes	Modify	This section is modified by eliminating discussions regarding changes and processes that are or could be utilized to reduce the amount of solid waste. These are good practices, but they do not need to be specifically addressed in the UFSAR. In addition, the discussions regarding the solidification of waste liquid concentrates and the

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process for solidifying waste liquid concentrates and sludges in liners are eliminated, because these activities are no longer conducted.

11.1.4	4.1.3.4	Minimum Operating Conditions	Retain	No proposed changes.
Table 11.1-1	NA	Deleted	Delete	Previously deleted.
Table 11.1-2	NA	Deleted	Delete	Previously deleted.
Table 11.1-3	NA	Deleted	Delete	Previously deleted.
Table 11.1-4	NA	Deleted	Delete	Previously deleted.
Table 11.1-5	NA	Deleted	Delete	Previously deleted.
Table 11.1-6	Table 4.1-1	Waste Disposal System Components Code Requirements	Modify	This table is modified to eliminate the references to the waste condensate tank. Refer to the discussion provided for UFSAR Subsection and 11.1.2.2.11.
Table 11.1-7	Table 4.1-2	Component Summary Data	Modify	This table is modified to eliminate the references to the waste condensate tank, waste condensate pump, and waste evaporator feed pump. Refer to the discussions provided for UFSAR Subsections 11.1.2.2.9 and 11.1.2.2.11.
Table 11.1-9	NA	Deleted	Delete	Previously deleted.
Figure 11.1-1 Sh. 1	Figure 4.1-1 Sh. 1	Waste Disposal System Process Flow Diagram, Sheet 1, Replaced with Plant Drawing 9321-2719	Retain	No proposed changes.
Figure 11.1-1 Sh. 2	Figure 4.1-1 Sh. 2	Waste Disposal System Process Flow Diagram, Sheet 2. Replaced with Plant Drawing 9321-2730	Retain	No proposed changes.
11.2	4.2	Radiation Protection	Retain	No proposed changes.
11.2.1	4.2.1	Design Bases	Modify	This section is modified to eliminate the discussion regarding operational and design ALARA training programs that are provided to station and support engineering and technical groups. This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.
11.2.1.1	4.2.1.1	Monitoring Radioactivity Releases	Modify	The term “plant” is replaced with the term “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition This section is modified by eliminating the discussions regarding monitoring the containment atmosphere, the containment fan cooler service water discharge, the condenser air ejectors, and steam generator blowdown. In addition, the discussion

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regarding anticipated transients and containment accident conditions are eliminated. The references to plant procedures, plant emergency plan, and plant personnel are replaced with references to procedures, emergency plan, and personnel.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, accidents within the containment and operational transients can no longer occur. Chapter 14 is revised to reflect the permanently shut down and defueled condition. The only remaining applicable design basis accidents (DBAs) are the Fuel Handling Accident (FHA) and a gaseous or liquid waste release. In addition, there is no longer a need to monitor the containment atmosphere, the containment fan cooler service water discharge, the condenser air ejectors, or steam generator blowdown.

The replacement of the references to plant procedures, plant emergency plan, and plant personnel with references to procedures, emergency plan, and personnel are administrative changes.

11.2.1.2	4.2.1.2	Monitoring Fuel and Waste Storage	Retain	No proposed changes.
11.2.1.3	4.2.1.3	Fuel and Waste Storage Radiation Shielding	Retain	No proposed changes.
11.2.1.4	4.2.1.4	Protection Against Radioactivity Release from Spent Fuel and Waste Storage	Retain	No proposed changes.
11.2.2	4.2.2	Shielding	Retain	No proposed changes.
11.2.2.1	4.2.2.1	Design Basis	Modify	This section is modified by eliminating the references to reactor operation, normal operation, safe shutdown, and reactor operating modes, replacing the reference to “operating personnel” with a reference to “site personnel,” the reference to “plant” with a reference to “facility,” the reference to “operating procedures” with a reference to “procedures,” and eliminating a discussion regarding a historical review of radiation and shielding design. In addition, the discussion regarding shielding and its role to limit offsite doses in the event of a hypothetical accident is eliminated,



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along with the references to primary shielding, secondary shielding, and accident shielding.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the plant will never be operated again. The mission of the site is no longer power operations or electrical power generation but the safe maintenance and storage of spent fuel.

Replacing the term “operating personnel” with the term “site personnel” is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.

Referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.

The replacement of the reference to operating procedures with a reference to procedures, is an administrative change. The discussion regarding the radiation and shielding design review was eliminated, because it is historical. It does not pertain to the permanently shut down and defueled condition.

These analyses do not credit shielding to limit offsite dose consequences.

The primary shield, secondary shield, and accident shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the primary shield, secondary shield, and accident shield in the UFSAR are obsolete.

11.2.2.1.1

NA

Primary Shield

Delete

This section is proposed to be deleted in its entirety. The DBAs that remain applicable in the defueled condition are the FHA and release of gaseous or liquid waste. The primary shield will not be required to perform any function in the permanently shut down and defueled condition.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR

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11.2.2.1.2	NA	Secondary Shield	Delete	<p>50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the primary shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the primary shield in the UFSAR are obsolete.</p> <p>This section is proposed to be deleted in its entirety. The secondary shield will not be required to perform any function in the permanently shut down and defueled condition.</p>
11.2.2.1.3	NA	Accident Shield	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the secondary shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the secondary shield in the UFSAR are obsolete.</p> <p>This section is proposed to be deleted in its entirety. The accident shield will not be required to perform any function in the permanently shut down and defueled condition.</p>
11.2.2.1.4	4.2.2.1.1	Fuel Handling Shield	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the accident shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the accident shield in the UFSAR are obsolete.</p> <p>This section is modified by eliminating the discussion of removal and transfer of spent fuel assemblies and control rod clusters from the reactor vessel to the spent fuel pit.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the spent fuel assemblies and control rod clusters will be removed as part of the permanently defueled condition.</p>

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11.2.2.1.5	4.2.2.1.1	Auxiliary Shield	Modify	<p>This section is modified by eliminating the reference to the residual heat removal system and discussions regarding normal operations and accident conditions. In addition, the section is modified by replacing the term “operator” with the term “site personnel.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Consequently, the residual heat removal system does not perform a function in the permanently shut down and defueled condition. Also, the DBAs that remain applicable in the defueled condition (FHA and release of gaseous or liquid waste) do not credit operator action; thus, there would be no actions that would require personnel to be shielded in those events.</p> <p>Replacing the term “operator” with “site personnel” is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.</p>
11.2.2.2	4.2.2.2	Shielding Design	Retain	No proposed changes.
11.2.2.2.1	NA	Primary Shield	Delete	<p>This section is proposed to be deleted in its entirety. The primary shield will not be required to perform any function in the permanently shut down and defueled condition.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the primary shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the primary shield in the UFSAR are obsolete.</p>
11.2.2.2.2	NA	Secondary Shield	Delete	<p>This section is proposed to be deleted in its entirety. The secondary shield will not be required to perform any function in the permanently shut down and defueled condition.</p>

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11.2.2.2.3	NA	Accident Shield	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the secondary shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the secondary shield in the UFSAR are obsolete.</p> <p>This section is proposed to be deleted in its entirety. The accident shield will not be required to perform any function in the permanently shut down and defueled condition.</p>
11.2.2.2.4	4.2.2.2.1	Fuel Handling Shield	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the accident shield will no longer be required to perform a function in the permanently shut down and defueled condition. As a result, the discussions of the accident shield in the UFSAR are obsolete.</p> <p>The section is modified by eliminating the discussions regarding the fuel transfer canal, the conditions required for fuel transfer from the vessel to the spent fuel pit, and the conditions required for refueling. In addition, the refueling shield is retitled the fuel handling shield to be consistent with the section title.</p>
11.2.2.2.5	4.2.2.2.2	Auxiliary Shield	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the spent fuel assemblies and control rod clusters will be removed as part of the permanently defueled condition.</p> <p>Renaming the refueling shield as the fuel handling shield is an administrative change. This section is modified to eliminate the discussions regarding access to the auxiliary building during reactor operation.</p>

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR

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50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the plant will be permanently shut down and defueled.

11.2.3	4.2.3	Radiation Monitoring System	Retain	No proposed changes.
11.2.3.1	4.2.3.1	Design Bases	Modify	This section is modified by replacing references to “plant” with references to “facility” and a reference to “safe operation of the plant” with a reference to “safe maintenance of the facility.”
Referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.				
After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the plant will be permanently shut down and defueled. As a result, the facility will be maintained to ensure safe storage of spent fuel.				
11.2.3.2	4.2.3.2	Radiation Monitoring Betterment Program	Modify	This section is modified by eliminating a discussion regarding the replacement of the original process radiation monitoring system. This is an administrative change. The paragraph is unnecessary, and reflects a historical information that is not relevant to the permanently shut down and defueled condition.
In addition, this section is revised to denote that the Appendix R / SBO diesel generator will be the source of power in the event of a loss of other power sources. This is consistent with changes made to Chapter 8, as discussed in that Chapter’s review table.				
11.2.3.2.1	4.2.3.2.1	Service Water from Component Cooling Heat Exchangers Monitors	Retain	No proposed changes.
11.2.3.2.2	NA	Containment Air Monitors	Delete	This section is proposed to be deleted in its entirety. Monitors R-41 and R-42 monitor the containment atmosphere for particulate and gaseous activity, respectively.

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After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). These monitors will not be required in the permanently shut down and defueled condition, because there will be no DBAs that can occur in the containment.

11.2.3.2.3	4.2.3.2.2	Plant Vent Air Monitors	Modify	This section is modified to eliminate the discussion of R-43 and the requirement for R-44 to initiate containment ventilation isolation. In addition, the section is modified to denote that the plant vent air monitors were historically seismically qualified and as class IE.
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After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). There will be no DBAs that can occur in the containment; thus, there is no need to isolate containment. R-43 has been retired. R-44 will be retained in the permanently shut down and defueled condition. However, they are not credited as part of mitigation of any of the remaining DBAs. Thus, it is no longer required to be maintained as seismically qualified or class IE.

11.2.3.2.4	NA	Condenser Air Ejector Discharge Monitor	Delete	This section is proposed to be deleted in its entirety. There will be need to monitor the gas removed from the condenser by the air ejector.
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After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). The condenser air ejector will not be required to function in the permanently shut down and defueled condition. As a result, there will be no air to monitor.

11.2.3.2.5	NA	Service Water Return from Containment Fan Cooler Units	Delete	This section is proposed to be deleted in its entirety. Monitors R-46 and R-53 monitor the service water return from the containment fan cooler units.
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50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). There will be no DBAs that can occur in the containment. Thus, these monitors will not be required in the permanently shut down and defueled condition, because the containment fan cooler units are not required to perform any function in that condition.

11.2.3.2.6      4.2.3.2.3      Component Cooling  
Radiation Monitor

Modify

This section is modified to eliminate the reference to the reactor coolant system and the residual heat removal loop. In addition, the requirement for the system to be capable of performing its function after a safe shutdown earthquake is eliminated.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, the reactor coolant system and the residual heat removal loop are not required to perform a function in the permanently shut down and defueled condition. In addition, given that the plant is permanently shut down, the capability to achieve safe shutdown following an earthquake is no longer required.

After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for any active components to mitigate the consequences of the accident.

11.2.3.2.7      NA      Waste Condensate Tank  
Discharge Line

Delete

This section is proposed for deletion in its entirety, because it was previously removed from service and retired in place.

11.2.3.2.8      NA      Steam Generator Blowdown  
Monitor

Delete

This section is proposed for deletion. There is no need to monitor steam generator blowdown in the permanently shut down and defueled condition.

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				50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, steam generator blowdown will not be generated any longer. Thus, eliminating the need to monitor that process fluid.
11.2.3.2.9	4.2.3.2.4	Waste Gas Decay Tank	Retain	No proposed changes.
11.2.3.2.10	NA	Secondary Boiler Blowdown Purification System	Delete	This section is proposed for deletion. There is no need to monitor secondary boiler blowdown in the permanently shut down and defueled condition.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, secondary boiler blowdown will not be generated any longer. Thus, eliminating the need to monitor that process fluid.
11.2.3.2.11	NA	Steam Generator Blowdown Purification System Cooling Water Monitor	Delete	This section is proposed for deletion. There is no need to monitor steam generator blowdown in the permanently shut down and defueled condition.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, steam generator blowdown will not be generated any longer. Thus, eliminating the need to monitor that process fluid.
11.2.3.2.12	4.2.3.2.5	Liquid Waste Distillate Radiation Monitor	Modify	The name of the monitor is changed from Liquid Waste Distillate Radiation Monitor to Liquid Waste Effluent Radiation Monitor to match the ODCM.
11.2.3.2.13	NA	Steam Generator Secondary System Monitors	Delete	This section is proposed for deletion in its entirety, because these monitors were previously removed from service and retired in place.
11.2.3.2.14	NA	Effluent Discharge to ENIP3	Delete	This section is proposed for deletion. R-57 monitors the contents of the sewage ejector pit, located in IP1. Following the permanent shut down and defueling of IP2, this monitor will no longer be required to perform a function.
11.2.3.2.15	NA	House Service Boilers	Delete	This section is proposed for deletion. R-59 monitors the condensate return. Following the permanent shut down and defueling of IP2, this monitor will no longer be required to perform a function.



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11.2.3.2.16	4.2.3.2.6	Stack Radiation Monitor	Modify	This section is modified by correcting the information regarding the R-60 monitor. It is the Unit 1 Stack Radiation Monitor and to denote that it only monitors noble gas. Particulates and iodines are collected on filters and analyzed in the count room.
11.2.3.2.17	NA	Maintenance and Outage Building Ventilation Exhaust	Delete	This section is proposed for deletion. R-5976 monitors the air exhausted from the 95' elevation of the Maintenance and Outage Building. Following the permanent shut down and defueling of IP2, this monitor will no longer be required to perform a function.
11.2.3.2.18	4.2.3.2.7	Sphere Foundation Sump Liquid Effluent	Modify	The name of the Sphere Foundation Sump monitor is changed to Sphere Foundation Drain Sump monitor to match the ODCM.
11.2.3.2.19	NA	Main Steam/Steam Generator Tube Leakage	Delete	This section is proposed for deletion. R-61A, R-61B, R-61C, and R-61D are N-16 monitors located near the main steam lines in the Auxiliary Boiler Feed Pump Building. They will alarm in the event of a steam generator tube leak.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, the possibility of a steam generator tube leak is eliminated. Thus, these monitors are not required to perform a function in the permanently shut down and defueled condition.
11.2.3.3	4.2.3.3	Original Radiation Monitoring System	Retain	No proposed changes.
11.2.3.3.1	4.2.3.3.1	Control Room Cabinet	Modify	This section is modified to eliminate the historical discussion regarding the installation of R-11, R-12, R-13, R-14, R-15, R-16, R-17, R-18, R-19, R-20, and R-23 have been installed in a new radiation recorder panel SA-1. As discussed in UFSAR Subsections 11.2.3.3.4.1 through 11.2.3.4.9, the referenced monitors are no longer functional. Thus, this discussion is obsolete.
11.2.3.3.2	4.2.3.3.2	Monitor Channel Output	Retain	No proposed changes.
11.2.3.3.3	4.2.3.3.3	Operating Conditions	Modify	This section is modified by replacing the reference to “plant” with a reference to “facility.” Referring to IP2 as a plant in the defueled condition is inappropriate, because it is no longer a generation unit. Thus, the term facility is considered to be more appropriate.
				In addition, the section is revised by eliminating the discussion of the portable alarming area radiation monitors and continuous area monitors that were utilized in

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				the Unit 1 area for interim storage of dry active wastes. These monitors are no longer in use.
11.2.3.3.4	NA	Original Process Radiation Monitoring System	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsections 11.2.3.3.4.1 through 11.2.3.3.4.11 define that the monitors and detectors are no longer functional. As a result, the entire discussion regarding the original process radiation monitoring system is obsolete.
11.2.3.3.4.1	NA	Containment and Plant Vent Air Particulate Monitors (R-11 and R-13)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.1 identifies that these monitors are no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.2	NA	Containment Radioactive Gas Monitor (R-12)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.2 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.3	NA	Plant Vent Gas Monitor (R-14)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.3 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.4	NA	Condenser Air Ejector Gas Monitor (R-15)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.4 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.5	NA	Containment Fan Cooling Water Monitors (R-16 and R-23)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.5 identifies that these monitors are no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.6	NA	Component Cooling Loop Liquid Monitor (R-17)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.6 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.7	NA	Waste Disposal System Liquid Effluent Monitor (R-18)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.7 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.8	NA	Waste Disposal System Gas Analyzer Monitor (R-20)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.8 identifies that this monitor was replaced by another monitor. As a result, the discussion is obsolete.
11.2.3.3.4.9	NA	Steam Generator Liquid Sample Monitor (R-19)	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.9 identifies that this monitor is no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.10	NA	Gross Failed Fuel Detector	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.10 identifies that this detector is no longer functional. As a result, the discussion is obsolete.

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11.2.3.3.4.11	NA	Iodine-131 Monitors	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsection 11.2.3.3.4.11 identifies that these monitors are no longer functional. As a result, the discussion is obsolete.
11.2.3.3.4.12	NA	Calibration of Process and Effluent Monitors	Delete	This section is proposed to be deleted in its entirety. UFSAR Subsections 11.2.3.3.4.1 through 11.2.3.3.4.11 define that the monitors and detectors are no longer functional. As a result, the entire discussion regarding the original process radiation monitoring system is obsolete.
11.2.3.3.5	4.2.3.3.4	Original Area Radiation Monitoring System	Modify	This section is modified by eliminating the discussion of the IP1 area radiation monitoring system and the containment, charging pump room, sampling room, and incore instrument area channels of the IP2 area radiation monitoring system.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). As a result, the IP1 area radiation monitoring system and the containment, charging pump room, sampling room, and incore instrument area channels of the IP2 area radiation monitoring system will no longer be required to perform a function in the permanently shut down and defueled condition.
11.2.3.4	4.2.3.4	NUREG-0737 Monitors	Retain	No proposed changes.
11.2.3.4.1	NA	Containment High Range Radiation Monitors (R-25 and R-26)	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, accidents within the containment can no longer occur. Chapter 14 is revised to reflect the permanently shut down and defueled condition. The only remaining applicable DBAs are the FHA and a gaseous or liquid waste release. As a result, the containment high range radiation monitors are no longer required to perform a function in the permanently shut down and defueled condition.
11.2.3.4.2	4.2.3.4.1	High-Range, Noble Gas Monitor (R-27)	Modify	The name of the R-27 monitor is changed from High Range, Noble Gas to Wide Range Gas. R-27 has 3 detectors to cover low, mid, and high ranges.

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11.2.3.4.3	NA	Main Steam Line Radiation Monitors (R-28, R-29, R-30, and R-31)	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, an accident regarding the primary systems can no longer occur. Chapter 14 is revised to reflect the permanently shut down and defueled condition. The only remaining applicable DBAs are the FHA and a gaseous or liquid waste release. As a result, the main steam line radiation monitors are no longer required to perform a function in the permanently shut down and defueled condition.</p>
11.2.3.4.4	NA	[Deleted]	Delete	Previously deleted.
11.2.3.4.5	NA	PAB Breaker Service Access Area Radiation Monitor R-5987	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the majority of DBAs can no longer occur. Chapter 14 is revised to reflect the permanently shut down and defueled condition. The only remaining applicable DBAs are the FHA and a gaseous or liquid waste release. These DBAs do not require access to service accident mitigation equipment. As a result, the PAB breaker service access area radiation monitor is no longer required to perform a function in the permanently shut down and defueled condition.</p>
11.2.3.4.6	NA	Post Accident Sampling System Monitors	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the majority of DBAs can no longer occur. Chapter 14 is revised to reflect the permanently shut down and defueled condition. The only remaining applicable DBAs are the FHA radiation monitors are no</p>

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				longer required to perform a function in the permanently shut down and defueled condition.
11.2.3.4.7	4.2.3.4.2	Control Room Air Intake	Modify	This section is modified by eliminating the requirement to switch the Control Room ventilation system to the pressurization mode in the event of a high radiation condition.
				After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shut down and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. Based on this analysis, there are no requirements for any active components to mitigate the consequences of the accident.
11.2.4	4.2.4	Environmental Monitoring Program	Retain	No proposed changes.
11.2.5	4.2.5	Radiation Protection and Medical Programs	Modify	The title of this section is retained to support consolidation of material into the DSAR.
				The content of this section is proposed for deletion in its entirety. It provided a historical discussion regarding action that was taken to upgrade the station's radiological controls by Consolidated Edison circa 1986. This information is historical and obsolete.
11.2.5.1	4.2.5.1	Personnel Monitoring	Retain	No proposed changes.
11.2.5.2	4.2.5.2	Personnel Protective Equipment	Modify	This section is modified by eliminating the reference to "arising from plant operations."
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, plant operations will no longer occur.
11.2.5.3	4.2.5.3	Facilities and Access Provisions	Modify	This section is modified by replacing a reference to "plant procedures" with "procedures." This is an administrative change to eliminate an unnecessary adjective.

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11.2.5.4	4.2.5.4	Radiation Instrumentation	Modify	<p>This section is modified by replacing a reference to “plant radiation protection program” with “radiation protection program.” This is an administrative change to eliminate an unnecessary adjective.</p> <p>Additionally, this section is modified by replacing the discussion of the means to control access to high radiation areas with a reference to Technical Specifications 5.7.1 and 5.7.2 of the IP2 Permanently Defueled Technical Specifications. These specifications provide the details associated with controlling entry into high radiation areas. This eliminates a potential issue associated with modifying information in the UFSAR in accordance with 10 CFR 50.59, while the information resides in the technical specifications and is controlled in accordance with 10 CFR 50.90.</p>
11.2.5.5	4.2.5.5	Onsite Treatment Facilities, Equipment and Supplies	Retain	No proposed changes.
11.2.5.6	4.2.5.6	Treatment Procedures and Techniques	Retain	No proposed changes.
11.2.5.7	4.2.5.7	Qualifications of Medical Personnel	Retain	No proposed changes.
11.2.5.8	4.2.5.8	Transport of Injured Personnel	Retain	No proposed changes.
11.2.5.9	4.2.5.9	Hospital Facilities	Retain	No proposed changes.
11.2.6	4.2.6	Evaluation of Radiation Protection	Modify	<p>This section is modified to eliminate the discussion of the Loss of Coolant Accident (LOCA), containment shielding, and the dose to the Control Room operators resulting from the LOCA and to eliminate the “Liquid Waste Release” header.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, a LOCA is no longer possible.</p> <p>In addition, the header is unnecessary following the elimination of the LOCA discussion.</p>
11.2.7	4.2.7	Tests and Inspections	Modify	<p>This section is modified to eliminate the discussion of the radiation surveys that were conducted during the initial phases of plant startup and to replace the frequency for testing specific monitors from “each refueling shutdown” to “every two-years.”</p>

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The discussion regarding the radiation surveys that were conducted during the initial phases of plant startup are historical. They do not pertain to the permanently shut down and defueled condition.

The frequency of “every two years” is equivalent to “each refueling shutdown.” It is an administrative change to eliminate an obsolete term, i.e., refueling shutdown.

11.2.8	4.2.8	Handling and Use of Sealed Special Nuclear, Source and By-Product Material	Modify	This section is modified by eliminating the note and test requirement regarding startup sources.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, startup sources are no longer required to be utilized at IP2.
Table 11.2-1	NA	Deleted	Delete	Previously deleted.
Table 11.2-2	NA	Primary Shield Neutron Fluxes and Design Parameters	Delete	This table is proposed to be deleted in its entirety. See the discussion provided for UFSAR Subsections 11.2.2.1.1 and 11.2.2.1.2.
Table 11.2-3	NA	Secondary Shield Design Parameters	Delete	This table is proposed to be deleted in its entirety. See the discussion provided for UFSAR Subsections 11.2.2.1.2 and 11.2.2.2.2
Table 11.2-4	NA	Accident Shield Design Parameters	Delete	This table is proposed to be deleted in its entirety. See the discussion provided for UFSAR Subsections 11.2.2.1.3 and 11.2.2.2.3
Table 11.2-5	Table 4.2-1	Refueling Shield Design Parameters	Modify	This table is retitled as the fuel handling shield design parameters to be consistent with the section title, and the parameters associated with the reactor core are eliminated.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the reactor core parameters are no longer relevant in the permanently defueled condition.
Table 11.2-6	Table 4.2-2	Principal Auxiliary Shielding	Modify	This table is modified to eliminate the specific concrete shield thicknesses for equipment that will no longer be required to perform a function in the permanently

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shut down and defueled condition and to eliminate process parameters that are no longer relevant.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2).

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Consequently, the residual heat removal system does not perform a function in the permanently shut down and defueled condition. Also, the DBAs that remain applicable in the defueled condition (FHA and release of gaseous or liquid waste) do not credit operator action; thus, there would be no actions that would require personnel to be shielded in those events.

Table 11.2-7    Table 4.2-3    Radiation Monitoring  
Channel Data

Modify

This table is modified to eliminate the references to the radiation monitors that will no longer perform a function in the permanently shut down and defueled condition. For the specific monitors, a discussion providing the rationale for its elimination is provided for one of the UFSAR Subsections. In addition, the footnote is revised to remove unnecessary information.

The term “plant” is replaced with the term “facility.” The term “facility” better represents IP2 in the permanently shut down and defueled condition.

The name for the Liquid Waste Distillate Radiation Monitor is changed to Liquid Waste Effluent Radiation Monitor to match the ODCM.

The listing for R-60 is corrected to denote that it is the Unit 1 Stack Radiation Monitor and to denote that it only monitors noble gas. Particulates and iodines are collected on filters and analyzed in the count room.

The name of the Sphere Foundation Sump monitor is changed to Sphere Foundation Drain Sump monitor to match the ODCM.



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The name of the R-27 monitor is changed from High Range, Noble Gas to Wide Range Gas. R-27 has 3 detectors to cover low, mid, and high ranges.

Table 11.2-7a	NA	Deleted	Delete	Previously deleted.
Table 11.2-8	NA	Deleted	Delete	Previously deleted.
Table 11.2-9	NA	Deleted	Delete	Previously deleted.
Table 11.2-10	NA	Deleted	Delete	Previously deleted.
Table 11.2-11	NA	Deleted	Delete	Previously deleted.
Table 11.2-12	NA	Deleted	Delete	Previously deleted.
Table 11.2-13	NA	Deleted	Delete	Previously deleted.
Figure 11.2-1	NA	Deleted	Delete	Previously deleted.
Figure 11.2-2	NA	Deleted	Delete	Previously deleted.
Figure 11.2-3	NA	Deleted	Delete	Previously deleted.
Figure 11.2-4	NA	Deleted	Delete	Previously deleted.
Figure 11.2-5	NA	Deleted	Delete	Previously deleted.
Figure 11.2-6	NA	Deleted	Delete	Previously deleted.
Appendix 11A	NA	Deleted	Delete	Previously deleted.
Appendix 11B	Appendix 4B	Determination of River Water Dilution Factors Between the Indian Point Site and the Nearest Public Drinking Water Intakes	Modify	This appendix is modified by eliminating the discussion of the accidental loss of the entire primary coolant, including one-percent failed fuel, in a burst release. In addition, the remaining portions of Appendix 11B are identified as historical.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Therefore, the postulated event regarding the accidental loss of the primary coolant while the reactor is fueled is no longer possible.
Table 11B-1	Table 4B-1	Concentrations of Primary Coolant Isotopes in the Hudson River at Indian Point and Chelsea	Retain	No proposed changes.
Table 11B-2	NA	Concentrations of Radioisotopes in the Hudson	Delete	This table is proposed for deletion in its entirety. See the discussion of the proposed change to Appendix 11B.

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		River at Indian Point and Chelsea		
Figure 11B-1	Figure 4B-1	Iodine-131 Concentration vs Days After Burst Release from Indian Point for 1 Curie Release	Retain	No proposed changes.
Figure 11B-2	Figure 4B-2	Iodin-131 Concentration vs Chelsea vs Days After Burst Release from Indian Point for 1 Curie Release	Retain	No proposed changes.
Figure 11B-3	Figure 4B-3	Maximum Concentration vs Distance Upstream for 1 Curie Release	Retain	No proposed changes.
Figure 11B-4	Figure 4B-4	Maximum Concentration at Chelsea vs Half-Life for 1 Curie Release	Retain	No proposed changes.
Figure 11B-5	Figure 4B-5	Time to Reach Peak Concentration at Chelsea vs Half-Life for 1 Curie Release	Retain	No proposed changes.
Appendix 11C	NA	Deleted	Delete	Previously deleted.
Appendix 11D	NA	Deleted	Delete	Previously deleted.
Table 11D-1	NA	Deleted	Delete	Previously deleted.
Figure 11D-1	NA	Deleted	Delete	Previously deleted.
Figure 11D-2	NA	Deleted	Delete	Previously deleted.
Appendix 11E	NA	Deleted	Delete	Previously deleted.
Figure 11E-1	NA	Deleted	Delete	Previously deleted.
Figure 11E-2	NA	Deleted	Delete	Previously deleted.

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**CHAPTER 12 – CONDUCT OF OPERATIONS**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
12	5	Conduct of Operations	Modify	The title of this chapter is modified by replacing the term “Operations” with the phrase “Facility Activities.” This term better reflects IP2 in the permanently shut down and defueled condition.
12.1	5.1	Organization and Responsibility	Modify	This section is modified by replacing the reference to the Quality Assurance Program Manual (QAPM) with a reference to the IPEC QAPM. Following the permanent shut down and defueling of IP2, the site will transition to a site specific QAPM, instead of utilizing the generic Entergy QAPM. In addition, the reference to Section 1.10.3 of the is modified to clearly indicate that the reference is to the UFSAR (DSAR) section.
12.1.1	5.1.1	Facility Staff	Modify	This section is modified by replacing the current responsibilities for the corporate officer and the general manager with the responsibilities for the corporate officer and plant manager as defined in the Permanently Defueled Technical Specifications (PDTS). In addition, the reference to “reactor operational and refueling personnel” is replaced with a reference to “site personnel.” This is an administrative change to reflect the changes in staff that will occur in the permanently shut down and defueled condition.
12.1.2	5.1.2	Facility Staff Qualifications	Modify	This section is modified to reflect the revised facility staff qualification requirements addressed in PDTS 5.3.1 and 5.3.2. These proposed changes are consistent with those in the PDTS.
Table 12.1-1	NA	Deleted	Delete	Previously deleted.
Figure 12.1-1	NA	Deleted	Delete	Previously deleted.
Figure 12.1-2	NA	Deleted	Delete	Previously deleted.
12.2	5.2	Training	Modify	This section is modified by eliminating the reference to operator training, the Nuclear Training Manager, and ANSI-3.1 adding a reference to the NRC approved training and retraining program for Certified Fuel Handlers, and modifying the reference for the security force training requirements.

10 CFR 55 and operating training requirements are no longer applicable in the permanently shut down and defueled state. Listing ANSI-3.1 is not necessary in this section, because UFSAR Section 12.1.2 provides a reference to ANSI-3.1 and exceptions to it per the QAPM. In addition, the title “Nuclear Training Manager” will not exist in the organization in the permanently shut down and defueled condition. The changes to this UFSAR section are consistent with the new training requirements in the PDTS.

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				<p>The term “plant” is replaced with the term “facility.” This term better reflects IP2 in the permanently shut down and defueled condition.</p>
				<p>In addition, the FSAR reference regarding the training requirements for the security force is modified to reflect the appropriate document, i.e., the “Indian Point, Physical Security, Training and Qualification, Safeguard Contingency Plan, and Independent Spent Fuel Storage Installation Program.”</p>
12.3	5.3	Written Procedures	Modify	<p>This section is modified by replacing the reference to the QAPM with a reference to the IPEC QAPM. Following the permanent shut down and defueling of IP2, the site will transition to a site specific QAPM, instead of utilizing the generic Entergy QAPM. In addition, a reference to the Renewed Facility License and the Appendices A through C Technical Specifications are added, because they also address procedural requirements.</p>
12.3.1	5.3.1	Emergency Operating Procedures	Modify	<p>This section is modified to provide a generic discussion of the emergency plan implementing procedures. This term replaces the term emergency operating procedures. The Emergency Plan and its implementing procedures define the requirements for the Emergency Response Facilities. They are maintained in accordance with 10 CFR 50.54(q). The requirements in the Emergency Plan and its implementing procedures will be modified as the status of the plant changes from an operating plant to a permanently shut down and defueled facility, after the zirconium fire scenario milestone has expired, and following the transition to a facility with all of the nuclear fuel stored at an Independent Spent Fuel Storage Installation.</p>
12.4	5.4	Records	Modify	<p>This section is modified by replacing the terms “plant,” “facility operations,” and “operating” with the terms “facility” or “facility activities,” as applicable. These terms better reflect IP2 in the permanently shut down and defueled condition. In addition, this section is modified to reflect that the records include those associated with historical operations.</p> <p>This section is modified by changing the references to the groups and individuals that maintain logbooks and records. These changes reflect that the staffing requirements for IP2 will change through-out the decommissioning period. The first set of changes to the staffing requirements is addressed in the PDTs. The changes to this UFSAR section are consistent with the new requirements in the PDTs.</p>

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
12.5	5.5	Review and Audit of Operations	Modify	This section is modified by replacing the terms “operations,” “facility operations,” “operating,” and station operating” with the terms “facility” or “facility activities,” as applicable. These terms better reflect IP2 in the permanently shut down and defueled condition.
12.5.1	5.5.1	On-Site Safety Review Committee (OSRC)	Modify	This section is modified by replacing the reference to the QAPM with a reference to the IPEC QAPM. Following the permanent shut down and defueling of IP2, the site will transition to a site specific QAPM, instead of utilizing the generic Entergy QAPM.
12.5.2	5.5.2	Safety Review Committee (SRC)	Modify	This section is modified by replacing the reference to the QAPM with a reference to the IPEC QAPM. Following the permanent shut down and defueling of IP2, the site will transition to a site specific QAPM, instead of utilizing the generic Entergy QAPM.
12.5.3	5.5.3	Qualification of Inspection, Examination, Testing, and Audit Personnel	Modify	The term “plant” is replaced with the term “facility.” This term better reflects IP2 in the permanently shut down and defueled condition. This section is modified by replacing the term “plant operations” with the term “facility activities.” This term better reflects IP2 in the permanently shut down and defueled condition.
12.6	5.6	Plant Security	Modify	This section is modified by replacing the reference to the QAPM with a reference to the IPEC QAPM. Following the permanent shut down and defueling of IP2, the site will transition to a site specific QAPM, instead of utilizing the generic Entergy QAPM. This section is modified by replacing the reference to the “facility operating license” with a reference to the 10 CFR 50 facility license. This reflects the fact that the IP2 facility license will no longer permit operations.
12.7	NA	Emergency Preparedness	Delete	This section is modified by correcting editorial errors. These are administrative changes. In addition, the term “plant” is replaced with the term “facility.” This term better reflects IP2 in the permanently shut down and defueled condition. This section header is proposed to be deleted. This is an administrative change to reflect that the only remaining subsection is 12.7.1. The header for that subsection will be maintained.

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
12.7.1	5.7	Emergency Plan	Modify	No proposed changes.
12.7.2	NA	Emergency Response Facilities	Delete	This section is proposed to be deleted in its entirety. The Emergency Plan and its implementing procedures are maintained in accordance with 10 CFR 50.54(q) will define the requirements for the Emergency Response Facilities. The requirements in the Emergency Plan and its implementing procedures will be modified as the status of the plant changes from an operating plant to a permanently shut down and defueled facility, after the post-zircaloy fire time period has expired, and following the transition to a facility with all of the nuclear fuel stored at an Independent Spent Fuel Storage Installation,

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**CHAPTER 13 – TESTS AND OPERATIONS**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
13.0	NA	Introduction	Delete	<p>This section provides a summary of the testing and startup operation of the plant systems prior to full power operation of the unit. The purpose of the program was to test and operate the reactor and its various systems (1) to make certain that the equipment was installed and would operate in accordance with the design requirements, (2) to provide procedures for safe initial fuel loading or fuel reloading and to determine zero power values of core parameters significant to the design and operation, and (3) to bring the unit to its rated capacity in a safe and orderly fashion. The information in this section is identified as historical information.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial testing and startup operation of IP2 is obsolete.</p>
13.1	NA	Tests Prior to Initial Reactor Fuel Loading	Delete	<p>This section provides a summary of the initial tests was a comprehensive testing that ensured equipment and systems performed in accordance with design criteria prior to fuel loading. The information in this section is identified as historical information.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial testing of IP2 equipment and systems is obsolete.</p>
Table 13.1-1	NA	Objectives of Tests Prior to Initial Reactor Fuel Loading (Historical Information)	Delete	See the discussion for Section 13.1.
13.2	NA	Final Plant Preparation (Historical Information)	Delete	This section is proposed for deletion, because all of its subsections are proposed for deletion.
13.2.1	NA	Core Loading	Delete	This section describes the initial core loading process. It is identified as historical information.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial core loading of IP2 is obsolete.
13.2.2	NA	Precritical Tests (Historical Information)	Delete	This section describes mechanical and electrical tests that were performed after the initial core load and prior to initial criticality. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial precritical testing of IP2 is obsolete.
13.3	NA	Initial Tests in the Operating Reactor (Historical Information)	Delete	This section describes initial criticality, low-power testing, and power level escalation. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial operations testing of IP2 is obsolete.
13.3.1	NA	Initial Criticality (Historical Information)	Delete	This section describes initial criticality. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial criticality of IP2 is obsolete.
13.3.2	NA	Zero-Power Testing (Historical Information)	Delete	This section describes a prescribed program of reactor physics measurements was undertaken to verify that the basic static and kinetic characteristics of the core were



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				as expected and that the values of kinetic coefficients assumed in the safeguards analysis were indeed conservative. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial zero-power testing of IP2 is obsolete.
13.3.3	NA	Power Level Escalation (Historical Information)	Delete	This section describes a power escalation test program to carry the plant from completion of zero-power physics testing through full-power operation. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial power escalation of IP2 is obsolete.
Table 13.3.-1	NA	Initial Testing Summary (Historical Information)	Delete	See the discussion for Subsection 13.3.
13.4	NA	Operating Restrictions	Delete	This section is deleted, because all of its subsections are proposed for deletion.
13.4.1	NA	Safety Precautions	Delete	This section describes precautions that were in-place during zero-power and power escalation phases. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the safety precautions that were used during the initial testing of IP2 is obsolete.
13.4.2	NA	Initial Operation Responsibilities	Delete	This section describes the organizations and individuals that were responsible for the testing of equipment and systems and system operations. It is historical information.

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				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial responsibilities for testing of IP2 equipment and systems is obsolete.
13.5	NA	Reactor Coolant System Vibration Testing Program (Historical Information)	Delete	This section identifies the test programs that were initially performed on the IP2 reactor coolant system. It is identified as historical information.
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, this historical information regarding the initial testing of reactor coolant system testing is obsolete.
13.5.1	NA	Reactor Coolant System Impedance Test	Delete	See the discussion for Section 13.5.
13.5.2, including 13.5.2.1 through 13.5.2.6	NA	Steady-State and Transient Internals and Loop Vibration Measurements	Delete	See the discussion for Section 13.5.
Table 13.5-1	NA	[Historical Information] Transducer Locations for Vibration Experiments	Delete	See the discussion for Section 13.5.
13.6	NA	Tests Following Reactor Refueling	Delete	This section describes a series of tests are carried out on the new core that are conducted during the initial return to power following a refueling shutdown or following a cold shutdown where fuel assemblies have been handled (inspection for example).
				After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in

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**CHAPTER 13 – TESTS AND OPERATIONS**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
13.6.1	NA	Reload Startup Physics Test Program	Delete	<p>accordance with 10 CFR 50.82(a)(2). Given that IP2 will never be refueled again, there is no need to retain the information regarding the tests to perform following the initial return to power.</p> <p>This section describes a typical reload startup physics test program that could include precriticality tests, hot zero power and beginning of core life condition tests, and power ascension tests.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Given that IP2 will never be refueled again, there is no need to retain the information regarding the reload startup physics tests program.</p>
13.6.2	NA	Test Results	Delete	<p>This section discusses the development and submittal to the NRC of a startup report.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Given that IP2 will never be refueled again, there is no need to retain the information regarding the startup report.</p>

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### CHAPTER 14 – SAFETY ANALYSIS

UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
14.0	NA	Introduction	Delete	<p>This section provides a general overview of the analyses presented in Chapter 14 of the IP2 UFSAR. It is proposed to be deleted in its entirety.</p> <p>The analyzed accidents that remain applicable to IP2 in the permanently shut down and defueled condition are the Fuel Handling Accident (FHA) in the Fuel Handling Building (i.e., Fuel Storage Building (FSB)), accidental release-recycle of waste liquid, and the accidental release of waste gas. They are discussed in Sections 14.2.1.1, 14.2.2 and 14.2.3 of the IP2 UFSAR. Proposed modifications to those sections are discussed below. The fuel cask drop accident was deemed to not be credible in Section 14.2.1.3 of the IP2 UFSAR. This UFSAR section will be retained. In addition, a new discussion regarding the drop of a High Integrity Container will be added.</p> <p>The transients and accidents analyzed in Sections 14.1, 14.2.4, 14.2.5, 14.2.6, 14.3, and 14.4 of the IP2 UFSAR will be eliminated as discussed below.</p> <p>Based on the above, this introduction section will not be retained, because the IP2 UFSAR sections will be consolidated when the Defueled Safety Analysis Report (DSAR) is compiled. The introduction provided in Section 14.2 of the IP2 UFSAR will be modified to reflect the remaining analyses.</p>
14.0.1	NA	Accident Classification	Delete	See the above discussion.
14.0.2	NA	General Assumptions	Delete	This section introduces the fact that there were some parameters and assumptions that are common to various accident analyses when IP2 was in operation. This section is proposed for deletion in its entirety, because all of its subsections are proposed for deleted as discussed below.
14.0.2.1	NA	Steady-State Errors	Delete	This section addresses steady state errors and assumptions regarding core power, average reactor coolant system temperature, pressurizer pressure, reactor coolant flow, and nominal full power vessel average temperature. This section is proposed to be deleted in its entirety. <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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14.0.2.2	NA	Power Distribution	Delete	<p>Consequently, these steady state errors and assumptions are no longer relevant in the permanently shut down and defueled condition. Thus, this information is obsolete.</p> <p>This section addresses assumptions regarding reactor core power distribution.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, assumptions regarding reactor core power distribution are no longer relevant in the permanently shut down and defueled condition. Thus, this information is obsolete.</p>
14.0.2.3	NA	Reactor Trip	Delete	<p>This section addresses assumptions regarding reactor trip. This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, assumptions regarding reactor trip are no longer relevant in the permanently shut down and defueled condition. Thus, this information is obsolete.</p>
Figure 14.0-1	NA	Reactivity Insertion vs Time for Reactor Trip	Delete	<p>See the discussion for Subsection 14.0.2.3.</p>
14.1	NA	Core and Coolant Boundary Protection Boundary	Delete	<p>This section provides a summary of the analysis for specific plant abnormalities and transients for which the reactor coolant and protection systems are relied upon to protect the core and reactor coolant boundary from damage.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR</p>

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50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

Consequently, the abnormalities and transients analyzed in this section cannot occur. Thus, the discussions regarding them in the UFSAR is obsolete.

14.1.1, including Subsections 14.1.1.1 through 14.1.1.4	NA	Uncontrolled Rod Cluster Control Assembly Withdrawal from a Subcritical or Low Power Startup Condition	Delete	See the discussion above.
14.1.2, including Subsections 14.1.2.1 through 14.1.2.3	NA	Uncontrolled Rod Cluster Control Assembly Bank Withdrawal at Power	Delete	See the discussion above.
14.1.3	NA	Incorrect Positioning of Part-Length Bods	Delete	See the discussion above.
14.1.4, including Subsections 14.1.4.1 through 14.1.4.3	NA	Rod Cluster Control Assembly Drop	Delete	See the discussion above.
14.1.5, including Subsections 14.1.5.1 through 14.1.5.3	NA	Chemical and Volume Control System Malfunction	Delete	See the discussion above.
14.1.6, including Subsections 14.1.6.1 through 14.1.6.5	NA	Loss of Reactor Coolant Flow	Delete	See the discussion above.
14.1.7	NA	Startup of an Inactive Reactor Coolant Loop	Delete	See the discussion above.
14.1.8, including Subsections 14.1.8.1 through 14.1.8.4	NA	Loss of External Electrical Load	Delete	See the discussion above.

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14.1.9, including Subsections 14.1.9.1 through 14.1.9.4	NA	Loss of Normal Feedwater	Delete	See the discussion above.
14.1.10, including Subsections 14.1.10.1 through 14.1.10.3	NA	Excessive Heat Removal Due to Feedwater System Malfunctions	Delete	See the discussion above.
14.1.11, including Subsections 14.1.11.1 through 14.1.11.3	NA	Excessive Load Increase Incident	Delete	See the discussion above.
14.1.12, including Subsections 14.1.12.1 through 14.1.12.4	NA	Loss of All AC Power to the Station Auxiliaries	Delete	See the discussion above.
14.1.13, including Subsections 14.1.13.1 through 14.1.13.2	NA	Likelihood and Consequences of Turbine-Generator Unit Overspeed	Delete	See the discussion above.
Table 14.1-1	NA	Uncontrolled RCCA Withdrawal from a Subcritical Condition Time Sequence of Events	Delete	See the discussion above.
Table 14.1-2	NA	Uncontrollable RCCA Bank Withdrawal at Power Time Sequence of Events	Delete	See the discussion above.

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Table 14.1-3	NA	Complete Loss of Flow (Undervoltage) Time Sequence of Events	Delete	See the discussion above.
Table 14.1-4	NA	Partial Loss of Flow Time Sequence of Events	Delete	See the discussion above.
Table 14.1-5	NA	Locked Rotor Event – Hot Spot Time Sequence of Events	Delete	See the discussion above.
Table 14.1-6	NA	Loss of External Electrical Load Time Sequence of Events	Delete	See the discussion above.
Table 14.1-7	NA	Loss of Normal Feedwater Time Sequence of Events	Delete	See the discussion above.
Table 14.1-8	NA	Feedwater Malfunction Event Time Sequence of Events	Delete	See the discussion above.
Table 14.1-9	NA	Deleted	Delete	Previously deleted.
Table 14.1-10	NA	Loss of All AC Power to the Station Auxiliaries Time Sequence of Events	Delete	See the discussion above.
Table 14.1-11	NA	Deleted	Delete	See the discussion above.
Table 14.1-12	NA	Deleted	Delete	Previously deleted.
Table 14.1-13	NA	Deleted	Delete	Previously deleted.
Table 14.1-14	NA	Deleted	Delete	Previously deleted.
Table 14.1-15	NA	Deleted	Delete	Previously deleted.
Table 14.1-16	NA	Deleted	Delete	Previously deleted.
Table 14.1-17	NA	Deleted	Delete	Previously deleted.
Table 14.1-18	NA	Deleted	Delete	Previously deleted.
Table 14.1-19	NA	Deleted	Delete	Previously deleted.
Table 14.1-20	NA	Deleted	Delete	Previously deleted.
Table 14.1-21	NA	Deleted	Delete	Previously deleted.
Figure 14.1-1	NA	Uncontrolled RCCA Withdrawal from a	Delete	See the discussion above.



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Figure 14.1-2	NA	Subcritical Condition Nuclear Power vs. Time Uncontrolled RCCA Withdrawal from a Subcritical Condition Heat Flux vs. Time, Avg. Channel	Delete	See the discussion above.
Figure 14.1-3	NA	Uncontrolled RCCA Withdrawal from a Subcritical Condition Fuel Average Temperature vs. Time at Hot Spot	Delete	See the discussion above.
Figure 14.1-4	NA	Uncontrolled RCCA Withdrawal from a Subcritical Condition Clad Inner Temperature vs. Time at Hot Spot	Delete	See the discussion above.
Figure 14.1-5	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (70 pcm/sec Withdrawal Rate)	Delete	See the discussion above.
Figure 14.1-6	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (70 pcm/sec Withdrawal Rate)	Delete	See the discussion above.
Figure 14.1-7	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (70 pcm/sec Withdrawal Rate)	Delete	See the discussion above.

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Figure 14.1-8	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (1 pcm/sec Withdrawal Rate)	Delete	See the discussion above.
Figure 14.1-9	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (1 pcm/sec Withdrawal Rate)	Delete	See the discussion above.
Figure 14.1-10	NA	Uncontrolled RCCA Bank Withdrawal from Full Power with Minimum Reactivity Feedback (1 pcm/sec Withdrawal Rate)	Delete	See the discussion above.
Figure 14.1-11	NA	Minimum DNBR Versus Reactivity Insertion Rate, Rod Withdrawal From 100 Percent Power	Delete	See the discussion above.
Figure 14.1-12	NA	Minimum DNBR Versus Reactivity Insertion Rate, Rod Withdrawal From 60 Percent Power	Delete	See the discussion above.
Figure 14.1-13	NA	Minimum DNBR Versus Reactivity Insertion Rate, Rod Withdrawal From 10 Percent Power	Delete	See the discussion above.
Figure 14.1-14	NA	Dropped Rod Incident Manual Rod Control Nuclear Power and Core Heat Flux at BOL (Small Negative MTC) for	Delete	See the discussion above.

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Figure 14.1-15	NA	Dropped Rod Incident Manual Rod Control Core Average and Vessel Inlet Temperature at BOL (Small Negative MTC) for Dropped RCCA of Worth - 400 PCM	Delete	See the discussion above.
Figure 14.1-16	NA	Dropped Rod Incident Manual Rod Control Pressurizer Pressure at BOL (Small Negative MTC) for Dropped RCCA Worth of 400 PCM	Delete	See the discussion above.
Figure 14.1-16a	NA	Deleted	Delete	Previously deleted.
Figure 14.1-17	NA	Dropped Rod Incident Manual Rod Control Nuclear Power and Core Heat Flux at EOL (Large Negative MTC) for Dropped RCCA of Worth - 400 PCM	Delete	See the discussion above.
Figure 14.1-18	NA	Dropped Rod Incident Manual Rod Control Core Average and Vessel Inlet Temperature at EOL (Large Negative MTC) for Dropped RCCA of Worth - 400 PCM	Delete	See the discussion above.
Figure 14.1-19	NA	Dropped Rod Incident Manual Rod Control Pressurizer Pressure at EOL (Large Negative	Delete	See the discussion above.

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		MTC) for Dropped RCCA Worth of 400 PCM		
Figure 14.1-20	NA	Loss of One Pump Out of Four Nuclear Power and Core Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-21	NA	Loss of One Pump Out of Four Total Core Flow and Faulted Loop Flow vs. Time	Delete	See the discussion above.
Figure 14.1-22	NA	Loss of One Pump Out of Four Pressurizer Pressure and DNBR vs. Time	Delete	See the discussion above.
Figure 14.1-23	NA	Four Pump Loss of Flow - Undervoltage Nuclear Power and Core Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-24	NA	Four Pump Loss of Flow - Undervoltage Total Core Flow and RCS Loop Flow vs. Time	Delete	See the discussion above.
Figure 14.1-25	NA	Four Pump Loss of Flow - Undervoltage Pressurizer Pressure and DNBR vs. Time	Delete	See the discussion above.
Figure 14.1-26	NA	Four Pump Loss of Flow - Underfrequency Nuclear Power and Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-27	NA	Four Pump Loss of Flow - Underfrequency Total Core Flow and RCS Loop Flow vs. Time	Delete	See the discussion above.
Figure 14.1-28	NA	Four Pump Loss of Flow Underfrequency Pressurizer Pressure and DNBR vs. Time	Delete	See the discussion above.

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Figure 14.1-29	NA	Locked Rotor Nuclear Power and RCS Pressure vs. Time	Delete	See the discussion above.
Figure 14.1-30	NA	Locked Rotor Total Core Flow and Faulted Loop Flow vs. Time	Delete	See the discussion above.
Figure 14.1-30a	NA	Locked Rotor Fuel Clad Inner Temperature vs. Time	Delete	See the discussion above.
Figure 14.1-31	NA	Loss of Load With Pressurizer Spray and PORV - Nuclear Power and Pressurizer Pressure vs. Time	Delete	See the discussion above.
Figure 14.1-32	NA	Loss of Load With Pressurizer Spray and PORV - Average Coolant Temperature and Pressurizer Water Volume vs. Time	Delete	See the discussion above.
Figure 14.1-33	NA	Loss of Load With Pressurizer Spray and PORV - DNBR vs. Time	Delete	See the discussion above.
Figure 14.1-34	NA	Deleted	Delete	Previously deleted.
Figure 14.1-35	NA	Deleted	Delete	Previously deleted.
Figure 14.1-36	NA	Deleted	Delete	Previously deleted.
Figure 14.1-37	NA	Loss of Load Without Pressurizer Spray and Power Operated Relief Valves - Nuclear Power and Pressurizer Pressure vs. Time	Delete	See the discussion above.
Figure 14.1-38	NA	Loss of Load Without Pressurizer Spray and Power Operated Relief	Delete	See the discussion above.

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		Valves - Average Coolant Temperature and Pressurizer Water Volume vs. Time		
Figure 14.1-39	NA	Loss of Load Without Pressurizer Spray and Power Operated Relief Valves - Steam Pressure vs. Time	Delete	See the discussion above.
Figure 14.1-40	NA	Deleted	Delete	Previously deleted.
Figure 14.1-41	NA	Deleted	Delete	Previously deleted.
Figure 14.1-42	NA	Deleted	Delete	Previously deleted.
Figure 14.1-43 Sh. 1	NA	Loss of Normal Feedwater, Offsite Power Available, High $T_{avg}$ Program, Pressurizer Pressure and Pressurizer Water Volume vs. Time	Delete	See the discussion above.
Figure 14.1-43 Sh. 2	NA	Loss of Normal Feedwater, Offsite Power Available High $T_{avg}$ Program, Nuclear Power and Core Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-43 Sh. 3	NA	Loss of Normal Feedwater, Offsite Power Available, High $T_{avg}$ Program, Loop 21 Temperature and Loop 23 Temperature vs. Time	Delete	See the discussion above.
Figure 14.1-43 Sh. 4	NA	Loss of Normal Feedwater, Offsite Power Available, High $T_{avg}$ Program, Steam Generator 21 Pressure	Delete	See the discussion above.

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Figure 14.1-43 Sh. 5	NA	and Steam Generator 23 Pressure vs. Time Loss of Normal Feedwater, Offsite Power Available, High $T_{avg}$ Program, Total RCS Flow and Pressurizer Relief vs. Time	Delete	See the discussion above.
Figure 14.1-44 Sh. 1 through Sh. 5	NA	Deleted	Delete	Previously deleted
Figure 14.1-45 Sh. 1	NA	Feedwater System Malfunction Excessive Feedwater Flow - HFP Conditions Manual Rod Control Nuclear Power, and Core Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-45 Sh. 2	NA	Feedwater System Malfunction Excessive Feedwater Flow - HFP Conditions Manual Rod Control Pressurizer Pressure and DNBR vs. Time	Delete	See the discussion above.
Figure 14.1-45 Sh. 3	NA	Feedwater System Malfunction Excessive Feedwater Flow - HFP Conditions Manual Rod Control, Loop Delta - T, and Core $T_{avg}$ vs. Time	Delete	See the discussion above.
Figure 14.1-46 Sh. 1 and Sh. 2	NA	Deleted	Delete	Previously deleted.
Figure 14.1-47 Sh. 1 and Sh. 2	NA	Deleted	Delete	Previously deleted.

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Figure 14.1-48 Sh. 1 and Sh. 2	NA	Deleted	Delete	Previously deleted.
Figure 14.1-49 Sh. 1 and Sh. 2	NA	Deleted	Delete	Previously deleted.
Figure 14.1-50 Sh. 1	NA	Loss of all AC Power, High T <sub>avg</sub> Program, Pressurizer Pressure and Water Volume vs. Time	Delete	See the discussion above.
Figure 14.1-50 Sh. 2	NA	Loss of all AC Power, High T <sub>avg</sub> Program, Nuclear Power and Core Heat Flux vs. Time	Delete	See the discussion above.
Figure 14.1-50 Sh. 3	NA	Loss of all AC Power to the Station Auxiliaries, High T <sub>avg</sub> Program, Loop 21 Temperature and Loop 23 Temperature	Delete	See the discussion above.
Figure 14.1-50 Sh. 4	NA	Loss of all AC Power to the Station Auxiliaries, High T <sub>avg</sub> Program, Steam Generator 21 Pressure and Steam Generator 23 Pressure	Delete	See the discussion above.
Figure 14.1-50 Sh. 5	NA	Loss of all AC Power to the Station Auxiliaries, High T <sub>avg</sub> Program, Total RCS Flow and Pressurizer Relief vs. Time	Delete	See the discussion above.
Figure 14.1-51 Sh. 1 through Sh. 5	NA	Deleted	Delete	Previously deleted.
Figure 14.1-52	NA	Deleted	Delete	Previously deleted.
Figure 14.1-53	NA	Deleted	Delete	Previously deleted.
Figure 14.1-54	NA	Deleted	Delete	Previously deleted.
Figure 14.1-55	NA	Deleted	Delete	Previously deleted.



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Figure 14.1-56	NA	Deleted	Delete	Previously deleted.
Figure 14.1-57	NA	Deleted	Delete	Previously deleted.
Figure 14.1-58	NA	Deleted	Delete	Previously deleted.
Figure 14.1-59	NA	Deleted	Delete	Previously deleted.
Sh. 1 and Sh. 2				
Figure 14.1-60	NA	Deleted	Delete	Previously deleted.
Figure 14.1-61	NA	Deleted	Delete	Previously deleted.
Figure 14.1-62	NA	Tracking BB-95/96 Stop Valve (SV) Type 1 Failures, Stop Valve Disc Fails	Delete	See the discussion above.
Figure 14.1-63	NA	Tracking BB-95/96 Stop Valve (SV) Type 2 Failures, Stop Valve Spring Fails	Delete	See the discussion above.
Figure 14.1-64	NA	Tracking BB-95/96 Stop Valve (SV) Type 3 Failures, Stop Valve Sticks Open	Delete	See the discussion above.
Figure 14.1-65	NA	Tracking BB-95/96 Control Valve (CV) Type 4 Failures, CV Spring Bolt Fails	Delete	See the discussion above.
Figure 14.1-66	NA	Tracking BB-95/96 Control Valve (CV) Type 5 Failures, Control Valve Sticks Open	Delete	See the discussion above.
Figure 14.1-67	NA	Annual Frequency of Destructive Overspeed for Various BB-95/96 Turbine Valve Test Interval	Delete	See the discussion above.
14.2	6.1	Standby Safety Features Analysis	Modify	This section introduces the analyses that are summarized in Section 14.2. This section is rewritten to address the analyzed accidents that remain applicable to IP2 in the permanently shut down and defueled condition. These are the FHA in the Fuel

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Handling Building (i.e., FSB), accidental release-recycle of waste liquid, and the accidental release of waste gas. They are discussed in Sections 14.2.1.1, 14.2.2 and 14.2.3 of the IP2 UFSAR. Proposed modifications to those sections are discussed below. The fuel cask drop accident was deemed to not be credible in Section 14.2.1.3 of the IP2 UFSAR. This UFSAR section will be retained. In addition, a new discussion regarding the drop of a High Integrity Container will be added. The section is retitled as Introduction.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible. Thus, the discussions regarding the rupture of steam generator tube, rupture of a steam pipe, and rupture of a control rod drive mechanism housing, and rod cluster control assembly ejection in UFSAR Sections 14.2.4, 14.2.5, and 14.2.6 are no longer possible.

The proposed rewrite of this section is administrative change to reflect the remaining contents of the section. The changes to the specific subsections are discussed and justified below.

14.2.1

6.2

Fuel-Handling Accidents

Modify

This section provides a discussion regarding the various types of fuel handling accidents that are possible. It is modified to eliminate the discussions regarding refueling operations, source range nuclear instrumentation, operations in the containment, reactor cavity and spent fuel transfer tube. In addition, the term “operating” is eliminated when utilized to describe personnel.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

In addition, refueling operations will no longer occur. The spent fuel will be stored in the SFP or the ISFSI. It will never be transferred to the reactor core again.

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14.2.1.1	6.2.1	Fuel-Handling Accident in Fuel-Handling Building	Modify	<p>This section provides a summary of the analysis of the FHA in the fuel handling building (i.e., the FSB). This postulated accident remains applicable in the permanently shut down and defueled condition.</p> <p>An analysis of the FHA utilizing the AST methodology described in Regulatory Guide 1.183 was previously approved by the NRC in License Amendment No. 211 (Reference 5) on July 27, 2000. It consisted of changes to the TSs which resulted from implementation of an alternate radiological source term as permitted by 10 CFR 50.67 and allowed implementation of plant modifications to the containment air handling systems and the control room air handling systems related to the use of the AST. Later, as part of the IP2 power uprate project, a re-analysis of the FHA was performed utilizing the AST methodology, that is currently the analysis of record as presented in Section 14.2.1.1 of the IP2 UFSAR.</p> <p>Concurrent with implementation of the PDTS, this UFSAR section is revised to reflect the results of the “Normal” case analyzed in Calculation IP-CALC-11-00073, as summarized in Calculation IP-CALC-19-00003. This FHA analysis utilizes the AST methodology and concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, and Control Room filtration assuming 84 hours of decay time following shut down.</p> <p>In addition, the section is modified to add an analysis to determine how many hours or days of decay are required for FHA EAB TEDE to be less than the Environmental Protection Agency (EPA) Protective Action Guideline recommended threshold for evacuation of 1 Rem.</p>
14.2.1.2	NA	Refueling Accident Inside Containment	Delete	<p>This section addresses a refueling accident inside the containment. It is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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14.2.1.3	6.2.2	Fuel Cask Drop Accident	Modify	<p>This section is modified by eliminating the subsection titles. This change supports the consolidation of information into the Defueled Safety Analysis Report.</p> <p>In addition, the term “crane operator” is changed to “crane operators.” This is a non-technical change to reflect that multiple individuals are qualified as crane operators.</p>
14.2.2	6.4	Accidental Release- Recycle of Waste Liquid	Modify	<p>This section addresses the accidental release of waste liquid. It is proposed to be modified to denote that a separate liquid-specific release accident evaluation is not required to be performed with regard to removal of supporting systems such as PAB ventilation, station vent radiation monitors, Control Room isolation, and Control Room filtration.</p> <p>A potential liquid waste release collects in building sumps or is retained in building vaults. It is not released to the environment. As such, the hazard from these releases is derived only from any volatilized components. The volatilized components are what comprise the waste gas accident and are evaluated as described in Section 14.2.3. Therefore, a separate liquid-specific release accident evaluation is not required to be performed with regard to removal of supporting systems such as PAB ventilation, station vent radiation monitors, Control Room isolation, and Control Room filtration.</p>
14.2.3	6.3	Accidental Release – Waste Gas	Modify	<p>This section evaluates the accidental release of waste gas. Concurrent with implementation of the PDTs, this UFSAR section is revised to reflect the results of Calculation IP-CALC-19-00003, “Post-Permanent Shutdown Analyses of Fuel Handling, Waste Handling, and High Integrity Container Drop Accidents for Indian Point Units 2 and 3.”</p> <p>The waste gas decay tanks receive the radioactive gases from the radioactive liquids from the various laboratories and drains processed by the waste disposal system. The 50,000 Ci dose-equivalent Xe-133 waste gas tank activity assumed in this calculation bounds the current Xe-133 dose-equivalent limit of 29,761 Ci, as well as the administrative Xe-133 dose-equivalent limit of 6,000 Ci.</p> <p>Other tanks that contain waste gas during operations (the volume control tank and liquid holdup tank) were not considered in this analysis, since gaseous products from these liquid tanks are collected and compressed in the waste gas decay tanks for decay prior to release. Potential liquid waste releases are considered from these tanks; however, any liquid releases are retained in the building or sumps and only</p>

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volatilized components would be released to the environment. These volatilized components are evaluated as part of the waste gas decay tank accident.

This calculation includes the determination of the dose consequences for a waste gas decay tank rupture accident using a 50,000 Ci dose-equivalent Xe-133 waste gas tank activity limit without any credit for mitigating systems. The dose consequences following a waste gas decay tank rupture are less than the dose consequences following an FHA. They are also less than the 10 CFR 50.67 limit of 5 rem TEDE to the control room operators, the 500 mrem EAB dose limit following a waste gas tank accident as referenced in the IP2 and IP3 FSARs and Offsite Dose Calculation Manual (ODCM), and the 1 rem EPA Protective Action Guideline. The resulting EAB and LPZ dose consequences are essentially the same as the 0.32 rem (EAB) and 0.12 rem (LPZ) reported in Section 14.2.3 of the IP2 UFSAR.

14.2.4	NA	Steam-Generator Tube Rupture	Delete	<p>This section summarizes the analysis of a steam generator tube rupture.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, a steam generator tube rupture is no longer possible in the permanently shut down and defueled state. Thus, the information regarding a steam generator tube rupture in the IP2 UFSAR is obsolete.</p>
14.2.5, including Subsections 14.2.5.1 through 14.2.5.7	NA	Rupture of a Steam Pipe	Delete	<p>This section summarizes the analysis of the rupture of a steam pipe.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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Consequently, the rupture of a steam pipe is no longer possible in the permanently shut down and defueled state. Thus, the information regarding the rupture of a steam pipe in the IP2 UFSAR is obsolete.

14.2.6, including Subsections 14.2.6.1 through 14.2.6.12      NA      Rupture of a Control Rod Mechanism Housing – Rod Cluster Control Assembly Ejection      Delete

This section summarizes the analysis of the rupture of a control rod mechanism – rod cluster control assembly ejection.

After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.

NA      6.5      High Integrity Container Drop Event      Add

Consequently, rupture of a control rod mechanism – rod cluster control assembly ejection is no longer possible in the permanently shut down and defueled state. Thus, the information regarding rupture of a control rod mechanism – rod cluster control assembly ejection in the IP2 UFSAR is obsolete.

This section is added to establish a limit on the dose-equivalent Xe-133 activity for a High Integrity Container (HIC), so that the release resulting from a potential HIC drop event remain below the EPA PAG of 1 Rem. The event was analyzed in Calculation IP-CALC-19-00003, “Post-Permanent Shutdown Analyses of Fuel Handling, Waste Handling, and High Integrity Container Drop Accidents for Indian Point Units 2 and 3.”

For the HIC drop accident, the new dose equivalent activity limits are calculated to ensure the results are bounded by the analyzed FHA, both for the defueled Technical Specifications when the mitigating support systems can be taken out of service and when they meet the Emergency Plan exemption requirements. The limiting activity will become the new post-permanent shut down limit.

Table 14.2-1      NA      Deleted      Delete      Previously deleted.

Table 14.2-2      Tables 6.2-1, 6.2-2 and 6.2-3      Fuel Handling Accident – Design Basis Case      Modify      See the previous discussion for Subsection 14.2.1.1

Table 14.2-2a      NA      Deleted      Delete      Previously deleted.

Table 14.2-3      NA      Deleted      Delete      Previously deleted.

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Table 14.2-4	NA	Deleted	Delete	Previously deleted.
Table 14.2-5	NA	Volume Control Tank Activity	Delete	See the previous discussion for Section 14.2.3
Table 14.2-6	NA	Time Sequence of Events for the Rupture of a Main Steamline	Delete	See the previous discussion for Section 14.2.5.
Table 14.2-7	NA	Parameters Used in the Analysis of the Rod Cluster Control Assembly Ejection Accident	Delete	See the previous discussion for Section 14.2.6.
Table 14.2-8	NA	Results of the Analysis of the Rod Cluster Control Assembly Ejection Accident	Delete	See the previous discussion for Section 14.2.6.
Table 14.2-9	NA	Time Sequence of Events for Rod Cluster Control Assembly Ejection	Delete	See the previous discussion for Section 14.2.6.
Figure 14.2-0	NA	Steam Generator Tube Rupture, Break Flow and Safety Injection Flow vs. Reactor Coolant System Pressure	Delete	See the discussion above for Section 14.2.4.
Figure 14.2-1	NA	Steam Line Valve Arrangement Schematic	Delete	See the discussion above for Section 14.2.5.
Figure 14.2-2 Sh. 1	NA	Steam Line Rupture Offsite Power Available, EOL, Core Heat Flux and Core Reactivity vs. Time	Delete	See the discussion above for Section 14.2.5.
Figure 14.2-2 Sh. 2	NA	Steam Line Rupture Offsite Power Available, EOL, Reactor Coolant Pressure and RV Inlet Temperature vs. Time	Delete	See the discussion above for Section 14.2.5.

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Figure 14.2-2 Sh. 3	NA	Steam Line Rupture Offsite Power Available, EOL, Steam Flow and Steam Generator Pressure vs. Time	Delete	See the discussion above for Section 14.2.5.
Figure 14.2-2 Sh. 4	NA	Steam Line Rupture Offsite Power Available, EOL, Core Boron Concentration vs. Time	Delete	See the discussion above for Section 14.2.5.
Figure 14.2-3	NA	Deleted	Delete	Previously deleted.
Figure 14.2-4	NA	Deleted	Delete	Previously deleted.
Figure 14.2-5	NA	Deleted	Delete	Previously deleted.
Figure 14.2-6	NA	Deleted	Delete	Previously deleted.
Figure 14.2-7	NA	Containment Pressure Time History (Double - Ended Main Steam Line Break Main FCV Failure Maximum Containment Safeguards)	Delete	See the discussion above for Section 14.2.5.
Figure 14.2-8	NA	Deleted	Delete	Previously deleted.
Figure 14.2-9	NA	Deleted	Delete	Previously deleted.
Figure 14.2-10	NA	Deleted	Delete	Previously deleted.
Figure 14.2-11	NA	Rod Ejection Accident, BOL-HFP, Nuclear Power vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-12	NA	Rod Ejection Accident, BOL-HFP, Fuel Temperatures vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-13	NA	Rod Ejection Accident, BOL-HZP, Nuclear Power vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-14	NA	Rod Ejection Accident, BOL-HZP, Fuel Temperatures vs. Time	Delete	See the discussion above for Section 14.2.6.



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Figure 14.2-15	NA	Rod Ejection Accident, EOL-HZP, Nuclear Power vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-16	NA	Rod Ejection Accident, EOL-HZP, Fuel Temperatures vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-17	NA	Rod Ejection Accident, EOL-HFP, Nuclear Power vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-18	NA	Rod Ejection Accident, EOL-HFP, Fuel Temperatures vs. Time	Delete	See the discussion above for Section 14.2.6.
Figure 14.2-19	NA	Deleted	Delete	Previously deleted.
Figure 14.2-20	NA	Deleted	Delete	Previously deleted.
Figure 14.2-21	NA	Deleted	Delete	Previously deleted.
Figure 14.2-22	NA	Deleted	Delete	Previously deleted.
14.3, including Subsections 14.3.1 through 14.3.6, Tables 14.3-1 through and 14.3-52, and Figures 14.3-1 through 14.3-129	NA	Loss-of-Coolant Accidents	Delete	<p>This section summarizes the analyses of loss of coolant accidents (LOCAs). After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p> <p>Consequently, LOCAs are no longer possible in the permanently shut down and defueled state. Thus, the information regarding the LOCAs in the IP2 UFSAR is obsolete.</p>
14.4.4, including Tables 14.4-1 through 14.4-8, and Figures 14.4-1 through 14.4-37	NA	Anticipated Transients Without Scram	Delete	<p>This section summarizes the analysis of anticipated transients without scram. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur and core related design basis accidents are no longer possible.</p>

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Consequently, anticipated transients without scram are no longer possible in the permanently shut down and defueled state. Thus, the information regarding anticipated transients without scram in the IP2 UFSAR is obsolete.

Appendix 14A      NA

Delete      Previously deleted.

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**APPENDIX A – LICENSE RENEWAL**

<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
A.1	A.1	Introduction	Modify	<p>This section is modified by eliminating the discussion of the time limited aging analyses and providing a clarification regarding how the information from Appendix B of the IPEC License Renewal Application continues to be utilized in the Defueled Safety Analysis Report (DSAR).</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the period of extended operation has ceased and the evaluations of time-limited aging analyses associated with the period of extended operation are no longer required.</p> <p>In addition, the UFSAR will be replaced with the DSAR to reflect the SSCs and accident analyses that remain applicable in the permanently shut down and defueled condition.</p>
A.2	A.2	New UFSAR Section for Unit 2	Modify	<p>The title of this section is changed from “New UFSAR Section for Unit 2” to “Aging Management.” This is an administrative change to reflect the consolidated of material into the DSAR.</p> <p>This section is modified by replacing the term UFSAR with DSAR, eliminating the discussion of the time limited aging analysis.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the period of extended operation has ceased and the facility has entered a period where aging management for SSCs utilized for wet fuel storage will</p>

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A.2.0	A.2.0	Supplement for Renewed Operating License	Modify	<p>continue until the fuel is transferred to the ISFSI. The evaluations of time-limited aging analysis is no longer required.</p> <p>In addition, the UFSAR will be replaced with the DSAR to reflect the SSCs and accident analyses that remain applicable in the permanently shut down and defueled condition.</p> <p>This section is modified by replacing the term UFSAR with DSAR. eliminating the discussion of the time limited aging analysis, and adding a discussion regarding how the aging management programs will apply in the permanently shut down and defueled condition.</p>
A.2.1	A.2.1	Aging Management Programs and Activities	Modify	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the period of extended operation has ceased and the facility has entered a period where aging management for SSCs utilized for wet fuel storage will continue until the fuel is transferred to the ISFSI. The evaluations of time-limited aging analysis is no longer required.</p> <p>In addition, the UFSAR will be replaced with the DSAR to reflect the SSCs and accident analyses that remain applicable in the permanently shut down and defueled condition.</p> <p>This section is modified by eliminating the reference to the “period of extended operation,” denoting that the aging management programs were implemented prior to entering the period of extended operation, eliminating the adjective “existing” from describing the IPEC corrective action program, replacing the Entergy Quality Assurance Program with the IPEC Quality Assurance Program. and eliminating the reference to the Entergy fleet.</p>

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UFSAR Ref #	DSAR Ref #	Title	Action	Conclusions
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the period of extended operation has ceased and the facility has entered a period where aging management for SSCs utilized for wet fuel storage will continue until the fuel is transferred to the ISFSI.</p> <p>The aging management programs were implemented prior to entering the period of extended operation. The change reflects this fact. Eliminating the adjective “existing” is an administrative change that doesn’t alter the meaning of the statement.</p> <p>Due to the permanent shut down and defueling of IP2, the facility will adopt a site-specific Quality Assurance Program. Its name will be the IPEC Quality Assurance Program. In addition, operating experience from the Entergy fleet will be addressed just like any other industry operating experience.</p>
A.2.1.1	NA	Aboveground Steel Tanks Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.2	NA	Bolting Integrity Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.3	NA	Boraflex Monitoring Program	Delete	This section is proposed to be deleted in its entirety. The Boraflex Monitoring Program has been discontinued, because a revision to TS 3.7.13 has been implemented and Boraflex is no longer credited in the criticality analysis of the spent fuel racks.
A.2.1.4	NA	Boric Acid Corrosion Prevention Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies

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<b>UFSAR Ref #</b>	<b>DSAR Ref #</b>	<b>Title</b>	<b>Action</b>	<b>Conclusions</b>
A.2.1.5	NA	Buried Piping and Tanks Inspection Program	Delete	to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal. This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.6	NA	Containment Leak Rate Program	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Containment is no longer required to perform a function in the permanently shut down and defueled state. Thus, the Containment Leak Rate Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.
A.2.1.7	NA	Containment Inservice Inspection (CII) Program	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Containment is no longer required to perform a function in the permanently shut down and defueled state. Thus, the Containment Inservice Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.
A.2.1.8	NA	Diesel Fuel Monitoring Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies

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A.2.1.9	NA	Environmental Qualification (EQ) of Electric Components Program	Delete	<p>to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA.</p> <p>Consequently, the environmental qualification of electric components is no longer required to be maintained. Thus, the Environmental Qualification of Electric Components Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.10	NA	External Surfaces Monitoring Program	Delete	<p>This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.</p>
A.2.1.11	NA	Fatigue Monitoring Program	Delete	<p>This section is proposed to be deleted in its entirety.</p>

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				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the reactor coolant system is no longer required to perform a function. Thus, the Fatigue Monitoring Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.12	NA	Fire Protection Program	Delete	<p>This section is deleted in its entirety.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Fire Protection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated. However, IP2 shall maintain a Fire Protection Program in accordance with 10CFR50.48(f).</p>
A.2.1.13	NA	Fire Water System Program	Delete	<p>This section is deleted in its entirety.</p>
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Fire Water System Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated. However, IP2 shall maintain a Fire Protection Program in accordance with 10CFR50.48(f).</p>



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A.2.1.14	NA	Flow-Accelerated Corrosion Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA.</p> <p>Consequently, the Flow Accelerated Corrosion Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.15	NA	Flux Thimble Tube Inspection Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Flux Thimble Tube Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>

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A.2.1.16	NA	Heat Exchanger Monitoring Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.17	NA	Inservice Inspection – Inservice Inspection (ISI) Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the Inservice Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.18	NA	Masonry Wall Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.19	NA	Metal-Enclosed Bus Inspection Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.

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A.2.1.20	NA	Nickel Alloy Inspection Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the Nickel Alloy Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.21	NA	Non-EQ Bolted Cable Connections Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent</p>

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A.2.1.22	NA	Non-EQ Inaccessible Medium-Voltage Cable Program	Delete	radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the Non-EQ Bolted Cable Connections Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated. This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.23	NA	Non-EQ Instrumentation Circuits Test Review Program	Delete	This section is proposed to be deleted in its entirety. After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the Non-EQ Instrumentation Circuits Test Review Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.

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A.2.1.24	NA	Non-EQ Insulated Cables and Connections Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA. Consequently, the Non-EQ Insulated Cables and Connections Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.25	NA	Oil Analysis Program	Delete	<p>This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.</p>
A.2.1.26	NA	One-Time Inspection Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>The One-Time Inspection Program was completed prior to the period of extended operations. Consequently, the One-Time Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.27	NA	One-Time Inspection – Small Bore Piping Program	Delete	<p>This section is proposed to be deleted in its entirety.</p>

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A.2.1.28	NA	Periodic Surveillance and Preventive Maintenance Program	Delete	<p>The One-Time Inspection – Small Bore Piping Program was completed prior to the period of extended operations. Consequently, the One-Time Inspection – Small Bore Piping Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p> <p>This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.</p>
A.2.1.29	NA	Reactor Head Closure Studs Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Reactor Head Closure Studs Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.30	NA	Reactor Vessel Head Penetration Inspection Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Reactor Vessel Head Penetration Inspection Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>

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A.2.1.31	NA	Reactor Vessel Surveillance Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Reactor Vessel Surveillance Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.32	NA	Selective Leaching Program	Delete	<p>This section is proposed to be deleted in its entirety. This was a one-time inspection that was required to be completed prior to the period of extended operation. Consequently, the Selective Leaching Program may be eliminated.</p>
A.2.1.33	NA	Service Water Integrity Program	Delete	<p>This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.</p>
A.2.1.34	NA	Steam Generator Integrity Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Steam Generator Integrity Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.35	A.2.1.35	Structures Monitoring Program	Modify	<p>This section is modified by eliminating the adjective “existing” from the term “existing program,” eliminating the discussion regarding the</p>

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				<p>procedures that were revised, denoting enhancements to the structures monitoring program that were implemented prior to the period of extended operation, eliminating enhancements that are no longer applicable during the aging management period, and replacing the phrase “period of extended operation” with “aging management period.”</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the period of extended operation has ceased and the facility has entered a period where aging management for SSCs utilized for wet fuel storage will continue until the fuel is transferred to the ISFSI.</p> <p>These changes reflect the completion of activities, the permanent shut down and defueling of IP2, and the compilation of the DSAR.</p>
A.2.1.36	NA	Thermal Aging Embrittlement of Cast Austenitic Stainless Steel (CASS) Program	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p>
A.2.1.37	NA	Thermal Aging and Neutron Irradiation Embrittlement of	Delete	<p>The CASS Program only applies to the reactor coolant system and reactor vessel internals. Consequently, the Thermal Aging Embrittlement of CASS Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p> <p>This section is proposed to be deleted in its entirety.</p>



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		Cast Austenitic Stainless Steel (CASS) Program		<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>The CASS Program only applies to the reactor coolant system and reactor vessel internals. Consequently, the Thermal Aging and Neutron Irradiation Embrittlement of CASS Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.38	NA	Water Chemistry Control – Auxiliary Systems Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.39	NA	Water Chemistry Control – Closed Cooling Water Program	Delete	This section is proposed to be deleted in its entirety. Following the permanent shut down and defueling of IP2, the program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal.
A.2.1.40	NA	Water Chemistry Control – Primary and Secondary	Delete	This section is proposed to be deleted in its entirety.
				<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Water Chemistry Control – Primary and Secondary Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p>
A.2.1.41	NA	Reactor Vessel Internals Aging Management Activities	Delete	This section is proposed to be deleted in its entirety.

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A.2.2	NA	Evaluation of Time-Limited Aging Analyses	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the Reactor Vessels Internals Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p> <p>This section is proposed to be deleted in its entirety.</p>
A.2.2.1, including subsections A.2.2.1.1 through A.2.2.1.4	NA	Reactor Vessel Neutron Embrittlement	Delete	<p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p> <p>Consequently, the period of extended operation has ceased and the facility has entered a period where aging management for SSCs utilized for wet fuel storage will continue until the fuel is transferred to the ISFSI. The time-limited aging analyses are no longer relevant. Thus, the analyses may be eliminated.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.</p>

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A.2.2.2	NA	Metal Fatigue	Delete	Consequently, there is no need to continue to address reactor vessel neutron embrittlement. This section is proposed to be deleted in its entirety, because its subsections are proposed for deletion.
A.2.2.2.1	NA	Class 1 Metal Fatigue	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.
A.2.2.2.2	NA	Non-Class 1 Metal Fatigue	Delete	Consequently, the Fatigue Monitoring Program for the Class 1 components is no longer required in the permanently shut down and defueled condition. This section is proposed to be deleted in its entirety. No non-class 1 piping and in-line components were identified with projected cycles exceeding 7000.
A.2.2.2.3	NA	Subsection NG Fatigue Analysis of Reactor Pressure Vessel Internals	Delete	See the discussion above for Section A.2.2.1
A.2.2.2.4	NA	Environmental Effects on Fatigue	Delete	See the discussion above for Section A.2.2.1.
A.2.2.3	NA	Environmental Qualification of Electrical Components	Delete	This section is proposed to be deleted in its entirety.  After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur.

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A.2.2.4	NA	Containment Liner Plate and Penetrations Fatigue Analyses	Delete	<p>After permanent shutdown and full core offload, all fuel will be in the SFP or the ISFSI. An FHA in the SFP is analyzed utilizing the AST methodology. It concludes that the dose consequences of the FHA will remain within the licensing basis dose limits without crediting FSB ventilation, the station vent radiation monitors, Control Room isolation, or Control Room filtration if the accident were to occur after 84 hours of decay time following shut down. After permanent shutdown and full core offload, the decay time for fuel assemblies in the SFP will be longer than the assumed decay time. No instrumentation and control systems or active systems are required to mitigate the FHA.</p> <p>Consequently, the environmental qualification of electric components is no longer required to be maintained. Thus, the Environmental Qualification of Electric Components Program no longer applies to a plant system, structure, or component that is within the 10 CFR 54.4 Scope for License Renewal and may be eliminated.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Containment is no longer required to perform a function in the permanently shut down and defueled state. Thus, the Containment Liner Plate and Penetrations Fatigue analyses discussion is obsolete.</p>
A.2.2.5	NA	Leak before Break	Delete	<p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or</p>

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A.2.2.6	NA	Steam Generator Flow-Induced Vibration and Tube Wear	Delete	<p>placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the reactor coolant system is no longer required to perform a function in the permanently shut down and defueled state. Thus, the “Leak before Break” discussion is obsolete.</p> <p>This section is proposed to be deleted in its entirety.</p> <p>After certifications for permanent cessation of operations and permanent removal of fuel from the reactor vessel are submitted to the NRC in accordance with 10 CFR 50.82(a)(1)(i) and (ii) and they are docketed for IP2, the 10 CFR Part 50 license will no longer permit operation of the reactor or placement of fuel in the reactor vessel in accordance with 10 CFR 50.82(a)(2). Thus, power operations can no longer occur. Consequently, the Steam Generators are no longer required to perform a function in the permanently shut down and defueled state. Thus, the Steam Generator Flow-Induced Vibration and Tube Wear discussion is obsolete.</p>
A.2.3	A.2.3	References	Retain	No proposed changes.