

Donald C. Cook Nuclear Plant (CNP)
Unit 1 Technical Specification (TS) Bases Update Summary
Enclosure to AEP-NRC-2016-42

Revision	Effective Date	Description of Change
44	12/05/2014	Revised the TS Bases 3.6.9, Distributed Ignition System (DIS), to remove the term "glow plug" and replace it with the term "ignitor."
45	12/08/2014	Bases were revised to support upgrades to the 69kV system being performed in AEP transmission. Since the TS Bases specifically identifies the source of the alternate qualified offsite circuit as a tap of the Bridgman-Derby or Bridgman Hickory Creek line, this change is required to identify the source as a 69kV line fed from Bridgman, Derby, or Hickory Creek to reflect the 69kV system changes. Additionally, the new 2014 "4-Year System Load Flow and Short Circuit Study for D. C. Cook" demonstrates that the 4kV EP Bus voltage will remain above the minimum allowable voltage of 0.91 pu voltage for all evaluated scenarios. The TS Bases currently specify that the voltage regulators located downstream of transformer TR12EP-1 ensure adequate voltage on the 4.16 kV Bus 1 for certain scenarios. Based on the results of the new study, reference to requirement for the voltage regulators with regard to the OPERABILITY of the alternate qualified offsite circuit for the provided scenarios has been deleted.
46	12/18/2014	The change was to Divider Barrier Integrity. The specific change is the addition of the statement, "such that the total divider barrier bypass area is less than or equal to the design limit of 7 square feet" to the end of the sentence "Visual inspection of the seal around the perimeter provides assurance that the seal is properly secured in place." The statement "strength of bolts" is changed to "strength of connection." Finally, add additional sentence "Example of acceptable connections include bolts, studs, pins, screws, nuts, welds, and rivets" is added. The statements are being added as a result of the update to the technical specifications under AEP-NRC-2013-50. NRC approval was received under this change for an update to TS 3.6.13, Divider Barrier Integrity, Surveillance Requirement 3.6.13.5 for the divider barrier seal inspection.
47	02/13/2015	Revised TS Bases due to two separate issues dealing with the Loss of Coolant Accident (LOCA) containment analysis. The first issue relates to updating the TS Bases for the peak pressure calculation that was performed by Westinghouse using the 4200 second input for the residual heat removal spray initiation time. The RHR spray initiation time was reduced to offset the penalty error that Westinghouse identified in the initial containment temperature assumption. This change updated the TS Bases to be consistent with the corrected analysis. The second change removes a 0.06 psi penalty that was incorrectly issued by Westinghouse.

48	02/27/2015	Update the TS Bases for Page B3.7.12-5, ESF Ventilation System, for both Units 1 and 2 to change Reference 4 which stated "UFSAR, Section 14.3.5.19." to "UFSAR 14.3.5.5."
49	05/01/2015	Revise the TS Bases for LCO Applicability, for both Units 1 and 2 in conjunction with implementation of Amendments 327 (U1) and 310 (U2).
50	06/10/2015	Revise TS Bases Pages B 3.8.1-4 and B 3.8.2-2 to remove the line "a 69kV line fed from Bridgman, Derby, or Hickory Creek." and replace with "the 69kV Bus #2 of the Cook-Thornton Station." This change was made to support the upgrades to the 69kV system.
51	07/13/2015	This change is in support of TS Amendment 328 related to conditions for one or more inoperable channels for main feedwater pump trips. The changes make the TS Bases descriptions consistent with the TS Amendment.
52	09/08/2015	Added a reference to Section 3.7.9, Ultimate Heat Sink. The reference added calculation MD-12-ESW-106-N which provides the calculation for maximum UHS temperature of 88.8 degrees Fahrenheit.
53	11/12/2015	Updated TS Bases Section 3.6.4 and 3.6.6 to replace the current calculated peak pressure value of 11.43 psig with the revised calculated peak pressure value of 10.37 psig.
54	01/18/2016	Changed TS Bases for TS 3.7.3, "Main Feedwater Isolation Valves (MFIVs) and Main Feedwater Regulation Valves (MFRVs)." The Bases background for TS 3.7.3 stated that the MFRV and MFIV could be used as a pressure boundary for AFW flow injection into the steam generators (SGs). However, the MFRV will not prevent reverse flow from AFW into the MFW system and cannot be used as an AFW pressure boundary for injection of AFW. Therefore, this change removed this statement and changed the bases to state that the check valves at the FW inlet are used as the credited boundary for AFW injection. This supports the established design bases for MFW, which is that the feedwater check valves are the pressure boundary for the SGs.
55	02/17/2016	Changed the note in TS SR 3.6.11.3 Bases regarding the Unit 1 Cycle 26 operation to refer to Cycle 27 operation. Reference 5, which demonstrates that "the as-left ice basket condition would not result in a significant localized degraded mass during the fuel cycle" was revised from EC-0000053931 to EC-0000054414.
56	03/30/2016	Updated B3.4.14, B 3.5.5, B 3.6.6, and B 3.6.10 to reflect LAR approval by the NRC of Amendment 329 for return to Normal Operating Pressure and Temperature.
57	04/04/2016	Change the Bases TS 3.8.1 "AC SOURCES-Operating" to reflect the modification of the notes to allow surveillance testing of the standby EDG during Modes in which it is currently prohibited. This was reflected in NRC approved Amendment 330.
58	04/07/2016	Removed the statement "or an improperly loaded fuel assembly" from TS Bases 3.9.2, Nuclear Instrumentation. This statement is not supported by reactor physics as documented in TSTF-555T, Revision 0, "Clarify the Nuclear Instrumentation Bases Regarding the Detection of an Improperly Loaded Fuel Assembly."

Donald C. Cook Nuclear Plant
Unit 2 Technical Specification Bases Update Summary
Enclosure to AEP-NRC-2016-42

Revision	Effective Date	Description of Change
43	12/08/2014	Bases were revised to support upgrades to the 69kV system being performed in AEP transmission. Since the TS Bases specifically identifies the source of the alternate qualified offsite circuit as a tap of the Bridgman-Derby or Bridgman Hickory Creek line, this change is required to identify the source as a 69kV line fed from Bridgman, Derby, or Hickory Creek to reflect the 69kV system changes. Additionally, the new 2014 "4-Year System Load Flow and Short Circuit Study for D. C. Cook" demonstrates that the 4kV EP Bus voltage will remain above the minimum allowable voltage of 0.91 pu voltage for all evaluated scenarios. The TS Bases currently specify that the voltage regulators located downstream of transformer TR12EP-1 ensure adequate voltage on the 4.16 kV Bus 1 for certain scenarios. Based on the results of the new study, reference to requirement for the voltage regulators with regard to the OPERABILITY of the alternate qualified offsite circuit for the provided scenarios has been deleted.
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47	04/15/2015	A note was added to the TS SR 3.6.11.3 Bases that states: "For Fuel Cycle 22, individual ice baskets need not be serviced to keep their ice mass above 1132 lbs. provided that SR 3.6.11.2 and SR 3.6.11.3 requirements are projected to be met for the fuel cycle. An evaluation (Reference 5) has demonstrated that the as-left ice basket condition would not result in a significant localized degraded mass condition during the fuel cycle." "Revise Unit 2 Ice Basket Weight Acceptance Criteria for Unit 2 Cycle 22," was added to the Reference Section for B 3.6.11.
48	05/01/2015	Revise the TS Bases for LCO Applicability, for both Units 1 and 2 in conjunction with implementation of Amendments 327 (U1) and 310 (U2).
49	06/10/2015	Revise TS Bases Pages B 3.8.1-4 and B 3.8.2-2 to remove the line "a 69kV line fed from Bridgman, Derby, or Hickory Creek." and replace with "the 69kV Bus #2 of the Cook-Thornton Station." This change was made to support the upgrades to the 69kV system.
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