2.2 Nearby Industrial, Transportation, and Military Facilities

This section of the referenced DCD is incorporated by reference with the following departures and/or supplements.

CP SUP 2.2(1) The Comanche Peak Nuclear Power Plant (CPNPP) is located in Hood and Somervell counties, Texas. Hood County is located north of Somervell County. The two counties are bounded by Parker County to the north, Johnson County to the east, Bosque County to the south, Erath County to the west, and Palo Pinto County to the northwest, as seen in **Figure 2.1-203**.

The CPNPP site is accessible by road and rail. Interstate 20 (I-20) connects the Dallas-Fort Worth metropolitan area with Abilene, and its closest portion to the site is located approximately 28 mile (mi) northwest (**Reference 201**). U.S. Highway 377 (US 377) runs southwest from the city of Fort Worth to Stephenville passing through Granbury. U.S. Highway 67 (US 67) connects Cleburne to Stephenville after passing through Glen Rose. The site is accessible by rail via a rail spur that runs from the CPNPP site to an intersection with the main line in Tolar, Texas. The Tolar line is owned by Fort Worth and Western Railroad and is located approximately 9.5 mi northwest of the site center point.

This section of the safety analysis report provides information regarding the potential effects on the safe operation of the nuclear facility from industrial, transportation, mining, and military installations in the CPNPP vicinity.

2.2.1 Locations and Routes

Within a 5-mi radius of the CPNPP site, there is one railroad, four farm-to-market roads, one state highway, and one federal highway, all with commercial traffic (**Reference 201**). Not including CPNPP Units 1 and 2, there are eight industrial facilities including two electric generation plants within 5 mi of the site center point (**Reference 202**). There are no public airports within 5 mi of the site center point (**Reference 203**). Specifically, the following transportation routes and industrial facilities are shown in **Figure 2.2-201**.

- IESI Somervell County Transfer Station
- Wolf Hollow 1 LP
- DeCordova Steam Electric Station
- Glen Rose Medical Center
- Cleburne Propane

CP COL 3.6(4) "The criteria are to be implemented for defining pipe break and crack location and configuration and the locations of the design-basis breaks and cracks are provided for the site-specific high-and moderate-energy piping systems.

CP COL 3.6(5) The postulated rupture orientation of each break location is to be identified for the site specific high-and moderate-energy piping systems.

CP COL 3.6(7) As-built criteria for high-and moderate-energy lines are to be developed. As-built inspections are to be completed prior to system turnover for testing and operation to verify that the installed piping, support locations, types, and component locations agree with the design drawings and are within the installation tolerances."

3.6.2.4 Dynamic Analysis Methods to Verify Integrity and Operability

CP SUP 3.6(3) In DCD Subsection 3.6.2.4, insert the following subsection after Subsection 3.6.2.4.4.3:

STD COL 3.6(6)"**3.6.2.5 Implementation of Criteria Dealing with Special Features**

The activities associated with site-specific piping analysis and the identification of break locations are to be completed prior to fabrication and installation of piping and components. Criteria are implemented to address, where required, special features such as an augmented ISI Program or use of special protective devices such as pipe whip restraints, including diagrams showing their final configurations, locations, and orientations in relation to break locations."

3.6.3 LBB Evaluation Procedures

CP SUP 3.6(4) In DCD Subsection 3.6.3, insert the following text after the last paragraph of 3.6.3 and before Subsection 3.6.3.1:

CP COL 3.6(8) "The as-built material used for base metal welds, weldments, and safe ends are as per specifications for piping evaluated for LBB."

CP COL 3.6(9) The as-built piping material and material specification including toughness curve (J-R curves), tensile strength (stress-strain curves), yield and ultimate strength, and welding process/methods used for piping evaluated for LBB."

Table 6.3-3R Response of US-APWR to Generic Safety Issues

No.	Regulatory Position	US-APWR Design
23	**Reactor Coolant Pump Seal Failure**	
	The results reported in WASH-1400 indicated that breaks in the RCPB in the range of 0.5 to 2 in. may contribute to core-melt. In this range of break size, the RCP seal is assumed to have the highest failure rate. Therefore, it is important to ensure the RCP seal integrity. However, the RCP seal integrity relates to Item A-44, SBO, or Item GI-65, CCW Failure, and needs to be addressed. An easy measure for assuring the RCP seal integrity is to change the seals every year, but results in increased radiation exposure.	RCP seals are designed such that the pressure tightness (or leak tightness) is usually maintained by No. 1 seal, and in case of a failure of No. 1 seal, No. 2 seal can withstand full pressure as the defense-in-depth function. The RCP seal integrity during SBO is discussed in DCD Chapter 8, Subsection 8.4.2.1.2 and Chapter 9, Subsection 9.2.2.
24	**Automatic ECCS Switchover to Recirculation**	
	There are three methods to switchover from injection mode to recirculation mode (i.e., manual, semi-automatic, and automatic), but these methods may be affected by human-error, component failure, and common-cause failure, respectively.	In the US-APWR, the RWSP is placed in the containment and the switchover of ECCS water source following an accident is not necessary.
105	**Interfacing Systems LOCA at LWRs**	
	The low-pressure systems are connected to RCPB using check valves. The leak of check valves could result in the failure of low-pressure system. In BWR plants, leak testing for PIV in the low-pressure system, which connects to the RCS, is specified to be performed every 18 months in the Technical Specifications. However, 30 failures of RCPB function have occurred in 200 BWR years of operating experience. Among the 30 failures, 20 cases are inadvertent remained-open check valves after maintenance by human-error, and 10 cases are stuck-open check valves.	In the US-APWR, the discharge of borated water from the accumulators below the standpipe, replaces the low head SI function in typical US PWR plants. As such, there are no "low-head" systems associated with ECCS.
122.2	**Initiating Feed-and-Bleed**	
STD COL 6.3(3)	This issue addresses the emergency operating procedure and operator training to assess the necessity of initiation of cooling operation using feed-and-bleed based on the experienced loss-of-steam generator cooling incident at Davis-Besse described in NUREG-1154.	Preparation of emergency operating instructions for feed-and-bleed operation is addressed in Subsection 6.3.2.8.
185	Control of Recriticality Following Small-Break LOCA in PWRs	
	In PWR plants, if RCPs and natural circulation stopped during small break LOCA, steam generated at the core could be condensed in the SG and be accumulated in the outlet plenum and crossover piping. When the natural circulation or RCP is restarted, the low concentration boric acid coolant could	This issue was considered not to be a generic safety issue by the NRC, and closed.