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2.8 Related Federal Project Activities

2.8.1 Overview

This section of the Environmental Report identifies and describes federal activities related to the proposed VCS site. The purpose of this assessment is to identify the possible need for other federal agencies to participate in the preparation of the Environmental Impact Statement (EIS) as a cooperating agency. Upon request of the lead agency, which at the VCS would be the U.S. NRC, any other federal agency that has jurisdiction by law shall be a cooperating agency for preparation of the EIS.

The National Environmental Policy Act (NEPA) [42 U.S.C. 4321 et seq.], signed into law on January 1, 1970, requires federal agencies to consider the environmental impacts of proposed actions and identify reasonable alternatives to those actions. As a result, federal agencies prepare an EIS, which the U.S. EPA reviews.

Cooperating agencies will participate in the NEPA process with the U.S. NRC if their activities could have connected, cumulative, and/or similar environmental impacts defined by 40 CFR 1508.25 (U.S. EPA July 2007) and 10 CFR 51.14 (U.S. NRC Jan 2007) as follows:

- Connected actions are closely related and should be discussed in the same EIS. They are defined as actions that can automatically trigger other actions, which may require an EIS; as actions that cannot or will not proceed unless other actions are taken either previously simultaneously to the larger action; and/or as actions that are interdependent parts of a larger action and, therefore, depend on the larger action for their justification.
- Cumulative actions are those that, when viewed with other proposed actions, have cumulatively significant impacts and therefore should be discussed in the same impact statement.
- Similar actions are those that, when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography.

Actions related to the granting of licenses, permits, or approvals by other federal agencies are not considered in this section. The scope of this section is centered on federal project activities that may affect the proposed plant siting, transmission line routing, plant water supply, or the need for power.

2.8.2 Acquisition of Land and Use of Transmission Corridors

2.8.2.1 Federal Actions Associated With Land Acquisition and/or Use

Federal lands within 50 miles (80 kilometers) of the site were reviewed for activities that might impact the potential construction or operation of the VCS units. Distances were measured from the power block area to the closest edge of each location using ArcGIS software v9.2, ESRI Data & Maps, and StreetMap USA, 2006.

There is one national wildlife refuge, the Aransas National Wildlife Refuge, which is 22.1 miles south of the site and managed by the U.S. Fish and Wildlife Service (USFWS). Within the Aransas National Wildlife Refuge, the 3440-acre Myrtle Foester Whitmire Unit is located at the end of the Guadalupe-Blanco River Authority's (GBRA) canal system. It provides food, water, and shelter for up to 20 percent of the waterfowl population migrating to the Texas Gulf Coast. One U.S. Department of Interior hydroelectric generating project, the Palmetto Bend Dam, is on Lake Texana, and is operated and maintained by the Lavaca-Navidad River Authority.

There are no designated national forests or grasslands within 50 miles (80 kilometers) of the proposed VCS site. There are no lands protected under the National Wilderness Preservation System within 50 miles (80 kilometers) of the proposed VCS site, and no federally designated wild and scenic rivers or Native American Reservations. Chase Field Naval Air Station is within 50 miles (80 kilometers) of the VCS site, but it has been closed since 1993 and offers no impacts, potential or otherwise, to construction or operation of the plant. No activities at these identified federal locales will result in environmental impacts affecting preparation of the VCS EIS.

In 1998, the USFWS reviewed its files of the McCan property, where the proposed VCS is now being considered for development. The files coupled with onsite investigations resulted in a declaration by USFWS that the land harbored no federally listed or proposed threatened or endangered species (USFWS 1998). Recent ecological surveys have confirmed this finding. There are no known federal agency actions, other than those of the U.S. NRC, associated with the acquisition or use of the proposed site.

2.8.2.2 Federal Actions Associated With Land Acquisition for Transmission Corridors

The proposed site will connect to the Electric Reliability Council of Texas (ERCOT) grid. ERCOT is an independent, not-for-profit corporation dedicated to ensuring electricity transmission reliability throughout most of Texas by managing the incoming and outgoing supply of electricity over the grid. ERCOT monitors the flow of power and issues instruction to generation and transmission companies to maintain balance. The ERCOT electrical service region is contained completely within the borders of Texas. It has only a few ties across state lines to import or export power with neighboring reliability

regions. As a result, ERCOT is considered "intrastate" and not under jurisdiction of the Federal Energy Regulatory Commission except for reliability oversight (ERCOT 2006).

American Electric Power (AEP) is one of many transmission service providers for ERCOT. AEP delivers electric service for ERCOT to consumers in the major cities of Corpus Christi, Abilene, McAllen, Harlingen, San Angelo, Vernon, Victoria, and Laredo. AEP is responsible for acquisition and ownership of transmission corridors; consequently, there will be no federal actions associated with land acquisition for transmission corridors.

2.8.3 **Cooling Water Source and Supply**

A cooling basin with a nominal surface area of approximately 4900 acres will serve as the normal heat sink for VCS. The basin also will supply makeup flow to the mechanical draft cooling towers. Makeup water to replenish water losses in the cooling basin will be supplied by a new pump station located on the Guadalupe River. A new cooling water supply pipeline system will be constructed to deliver the makeup water to the cooling basin from this new pump station. No federal involvement is anticipated for construction of the cooling system. However, some collaboration with federal agencies may result due to the need for permits, authorizations, and consultations associated with the potential construction or operation of the proposed VCS units. Permits, authorizations, and consultations are discussed in Section 1.2.

Victoria County lies in the South Central Texas Regional Water Planning Area, which is comprised of the Guadalupe-Blanco, Nueces, and San Antonio river authorities, and the Edwards Aquifer Authority (Caldwell, Hays, Comal, Guadalupe, Bexar, Medina, and Uvalde counties) and the Evergreen Underground Water Conservation District (Frio, Atascosa, Karnes, and Wilson counties). Additional details about water usage in the area are provided in Subsection 2.3.2, and Sections 4.2 and 5.2. Cumulative impacts from water usage during the potential construction and operation of the VCS units are discussed in Sections 4.7 and 5.11, respectively. There are no other known planned federal projects that will be required either to provide an adequate source of plant cooling water or to ensure an adequate supply of cooling water over the operating lifetime of the potential VCS units.

2.8.4 **Other Federal Actions Affecting Construction or Operation**

There are no known planned federal projects or activities that must be completed as a condition for potential construction or operation of the VCS units. Cumulative socioeconomic impacts may result from the potential construction and operation of the two nuclear units at the South Texas Project, approximately 60 miles east-northeast of the proposed VCS site. These impacts are addressed in Section 4.7 and 5.11 for cumulative impacts due to construction and operation, respectively.

A major roadway project, the I-69 Trans-Texas Corridor (TTC), will, if completed within the next 10 years, impact U.S. Highway 77. U.S. Highway 77 runs north-south approximately 1 mile west of the proposed VCS site, and will provide access to and egress from it. U.S. Highway 77 is also the primary route for transporting commodities between Corpus Christi and Houston. Proposed I-69 TTC will overlay the southern portion of U.S. Highway 77, adjacent to the VCS site.

Interstate 69 is a planned 1600-mile national highway connecting Mexico, the United States and Canada. Eight states are involved in the project. In Texas, I-69 will be developed under the TTC master plan (TxDOT 2008a). A study performed for the Corpus Christi Local Emergency Planning Commission concluded the I-69 TTC would facilitate increased movement of freight from Corpus Christi to Houston (Olivarri 2004). This would also impact traffic moving by the proposed VCS site. The decision to connect I-69 TTC to U.S. 77 has been deferred until the second phase of the I-69 TTC Study is completed (TxDOT 2008b).

2.8.5 Planned Federal Projects Contingent on Plant Construction or Operation

There are no known planned federal projects that are contingent on construction and operation of the potential VCS units.

2.8.6 **Cooperating Agencies**

In September 2008, the U.S. NRC and the U.S. Army Corp of Engineers (USACE) signed an updated memorandum of understanding regarding environmental reviews for authorizations to construct and operate nuclear power plants. Other than the USACE, no agencies have been identified as potential cooperating agencies. However, some collaboration with federal agencies may result at the COL stage due to the need for permits, authorizations, and consultations associated with construction or operation of the proposed plant. Permits, authorizations, and consultations are discussed in Section 1.2.

2.8.7 References

ERCOT 2006. Electric Reliability Council of Texas, 2006 Annual Report May 2007.

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