

ATTACHMENT 19.1 WATER INTAKE STRUCTURE INFORMATION

Water Source

Water for the Power Plant will be purchased from the Wise County Public Service Authority (WCPSA), eliminating the need for a new water intake structure and piping. This will further minimize impacts to sensitive habitats. Dominion and the WCPSA entered into a water purchase option agreement on January 10, 2006. Wise County will install new supply piping along the right-of-way (ROW) of U.S. Alternate Highway 58 from the WCPSA Carfax water plant to the Power Plant. Supply water provided from the WCPSA will be stored in an on-site tank that would also serve as the water source for the Power Plant fire protection system.

The Power Plant is estimated to require up to one million gallons of water per day for operating activities. In order to reduce water consumption by the Power Plant down to one million gallons per day, a dry-cooling process was selected for use with the circulating fluidized bed boilers. This dry-cooling process, also referred to as air-cooling, substantially reduces the amount of water that will be used by the Power Plant, minimizing impact to aquatic resources in the area. A standard power generating plant of similar size and design without a dry-cooling process could require up to 12 million gallons of water per day for operating activities.

Water Discharge

The discharge of Power Plant and SWMF process water will be collected on-site, treated as needed, and discharged to the Town of St. Paul's Wastewater Treatment Plant (WWTP). Wise County will install new discharge piping infrastructure along the ROW of U.S. Alternate Highway 58 from the WWTP to the Power Plant. Dominion will not discharge water to the WWTP until the WWTP's infrastructure is adequate to receive and treat the wastewater from the Power Plant and SWMF. The discharges from the facilities will not prevent the WWTP from maintaining compliance with its existing Virginia Pollutant Discharge Elimination System (VPDES) permit requirements.

There will be no releases into public streams or waterways, other than storm water runoff permitted by the Virginia Department of Environmental Quality under a VPDES storm water discharge permit.