

**Canadys Station
Combined-Cycle Project
Groundwater Capacity Use Permit Application**

Background

Dominion Energy South Carolina and Santee Cooper are seeking a groundwater withdrawal permit to support the proposed Canadys Station combined-cycle generating plant, an approximately 2,200 megawatt natural gas-fired generating plant proposed to be constructed in Colleton County.

On March 27, we applied to the South Carolina Department of Environmental Services, which will issue a draft permit later this year. Canadys Station will utilize a closed-cycle, air-cooled condenser system, which uses considerably less water than traditional systems.

How will Canadys use groundwater?

Water plays an essential role in power generation at natural gas plants. In steam-powered combined-cycle facilities like Canadys Station, heat from natural gas combustion is used to create steam, which spins a turbine to create electricity. Extremely high quality water is required for use in the steam-cycle of the plant (*i.e.*, the steam turbines and heat recovery steam generators) to maintain efficiency and reliable operation.

While water is also traditionally used for cooling in thermal power plant, Canadys Station will use advanced, environmentally efficient air-cooling technology to significantly reduce water use (by approximately 90% compared to traditional cooling systems).

How much water is required?

Both companies are committed to being responsible stewards of the environment and South Carolina's natural resources. Canadys Station will use 90 percent less water than the retired coal-fired generating plant that previously operated at the site. We will comply with all regulatory requirements under the final approved permit.

Our application seeks to withdraw no more than 530 million gallons per year of groundwater from two different aquifers (the Charleston and McQueen Branch aquifers). The amount of usage per year will vary based on weather and other factors but will generally be significantly less than this amount. For perspective, this amount of usage is similar to that of several golf courses in the area.

Why is Canadys Station using groundwater rather than the nearby Edisto River?

The state-of-the-art combined-cycle turbines require clean, demineralized water to operate efficiently. Using groundwater will reduce the need for chemical treatment and limit the environmental impacts to the Edisto River.

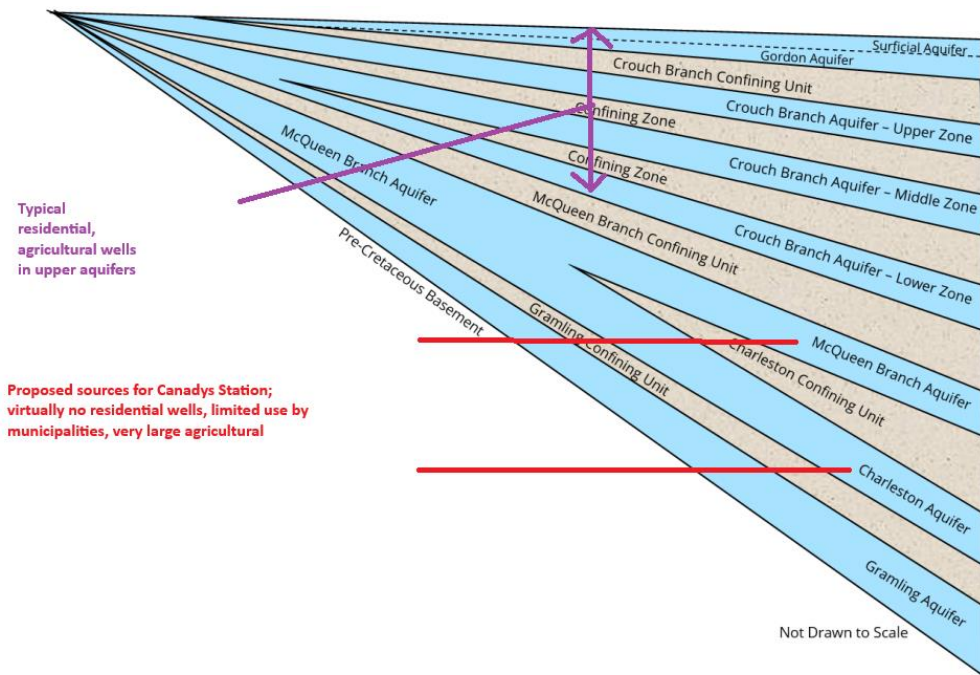
Under the planned approach for water use at Canadys Station, a modest amount of surface water from the river will also be used to support plant operations. This aligns with best practice principles for sustainable watershed management.

Having the ability to use surface water from the Edisto River and from two different aquifers provides significant flexibility for the facility.

How do I know that the groundwater wells at Canadys Station will not impact nearby residential wells or agricultural wells?

The South Carolina Department of Environmental Services regulates and administers a permitting process for groundwater withdrawals. The proposed withdrawals for Canadys Station have been modeled by a third-party engineering consultant and hydrogeologists and this modeling demonstrates that the proposed withdrawals will not impact adjacent wells.

The aquifers proposed to be used for Canadys Station are much deeper than the aquifers typically utilized in the area for residential and agricultural uses, the McQueen Branch and Charleston aquifers are accessed at a depth in excess of 1,000 feet deep at the Canadys site, far deeper than typical wells in the area.



530 million gallons per year seems like a lot of water? Is this much water really necessary to operate a power plant?

The former coal-fired generating units at the Canadys site were permitted to use over 15 billion gallons per year of water for about 490 megawatts of generation. Canadys Station will be approximately 2,200 megawatts and use considerably less water.

While 530 million gallons may seem like a large number, there are multiple deep groundwater wells in the region permitted for far greater withdrawals. DESC and Santee Cooper are committed to responsible use



of groundwater and surface water resources to operate Canadys Station—the air cooling equipment arrangement requires significantly less water than traditional cooling tower arrangements historically utilized for thermal power generating facilities.

References:

South Carolina Department of Environmental Services – Lowcountry Groundwater Capacity Use Area (<https://des.sc.gov/programs/bureau-water/groundwater-management-planning/groundwater-capacity-use-areas-lowcountry>)

South Carolina Department of Environmental Services – Coastal Plain Well Inventory (<https://gis.des.sc.gov/coastalplainwell/>)

South Carolina Department of Environmental Services – Lowcountry Capacity Use Area 2021 Groundwater Evaluation Report (https://des.sc.gov/sites/scdph/files/media/document/BOW_LowcountryEval2021.pdf)

South Carolina Department of Environmental Services – 2025 South Carolina State Water Plan, Third Edition (https://des.sc.gov/sites/des/files/2025-12/SC%20State%20Water%20Plan%202025_Report-online.pdf)