



Power Plants Drink 40 Billion Gallons a Day in Southeast: Study

Two out of every three gallons of freshwater withdrawn in the Southeast are sent to thermoelectric power plants, which are mostly coal-fired and nuclear, according to a study just released by the World Resources Institute (WRI) and two other groups.

The study, titled “Water and Watts,” notes that thermoelectric plants in the Southeast require about 40 billion gallons of freshwater each day—nearly equal to the total daily freshwater withdrawals required to meet public supply needs for the entire U.S.

While water disputes are well known to be an ongoing issue in the West, availability of this fundamental resource has become a more common source of conflict among states in the Southeast as well. Alabama, Florida, and Georgia have fought over control of the Apalachicola/Chattahoochee/Flint River Basin, and similar issues have arisen in North and South Carolina over the Catawba River.

First and foremost, the authors of the study—which was released by WRI, Southface (a group that promotes sustainability), and the Southeast Energy Efficiency Alliance—stress the need to implement water and energy efficiency measures. But the report also caught the eye of renewable energy advocates, who have long touted the water-saving benefits of such resources as wind energy. Unlike thermoelectric facilities, which use steam to spin a turbine’s blades, wind energy uses only negligible amounts of water. The U.S. Department of Energy’s 2008 report on the feasibility of wind providing 20% of the nation’s electricity by 2030 found that the 20% wind scenario studied (i.e., with the amount of wind energy increasing incrementally through 2030) would reduce cumulative water consumption in the electric sector by 4 trillion gallons between 2007 and 2030.

Looking ahead, population growth in the Southeast could lead to a 30% increase in thermoelectric power generation by 2025, the study noted.

“Building more thermoelectric power plants that run on nuclear and coal is simply not sustainable,” said Dennis Creech, executive director at Southface, another report co-author. “Fortunately, we see that efficiency upgrades and conservation efforts can reduce demands on both energy and water resources, while saving consumers money on utility bills.”

“These relationships between energy and water should not be overlooked in the Southeast,” said Eliot Metzger, an energy expert at WRI and co-author of the report. “Policymakers should take steps to promote water and energy savings, starting with near-term actions that make good economic and environmental sense.”

Source: Wind Energy Weekly, 15 May 2009