

June 23, 2011

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Georgia Department of Natural Resources
Environmental Protection Division
2 Martin Luther King Jr. Drive
Suite 1152, East Tower
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Via E-mail (info@georgiawaterplanning.org)

RE: STATEWIDE COMMENTS OF SOUTHERN ALLIANCE FOR CLEAN
ENERGY ON THE ENERGY RELATED PORTIONS OF THE INITIAL DRAFT
RECOMMENDED GEORGIA REGIONAL WATER PLANS

Dear Ms. Murphy:

The following comments by the Southern Alliance for Clean Energy concern policies, analyses and information on the energy sector that are presented in Georgia's draft regional water plans. These comments affect all draft regional water plans and affect water resource management planning statewide.

Southern Alliance for Clean Energy a non-profit organization that works on energy policy in the Southeast with members in Georgia who are concerned about water quality and other environmental issues. Thank you for providing an opportunity to comment. Regarding other aspects of the initial draft recommended regional water plans unrelated to electricity and energy, we generally support the comments being submitted by the Georgia Water Coalition of which SACE is a member.

The Georgia Environmental Protection Division (EPD) has established a planning process that recognizes there is a relationship between water consumption and electricity generation. Choices made today about Georgia's electricity supply will significantly affect future water use and consumption both statewide and locally. The State of Georgia recognizes the need to integrate its energy and water planning, and it is now taking an initial, commendable step toward achieving this.

However, major strides are needed for Georgia to accomplish basic goals of energy and water planning. Georgia's energy utilities use more water than any other sector¹, and some electric generating plants have been a driving factor behind water wars

¹ Georgia Department of Natural Resources (GA DNR), Environmental Protection Division (EPD), "Georgia's Water Conservation Implementation Plan," March 2010, p. 32. At http://www.georgiawaterplanning.org/pages/technical_guidance/water_conservation_implementation_plan.php

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involving Georgia, Alabama and Florida.² Georgia's electric utilities have been advancing a highly water-intensive energy future for many decades. Unfortunately, this practice continues today as proposed power plants such as Plant Washington (coal-fired), Plant Ben Hill (coal-fired), Longleaf/Early County (coal-fired) and Vogtle 3&4 (nuclear reactors), that, if built, will negatively impact communities located both upstream and downstream from these facilities that may need that water for other uses in the future.

The notable absence of water-saving forecast scenarios in EPD's analysis that was drafted with the energy utility ad hoc group's guidance, described below, is strong evidence of inadequate planning at the statewide level. Because regional water councils relied heavily on statewide guidance for energy sector water forecasts, the statewide inadequacies are replicated in each of the energy sections of the draft regional water plans. EPD should take immediate action prior to the approval of any draft regional water plans to rectify the shortcomings of the energy section of these plans and directly address those shortcomings before finalizing regional water plans.

Southern Alliance for Clean Energy asked technical experts Anna Sommer and David Schlissel to review the Technical Memorandum of October 29, 2010 from William David and Mitch Horrie of CDM to Chuck Mueller of Georgia EPD regarding the Statewide Energy Sector Water Demand Forecast that outlines forecasts of Georgia's future as it pertains to the energy sector's needs for statewide water resources.³ Sommer/Schlissel identified significant shortcomings in the EPD analysis with a focus on the amount of water that EPD determined was necessary to meet Georgia's projected future electricity demands, based on EPD's energy sector water forecast. Below are the most troubling shortcomings identified in the Sommer/Schlissel review. Accompanying each shortcoming is a summary of the action EPD needs to take to rectify the problem.

1. Significant overestimation by EPD of the amount of water the state needs to set aside for electricity generation. EPD presents two forecasts of future electricity needs in its Technical Memorandum: a reference case and a high case. The reference case is the Baseline Power Needs forecast, which anticipates annual growth of 1.64%. The high case, which EPD calls the Alternative Statewide Power Needs forecast, projects a 2.14% rate of annual growth. All EPD scenarios assume that peak load will increase 1,000 MW per year, which is notably unrealistic. The assumptions made in the EPD Technical Memo means that the Baseline case is actually a worst-case scenario: too much energy production requiring excessively high water demand.

² Alabama Governor Bob Riley letter to President George W. Bush regarding "Southeastern Drought Conditions," October 22, 2007; Ken Fosskett, Margaret Newkirk & Stacy Shelton, "Electricity demand guzzling state's water," Atlanta Journal Constitution. November 18, 2007; and Kristi Swartz and Dan Chapman, "Ga., Ala. power companies have huge stake, influence in water wars," Atlanta Journal Constitution, August 5, 2009.

³ Technical memo and Executive Summary of the Georgia Statewide Energy Sector Water Demand Forecast, October 29, 2010, is available at EPD's Georgia State Water Plan website: http://www.georgiawaterplanning.org/pages/forecasting/energy_water_use.php

Immediate EPD Action Needed: Revise EPD scenarios to correct for the inaccuracies identified in Section 3 of the Sommer/Schlissel review.

2. Failure to provide a low-water consuming energy scenario. EPD assumes that future electricity needs will be primarily met through water-intensive coal and nuclear plants. It fails to include low or no water consuming technologies available to Georgia's energy sector such as energy efficiency, solar and wind.

Immediate EPD Action Needed: Develop a Water Conserving Scenario that includes full energy efficiency (1.0% energy savings per year) and demand response resources. The Sommer/Schlissel review presents a water-conserving scenario for EPD consideration.

The above changes by EPD would more accurately reflect future electrical generation and provide a more realistic scenario of water consumption in the electric sector. Background on the need for these changes is provided in the attached document entitled "Comments on the Technical Memorandum for the Georgia Statewide Energy Sector Water Demand Forecast" prepared by Anna Sommer and David Schlissel of Schlissel Technical Consulting for Southern Alliance for Clean Energy, June 22, 2011.

Beyond these primary concerns addressed in the Sommer/Schlissel review, we have the following additional comments:

4. EPD omitted key non-utility energy industry players in the process of devising an energy-water forecast for Georgia's energy sector. EPD worked with the following participants in an "ad hoc energy group" that included Georgia Power, Oglethorpe Power Corporation, MEAG Power and the Georgia Environmental Finance Authority (GEFA).⁴

Examples of key non-utility industry players that were excluded from this process include both the energy efficiency industry and the renewable energy industry whose technologies and services are predicted to provide the most water-saving opportunities of any technologies available to Georgia.

5. Information about the utility energy water forecasts was kept undisclosed for an extended time thereby placing non-utility industry interests and the affected public at a disadvantage over electric utility interests. EPD was to have made the energy water forecast information available to the public by October of 2009.⁵ The energy forecasting was released more than a year later, on October 29, 2010. Repeated requests by public commenters to have this information available were essentially

⁴ Executive Summary of Georgia Statewide Energy Sector Water Demand Forecast, October 29, 2010, p. i. Available at http://www.georgiawaterplanning.org/pages/forecasting/energy_water_use.php

⁵ See EPD's Comprehensive Statewide Water Management Plant 3-Year Implementation Schedule at http://www.georgiawaterplanning.org/documents/Final_3-year_SWP_Schedule_Pkg.pdf

ignored. For instance, representatives of Southern Alliance for Clean Energy (SACE) raised concerns about the delay of the issuance of the energy forecasting at several regional council meetings, including joint regional council meetings, and were not provided with explanations for the delays or firm estimates of when the energy forecasting would be released. It was not until the joint regional council meeting in Macon on October 6, 2010 that a SACE representative was provided a firmer estimate after presenting public comments that again questioned the delay. These delays made it impossible for public commenters to participate in the process in any effective way while some in the utility sector were apparently provided open opportunity to do so.

6. Some of the draft regional water plans draw erroneous conclusions about state agency roles in utility energy planning that need correction. For example, the Savannah Upper-Ogeechee Water Planning Council states in its initial plan that “As part of a planning process regulated by the Georgia Public Service Commission (PSC), Georgia Power and other power companies develop energy forecasts every 3 years for a 10-year planning period as part of their integrated public resource plan. The Savannah Upper-Ogeechee Water Planning Council believes that, while the current forecast is sufficient for this planning effort, updates to the Regional Water Plans should incorporate data from future PSC public resource plans.” It is not correct that the PSC regulates a planning process for other power companies beyond Georgia Power. This poses a serious informational gap in statewide energy forecasting for the state and the regional water councils. Contrary to the Savannah Upper-Ogeechee Water Planning Council’s belief, no updates for the electric membership corporations (EMCs) and municipal electric companies in Georgia will be possible through PSC reviewed utility resource plans because no such oversight exists for those utilities.

Another misconception is that the utility resource plans and forecasts are made publicly available; in fact, Georgia Power files its energy forecast information at the PSC as trade secret and is unwilling to share the forecast with the public. Similarly other utilities not regulated by the PSC have been unwilling to share their forecasts and the details of the resource plans publicly either. Unavailability of utility forecast data to the public makes it even more imperative that EPD and the regional water councils turn to other available data sources for more realistic forecasts.

7. Some power plants located outside of Georgia can impact Georgia water resources and may contribute to “gaps” within various water planning regions but are not addressed. For example, a Congressional Research Service report mentioned two Southern Company power plants that can affect or be affected by the complex Apalachicola-Chattahoochee-Flint systems.⁶ Alabama Power’s Plant Farley pulls from an intake canal that connects to the Chattahoochee River. Gulf Power’s Plant

⁶ Congressional Research Service, Apalachicola-Chattahoochee-Flint (ACF) Drought: Federal Reservoir and Species Management, Order Code RL34250, November 14, 2007, pp. CRS-13—CRS-15.

SACE comments continued

Scholz in the Florida panhandle has been indentified as potentially affecting the flow of the Apalachicola River.⁷

8. Though existing power plants withdraw a much smaller portion of water from groundwater sources than from surface water resources,⁸ possible future groundwater use by new power plants may increase, especially during drought conditions and is not adequately addressed. For instance, the proposed Plant Washington coal plant plans to withdraw up to 16 million gallons of water per day from 14 proposed new wells in the Ogeechee and Oconee basins for “refilling of storage ponds, backup cooling and process water.”⁹ This increased groundwater use, which is proposed for water needs potentially during times of drought, could negatively impact surrounding communities’ reliance on existing groundwater resources along with the two affected river basins.

Thank you for the consideration of our comments and concerns. We again appreciate the work that EPD has committed to this project along with that of all the Regional Councils. If you have any questions, please do not hesitate to contact us at 912-201-0354 or 404-373-5832, x1.

Sincerely,

Sara Barczak
Program Director

Rita Kilpatrick
Georgia Policy Director

Attachment

⁷ CRS 2007, p. CRS-15.

⁸ Executive Summary of Georgia Statewide Energy Sector Water Demand Forecast 2010, pp. ii-iii.

⁹ EPD, Groundwater Permit #150-0026 for Power4Georgians, LLC, April 8, 2010. At <http://www.gaepd.org/air/airpermit/downloads/permits/psd/dockets/plantwashington/othermedia/groundwaterfinal.pdf>