

Southeast Will Rely on Biomass for Renewable Power

Q&A With C. Dean Alford, President and CEO of Allied Energy Services

CCBJ: You work for non-profit electric member corporations, and you're affiliated with Cobb Electric Member Corp., which serves 190,000 electricity customers in Georgia. What are the particular characteristics and needs of EMCs, and how do you tailor your services for those clients?

DA: How our services are tailored depends upon the specific EMC. We have a very diverse set of EMC clients in Georgia. Georgia has been growing rapidly over the past half century, and the Metro Atlanta area in particular has been rapidly expanding in terms of both area and population density. Some EMC territories that, when the EMCs were created, were very rural have transformed into affordable suburban destinations for new investment. In turn, a couple of the EMCs in Georgia are now among the largest in the country.

Some of these larger EMCs could be impacted by proposed federal Renewable Portfolio Standards, while their smaller counterparts would not. This fact, coupled with their relative size, impacts the capacity needed, type of generation considered, and sense of urgency associated with new capacity decisions.

CCBJ: We've heard that the Southeast is not particularly favorable to wind power or solar PV because the resources—wind and insolation—aren't robust and because few states have renewable energy standards (aka renewable portfolio standards). Can you comment on this?

DA: It has been our experience that based on today's technologies and costs, biomass is the only significant renewable source of baseload power that can be

brought online in Georgia. We are accordingly mainly focused on biomass projects when Southeastern clients look for the amount of capacity that would be required to meet various renewable portfolio standards, whether real or proposed.

With regards to wind, NREL data shows that the only area in Georgia where there are significant wind resources is off the coast. A project there would present significant environmental and economic issues with running transmission back to the grid. Furthermore, anyone developing such a project should anticipate very strong local opposition from property owners that want neither the windmills nor the transmission lines running through the marshes and wetlands of Coastal Georgia.

“Biomass development will be driven by what types of biomass are considered renewable in a federal RPS.”

Solar projects also present significant technological and economic challenges. NREL shows that Georgia is not a very well endowed state in terms of solar resources. Allied Energy Services, however, is in the development stage of a significant solar project in Georgia, but this project is heavily subsidized.

Furthermore, our clients are currently mainly in the market for baseload sources, especially when they are looking to meet an RPS. We think that, at this time, biomass is the future of renewable electricity in the Southeast.

CCBJ: What are the prospects for further development of biomass power in the Southeast, and what are your activities in that segment?

DA: Obviously a major driver of biomass potential in the Southeast will be the definition of what types of biomass are considered to be renewable in any sort

of federal RPS. With that in mind, we are evaluating multiple types of biomass technologies ranging from simple direct-fired technologies to gasification.

Process guarantees from EPC firms are proving to be the major hurdle for emerging biomass technologies. Without those guarantees, it is tough to impose to fund a project through traditional financing mechanisms. We have, however, developed strategies for gasification technologies to eventually obtain a process guarantee through initial pilot projects financed by private capital.

The other real challenge facing biomass projects is the ability to obtain long-term contracts for feedstock. When dealing with so many private landowners, it can sometimes be difficult to secure large amounts of guaranteed feedstock for a long-term contract.

After solving these issues through a significant amount of time and resources, Allied Energy Services expects to make multiple announcements on biomass projects in the next twelve months. ⚙️

Allied Energy Services' (AES) project development portfolio includes coal, hydrogen-based, photovoltaic, hydro-power, energy efficiency, and biomass energy projects. AES currently serves as the developer for over \$4.3 billion worth of energy projects across the United States.

C. Dean Alford, president & CEO, has a history as an entrepreneur, writer and lecturer on energy policy and utility issues. Prior to joining Allied, he was President and CEO of A&C Enercom, a utility consulting firm which he founded. He has also served as consultant to the U.S. Congressional Office of Technology Assessment on energy policy issues, and is on the advisory boards for the College of Engineering and the School of Electrical and Computer Engineering at Georgia Tech University.