Oglethorpe Power Corporation (OPC) is one of the nation’s largest power supply cooperatives with more than $8 billion in assets serving 38 Electric Membership Corporations which, collectively, provide electricity to more than 4.1 million Georgia citizens. Its diverse generation portfolio includes natural gas, hydroelectric, coal and nuclear generating plants with a combined capacity of approximately 7,074 megawatts (summer planning reserve capacity), as well as purchased power.

In order to provide reliable service to the EMCs, OPC’s operations staff needs a very accurate picture of its power plants’ generation capabilities. Traditionally, the information had been published quarterly in a hard-copy Resource Data Guide (RDG) that was difficult to share—and painful to produce.

**Challenge**

OPC’s RDG is a composite of 30+ power plants, each with its own manager who is responsible for updating plant parameters in the document. As a result, publishing each hard-bound release of the RDG was a very cumbersome process that involved compiling numerous emailed Excel files and Word documents.

Furthermore, OPC staff found it difficult to keep track of the most current data, and even more difficult to roll it up into a single document for publication and distribution to the users.

On the user end, hard copies of the document existed all over the company, but there was no way for anyone to export or filter the content or share it with others beyond scanning or copying pages. If an employee needed to load data to a downstream system, such as to an energy control room system for balancing supply and demand on the grid, the information had to be keyed manually.

**Solution**

OPC’s goal was a solution that would enable, not only user-friendly electronic updating and publication of an electronic RDG (or eRDG), but also the ability to import, manipulate, filter and export the data stored in the document. “We wanted a centralized, e-repository of that guide and its information,” says OPC’s Director of Energy and Operational Interfaces Scott Billiot. “That’s when we came up with idea of an E-RDG—an electronic resource data guide.” Billiot also wanted a controlled workflow environment to ensure no plant production value could be changed in the eRDG without appropriate review and approval.

After exploring its options, OPC selected Abel Solutions to develop the solution. Billiot explains, “They brought to the table the experience with SharePoint technology needed to achieve our vision.”

After evaluating their goals, Abel Solutions helped OPC convert the RDG to an electronic format (eRDG) by developing a custom application and specialized workflows in its SharePoint framework. The information collected in the forms could then be rolled up into SharePoint to...
streamline data aggregation and publication of the eRDG. Where previously it took OPC 80-120 hours to collect all of the updates and publish the quarterly guide, today the time to publish the eRDG is 10 hours—a reduction in time and effort of 90%.

"Sometimes when you work with a developer, you don't always get what you describe," says Billiot. "Abel Solutions had the ability to customize SharePoint and house the eRDG in the manner we wanted and in the end delivered a product that is exactly the application and technology that we needed to achieve our vision."

Results

In addition to trimming production time for the RDG by 90%, Billiot reports, "We have gained a much more controlled environment and a higher degree of data integrity." The solution also provides granular control of resource data and enables staff to access and manipulate it like never before.

"Users can now download, sort and filter the data in Excel and download or upload it into other systems," says Billiot. "Instead of 30 different people throughout the company looking at a hardbound copy of the RDG and keystroking hundreds of rows of data, now they are loading Excel extracts from the eRDG into their downstream systems. This is going to save significant time for everyone, including the downstream users."

Integrity of updates is managed through the approval workflow, because each set of plant parameters has specific values that cannot be changed unless appropriate approvals have been given. “The workflow is a sequential approval process,” says Billiot. “There are no automated controls on limits of numerical values, but no value can get published without having approvals on different layers of the management chain. For example, a plant manager can submit a new rating for a plant, but not before it goes to his boss—the plant manager lead—and then subsequently to the VP of plant operations to approve for publishing.”