

Quality Vegetation Management Program is Showing Positive Results

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Keeping the rights-of-way of South Mississippi Electric's more than 1600 miles of transmission lines clear and accessible has always been a key to providing reliable service to our Members. It is also essential to the safety of our line crews when they work in the field.

For many years, mechanical cutting and bush hogging have been the standard practices for clearing utility rights-of-way. These were relatively cheap and easy methods but provided only short-term results, especially in the South where vegetation grows back quickly. Companies across the country typically use revolving schedules to cut sections of their lines every four to six years. SME has tried to maintain a schedule of every four years.

Prior to 2006, SME had made only limited use of herbicide application for maintaining its transmission rights-of-way. Since then, Wesley Graham, right-of-way supervisor, has expanded use of the technique, as it has the capability of reducing costs and being more efficient than the standard bush hogging process.

"We conducted extensive research into how other utilities were using Quality Vegetation Management (QVM), which is a set of standards used by professionals for effectively clearing and managing vegetation," said Graham. "Since we have adopted this approach as our primary method of maintaining our rights-of-way, we have seen excellent results in terms of controlling the vegetation as well as our costs."

The cost of bush hogging has increased significantly with the rise in fuel prices. By using QVM, Graham is able to reduce the cost of maintaining South Mississippi Electric's 20,000 acres of right-of-way from \$175 per acre for bush hogging to only \$65 per acre for spraying the areas with herbicide.

Even more importantly, the cost of using QVM will continually decline over the next few years. The process currently being adopted is to mow one year, spray the following year, and then skip a year before spraying again. Following the initial spray, the process requires only spot spraying, which will cut costs even further. The overall cost of right-of-way maintenance could be reduced by one-half within five years.

"The herbicide process also makes a positive impact on the environment, which we think is very important," said Graham. "Bush hogging requires the use of heavy equipment that can harm wildlife and its natural habitat. QVM allows us to minimize the use of heavy equipment in an attempt to sustain and maintain the natural resources and habitat for wildlife."

Products used in the QVM process include only herbicides registered under the Environmental Protection Agency's Reduced Risk Pesticide Initiative, which means the products have undergone rigorous tests to ensure that their use does not jeopardize the safety of sensitive species of both plants

and animals. The products specifically target broadleaf, woody species while causing no harm to grass, and they are sprayed by QVM certified applicators who receive extensive training.

“We are trying to create an herbaceous, grassy environment that is as safe for our line crews as possible, while still being good stewards of our land,” said Graham. “These are by far the best methods available, and I am excited by the results so far.”

Tommy Garrard and William Murphy have been instrumental in implementing the program. As line crew members for many years, both have a thorough knowledge of the system and are able to help the spray crews find their way. They also are able to help avoid any obstacles the crews might encounter, navigate them around areas that are deemed sensitive or “no-spray areas” such as pastures, and assist with land owners.

“Most of the land owners we have talked with are glad to know we are moving to this kind of program,” Graham said. “Once they understand how safe the program is and the kind of results it will have, they have been very cooperative. They like the look of healthy land as much as we do.”

The success of the QVM project is beginning to be seen at the operations level as well. When Hurricane Gustav skirted SME’s system with tropical storm force winds in early September, there were no operations on any of the lines.

“We all thought something was wrong with our phones,” Graham joked. “But seriously, it was a remarkable accomplishment. The integrity of our system held, and I would like to think it was partly because of the results we are seeing with our QVM program.”

The line crews will also see significant benefits with the results of the new program. In the past, transmission line maintenance, which involves climbing and visual inspections, had to follow the bush hogging schedule.

“Gaining access to lines with three years of growth was extremely difficult,” said Jim Evans, transmission maintenance manager. “The woody species and other bushes grow so high in that time that you cannot see over them, and it is difficult to drive through them. We were limited in how we could schedule our maintenance rotation.

“If we achieve the results we hope for with this herbicide program, we will have much more access to lines any time, not only for maintenance but also during emergency restoration. It will be much easier to move quickly down a line on a four-wheeler to find any problems, and it will also be easier to get our heavy equipment and trucks to a location.”

Safety for the crews, always a primary concern, will also be enhanced. “Having more visibility along the lines will make our jobs safer, and we will be more effective.”

Graham, a self-proclaimed conservationist, received a bachelor's degree in agricultural extension and education and a master's degree in agronomy from Mississippi State University. To help SME play an active role in the protection of natural resources and safety of wildlife, he is currently working with such agencies as the U.S. Forest Service, U.S. Fish and Wildlife Service, the National Wild Turkey Federation and Quail Unlimited.

The achievements of South Mississippi Electric's efforts with the QVM program have already been recognized. The company has been nominated for a QVM Project Habitat Award sponsored by BASF Professional Vegetation Management. The awards are presented to outstanding vegetation management projects that best demonstrate the principles and practices of the process. Winners will be announced at a banquet in 2009. In addition to the nomination, SME's QVM project will be featured in an upcoming issue of *Latitude* magazine, a national professional vegetation management publication.