BRMEMC Right-of-Way Herbicidal Vegetation Management Program

1) Why does BRMEMC spray herbicides in the right-of-way?

In 2012, BRMEMC began a program of selective application of limited amounts of herbicides in its electric distribution and transmission rights-of-way, in an effort to control the growth of woody-stemmed vegetation that encroaches on overhead power lines causing outages and other problems. There are key reasons that BRMEMC has now adopted this right-of-way herbicide program. They include:

- a. Reduction in encroachments by woody-stemmed vegetation on electric distribution lines, potentially leading to reduced numbers and frequency of outages and improved electric service **reliability** for Members.
- b. Quicker response to outage events, and potential **reduction in outage durations** are realized. BRMEMC repair crews have a much easier time visually locating damage in rights-of-way free of woody-stemmed vegetation. Additionally, clear rights-of-way make it much easier and quicker for BRMEMC repair crews to access downed and/or damaged lines and poles with necessary equipment.

2) How often does BRMEMC apply herbicides versus cutting vegetation by hand or mechanically?

As is the case with most EMC's, rights-of-way need to be mowed every three to four years to be effective. Rights-of-Way that are frequently mowed return fairly soon after each mowing, especially with non-native, invasive plants that continue to spread through and degrade our natural ecosystems. Herbicide application programs start with an initial application in the first year, followed by a re-treatment usually one to two years later. Subsequent herbicide re-treatments are made to a greatly reduced amount of tall-growing or invasive vegetation. Eventually, walk-through selective backpack treatments are needed only every three to four years to ensure that undesirable, tall-growing and invasive vegetation remains controlled. Each time herbicide is applied, less and less herbicide is required because of the reduction in woody brush. Studies have found that herbaceous plant species (aka: wildflowers and other non-woody plant species) tend to take over once the woody canopy is reduced, and this ground cover actually helps reduce the amount of woody-stemmed vegetation returning to the right-of-way.

3) What herbicides are being applied to the rights-of-way?

The spray mix that BRMEMC uses is a combination of EPA-approved herbicides that affect only targeted vegetation. The blend of products BRMEMC uses is also used by most of the power companies in the southeast because they effectively control the problem-species plants common in the region. Copies of the Safety Data Sheets for each chemical used can be found on BRMEMC's website: http://brmemc.com/Electric Right of Way

4) Will this herbicide application kill nearby vegetation, my garden, or my yard grass?

The application crews are trained and licensed to use herbicides only on the electric distribution right-of-way, and away from nearby vegetation and waterways (including gardens and yards) according to product label specifications. The herbicides being applied are labeled for this type of use and are not much different than those products any consumer can purchase for home use at farm or garden stores (like Home Depot or Lowe's). The herbicides are safe around waterways, and are safe to vegetation that is off the right-of-way and not directly located in the spray area. Herbicides are phytotoxins, which means they are only effective against plants. They readily attach to plant material and soil particles so that leaching and runoff are virtually nonexistent. Again, the herbicides typically bind to soil particles and do not move in the soil. Additionally, application crews utilize an anti-drift agent as well as a surfactant to reduce overspray and increase the likelihood that the herbicide remains on the plants directly located in the spray area.

5) Is there a possibility that the substance will get into nearby waterways, tributaries, streams or groundwater?

The volume of herbicide used in any given area leaves no threat to waterways or groundwater even in the most extreme circumstances. Even still, precautions are taken in the application of these herbicides to avoid direct application over moving water or near wells. The products that BRMEMC uses are registered for their respective areas of use (uplands or wetlands), and the crews make every effort to treat away from water. The herbicides themselves are only applied at a rate of ounces per acre, and they bio-degrade very quickly in the environment.

6) Are these herbicides harmful to pets, farm animals or wildlife?

The herbicide mix and concentrations that BRMEMC uses only affects enzymes or amino acids present in plants, not humans or wildlife. The EPA requires extensive testing of these chemicals before being introduced to the market, in order to assure that there are no unintended effects on pets, livestock or wildlife. Herbicides like the ones used by BRMEMC are and have been used in forestry and wildlife applications for over 25 years. The fact is that more herbicides have been sprayed in surrounding National Forests and private timberlands for many years, especially in reforestation operations, than will likely be applied by BRMEMC in the course of right-of-way maintenance. Most of these applications in National forests and other private timberlands have been by aerial delivery, and no ill effects on the environment have been noted when following correct application methods and rates. BRMEMC is applying the herbicide using much more specific treatment methods than aerial spraying.

7) How soon will vegetation begin to grow back in areas sprayed?

Grasses and forbs (herbs other than grasses) will return the year following an herbicide treatment. The herbicide treatment mimics the effect of a fire, which controls tall growing trees and invasive plants to allow germination and propagation of low growing grasses, non-woody plants and wildflowers. This improves habitat for a wide variety of butterflies (like Monarchs), native bees (and other pollinators), and birds. The right-of-way will become a similar type of habitat that is in short supply, but seriously needed for game species like Bobwhite quail, grouse, wild turkey and other animals to thrive.

8) Some people complain that herbicides and the subsequent dead or dying vegetation is visually unappealing. Is there some other way that BRMEMC could achieve the same results without making it look so bad?

To ensure electric reliability for its Members, BRMEMC <u>must</u> control the vegetation located in the rights-of-way using either mechanical mowing, manual cutting, or herbicide treatments. Mowing and manual cutting of rights-of-way must be continued indefinitely, and looks similar after every treatment. A herbicide application may "look bad" after the initial application, but once the low growing plants are restored, less product is needed for all subsequent treatments, and the selective applications (woody-stemmed plants eliminated) blend into the environment and are much less obvious than mowing or manual efforts. The visual impact will become less and less with each spray cycle. With fewer trips by right-of-way mowers and manual tree-cutting crews, and with non-woody plants as ground-cover, there is less impact to the area both visually and otherwise. BRMEMC believes this is the optimal solution at this time.

9) When can we expect BRMEMC to spray these herbicides?

Herbicide applications are generally applied to the leaves of woody-stemmed plants to maximize the desired results. For this reason, BRMEMC's herbicide program will likely be conducted during periods from May through October.

10) Who is actually applying these herbicides and are these people licensed to do this?

The herbicide application is being conducted by both BRMEMC employees as well as contract crews, both of whom are thoroughly trained and licensed to apply herbicides. The North Carolina Department of Agriculture & Consumer Services – Pesticide Section, and the Georgia Department of Agriculture-Pesticide Division have both made in-person visits to inspect BRMEMC's herbicide application process, and both have agreed that BRMEMC and its contract crews are following appropriate application methodologies in accordance with each State's laws.