"Serving the People of Seabrook Island, South Carolina"

THE Seabrooker

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TOWN AND SIPOA SIT DOWN WITH BERKELEY ELECTRIC

FROM TOWN HALL

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On Thursday, April 12th, representatives of both the Town of Seabrook Island and the Property Owners Association met with Timothy Mobley, Vice President, Engineering and Operations and members of his team from Berkeley Electric Cooperative,

Timothy Mobley

Inc. (Berkeley), to discuss service to Seabrook Island and specifically measures to be taken by Berkeley following our community's experiences following hurricanes Matthew and Irma. As a consequence of our discussions, I am convinced that Berkeley is doing its best within the economic constraints of its business model – to ensure that we have uninterrupted power, even in an emergency.

By way of background, it is important to keep in mind that Seabrook Island's 2,799 member service locations are part of the 98,000 member service locations that Berkeley serves and that our services make up about three percent (3%) of its total number of services. Seabrook Island is served by a transmission line operated by Santee Cooper that generally follows Betsy Kerrison, and leads to a substation operated by Berkeley that is located near Resurrection Road. From this substation, Berkeley has three circuits that serve our island. Those circuits connect to a series of splice cabinets located near the traffic circle and Haulover Creek. Berkeley installed these cabinets to replace older equipment that

Henry Chavis, Trustee District 9 (includes Seabrook Island)

failed as a result of the flooding at the creek caused by Hurricane Irma. The manufacturer of the connections in the new equipment have represented to Berkeley that they are "submersible" and accordingly should be water resistant.

The three circuits servicing our island are made up of many complex pieces of equipment including switchgear, splice cabinets, transformers, reclosers (these are similar to breakers) connections, switches, fuses and relays.

Berkeley personnel constantly review their outage data, perform inspections, test their equipment, and consider the age and condition of equipment in setting their priorities for improving the system. As a result, since 2011, it has replaced a significant amount of underground cable and multiple switchgears. The principal reason for these change-outs is the highly corrosive environment of our island, and as a consequence, the deterioration of cabinets and connections. For similar reasons, it has changed out multiple transformers as well. It should be noted that each time it changes out a transformer, it has increased the pad thickness from 5" pads to 15" pads. While the primary purpose of the thicker pad is to allow more efficient and safe operation, it does have a collateral effect of raising the equipment slightly higher off of the ground.

Most of its scheduled maintenance over the next ten (10) years will focus on the underground cable which is nearing the end of its expected life. This work will be prioritized based on repairs which have already been made and the number of member service locations that would be affected if a cable were to fail and an outage were to occur.

Scheduled preventive measures – those designed to reduce the potential for future power outages under normal circumstances and during major storms with flooding – have been divided into four classifications based on various metrics which include the number of member service locations impacted, cost and long-term utility. These measures will include the installation of video cameras both at Haulover Creek and near the Pelican's Nest which will provide Berkeley the capability to see when flooding is threatened or occurs at either or both locations. A second priority will be to replace a dozen switchgears – each located in critical areas, identified as being subject to flooding - with splice cabinets where the contained components are "submersible". A third priority will be to install SCADA cell or radio communication equipment in two critical locations which will enable Berkeley headquarters to assess the condition of its equipment on a real-time, remote basis. Lastly, it anticipates installing two Trident PT20 switchgears, again in areas identified as being most prone to flooding; this equipment is "submersible" as well.

You may recall that following Hurricane Irma, Berkeley equipment which had been under water had to be cleaned out before being energized. Berkeley used St. Johns Fire District equipment for that purpose. You may also recall that one of SJFD's fire trucks used for this purpose, had mechanical problems, and a second was called to service elsewhere. In each case, Berkeley was required to use alternative, but less effective methods to clean its equipment which in turn resulted in a delay in restoring power to a number of homes. To address this issue, Berkeley has purchased four (4) skid mounted pumps which will be used in the future instead of St. Johns equipment. This equipment is maneuverable to an extent where it can get behind Berkeley's equipment, and can tap into our fire hydrants.

When we asked what we could do, it was clear that its biggest concern was the difficulty in accessing some of their equipment. They need ten (10) feet of clearance around their equipment so that it can be operated and maintained as needed; especially near the top or side panels that open. It suggested that residents can be of significant assistance Berkeley by keeping its equipment clear of shrubbery and landscaping to allow easier access in the event an emergency. ▲