To Senate Finance Committee, re H.513 Statement of Charles Finberg, Shrewsbury, VT, 4-18-2019

When we were young, and "plain old telephone service" was provided by copper wire, you could call the operator, and make an emergency call, even when power was out at your home, because the telephone line itself had power.

Twenty years ago, the federal government launched a huge project, to unify, standardize, expand, and make consistent E911 services throughout the nation — now even extending to cellphones.

The federal government also recognized the need for people with lower income to have access to these services, and it has established a "Lifeline" service, for which all other customers pay, providing discounted basic phone service — of course including the required access to E911 — to those who would have difficulty affording it.

In 2015, Vermontel came to Shrewsbury, Vermont, and to several other Vermont towns, and it installed fiber-optic cable in much of the Town, in most instances removing the existing copper lines. Vermontel has stated, "Installing fiber has no cost to you, thanks to around \$135 million in 2010-2015 federal and state funding awarded to VTel." But, that fiber is not self-powered so, when the power goes out at the house, telephone service is lost, unless one has an automatic back-up generator, or a back-up battery. As VTel put it, "Sadly, the "old days" of phone service that worked for over a century without requiring secondary power are quickly passing." Instead of that century-long reliability, VTel provided an 8-hour battery with its initial installation, but — although it concedes that the batteries lose effectiveness through time — VTel's position is that the maintenance and replacement of that battery is the responsibility of each customer. The experience of some VTel customers in Shrewsbury is that some older batteries now provide power for only 2 or 3 hours before failing.

In Vermont, there is occasionally snow, and wind, and trees that fall across power lines. Occasionally — especially in Winter — power goes out, often for longer than 3 hours.

In late November 2018, during a period of storms, a power outage in Shrewsbury (and in several other Vermont towns) lasted for nearly 3 days and, according to a survey taken during this year's Town Meeting, nearly half of the town had no phone service — including access to E911 — during that time. That is because only a portion of residents own back-up generators, and adequate cellphone service does not reach most residences in the Town.

VTel did not report its service outage in Shrewsbury (or anywhere else except for 60 customers in Chester) to Vermont's E911 Board, based upon an interpretation that it has no reporting obligation if VTel did not *itself cause* the outage. Vermont's E911 Board evidently does not require telephone service providers to report outages — including E911 outages — if the cause of the outage, no matter how long, was external.

Coincidentally, a dozen days before that storm and its power outages, the FCC issued a Notice to all telephone service providers that they would be required, effective February 13, 2019, to offer their customers at least 24 hours of back-up battery power.

VTel addressed the current 24-hour battery requirement by placing a brief reference in its bill to a page on the VTel website which provides "Battery Information." On that page, VTel first reiterates that the battery, its maintenance and replacement is solely the customer's responsibility. Then, it provides the name and web address of a solitary retailer in Rutland,

from which VTel states the extended battery packs can be obtained. However, not only is that navigation to find that information difficult, even for sophisticated computer users, but the search — for weeks and ever since February 13th — leads to a page on the retailer's website which states that the battery pack is unavailable and out of stock. In a telephone call to the retailer, it explained that it would only sell the units by special order. The price of these units, excluding shipping and sales tax, is substantially above \$100 (and even above the manufacturer's suggested retail price!). Obviously, even if this were satisfactory to the FCC, this does not provide a solution to Lifeline phone customers.

But, more fundamentally, one must ask whether even a 24-hour set of batteries is an adequate replacement for the uninterrupted E911 access that copper-wired phones provided. This is a gaping, dangerous hole in the phone service that substitution of fiber-optic wire for phone service has caused and, while expansion of robust internet service to rural areas throughout Vermont is admirable, expending large sums of taxpayer subsidies upon this expansion without simultaneously assuring preservation of access to E911 service, is inviting tragedy to occur down the road.

What is the solution? That must be explored ad found. Is it expansion of cellphone service boosters in rural areas? Is it retention of copper-wire until a solution can be found? Is it provision of back-up generators to those who cannot otherwise afford them? Or other handy battery sources?

We respectfully suggest that further expansion of fiber-optic phone service without preserving reliable E911 access during power outages is unwise and dangerous, and should be delayed until a solution is found.