Letters to the Editor: Nov. 16, 2014 "Solar flares and EMPs threaten our survival"

## Editor, Times-Dispatch:

Amid the recent flurry of political activity, another event occurred that was more likely to cause widespread global turmoil. Perhaps many readers missed it amongst the election focus. Not Ebola, not the latest climate change scare-propaganda, not the latest Hollywood or D.C. scandal, but an event entirely natural, literally out of this world, absolutely out of our control and able to disrupt modern civilization and basic survival.

NASA reported the sun emitted a series of intense solar flares beginning Oct. 19, 2014, and culminating when "a giant active region on the sun erupted on Oct. 26, 2014 ... its sixth substantial flare since Oct. 19 ... classified as an X2-class flare ... erupting from the largest active region seen on the sun in 24 years."

In 2012, NASA reported: "A powerful coronal mass ejection (CME) tore through Earth orbit on July 23, 2012 ... If the eruption had occurred only one week earlier, Earth would have been in the line of fire."

When the electromagnetic radiation generated by such solar events reaches Earth, it can produce radio blackouts, disrupt satellite communications and bring down our electrical power grid. The 1859 Carrington Event remains the most powerful such event in 160 years. It burned up telegraph wires and connected operators.

We face similar man-made threats from electromagnetic pulse (EMP) nuclear devices. Small nuclear devices, designed to explode high over the U.S. and emit high-intensity radio-wave energy, are capable of destroying unprotected solid-state devices and our electric power grid. That means no electricity, no computers, no cars, no communication, no stock market and no food or water.

While government spends billions to combat hypothetical man-made climate change, it has spent little to protect us from real EMP threats from rogue nuclear powers and terrorists. Demand prudent measures from your elected officials.

**Charles Battig** 

Virginia Scientists and Engineers for Energy and Environment. Charlottesville.