

Geomagnetic Storms:

Are you protected?

It is time!

Geomagnetic storms are expected to happen every 11 years, according to **NOAA**, National Oceanic and Atmospheric Administration. Are we past due? These storms have taken down Electrical Grid Systems over very large areas, causing damage to Electrical equipment and much inconvenience to the affected population. **Are you protected?**

What the hell, you say. How do you protect against such an ACT of GOD? is it possible? **Yes, *Phaseback VSGR* will handle this Voltage event much better than other Voltage limiting devices such as MOVs and other Transient / Surge Protection devices that take the over-voltage to ground. Even with *Phaseback VSGR*, If the system goes down, you could go down. Further electrical damage is prevented, while the important references needed for an orderly startup are maintained. As soon as the grid is up, you can start back up.**

According to NOAA, the event in 1989 caused widespread damage by inducing current into the ground so that it came up into the Electrical Systems from the ground. ***Phaseback VSGR*** will balance phase to ground voltage continuously without regard to what is happening with the ground, and will protect your system. [if the Utility uses *Phaseback VSGR*, they too will be protected.](#)

It is well documented that the typical TVSS (SPD) is tested for 5 to 8 millionths of a second (8 to 20 micro-seconds) to limit the damage to the MOVs and most circuit breakers have short time 3 to 5 hundredths of a second and instantaneous trips operate in 3 to 5 thousandths of a second. The article below shows that a geomagnetic storm can cause voltage anomalies for over 180,000% (90 seconds) longer than the longest device can withstand. [March 1989 geomagnetic storm](#)

Adding a ***Phaseback VSGR*** can prevent damage in these high voltage situations and protect all the other power quality devices installed in the power system. The ***Phaseback VSGR*** does not negatively interact with any other power quality device, in fact, it protects them. If you think having a generator will protect you, you should consider that the damage may already be done before it goes dark. The ***Phaseback VSGR will protect your sytem whether powered by the grid or generator. Generator power is frequently not well suited for electronics and computers, which is taken care of by Phaseback VSGR.***

What has happened in the past 28 years is electronics have gotten smaller and more susceptible to voltage anomalies and the same old "surge suppressors" are around which did not protect us last time.

It is time for a real solution: Install a ***Phaseback Voltage Stabilizing Ground Reference (VSGR)*** on the secondary of each power transformer and these will be simply events you read about in the paper, hear about on the radio or watch on the news. Even if the grid is off for resetting or repairs, when the power comes back on customers will have their equipment come back up and running. My facility is protected against these issues, is yours?

Take our challenge! Install ***Phaseback VSGR*** so your system will be protected! The good news is, "It will pay for itself" and Save Lives!