I have heard data breach incidents and hacks in financial institution, health care, data center, etc. But when I was surfing through several articles for case study, I came across the Ukraine Power grid hack. It seemed so unique at least to me as I have never heard of a power grid hack. So I was curious to know why does one hack a power grid.

Thus this power grid hack got my attention. After going through few articles, news, etc. I figured out this hack was due to political dispute between Russia and Ukraine.

Basically Russia did this to show that it can make Ukraine go in dark.

I would go ahead and give a short introduction about what a power grid So that everyone will get an idea about it.

Electrical power starts at the power plant. The three-phase power leaves the generator and enters a **transmission substation** at the power plant. This substation uses large transformers to convert the generator's [voltage](http://science.howstuffworks.com/question501.htm) up to extremely high voltages for long-distance transmission on the transmission grid.

For power to be useful in a home or business, it comes off the transmission grid and is **stepped-down** to the distribution grid. This may happen in several phases. The place where the conversion from "transmission" to "distribution" occurs is in a **power substation**.

The network inside the power station is controlled by the SCADA network.

It often has circuit breakers and switches so that the substation can be disconnected from the transmission grid or separate distribution lines can be disconnected from the substation when necessary.

Application whitelisting is a computer administration practice used to prevent unauthorized programs from running. The purpose is primarily to protect computers and networks from harmful applications, and, to a lesser extent, to prevent unnecessary demand for resources.

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