

Smart Grid Technology: Vulnerable To Hackers

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(PhysOrg.com) -- Smart Grids are digitally based electricity distribution and transmission systems and test have shown that a hacker can break into the system resulting in a massive blackout.

IOActive, a professional security services firm, has concluded that with \$500 of equipment and materials and a background in electronics and software engineering, a hacker could infiltrate the advanced meter infrastructure and cause a massive manipulation of service to homes and businesses.

Once in the system, a hacker could gain control of thousands of meters



and shut them all off simultaneously. It would also be possible to increase or decrease the demand for power and disrupting the load balance on the local <u>power grid</u> causing a blackout. Starting as a localized power outage, it would then cascade to other parts of the grid, expanding the blackout. One can only speculate how wide spread the outage would become.

Industry experts have said that they have no intention of placing an unsafe grid online. As of now there are no <u>Smart Grid</u> cybersecurity standards in place. A spoke person for the Department of Homeland Security stated, "there are a lot of discussions about where the requirements will come from and who will be ultimately responsible."

Garry Brown, who is the chairman of New York's Public Service Commission, said he believes the benefits of Smart Grid outweigh the risks, but his State needs to take a good look at cybersecurity before making large investments in the technologies.

In conclusion, we have to be vigilant and address security issues in the Smart Grid early on before moving forward with deployment of the Smart Grid infrastructure.

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