True Crime Case Files: The California Grid Attack

Date: April 16, 2013
Location: Silicon Valley, CA

There remains a long-standing assertion amongst revolutionaries that the disruption or abolishment of an oppressive system requires military force. That there will be war. That there will be battlefields.

And that there will be bloodshed.

That thinking is, of course, rooted in a base understanding of what qualifies as an adequate target. Not that we would advocate it, but apparently a person or persons near San Jose, California decided that the grid, the electronic infrastructure of this technologically dependent civilization, was theirs.

And on April 16, 2013, in a largely unreported event, they took their shots.

Their target was a PG&E (Pacific Gas and Electric Company) power substation that fueled Silicon Valley. Starting in an underground vault, telephone cables were exposed and cut. And within a half hour, a 19-minute precise shooting spree took out 17 giant transformers. By the time the police arrived, the shooter or shooters were off.

No suspects apprehended.

A PG&E spokesperson at the time claimed that there was a "human error" in the lack of response to any alarms regarding cut fences. That's hard to read, but considering the plan and scope of the attack, it's a bit hard to fully believe that claim.

Though the power company was able to divert power through other substations in the area, it took 27 days for the repairs to this substation to occur. Those repairs came with a price tag of $15.4 million. The interesting aspects of this attack are less in what the attacker/s accomplished, but what they uncovered: the vulnerability of the grid.

The vulnerability of the grid lies in its proximity. To be everywhere, it

must reach everywhere. Despite living in a society that proudly flaunts its wireless nature and spirit, those advances have yet to be applied in terms of infrastructure. If there is electricity, there are wires. And those wires connect.

A substation is one of those crucial meeting points. They largely serve two purposes: to either ramp up the voltage of power lines so they can cover longer distances or to diffuse that voltage for local energy consumption. Either way, the transformer is the key to establishing voltage regulation: a substation is worthless without it. Throughout the US, there are roughly 2,000 giant transformers constantly at work and spread out throughout power substations.

They are costly and notoriously slow to manufacture and distribute. By their own admission, the energy sector keeps some spares around, but not many. Costly and cumbersome, transformers are largely built to custom specifications and weigh in around 500,000 pounds.

Industry and government officials had tried to play this attack down, but they didn't go silent. Then Chairman of the Federal Energy Regulatory Commission, Jon Wellinghoff, claimed this was "the most serious domestic terror attack on the grid."[1] Despite only requiring the removal of two man hole covers, some early monitoring, and what one could only guess is a large amount of target practice, it became clear that the Emperor has no clothes and that their body lies exposed, stretched across their kingdom.

A 2009 Energy Department report claimed: "physical damage of certain system components (e.g. extra-high-voltage transformers) on a large scale…could result in prolonged outages, as procurement cycles for these components range from months to years."[2]

The reporting here gets iffy and intentionally so. The vague and ambigious nature of public statements leaves the impression that attacks on the grid, in varying forms of severity, are a regular occurence. Often major outages are caused by falling trees or debris, but from the highly coordinated and planned (such as this) to more common forms of robbery or drunken fits, what officials seem to be alluding towards is that events aimed at the grid itself are extremely common.

And even more tellingly, it is largely indefensible.

The conflation here is with terrorism. That any person who attacks the grid has as much blood on their hands as the ideologically or religious bound zealot who kills with impunity. This isn't to try and impose a reason for why this sniper or snipers targeted this substation, no claim was ever made, but it seems probable that anyone attacking the grid recognized that it is, in and of itself, a target. Specifically transformers, that

avenue and outlet of socio-political and technological power, not people.

The continued existence of the grid is the continued presence of an always on, energy and earth sucking civilization. One ruled by the looming and persistent omnipresence of an electrical outlet. The attackers could have nearly any reason to resent this and take charge. We won't know.

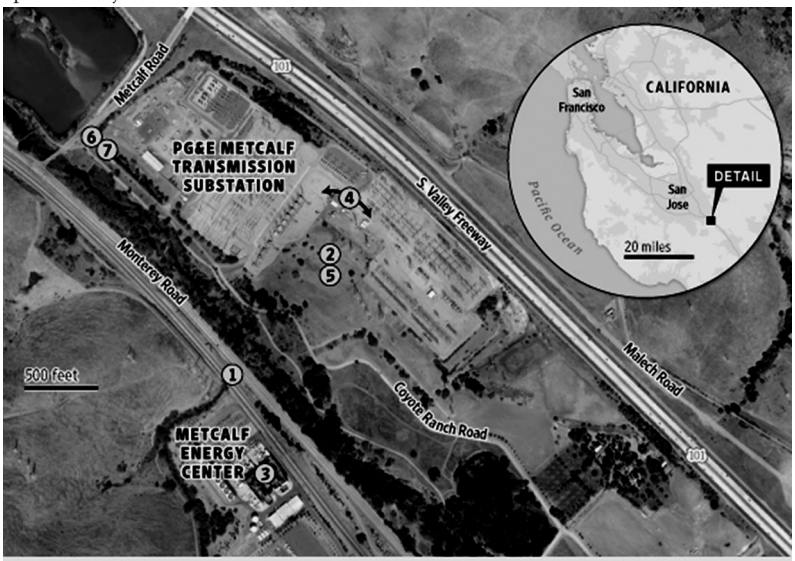
But what matters more is that the shooter/s reasoning doesn't matter. In their scurry to hit talking points and sweep this attack under the rug, hopefully before hitting the news cycle, officials made it clear that if replicated in numerous locations, this kind of attack isn't something that could have been prevented, prepared for, and quite possibly recovered from.

And here it remains: the most immediate threat to ominous and omnipresent power is the reality that its continued existence is fickle, tedious, and, in the long run, only temporary.

Endnotes

1 http://www.nytimes.com/2014/08/29/us/california-power-substation-attacked-in-2013-is-hit-again.html?_r=0

2 http://www.wsj.com/articles/SB10001424052702304851104579359141941621778



Shots in the Dark

A look at the April 16 attack on PG&E's Metcalf Transmission Substation

①	②	③	④	⑤	⑥	⑦
12:58 a.m., 1:07 a.m. Attackers cut telephone cables	**1:31 a.m.** Attackers open fire on substation	**1:41 a.m.** First 911 call from power plant operator	**1:45 a.m.** Transformers all over the substation start crashing	**1:50 a.m.** Attack ends and gunmen leave	**1:51 a.m.** Police arrive but can't enter the locked substation	**3:15 a.m.** Utility electrician arrives

Sources: PG&E; Santa Clara County Sheriff's Dept.; California Independent System Operator; California Public Utilities Commission; Google (image)
The Wall Street Journal