

To: Washington Utilities and Transportation Commissioners
From: Victoria Stoner, The Evergreen State College School of Public Administration
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RE: New WAC rules substation physical security

Executive Summary:

Physical power grid attacks are growing, and state guidelines are needed for utilities to secure substations against physical attacks.

Background:

In Washington state, there were fifteen attacks since June 2022, more than the total number of attacks in the last six years combined according to an Oregon Public Broadcasting article by Conrad Wilson and John Ryan. Specific physical security recommendations do not exist in the regulations. The chain of command falls to no one from the Department of Energy (DOE), the Federal Energy Regulatory Commission (FERC), to the Western Electricity Coordinating Council (WECC). On December 15, 2022, the FERC issued an order to its sister organization, the North American Electric Reliability Corporation (NERC), to evaluate power substation security risks and produce a report of physical security recommendations within 120 days.

NERC is a self-governing industry association that failed to enact specific physical security measures the last time the federal government requested it research appropriate security measures in 2009. In 2009 a Senate committee requested a study and security plan which were completed in 2018 without any specific physical security recommendations. The historical failure of the FERC and NERC to enforce physical security measures makes them inadequate partners for safeguarding power substations soon.

Recommendations:

- Regulate local grid substations with Washington Administrative Code (WAC). WACs should require all utility entities to create a uniform baseline of physical security measures.
 - Opaque perimeter walls like the walls installed at PG&E Metcalf substation after the attack in 2013.
 - Require security Cameras around substations.
 - Randomized, coordinated security guard and local law enforcement patrolling.
 - Encourage tips with a “see something, say something” campaign.