Protecting Sensitive Operations Information

Publicly accessible sensitive operations information can increase utility vulnerability by aiding research and planning for malicious actors, who may harm pipeline infrastructure and neighboring communities. AGA member natural gas utilities play an essential role in the communities they serve, balancing public awareness and infrastructure security. For example, to support emergency planning, utilities share pipeline maps and other operational information with those who have a demonstrated "Need To Know," like first responders. While complying with federal, state, and local laws and regulations, AGA member natural gas utilities should consider implementing appropriate measures to protect sensitive operations information (e.g., detailed pipeline maps with locations), when sharing beyond those with a demonstrated "Need To Know."

Federal Efforts to Protect Sensitive Information

As evidenced by various security regulations governing the treatment of sensitive information and the federal government's protectiveness of collected information, publicly detailing critical pipeline infrastructure attributes, operations, and locations can introduce significant security risks. Examples of federal efforts to restrict the public availability of sensitive pipeline information include the Pipeline Security Directives (SDs) and the limitations on public use of the National Pipeline Mapping System.

Abuse of Publicly Available Operations Information

Malicious actors have misused publicly available operations information to plan and facilitate actions that disrupt the operation of pipeline infrastructure. Some examples are listed below.

Attempted Bombing - A would-be saboteur used information on pipeline depth, width, and location to plan a pipeline bombing, which was fortunately unsuccessful. The bomb was planted but failed to detonate.

Valve Turners - Inspired by similar acts, a climate activist used federally available maps to plan a valve turning operation, intended to suspend oil flow.

How to Blow Up a Pipeline Movie - The website for the movie, featuring a fictionalized plot to destroy segments of a pipeline, displayed publicly-available maps of U.S. oil and gas pipelines. The webpage encouraged readers to "[a]ct outside of the system."

The Transportation Security Administration (TSA)

The TSA Pipeline Security Directives (SDs) have governed pipeline cybersecurity risk for designated critical pipeline systems since 2021. The promulgation of the SDs and additional security guidance recognizes the national security interest in safeguarding operational information as well as the reality of threats targeting critical infrastructure. Laws and regulations that would publicize sensitive operational information could directly conflict with federal requirements to secure the nation's critical pipeline systems and jeopardize the wellbeing and energy security of the nation.

The Pipeline and Hazardous Materials Safety Administration (PHMSA)

The Pipeline Safety Improvement Act of 2002 mandates participation by gas transmission and hazardous liquid pipeline owner/operators in the National Pipeline Mapping System (NPMS). While the NPMS collects, stores, and makes available detailed pipeline information to those with a demonstrated "Need To Know," PHMSA and lawmakers recognize the peril of indiscriminately publishing sensitive data. To address this, potential abuses are mitigated by preventing users from zooming closer than 1:24,000 scale, gathering more spatially accurate information than +/-500 feet, viewing more than one county at a time, or accessing information on sensitive pipeline attributes. The publication of more detailed pipeline information would undermine the purpose of these limitations and national security.

Accountability

Even with safeguards, the aggregation of sensitive operations information by government entities creates an enticing target for malicious cyber actors. To help protect sensitive operational information, natural gas utilities should engage with state and local government officials to highlight the risks of disclosure and work to ensure appropriate safeguards are in place to help mitigate risks to pipeline infrastructure.