



Elecsys Case Study - **PROTECTING VALVE SITES**

Elecsys remote monitoring protects critical oil infrastructure sites from eco-terrorists

BACKGROUND

Controversy over the expansion of energy infrastructure projects such as the Keystone XL pipeline and the Dakota Access Pipeline have refocused and emboldened the efforts by environmental activists to promote their anti-oil stance. While some activists are peaceful and non-intrusive, other protesters are daring in their reckless pursuit to make their objections known. Examples of recent demonstrations by these 'eco-terrorists' have been reported by the media as well as shown in videos on YouTube of them trespassing on oil company property at valve sites, cutting their way through the chains meant to protect oil company assets, and turning off the critical valves that transport oil. This sort of vandalism can have exponentially negative repercussions on the oil companies as well as the local community.

PROBLEM

It's now more important than ever before for oil companies to have complete insight into their systems. In addition to maintaining thorough anti-corrosion standards, in today's highly divisive energy conversation, it is also imperative to maintain anti-terrorism precautionary standards. Companies like Spectra Energy Corp. and Enbridge Inc. are just two of the oil companies that have first-hand experience with eco-terrorists attempting to slow the flow of oil. Both companies had incidents where these demonstrators trespassed and tampered with valves. In these situations, it was fortunate that the demonstrator's deliberate damage to company property did not rupture the line or impede delivery of oil for an extended period of time. Due to these events, oil companies have begun researching available solutions to immediately warn them of future breaches. For the safety of the community as well as the safety of the trespassers, companies must install safeguards to promptly know when intruders have entered their critical valve sites so they can quickly react to the situation.

SOLUTION

Obstructions like chain link fences and locks on gates are preventative measures that may or may not stop an eco-terrorist from trespassing at critical oil sites. More often than not, if a vandal has decided that their cause overshadows the potential prosecution, then they will intrude on oil company property by cutting the lock or otherwise entering the site, vandalize, and possibly cause unforeseeable damage to an oil pipeline. Put possible scenarios here. As such, it is vital for companies to have immediate knowledge when their sites are tampered with. A solution like the Elecsys ISM-4 provides alerts as soon as tampering happens. With the ISM-4, oil companies have the option to place a sensor on the gate, on the valve, or both, and since the unit is battery-powered, any tampering of the product or of the valve will send an immediate alarm via cellular communication to the oil company. The ISM-4 is also programmable for up to 4 channels, so oil companies also have the added bonus to monitor bonds at isolation flanges... **(what else do we want to put here?)**

RESULTS

As a result of using the Elecsys ISM-4, companies now have the added security of immediate notification of trespassing, vandalism, and valve site tampering, as well as the ability to accurately measure and collect data from other factors such as bonds at isolation flanges...(what else do we want to put here?), Because the ISM-4 is battery-powered and transmits data and alerts via cellular communication, oil companies now have the peace of mind to know that they will receive an immediate alert in the event one of their locations is invaded by an eco-terrorist or vandal. Receiving this crucial immediate alert helps them respond quickly for the safety of their line as well as the community.

APPLICATION
Protecting Valve Sites

INDUSTRY
Traffic Management

ELECSYS PRODUCT
ISM-4

