DIGITAL SOLUTIONS - CASCADE

CENTRAL HUDSON STRATEGY RELIES ON CASCADE

Customer story – Central Hudson

Central Hudson Gas & Electric relies on Cascade to take a step up to condition-based maintenance strategy of substation assets.

Central Hudson Gas & Electric is constantly seeking better ways to track and manage practices – and with Cascade they are moving forward step by step.

Pano Harpolis is Manager of Operations Services at the electric utility located in the Hudson Valley of New York state. He has been managing operations, maintenance and construction, as well as meter services, for the last eight years. The company has used Cascade since 2004, initially at a basic level to trigger maintenance orders. Harpolis' team has steadily increased the use and sophistication of Cascade at Central Hudson, putting more data into the system and using it as the basis for decision-making, both for maintenance practices and for replacement planning.

From the start, Harpolis saw the value of visibility into the equipment. "We've managed to put all the data into Cascade," he says. "This is helping drive our maintenance practices based on the information coming back from the field. We're testing, doing diagnostics and reviewing the data and making modifications to our plans, both from a maintenance perspective and also on capital spend."

Central Hudson is currently using Cascade for all substation assets. They have recently started the process of putting in data regarding distribution automation equipment, which consists of electronic reclosers, capacitors as well as regulators.

"We're starting to look at moving our transmission poles and wires into Cascade at some point," says Harpolis. The company tracks the data behind the assets: everything from nameplate data to capturing any scheduled maintenance or 'trouble' orders. The information is captured and tracked, allowing the engineers to see trends that will help in planning.

Transitioning to service provider platform

Central Hudson has been a one-way transmission and distribution provider of energy, but is now changing as smaller generators are added along the line. They are developing a different distribution

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system to integrate those hosted resources and enabling two-way power flow.

"In New York, our role is transitioning to a service provider platform for our customers and third-party developers, as distributed resources are interconnected to our distribution and transmission systems," says Harpolis. "This calls for the transformation of electric delivery systems to host greater levels of solar and other distributed resources. Much of that load is intermittent. We're also addressing aging infrastructure, and in doing so storm-hardening our systems while deploying new technologies," he says.

Cascade's myriad of capabilities

But Cascade offers more capabilities, and Harpolis is looking to expand the use even further. Some of the key challenges going forward for Central Hudson are loss of experience and knowledge transfer due in good part to retirements of employees who have domain expertise. In addition to losing employees to retirement over the last seven or eight years, there are more retirements coming up.

"Over the course of the next three or four years we're going to lose quite a bit of experience," says Harpolis. "Trying to capture that knowledge is critical. We may be able to do something with Cascade. We are looking at putting some of that information in, for example within the maintenance order. This relates to how to do certain things – what we consider back home as 'tribal talk,'" he says.

Storing equipment-specific information

He explains, citing a simple and easy-to-understand example of equipment-specific information: if an electrician is working on a piece of equipment, they may know they have to turn the wrench three times, instead of the four needed for a different but similar device. This type of information is often lost when experts with many years of experience leave the company, for whatever reason.

"Being able to capture that information somewhere is important. We are looking to put that within Cascade," says Harpolis.

CENTRAL HUDSON IN BRIEF:

Central Hudson Gas & Electric Corporation (Central Hudson) is a regulated transmission and distribution utility serving approximately 302,000 electric customers and 80,000 natural gas customers in a defined service territory of New York State's Mid-Hudson River Valley. Central Hudson delivers natural gas and electricity in a defined service territory that extends from the suburbs of metropolitan New York City north to the Capital District at Albany.

PROFILE

- Customer name: Central Hudson Gas & Electric
- Website: centralhudson.com
- Market: Electric and gas utility
- Employees: 1044
- Product: Cascade

BRIEF ACCOUNT

Why we chose DNV GL – Digital Solutions:

- Cascade is a leading software for electric utilities
- Capabilities to integrate with other systems
- Flexible back end allows customized data structure

This is what we gained:

- Visibility into substation assets
- Ability to see trends and analyse the data for decision-making in maintenance and capital spend
- Way to ensure knowledge transfer