

Presentation # 7

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Title: Ontario's "Smart Zone" - Owen Sound

Abstract

Hydro One, a company in the province of Ontario, has been installing smart meters since the end of 2007 and now has well over 1 million installed across its 640,000 square kilometer service territory. Early on, they realized the need for ubiquitous communications and integration of data and devices to enterprise applications had benefits well beyond traditional AMI.

In 2005, before Smart Grid was fashionable, the team explored the use of open protocol, standards based communications such as Zigbee (IEEE 802.15.4) and WiMax (IEEE 802.16). These components are now part of their two-way high bandwidth network development. They are using 1.8 Ghz radio spectrum acquired from Industry Canada dedicated to electric utility infrastructure protection. A proof of concept for applications like automated reclosers, remote terminal units, conservation and demand management devices and mobile IT has run its course. With the benefits now proven Hydro One is now moving forward with a scalable back office solution for smart grid applications and the deployment of smart devices in their Smart Zone. Their approach is unique as it's focused on end to end business scenarios rather than applications or narrow requirements. This presentation will elaborate on the strategy and implementation to date.