

## Energized by the Cloud

### Hydro Ottawa Ltd. – Protecting Critical Infrastructure in Canada’s Capital

How Hydro Ottawa Limited saved costs and improved operational efficiencies while protecting the City of Ottawa with cloud based access control.



*“The Feenics platform has resulted in cost savings and reduced administration efforts. Security audits now produce higher success rates based on better data analytics. Our security team also has a higher level of internal customer satisfaction through measuring key metrics and dashboards.”*

*– Jojo Maalouf, Manager IT Security,  
Hydro Ottawa Limited*

*“The key to success in this project was having Feenics Professional Services available at all times to answer any key questions encountered during the conversion.”*

*– Phil Yereck, Security Systems Integrator,  
ADSS*

#### Project Profile

##### Organization

Hydro Ottawa Limited  
Ottawa, ON Canada  
[hydroottawa.com](http://hydroottawa.com)

##### Industry

Critical Infrastructure  
Utilities

##### Systems Integrator

ADSS  
Ottawa, ON Canada  
[adss.ca](http://adss.ca)

**Overview.** Critical infrastructure owners are increasingly concerned with protecting their assets and maintaining service reliability in the face of all threats. They are susceptible to damage/loss due to natural causes, theft, deliberate destruction and mischief, and must be aware of the public's needs respecting safe and secure power.

Security and protection practices are being enhanced to address evolving utility needs and expectations of various governmental and regulatory authorities. High voltages assets like electrical transformer stations are geographically located in remote areas and require a monitoring and response strategy. Security systems and devices are increasingly being used by electric utilities to protect their transmission, distribution, generation and renewable assets.



**Company.** Hydro Ottawa Limited is a regulated electricity local distribution company operating in the City of Ottawa, Ontario Canada.

As the third largest municipally owned electrical utility in Ontario, Hydro Ottawa Limited maintains one of the safest, most reliable and cost-effective electricity distribution systems in the province, serving approximately 353,000 residential and commercial customers across 1,116 square kilometers.

As a future-focused organization, Hydro Ottawa Limited has re-engineered the company, as a positive opportunity to grow and pursue new opportunities whenever they fit their core business. Hydro Ottawa Limited is strongly positioned for success as they continue to focus on customer excellence, productivity and growth.

**Challenge.** The Hydro Ottawa Limited security team has made significant investments in security programs over the years. These have included its security and surveillance technologies, policies, and personnel. The security team is responsible for securing five main operations/administration buildings, warehouse facilities, fleet centres, control centres, data centres and 90 electrical transformer substation buildings.



## Challenge

Replace an aging legacy client-server access control system

The existing system could not achieve Hydro Ottawa's system requirements

## Solution

Enterprise Class, Cloud-Based Access Control

Feenics Visitor Management

Feenics Mobile App

200 + Card Readers

Wavestore VMS

## Key Functionality Leveraged

- ✓ **Integration:** Ease of integration to AD and ID Management platform for a simplified on-boarding and off-boarding 'one source of truth' process
- ✓ **Mobility:** Ease of granting access to various electronic gates and doors after hours, just-in-time security
- ✓ **Visitor Management:** Provides information on who entered and left the building, while maintaining an electronic log for audit purpose
- ✓ **Security Dashboard:** With the push of a button, pre-defined dashboards are produced for executive management review
- ✓ **Cloud:** With a limited budget and a high ROI, the move from a capital cost to a monthly expense satisfies the monthly security budget

Prior to implementation of the Feenics solution, the security team used an existing access control system that was on-premise and at end-of-life (obsolete). The security team had several goals in mind when they decided to modernize their security system platform. The security team identified seven 'must have' criteria that needed to be included in the RFP process. The following criteria were:

- ✓ Seamless integration to ERP and VMS
- ✓ Mobility
- ✓ Visitor Management
- ✓ Dashboard Reporting
- ✓ Cloud
- ✓ Mobile Credentials (Future State)
- ✓ Mass Notification (Future State)

**Integration.** The integration of the Feenics system was performed by the ADSS team. Hydro Ottawa Limited had provided ADSS documentation related to policies and procedures (Access Levels - Critical Assets) for on-boarding of cardholders into the Feenics system. The methodology of the integration was to perform a review of the provided documentation, meet with Hydro Ottawa stakeholders to obtain an understanding of policies and procedures and finally to review the current and future state configuration in comparison to the policies and procedures demonstrated. ADSS was responsible for validating and sanitizing the employee data from the previous system and uploading the new data into **Feenics Custom Forms**. Defined data attributes were created to seamlessly integrate into their **Active Directory & Identity Management** existing platform, which was managed by the IT department for an automated on-boarding and off-boarding process. The existing **Mercury Security** hardware boards were upgraded (firmware flash) allowing the security department to save cost without removing and replacing the old system. The cut over of each facility was completed over a weekend and each card reader was tested and verified as part of the commissioning.

**Benefits.** The benefits of the new system were immediately noticeable and having the right vendor and integrator made the project a success. In summary, Hydro Ottawa has positioned itself for success, building on industry-leading security technologies, a sound security personnel and a progressive approach to cloud adoption.

**ERP and VMS Integration.** The on-boarding and off-boarding process is now automated, reducing administration hours associated with processing the paperwork and now allowing for 'one source of truth' for data. Less time is spent circulating paper documents to each department which is an efficiency improvement. The Wavestore video management system was used to integrate all new and existing cameras together under one secured platform for better video analytics.

**Mobility.** Remote access using a mobile device now allows any of the security team members to pulse open the electronic gates or doors to allow access into buildings and electrical substation buildings during emergencies.

**Visitor Management.** The visitor management system creates efficiencies for the guard service, allowing the team to focus on security issues and not perform receptionist duties. The visitor management solution keeps track of visitors, contractors, and watch list, which also satisfies auditors requests to run and produce visitor logs in relationship to NERC CIP 006 & 014 Physical Security Compliance Standards.

**Security Dashboard.** The security dashboard functions as a security intelligent tool to elevate potential issues to the front office (executive team) as well as measure operational performance.

**Cloud.** Moving from on-premise to the cloud essentially removed the IT department tasks from updating and patching the system, which allows IT to perform other critical IT functions.

