



Horizon Utilities – Exploitation des postes électriques

CLIENT

Horizon Utilities

LIEU

Hamilton (Ontario)

DESCRIPTION DU PROJET

Horizon Utilities est l'une des plus grandes entreprises ontariennes de distribution d'électricité appartenant à des municipalités. L'entreprise fournit de l'électricité et des services publics connexes à 240 000 clients résidentiels, commerciaux et industriels à Hamilton et à St. Catharines. Elle se préoccupe de contribuer à la construction de communautés durables tout en investissant continuellement dans le renouvellement des actifs, la technologie et les personnes.

PORTÉE DES TRAVAUX DE B&M

Black & McDonald (B&M) effectue l'entretien haute tension dans différents postes électriques, la construction de postes électriques et des lignes aériennes et la réalisation des travaux de génie civil. Les services de B&M comprennent des inspections et des essais détaillés :

- Systèmes de protection et de commande
- Systèmes SCADA
- Transformateurs de puissance
- Appareils de commutation et disjoncteurs
- Services de soutien aux corps de métier d'électricité et de mécanique
- Services de soutien d'urgence

Government of Saskatchewan Energy Monitoring Services

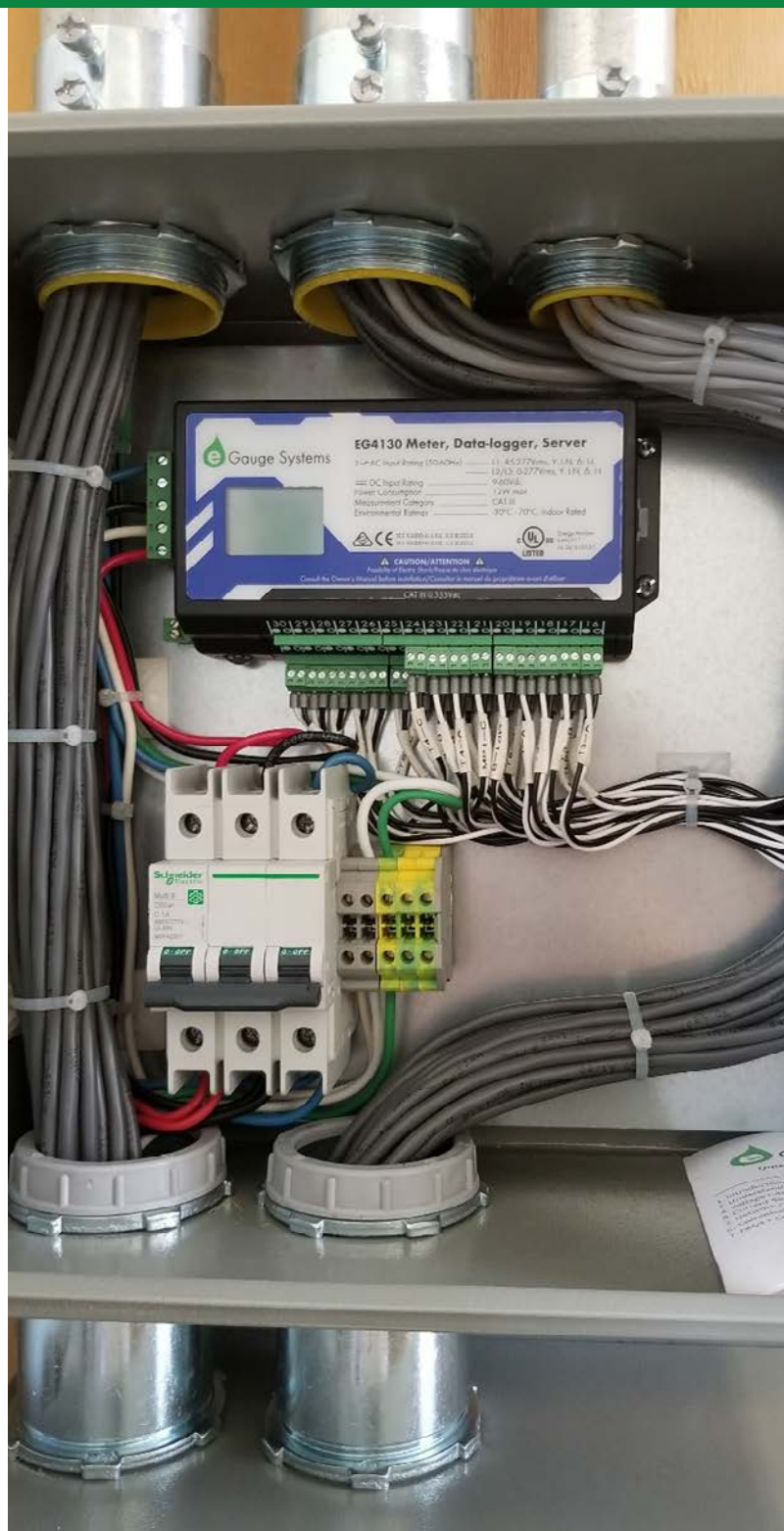
B&M SCOPE OF WORK

GOS wanted insight into how its buildings were performing and what would be the main operational changes it could make to reduce GOS's electrical consumption, utility bills and carbon emissions. It wanted a solution that would have the ability to be used by both off site management as well as onsite building operators. GOS wanted a solution with a visualization component to show consumption reduction and savings to the government, as well as to the broader public who use the buildings daily. It also wanted to engage staff and tenants to pursue net zero and other sustainability initiatives.

Beyond the physical installation, B&M was required to provide analytical services to review the data and provide recommendations to reduce utility usage. This included return on investment and carbon footprint reductions. Some examples would be consumption during unoccupied hours, peak demand usage and metrics regarding major building components.

B&M provided full end-to-end Energy Monitoring Services, from creating the scope to installation to monitoring. B&M installed the electrical meters with our fully licensed in-house electricians located in both our Saskatoon office and our Regina office. B&M's Environmental & Sustainability Services Team installed and implemented dashboard software LUCID BuildingOS that is fed by the real-time eGauge electrical meters and will allow the buildings and staff to monitor the performance in real-time.

The customized dashboards are accessible to the client and the building operators to login to at any given time, as well as turn into automatically generated reports that are sent to the client monthly to discuss with the operations team. The ESS team meets regularly with the client to discuss the trends in the data and provide efficiency suggestions.



Government of Saskatchewan Energy Monitoring Services

INNOVATIVE PROCESS AND TECHNOLOGY USED

Lucid dashboard

Unique dashboards were created to showcase energy usage and pinpoint actionable energy management strategies for the operations team. Data and analytics are only as valuable as the team acting on the information and tracking those interventions to capture savings and lifecycle impacts. The dashboard also allows comparing the buildings with one another, as well as against their own historical data. As sites benefit from the benchmarking process, the goal of greater efficiency leads to actions derived from the data trends observed.

Integration

B&M's electrical team installed more than 150 submeters on key loads throughout the buildings to better understand usage and cost impacts in real time at the panel and asset level.

Another unique aspect of B&M's role was that it acted as the systems integrator for the project. Once the electrical monitoring site devices were installed, the B&M ESS team then completed the integration work to associate each device with the correct building and the correct sensor points. More than 1,000 current transformers were mapped to the correct panels and assets within the portfolio of 11 buildings.

	The Museum of Nature	Canadian War Museum	National Gallery of Canada
Location	240 McLeod Street, Ottawa, ON	1 Vimy Place, Ottawa, ON	380 Sussex Dr, Ottawa, ON
Size of Facility	419,000 sq. ft.	440,000 sq. ft.	800,000 sq. ft.
Key Contact	Martin Leclerc ABCP, FMA, Director, Facilities & Protection (613) 566-4238 mleclerc@mus-nature.ca	Charles Patrick Jefferson Chief of Operations (819) 776-7037 charles.patrick-jefferson@ civilisations.ca	Steve Desousa Facility Manager (613) 993-5747 sdesousa@gallery.ca



Government of Saskatchewan Energy Monitoring Services

PROJECT FEATURES

Lorem ipsum dolor sit amet, consectetur adipiscing elit.
 Proin dapibus suscipit nunc vitae elementum.

Curabitur posuere ullamcorper massa, at efficitur quam
 porttitor quis. Maecenas eu consectetur arcu.

- Lorem ipsum dolor sit amet, consectetur adipiscing elit.
- Proin dapibus suscipit nunc vitae elementum.
 - Curabitur posuere ullamcorper massa, at efficitur quam porttitor quis.
 - Maecenas eu consectetur arcu. Aenean sollicitudin bibendum est ut posuere.
- Nulla at diam eget lacus sollicitudin congue porta dignissim diam. Pellentesque semper vitae nulla vel finibus.
- Integer lorem elit, venenatis non orci et, consectetur tempor eros.
- Pellentesque malesuada pretium augue eget iaculis.
- Duis laoreet pulvinar nunc, ut egestas diam posuere sed.
 - Nunc id neque vel libero imperdiet vestibulum.
 - Duis sit amet arcu commodo turpis dapibus imperdiet ut in urna.
- Donec tincidunt eget nulla ac convallis. Nunc eros leo, placerat vel felis ut, auctor aliquet mi.
- Vestibulum lobortis, nibh ac ornare euismod, mauris elit sagittis nunc, ut suscipit tellus orci non libero.
- Mauris convallis fringilla velit, nec ullamcorper mi vulputate sed. Donec laoreet lorem id vulputate faucibus. Curabitur semper, tortor in luctus fringilla, risus tortor laoreet ante.

