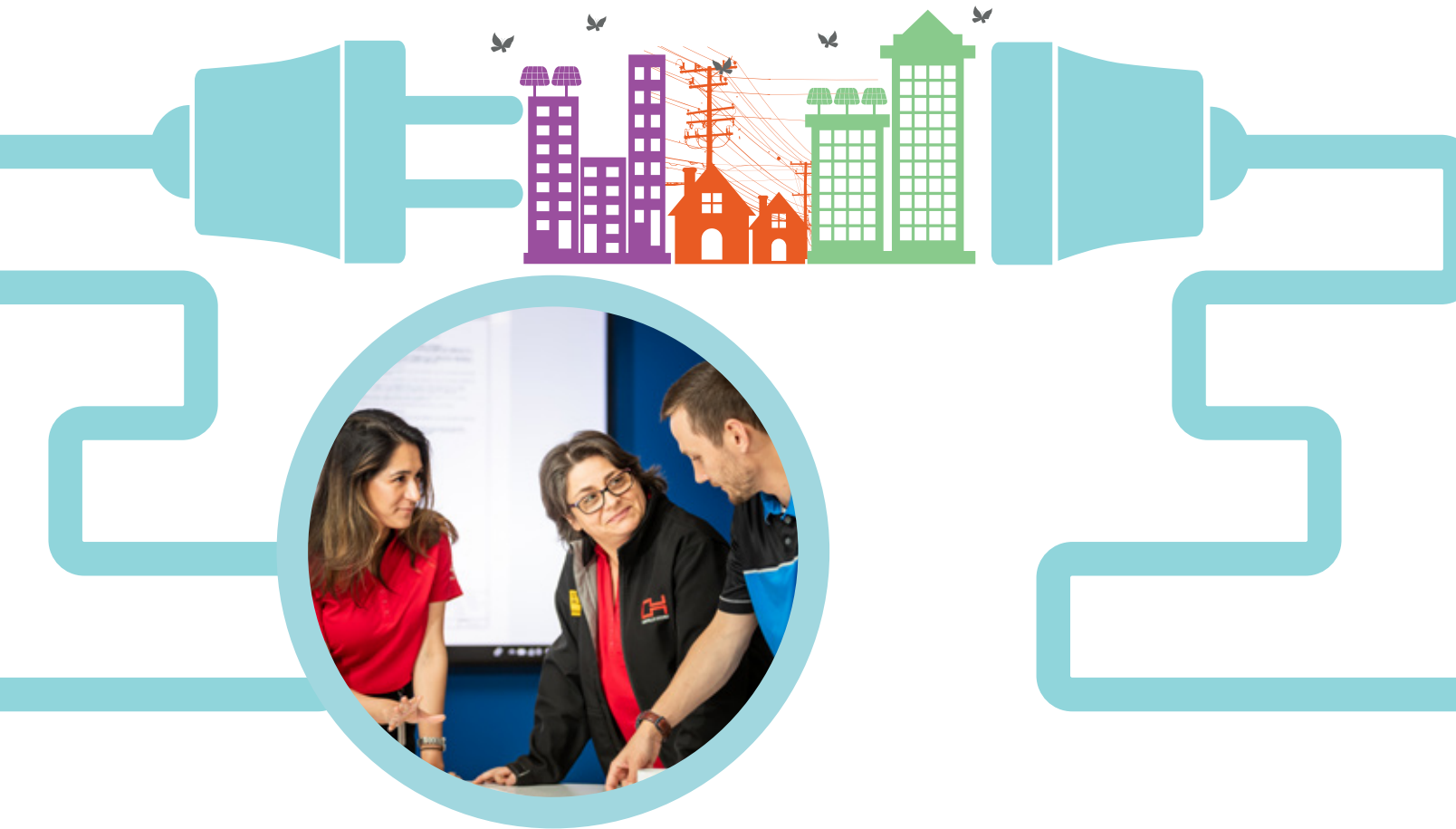


THE DISTRIBUTOR

FALL 2020



**EFFICIENT,
RESILIENT,
ESSENTIAL**

Ontario's Distributors Embrace Innovation

**EDA Advocacy
Campaign
Gets Golden
Recognition** ///7

**Perspectives
on Innovation
from Around
the Sector** ///10



Using Innovation for Insight



OEC's group of energy and infrastructure companies are using data to build innovative insights to change the way that assets and power quality are managed for local distribution companies. With services to aid every step of your distribution system management, OEC's companies have the proven experience to be your guide.

Visit oecorp.ca for more information on our services from engineering design, inspection, locating, construction, to metering and more.



Lead • Innovate • Commit to Excellence

oecorp.ca



ON THE FRONT COVER

Oakville Hydro staff collaborating on future spatial data initiatives. See page 22.



© Paul Wash



CONTENTS

UP FRONT

- 4 Message from the Chair
- 6 Sector Scan
- 7 *Power of Local Hydro Takes Gold*

COVER SECTION: EMBRACING INNOVATION

- 10 Perspectives on Innovation
- 12 EDA Innovation Advocacy
- 14 Ivy Charging Network to End Range Anxiety
- 16 Transforming for Complete Digitization
- 18 Creating a Post-Pandemic 'New Normal'
- 19 Making an Awkward Everyday Task Safer
- 20 Unique Business Model Amplifies Benefits
- 22 Stepping Back to See the Bigger Picture
- 24 Boxes and Backlogs a Thing of the Past

INDUSTRY INSIGHTS

- 26 EDA Advocacy in Action
- 27 Ask the Expert: Ameresco Canada
- 28 Ask the Expert: Grant Thornton
- 30 EDA CON::NECT Event Series

THE DISTRIBUTOR

Fall 2020

The Electricity Distributors Association (EDA) publishes *The Distributor* for its members and stakeholders. All rights to editorial content are reserved by the EDA. No article can be reproduced in whole or in part without the permission of the EDA.

PUBLISHED Fall 2020 FOR:

Electricity Distributors Association (EDA)
3700 Steeles Avenue West, Suite 1100
Vaughan, ON L4L 8K8
www.eda-on.ca



The Voice of Ontario's Electricity Distributors

EDA STAFF

CEO'S OFFICE

Teresa Sarkesian, President and CEO
Jessica Amico, Executive Assistant

POLICY, GOVERNMENT AND CORPORATE AFFAIRS

Ted Wigdor, VP, Policy, Government and Corporate Affairs
Derek Nardone, Manager,
Corporate and Government Affairs
Kathi Farmer, Senior Regulatory Affairs Advisor
Brendan McClughan, Policy and
Government Affairs Specialist

COMMUNICATIONS AND MEMBER ENGAGEMENT

Andrew Temes, VP, Marketing,
Communications and Member Relations
Marica Macura, Director, Member Relations and Events
Emily Kirk, Communications Specialist
Dianna Merlocco, Events Specialist
Lesia Kostecki, Marketing and
Member Relations Specialist

FINANCE AND ADMINISTRATION

Tamara Orlova, Chief Financial Officer
Arlene Klemmer, Accounting Clerk
Matthews Joseph, Senior IT Analyst
Lina Parisi, Receptionist

DOVETAIL PUBLISHER

DOVETAIL Communications

30 East Beaver Creek, Suite 202
Richmond Hill, ON L4B 1J2
Tel. 905.886.6640 | www.dvtail.com
Advertising inquiries, Leesa Nacht, lnacht@dvtail.com
Editorial inquiries, Emily Kirk, ekirk@eda-on.ca
Please return undeliverable copies to:
Electricity Distributors Association (EDA)
3700 Steeles Avenue West, Suite 1100,
Vaughan, ON L4L 8K8
PUBLICATIONS MAIL AGREEMENT NO. 43526108



MESSAGE FROM THE CHAIR

The scope and strength of the distribution sector's embrace of innovation is both impressive and necessary. We're the custodians of the connection point between electricity consumers and the complex system by which they are supplied. Our choice isn't between innovating or not; but between innovating or rapidly falling out of step with current realities and needs in a time of transformation.

There's ample evidence that our sector is making the choice one would expect. In this annual issue of *The Distributor*, we present diverse examples of utility innovation. They encompass technology-driven initiatives such as better leveraging of data and digitization; but also highlight the importance of innovation in the face of the unexpected, and as a means of advancing core objectives such as safety, conservation and customer-service excellence.

Innovation has an inherent appeal to many in our sector, responding to innate desires to experiment, proof-test and learn. But its benefits and importance extend far beyond intellectual satisfaction.

Innovation is a key means of continually improving the **effectiveness and efficiency** of our internal operations, while at the same time better aligning our services and interfaces with ever-changing customer expectations. This is vital within our regulatory framework, with its embedded requirements to continually stretch beyond yesterday's performance metrics, and at a time when alternative service providers and even the prospect of full-scale grid defection loom increasingly large.

Innovation is also crucial to our **resiliency** in the face of change and unforeseen challenges. The vastly different ways in which EDA members have had to conduct operations during the pandemic are a compelling recent example. But even bigger and more enduring challenges remain – climate change being key among them – and will require innovation of a nature and scale that we are only beginning to define.

And finally, and perhaps most fundamentally, innovation is how we will ensure an **essential and enduring LDC role** as the electricity grid continues to transform. The grid will be increasingly defined by the “three D's” of greater de-carbonisation, de-centralization and prosumer-driven “democratization.” At a time of such flux, only the innovative and agile will sustain vibrant or even viable business models.

Of course – more than just being a defensive play – innovation is also a pathway towards tighter customer relationships and new business opportunities. A significant part of EDA advocacy is focused on leveraging opportunities in these areas and – as you can read in this issue – this advocacy is well-backstopped by our members' strong track record of successful and customer-benefitting innovation.

Sincerely,

Ysni Semsedini

President & CEO, Newmarket-Tay Power
Chair, Electricity Distributors Association



Every community needs an ally

The not-for-profit health and social service agencies that support our communities are doing their best to help those in need.

We provide funding to a wide range of community support organizations to help foster good health, diversity and sustainability wherever we can.

Learn more about our commitment at alectrautilities.com/AlectraCARES

#alectraCARES



alectra
utilities

Discover the possibilities



WHAT'S HAPPENING AROUND THE DISTRIBUTION SECTOR



Susanna Zagar

Pending OEB Leadership Changes Announced

The provincial government has announced its intent to appoint Susanna Zagar as Chief Executive Officer and Lynne Anderson as Chief Commissioner of the Ontario Energy Board. Additional board and commissioner appointments and reappointments also were announced in July. As with the previously announced intent to

make Richard Dicerri OEB chair, these appointments will come into effect upon proclamation of previously passed legislative amendments – likely in the fall.

The EDA is pleased to see the government act on OEB modernization with these intended governance appointments. This follows extensive EDA advocacy, including recommendations in our 2018 submission to the Dicerri Panel – a number of which have since been acted on – and additional OEB reform recommendations contained in a 2019 white paper. The EDA will revisit the recommendations in the white paper with the new OEB leadership at the earliest appropriate opportunity. [D](#)



Ruth Tyrrell

Sector Leader Ruth Tyrrell Retires

Long-time EDA board member and Orangeville Hydro executive Ruth Tyrrell officially retired in June. One of this year's EDA's Chair's Citation recipients, she held progressively more senior roles in the industry over the course of more than two decades. In that time, she became a de facto ambassador for local hydro and embodied the spirit of cooperation

and collaboration that the EDA promotes.

She served on the EDA's board of directors from 2007 until her retirement. She was also a director of MEARIE, a trustee of the LDC Tomorrow Fund and an active member of her Georgian Bay District. Ruth emceed the EDA's *Women Connected* event multiple times and promoted the rewarding career opportunities available within the industry.

The EDA's members and staff wish her the best for a well-earned retirement. [D](#)

Energy+ Donates to United Way

Energy+ made a \$20,000 contribution to the Brant United Way and the Waterloo United Way's COVID-19 community response fund to help vulnerable residents in Brant County, North Dumfries and Cambridge. The company matched donations made by employees and board members. The funds will be used for needs including access to shelter, food and other crisis-related supports. Energy+ delivers electricity to 67,000 customers in Brant, North Dumfries Township and the City of Cambridge, and is one of many local hydro utilities supporting their communities during the COVID-19 pandemic. [D](#)

IESO Engages on York Region Non-Wires Alternatives Demonstration Project

The IESO is introducing an engagement process to its York Region Non-Wires Alternatives Demonstration Project. This project is an effort to better understand the potential of distributed energy resources, and is due to launch later this year in southern York Region with Alectra Utilities as the delivery partner. The engagement process will involve presentation of and feedback on: proposed resource eligibility, demonstration timelines, distribution locational marginal pricing, participation rules and the participation agreement. For more details, including a public webinar presented in July, see: <https://bit.ly/2WeMw7B> [D](#)

Industrial Conservation Initiative Hiatus Allows Businesses to Focus on Operations

The Ontario Government is implementing a peak hiatus for Industrial Conservation Initiative participants to allow these businesses to focus on recovering from the impacts of COVID-19. Class A customers will not need to anticipate and reduce their electricity demand during peak hours as they return to full levels of operation, and will maintain their peak demand factor from the 2019–20 period to determine global adjustment charges in 2021–22. [D](#)

OMERS Passes Five Plan Amendments

Following the 2020 Plan Review process, on June 24 the OMERS Sponsors Corporation board approved five amendments to the OMERS Primary Pension Plan. The first three related to the exceptional circumstances presented by the COVID-19 pandemic and are effective immediately. The final two amendments were part of the annual plan review and are not effective until January 1, 2023.

These amendments include: extending leave purchase deadlines; reducing or eliminating the 36-month employment requirement for purchases of periods of reduced pay; permitting temporary layoffs as purchasable service; removal of current eligibility requirements for non-full-time employees to join the plan; and shared risk indexing. For more details see: omersfuture.ca [D](#)

Hydro One Announces Additional Support for Indigenous Customers

[Hydro One](#) announced additional measures to support Indigenous customers, businesses and communities. This includes critical aid to First Nations and Métis communities, scholarships for young Indigenous leaders and support for the Indigenous economy.

The utility partnered with GlobalMedic, a registered Canadian charity specializing in disaster relief, to deliver 10,000 kits of food and safety supplies to First Nations communities across Ontario. Hydro One is also supporting the Métis Nation of Ontario's pandemic relief fund and its 31 community councils in providing necessities such as food, medical and pharmaceutical supplies to its vulnerable citizens.

Premier Doug Ford and Minister of Energy, Northern Development & Mines Greg Rickford applauded Hydro One for its continued efforts to support Indigenous youth and communities. [D](#)

Elexicon Energy Looks Back on Merger

[Elexicon Corporation](#), the single shareholder and holding company of Elexicon Energy Inc. and Elexicon Group Inc., released its 2019 annual report: *Delivering transformation – together*. The report highlights the many accomplishments of the subsidiary companies since the merger of Veridian Corporation and Whitby Hydro Energy Corporation on April 1, 2019. The report is available at: <https://bit.ly/30f8Df8>

"The merger has provided us with the increased capacity and strength to take on the challenges of a transforming energy sector," said Lesley Gallinger, President and CEO, Elexicon Energy. "Our talented employees – working together with an unwavering commitment to our customers – are the driving force behind our future success." [D](#)

ESA Launches Risk-Based Oversight of Wiring Inspections

The [Electrical Safety Authority \(ESA\)](#) continued its modernization journey with the launch of Risk-Based Oversight (RBO) for inspections of electrical wiring notifications. This approach allows ESA to focus on higher-risk work and to target the underground economy, and at the same time reduces burdens on Ontario businesses.

ESA's oversight of an electrical installation will be based on an assessment of the safety risk; that is, the likelihood an event will occur, and the degree of harm it will cause if it does. When a notification is opened with ESA, it will now include an assessment using "who, what, where" criteria, and a risk recommendation for final review by the inspector.

RBO will enable ESA to spend more time on safety activities such as helping to ensure wiring work meets the requirements of the *Ontario Electrical Safety Code* and is done by qualified people. The new online system makes it easier to open notifications, is more user-friendly and allows electrical work to be better described. It will also include "help" tools to assist when submitting an online notification. [D](#)



Power of Local Hydro Earns Gold-Level Recognition

The current version of the EDA's ongoing *Power of Local Hydro* awareness and advocacy campaign is both a testament to the crucial role EDA members play "On the Frontlines of Power", and now a multi award-winning piece of communications work.

The EDA was notified in July that the campaign had won gold-level recognition in both the Hermes Creative Awards and the dotCOMM Awards, in the categories of Strategic Programs – Public Relations Campaign and Digital Marketing & Communication Campaigns – Brand Awareness, respectively.

"We were excited about this campaign from day one," says EDA President and CEO Teresa Sarkesian. "The distribution sector doesn't always get recognized for the extremely important frontline role it plays, and this was a chance to claim some credit on behalf of our members."

"We know the campaign has moved the needle on awareness and appreciation with the decision makers we deal with daily," Teresa adds. "But it's great to have its impact confirmed by an authoritative marketing-industry source. We were able to execute the *Power of Local Hydro* campaign very cost-effectively, and now we're even more sure that it's also a top-tier communications product."

Both of these programs are international and long-standing awards programs. They are administered by the Dallas-based Association of Marketing and Communication Professionals, whose competitions are among the largest of their type in the world.

The *Power of Local Hydro* campaign remains active, and campaign materials are available at: www.eda-on.ca/Power-of-Local-Hydro [D](#)



SAVE THE DATE!



EDIST 2021

ELECTRICITY, DISTRIBUTION, INFORMATION SYSTEMS & TECHNOLOGY
CONFERENCE & EXHIBITION

The Power of Resiliency

SAVE THE DATE!

January 13-14, 2021

New virtual event format for 2021.

Learn more at www.eda-on.ca/events



CON::NECT
EVENT SERIES

Energizing life.

At Hydro One, we believe in building a brighter, more sustainable future. That's why we're investing in innovative new technologies as we plan, design and build a modern grid to energize life for the people and communities of Ontario.

Discover how at [HydroOne.com/about/sustainability](https://www.hydroone.com/about/sustainability)

The Hydro One & Design trademark is owned by Hydro One Inc.



PERSPECTIVES ON INNOVATION FROM AROUND THE SECTOR



"For the most part electrical distribution was not very innovative for decades. Over the past few years innovation has accelerated at a rapid pace. Moving forward, distribution companies will have to understand that customers and businesses

want **more control and options** on how they obtain and consume electricity. Innovation as with any other entrepreneurial enterprise is interesting because at times it is great to be the first to market but at other times it is best to let mistakes be made, the dust settle and then move forward with what has been learned. The value of the EDA is that we can partner and work together sharing knowledge, ideas, successes and mistakes."

- Chris Litschko, CEO
[Lakeland Holding Ltd.](#)



"The **rules of engagement** for employees **continue to shift**. Remote working approaches have been implemented but effective communication between teams remains a challenge. This situation makes asset management a key area of focus due to the required interaction between regulatory planners, field inspectors, engineering designers, and project teams. We needed a transition plan to empower the remote workforce across Oakville Hydro. And we accomplished this by embracing digitization and cross-platform integration to generate data-driven insights."

- Jeff Mocha
Vice President,
Enterprise Innovation
[Oakville Hydro](#)



"We will plan, design and build a grid to meet the future needs of the customers, businesses and communities of Ontario. These investments are increasingly important as we **prepare for** more severe storms and the **effects of climate change**. Whether it be through our distribution modernization program, our new distributed energy resource management system, our new approach to vegetation management or our battery energy storage system pilot, Hydro One is working to meet customer needs by building a more resilient and environmentally sustainable grid."

- Lyla Garzouzi
Vice President of Distribution
[Hydro One](#)



"Councils and other EDA forums, and our partnership in the GridSmartCity Cooperative, are helping us to bridge the need for innovation and infrastructure renewal, while reaping the benefits of **collaboration and cost efficiencies**. By sharing resources, insights and systems we are not only able to engage in more encompassing and innovative pilot projects, it's enabling us to run smarter companies. It's allowed Burlington Hydro to remain autonomous, yet achieve the same large scale savings as merged entities. A great example is our collaboration with fellow LDC member Energy+ and corporate partner S&C Electric to model how distribution feeders will operate with distributed energy resources grouped at various points and spread out along the feeder."

- Gerry Smallegange
President and CEO
[Burlington Hydro](#)



“Innovation often begins with a casual conversation – with a customer, a co-worker, a supplier, a colleague, a student, a board member, a perfect stranger. ‘What if...’ **‘Why couldn’t we...’** ‘Have you ever tried...’ Sometimes, that’s as far as it goes, but in the right environment, with a supportive culture and inspired leadership, it moves beyond a conversation and into a serious discussion. As leaders, we need to allow these conversations to take place and see where they go, even if we think they are headed down a road we already explored five years ago and found it to be a dead end. Because that was five years ago, and a lot can change in five years.”

– Jac Vanderbaan, P.Eng., CPA, CMA
Director of Engineering,
[London Hydro](#)



“Innovation takes patience and determination – because the process itself is messy, convoluted and anything but straightforward. It takes radical thinking, decisive action and strong governance that supports calculated risk-taking. The distribution sector’s DNA is built upon being risk averse, with reliability and safety at its core. This is not bad, but we need to evolve to accommodate fresh thinking. We need to be ready to get out of our comfort zone, to **test and fail fast**. We need to innovate with intention, in an open and creative environment that expands our scope beyond the bounds of the traditional utility business model.”

– Neetika Sathe
Vice President,
[Alectra's GRE&T Centre](#)



“Utilities need a proactive approach that embraces, unlocks, and harnesses the endless advancements in technology. Utilities aren’t alone in this however; we need **help from our partners**. Flexibility and openness of the regulator is critical to ensure barriers are removed and new ideas and approaches are considered. Access to government funding is also important as the cost of new technology can be very prohibitive. Through collaboration among all players, and alignment of end goals, the customer wins. Utilities must take every opportunity to leverage technology now. If we don’t, our communities and customers will find alternate solutions to their energy needs, leaving utilities in the dark.”

– Matt Payne
President and CEO,
[North Bay Hydro](#)



“The energy sector is going through a major transformation driven by advanced consumer technologies, renewable energy system parity, increasing costs, aging infrastructure, climate change initiatives and electrification of transportation. The pace of change will continue to accelerate and navigating this path is better served by sharing ideas and successes and learning lessons from less optimal results. As we focus on grid modernization, it is also encouraging to see support for **regulatory change and modernization** as well. The government is focused on achieving environmental, economic and social sustainability, and going digital will allow for a truly analytical approach towards achieving this.”

– John Avdoulos
President & CEO,
[Essex Power Corporation](#)

EDA ADVOCACY: KEY INNOVATION-RELATED FOCAL POINTS



DISTRIBUTED ENERGY RESOURCES

The EDA has produced substantive advocacy and thought leadership on DERs beginning with a 2017 vision paper and a 2018 road map. More recent and current focal points include connection standardization and remuneration for LDCs. DERs will enable LDCs to innovate with non-wires solutions. And LDCs in turn have a central role to play in the shared effort to maximize the environmental and other benefits of DERs, including reduced needs for capital outlays and new options for customers.

www.eda-on.ca/Advocacy/Research-and-Reports

ELECTRIFICATION

Using electricity to meet more of our energy needs has to be a foundational element of any credible Canadian climate strategy – with the added benefit of making productive use of Ontario's current surplus generation, and moderating Global Adjustment and other price pressures. The EDA has formed an EV sub-committee and is advocating for a significant LDC role in providing the charging infrastructure needed to facilitate transportation electrification.

POST-PANDEMIC RECOVERY

Innovation was at the core of the strategies by which LDCs lived up to their essential workplace designation, and continued to operate and serve customers throughout the pandemic. After intense engagement on a range of pricing and other immediate COVID-related advocacy needs, the EDA shifted focus over the summer to the issue of deferral accounts and cost-recovery, relating to the often extraordinary agility and innovation LDCs demonstrated in response to the pandemic.

MARKET STRUCTURE & INCENTIVIZATION

Innovation is essential and exciting, but can also be expensive. The EDA consistently seeks to ensure – through pricing and other aspects of market design, as well as through rate-basing guidelines – that LDCs have the potential to realize a return on their investments in innovation, within a well-balanced, risk/reward framework. Among other more specific objectives, we've called for explicit promotion of innovation as part of the Ontario Energy Board's core mandate.

MAGIC.

Make costly nuisance outages disappear.



REDUCE NUISANCE OUTAGES WHILE IMPROVING CUSTOMER SATISFACTION WITH
THE VACUFUSE™ SELF-RESETTING INTERRUPTER.



70% of fuse operations on overhead distribution transformers are for nuisance outages.

While there's no trick for keeping the lights on at the end of lateral lines, there is technology. With the VacuFuse™ Self-Resetting Interrupter, you'll have advanced fault-testing technology where you need it most at the outer reaches of the grid, improving customer satisfaction and saving you needless maintenance expenses.

Plan for advanced protection with S&C, the worldwide leader in reliability.



See the difference at sandc.com/vacufuse20

© S&C Electric Company 2019. All rights reserved.



HYDRO ONE IVY CHARGING NETWORK WILL BRING RANGE ANXIETY TO AN END

Submitted by Hydro One



The Ivy Charging Network was unveiled at the 2020 Canadian International AutoShow in Toronto.

“We’re pleased to partner with Hydro One on an initiative that will help to facilitate widespread electrification through providing a reliable, integrated network of electric vehicle charging stations,” says Theresa Dekker, Vice President, Corporate Business Development & Strategy, OPG, and Co-President of Ivy Charging Network. “Ivy Charging Network will support a healthier planet and a greener way to travel.”

Ivy Charging Network will have 73 locations with 160 fast-chargers across Ontario that will be on average less than 100 kilometres apart, making it easier for drivers to get around and to take a long road trip.

Electric vehicles (EVs) are becoming more common on roads across the province. Many drivers are attracted to the design and performance of EVs, in addition to the potential long-term savings of going electric. However, one challenge in particular still has drivers thinking twice before making the switch to an electric vehicle – range anxiety.

EV owners and those looking to make the switch want more ways to charge, especially in rural and remote areas. With a limited amount of charging stations available, EV drivers who rely heavily on charging at home could face the risk of running out of power while on the move.

In February, Hydro One and [Ontario Power Generation \(OPG\)](#) launched an innovative way to combat range anxiety with [Ivy Charging Network](#), which will be Ontario’s largest and most connected electric vehicle fast-charger network.

“Ivy Charging Network will be the largest electric vehicle fast-charger system Ontario has seen,” says Imran Merali, Vice President, Customer Service, Hydro One, and Co-President of Ivy Charging Network. “In partnership with Ontario Power Generation, Ontario drivers will have more incentive to go electric, while supporting a more environmentally friendly economy in Ontario.”

A new way to get around

The ongoing COVID-19 pandemic has many Ontarians rediscovering their province. Ivy aims to provide certainty to EV drivers that they will be able to charge outside of major cities.

Ten fast-charger locations are already open in Ontario with more locations expected to be fully operational this year.

“By entering this growing market, we will be able to support drivers looking to make the switch to an electric vehicle and help build a better and brighter future,” says Imran.

Ivy selected locations to make it easier for drivers to travel across Ontario with fast-chargers that provide approximately 100 kilometres of range in 20 minutes or less. Those looking to use the network can find nearby locations using Ivy’s app or website.

A network built for the future

With transportation being the second largest source of greenhouse gas (GHG) emissions in Canada, Ivy Charging Network will help mitigate future emissions by building the necessary infrastructure to support a greener future. Initiatives like EV fast-chargers bring the province and country closer to a competitive, zero-emissions transportation sector.



Theresa Dekker and Imran Merali, Co-presidents of the Ivy Charging Network, prepare to charge an electric vehicle at the 2020 Canadian International AutoShow.

“At OPG, we are committed to powering Ontario with clean, reliable and renewable energy while innovating for the future,” says Theresa. “Ivy is one of the ways we can continue delivering on that commitment while providing options for Ontarians looking to leverage more sustainable travel.”

For the possibilities of tomorrow

For Hydro One, Ivy Charging Network is part of the company’s broader goal of incorporating environmental sustainability into all aspects of its business. Building on the success of Ivy Charging Network, the company has its sights set on managing its carbon emissions, implementing new programs and monitoring its performance.

“Hydro One is responding to the needs of Ontarians today, while creating opportunities for tomorrow. Our charging network was a natural way for Hydro One to bring our proven ability to energize life for people and communities to the transportation market,” says Imran.

Having already delivered on the world’s single largest climate change

action to date with closure of all its coal stations, for OPG, climate change is not the future, it’s the present, and its consequences are already affecting the lives of Ontarians. OPG believes it’s possible to grow prosperity while dramatically decreasing carbon emissions through its portfolio of non-emitting nuclear power, renewable generation and electrification efforts to help Canada meet its climate change goals.

With the energy Hydro One transmits and distributes mostly coming from zero-carbon emitting sources, the electrification of transportation will mean more customers can utilize Ontario’s green electricity system. This will support the transition towards a more environmentally sustainable future and help meet the local economic needs for more non-wire solutions.

Ivy Charging Network plans to have all locations across Ontario open by the end of 2021 – putting an end to range anxiety once and for all. [D](#)

About Hydro One

Hydro One is Ontario’s largest electricity transmission and distribution service provider. We distribute electricity across Ontario to nearly 1.4 million predominantly rural customers, or approximately 26% of the total number of customers in Ontario. In November 2015, we became a publicly traded company on the Toronto Stock Exchange (H). [@HydroOne](#)



K-LINE INSULATORS LIMITED

www.k-line.net

"PROUDLY INTRODUCES"

Totally Insulated Framing System (TIF)

3-Phase TIF Tri-Frame - Distribution

15kV - 69kV (Patent No.: US 9,685,772)



3-Phase TIF H-Frame Transmission

69kV - 230kV (Patent No.: US 9,685,772)



DIGITAL TRANSFORMATION

0%  100%

ESSEX POWERLINES TRANSFORMS FOR COMPLETE DIGITIZATION

Submitted by Essex Powerlines



Essex Powerlines has embarked on an innovative, next-level effort to leverage every bit of data the utility collects, and to become completely digitized across all departments in the coming years. The now-underway Transformative Utility Project will enable EPL to provide more customer choice and customer centricity, while reducing outage times and loss-of-supply incidents.

EPL also envisions that complete digitization – and seamless flow of information among departments – will lead to ongoing operational efficiencies, optimal decision making and improved company-wide cost controls.

The many phases of the Transformative Utility Project include a new Work Management Centre application, which will digitize all work and service-level requests across the utility. This will provide enhanced cross-department visibility and reporting and escalation capabilities to the entire organization, with benefits for all stakeholders involved.

“A common platform to share digital data will enhance communications and visibility among our different departments, enabling us to provide uninterrupted and best-in-class service to our customers,” says Essex Powerlines

General Manager Joe Barile. “We are excited for what this project means for our customers, our employees and our stakeholders.”

As utilities embrace digitization, their customers will have better access to data and information. EPL’s Transformative Utility Project will aid the Customer Service Department in seamlessly granting customer choice – and in meeting evolving customer expectations – through mobile and digital options such as paperless billing, enhanced outage notifications and details, improved home energy analytics, and customer self-service tools.

In addition, the push towards digital technology and self-service tools will provide customers with easy access to customer support, and better and more resourceful communication channels, all while reducing phone calls and un-needed service requests.

Benefits across multiple departments

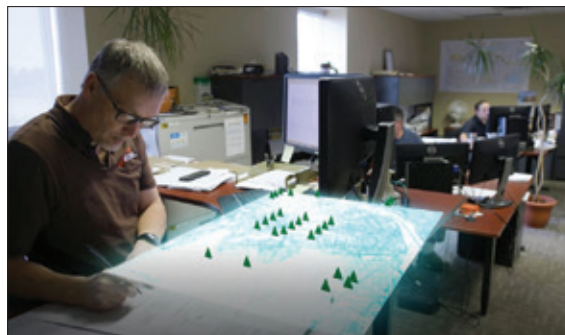
The Transformative Utility Project will also prove beneficial for the Operations, Engineering and Asset Management departments. Newly acquired tools will provide engineers with the ability to design, stake, plan and manage all aspects of capital

and project management work without paper trails, even at stages such as buyoffs and interactions with contractors and consultants.

The operations department will reap the benefits of migrating to digital maps and models, which ultimately will allow for collaboration with other local distribution companies and enable shared control room services and more accurate information for those in the field.

Lastly, the project is meant to aid the regulatory and finance departments by providing cost efficiencies and reduced labour hours spent on tedious work in various ad hoc and disparate systems. It will enable real-time automated reconciliation of Retail Settlement Variance Accounts, unbilled revenue and IESO settlement reporting. It will also automate processes in finance to enable completely updated reporting within a week of month end, providing complete cost-control and visibility and enabling escalation when necessary.

Overall, the Transformative Utility Project aims to bring sharable utility analytics from across the organization to a centralized platform, creating cross-department visibility and collaboration. This will enable customer choice and provide operational efficiencies and improved cost-controls within the organization. The future of utilities is here, and Essex Powerlines is working hard to be at the forefront. [D](#)



The Transformative Utility Project provides analysis for users to create digital maps, offering an enhanced view of the distribution system.

About Essex Powerlines Corporation

Essex Powerlines Corporation, a regulated company, provides safe, reliable and economical electrical distribution and service to over 30,000 residents and businesses in Amherstburg, LaSalle, Leamington and Tecumseh. The foundation to empower our corporate vision is based on a dynamic and progressive workforce that will be industry leaders in providing “best in class” business solutions in the delivery of service to our customers. [@essexpowerlines](#)



Ready
for you



Proud supporter of the LDC Community.

**TD is a long-time EDA member and would like to thank our many
Local Distribution Company customers for their business.**

© The TD logo and other trade-marks are the property of The Toronto-Dominion Bank.

M05598 (1118)

HALTON HILLS HYDRO CREATING A POST-PANDEMIC ‘NEW NORMAL’, ONE INNOVATION AT A TIME

Submitted by Halton Hills Hydro



Halton Hills Hydro has built a reputation as an innovative utility, and the current global pandemic has only accelerated its step-by-step, high-impact efforts.

In 2017, Halton Hills Hydro was awarded the EDA's Innovation Excellence Award for a leadership simulation that led to a culture shift towards “relentless incrementalism” – small steps that make a difference and help pave the way for more significant change. When the pandemic shut down workplaces across the province, the country and the globe, the utility put this strategy to work as it adapted and innovated.

The majority of employees were able to transition to working from home. Operations crews were separated to two locations with staggered start times. Each staff member used a separate vehicle to ensure physical distancing was maintained. And while web meetings helped keep work flowing seamlessly, the utility wanted a better way to keep employees engaged.

To achieve this, Halton Hills Hydro created an online employee portal at no cost, utilizing an existing community and customer engagement platform. This platform was first used to support its five-year rate application, and earned the utility the EDA's Communications Excellence Award in 2019.

The new employee portal quickly became a resource for all COVID-19 information and communication. More importantly, it became a space for staff to engage socially, share ideas and

collaborate. From recipes and pet photos to online concerts and other activities, the space offered employees opportunities they could enjoy from the safety of their homes.

Keeping customers connected

Ensuring customers have up-to-date, easy to access information during the pandemic has been equally important. Having closed its front doors to the public, Halton Hills Hydro needed to ensure that customers were able to find the best ways to pay their bills, contact their utility and get information about pricing, payment arrangements and programs.

A customer COVID-19 information page was created as a single resource for pandemic-related details. The regularly updated page includes details on office contacts, bill payment options and changes to electricity pricing, as well as links to local and provincial government sites with important pandemic-related news.

Safe access to company facilities

As the office adapted to physical distancing and health and safety guidelines, the utility ensured that staff could begin to access company facilities safely. A COVID-19 assessment app was implemented to allow employees and vendors to perform a health assessment easily prior to attending the office. Following provincial health guidelines, the easy-to-use app asks a series of COVID-19 related questions and the results – in an easy-to-read red light/green light format – are instantly sent to supervisors and human resources.

The need for staff working in many locations to access remote information spurred innovation in workflow. Electronic work order packages enabled engineering and operations staff to continue to share job instructions, material sheets and field activity reports without relying on a flow of paper documents. Where paper documentation is required, an improved document imaging system will ensure that these documents become part of the overall electronic project package.

As the utility moves into the new normal of post-pandemic work, innovation continues to shape the way employees interact and the way the utility communicates with customers. Halton Hills Hydro continues its journey of relentless incrementalism, one innovation at a time. [D](#)

About Halton Hills Hydro

Halton Hills Hydro serves 23,000 customers in two urban centres, Georgetown and Acton, the Halton Hills Premier Gateway employment area, the hamlets of Glen Williams, Stewarttown and Norval and several smaller settlements in its 280-sq-km service area. [@hhhydro](#)

KITCHENER-WILMOT HYDRO INC. EMPLOYEES MAKE AN AWKWARD EVERYDAY TASK SAFER

By Kelly McMath, Communications Specialist

A large portion of [Kitchener-Wilmot Hydro Inc.](#)'s (Kitchener-Wilmot Hydro) distribution system is located underground in vaults and pull boxes. Worker safety in these spaces is one of the utility's priorities, including the question of safe and easy access in-and-out of the vaults.

There are three components to an underground electricity vault: A heavy lid that protects the public from the high-voltage equipment below, a ladder that allows workers to climb in and out of the vault, and then the vault itself, which is a concrete box that contains the high-voltage electrical equipment.

Besides the risks of working near high-voltage electrical equipment in the restricted space of a vault, workers faced significant challenges in safely climbing on and off the ladder at the top of the vault, and with the weight and position of the lid in the event of an emergency.

"It can be awkward to climb out of these holes," says Mick Murray, who works in construction at Kitchener-Wilmot Hydro. "There is nothing to hold on to as you're climbing out."

The ladders are usually made of steel and in inclement weather such as rain or snow, they can become slippery. They're also positioned roughly 12 inches below the lip of the opening, so getting out of the vault means that workers had to hoist themselves out using their arms and hands in every weather condition.

"You're putting your hands down on ice and in muck and it can be hard to get a firm grip," says Mick. "If you slip or lose your balance, you're going to fall back into the hole and they can be pretty deep."

An additional challenge is the lid itself in the event of an emergency where rescue is required.

"We were using a steel cage to prop open the lid, which made the lid heavy and difficult to remove and created an obstruction in a rescue or emergency situation," says Mick. "We knew there had to be a solution to make it easier."

Despite an extensive search, Kitchener-Wilmot Hydro was unable to find a solution that would address all the concerns around safe entry and exit in vaults. Mick and a team of three construction department co-workers, however, had a design that they thought would address the issues.

Their Safe Entry/Exit System was designed to be retrofitted on hinged maintenance holes. It consists of two handles for workers to hold on to and a device that locks the lid in place as workers climb in and out of the holes, providing a solution for many of the safety concerns with access to underground vaults.

"We are really pleased with how well the design turned out," says Mick.



Mick Murray demonstrates the Safe Entry/Exit System's three-point contact.

Tested to perfection

The prototype system worked well, but before it could be put into use, Kitchener-Wilmot Hydro had a civil engineer inspect and certify the device, and it was subsequently approved to be used on the utility's vaults.

The system's grab handles are located under and attached to the access lid, and when the lid is open the handles allow workers to stay in an upright position as they climb in and out of the vault while maintaining three-point contact. Three-point contact means the worker is using two hands and one foot, or one hand and two feet, to support his or her body when climbing on or off the ladder, helping to prevent falls.



The Safe Entry/Exit System retrofitted to an old lid.

The lock ensures that the lid stays in place when it is open, making it easier to move equipment and people up and down in the event of an emergency rescue.

Patented system

Mick and his co-workers patented the Safe Entry/Exit System and it is owned and available through Mick's company, Underground Safety Access Inc. It has been installed on approximately 30 of Kitchener-Wilmot Hydro's underground network vaults and has been incorporated into the utility's specifications for any new network vaults.

"We're really proud of the ingenuity of our team," says Wilf Meston, Vice President of Operations at Kitchener-Wilmot Hydro. "They see the hazards in their work environments and often have innovative solutions to help mitigate those risks. The Safe Entry/Exit System is just one example of their talent."

For more information or to see the Safe Entry/Exit System, visit www.undergroundssafetyaccess.com 

About Kitchener-Wilmot Hydro

Kitchener-Wilmot Hydro is responsible for providing a safe, reliable supply of electricity for more than 96,000 homes and businesses across a 425-sq-km service territory in Kitchener and Wilmot Township. Kitchener-Wilmot Hydro is one of the most efficient utilities in Ontario and is focused on providing a safe and reliable supply of electricity to its customers. @KWHydro

UTILITIES KINGSTON UNIQUE BUSINESS MODEL AMPLIFIES CUSTOMER BENEFITS



Photo by @danlefeb on Unsplash

Utilities Kingston is unique among utility companies in Ontario, as it provides five core services under one roof. This model provides advantages in customer service and economies of scale. By sharing costs across its five utilities – water, wastewater, natural gas, electricity and broadband networking – Utilities Kingston can deliver customer-focused programs that otherwise might not be feasible.

A recent example of this is the Utilities Kingston smart thermostat program, which was funded both as a Save on Energy Community Program and through the utility's natural gas incentives. This model ensured the utility delivered a successful community program in a cost-effective way, while providing a rebate to customers of \$100 for each successful applicant.

"We're always working hard to find ways to deliver cost-effective services and help customers save water, energy and money. Our community can count on us," says Jim Keech, president and CEO of Utilities Kingston. "Our innovative



Customers of Utilities Kingston benefit in multiple ways from its innovative multi-utility model. Photo courtesy of © Paul Wash.

multi-utility model allowed us to deliver this program in a cost-effective way, providing maximum benefit to gas and electricity customers.”

Stacked incentives and shared costs

Smart thermostats use motion and occupancy sensors to automatically adjust temperatures and maximize energy efficiency. Users can also adjust the thermostat remotely via WiFi.

“By being able to stack incentives and share the costs between two utilities, we’re able to better help customers save money on heating and cooling – a household’s biggest home energy costs,” says Caitlin Newey, conservation officer for Utilities Kingston. “We noted a reduction in residential incentives following the centralizing of conservation programs in Ontario. By finding a way to expand the scope of the program, we were able to build a stronger business case.”

For those LDCs that haven’t yet applied for an IESO Community Program, Newey encourages them to do so: “This was our first program application like this and our first to go

through the Community Program, and it was relatively straightforward.”

The Utilities Kingston program received \$35,500 in funding from the IESO and \$35,500 from its gas utility, over two years.

Residential customers who receive both gas and electricity services from Utilities Kingston can find out more and apply online at: UtilitiesKingston.com/MultiUtility/SmartThermostats 

About Utilities Kingston

Utilities Kingston operates multiple utilities through a single service structure, allowing it to deliver cost savings and customer service excellence. The company is unique in Ontario, combining water, wastewater, gas, electrical and broadband networking services in one company. Trusted by customers to deliver reliable utilities for more than 150 years, employees are proud to provide personal, responsive services. You can count on us! @UtilitiesKngstn

Protection & Control

Certificate Training Program



dal.ca/faculty/cce/programs/certificate-in-high-voltage-protection---control.html

Please contact Steve Andrews, Program Director, for further details. Steve can be reached at 902.494.3247 or at steve.andrews@dal.ca



OAKVILLE HYDRO STEPPING BACK TO SEE THE BIGGER PICTURE

Submitted by Oakville Hydro



Oakville Hydro staff collaborating on future spatial data initiatives.

Google Maps is simple to use and easy to understand and has become the go-to means for many when finding destinations and nearby services. But what if you could take records out of dusty filing cabinets or obscure Excel files and combine and spatially view them in a similar interface, allowing for more data-driven decisions?

Local Distribution Companies must innovate and solve solutions with small budgets. So when the Supervisor of Assets and Spatial Data at [Oakville Hydro](#), Cody McMullin, was challenged to improve asset management, he started looking into ways to do more with less – using spatial solutions, and with a Google Maps-like vision in mind.

A lot of daily operational and planning decisions were being made without considering all the information that Oakville Hydro had on hand. Plenty of data were collected and tracked, but were either difficult to access and pull together, or came from different sources and weren't examined as pieces of the same puzzle.

Utopian planning and a spatial roadmap

Developing the framework for spatial solutions began with the end in mind and relied on inter-departmental collaboration to bring different data pieces together. Dreaming about what “utopian asset planning” would look like, the team built a

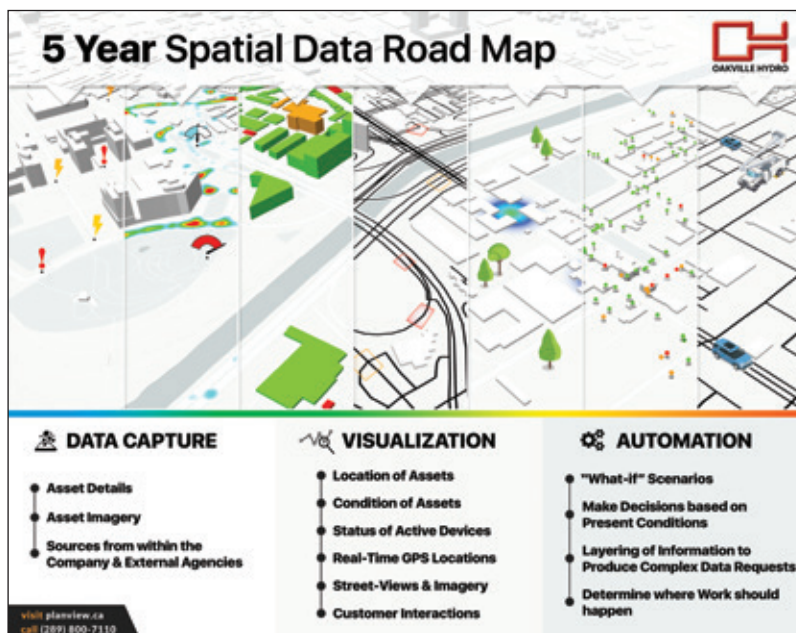
“Five-Year Spatial Data Roadmap” – relying on a process of small steps taken over time, allowing for easier adoption and lower costs, rather than large leaps that could be disruptive and costly.

Once the vision for the spatial solution was defined, the team worked to identify the numerous decisions made at Oakville Hydro across the various departments, to see if spatial data could aid in solving problems. The steps for the roadmap were distilled down to: data capture, visualization and automation.

After the capture of asset details, and imagery available both internally and from external agencies, Oakville Hydro worked with Planview Utility Services Ltd. (USL) to develop the visualization and automation steps. The process is still ongoing, but McMullin’s team has already reaped benefits from the Roadmap.

“Map first” is the new watchword

Using data collected through visual examinations, assets were plotted on a map and categorized. Maps were then sorted to show “poor” and “very poor” condition assets. Clusters of such assets helped guide capital planning, allowing the department to address the greatest need in a more efficient manner. Utilizing advanced rebuild analytics helped provide a more accurate capital forecast for Oakville Hydro’s Distribution System Plan.



Another project success involved plotting animal-caused failures and vegetation interferences around the Town of Oakville. Clusters of animal contacts around the Glen Abbey Golf Course drove asset planning to incorporate animal protection devices in the most-impacted areas. Clusters of vegetation interferences led to decisions on where to direct the next season’s Vegetation Clearing Program.

With the continued support from USL, the Spatial Roadmap process didn’t just create efficient data-based decision making, but it created a change in the organizational culture. A “map first approach” is now the starting point to solving any problem. Plotting spatially, and taking a step back to see the larger picture, has brought departments together to tackle problems efficiently and effectively. [D](#)

About Oakville Hydro

Part of the OEC group of companies, Oakville Hydro delivers reliable and safe electricity to more than 74,000 individuals, families and businesses in Oakville. The company maintains an active commitment to conservation, safety, and is strongly invested in the social and economic well-being of the Oakville community. [@Oakvillehydro](#)

J O M A R
INNOVATIVE SOFTWARE

Thank You Ontario Utilities

We would like to take this opportunity to express our appreciation to all Utility Management and Employees for their important service to Ontario Communities during the COVID-19 Pandemic.

See you at 2021 EDIST and Mearie Conference

LONDON HYDRO BOXES AND BACKLOGS A THING OF THE PAST WITH COLLECTIONS AUTOMATION

Submitted by London Hydro



The Mobile Workforce Tough Book, used in the field, has increased efficiencies by 96 per cent.

Before the company-wide rollout of its Mobile Workforce application, [London Hydro's](#) Collections Department relied on a paper trail of service orders to assign, record and perform daily tasks. Boxes of paper led to a backlog of work and inefficiencies for employees and delays for customers.

To improve operating effectiveness and productivity, London Hydro decided to move the time-consuming, manual process over to a fully automated, web-based platform. Through Mobile Workforce, internal collections representatives can quickly delegate and re-assign service orders, while external collectors can send and receive updates in the field. Tasks that were previously paper-based are now assigned, recorded and closed through the digital portal.

Since launching Mobile Workforce, the daily time spent on routine and daily tasks has been reduced by 92.5 per cent, from four hours and 25 minutes down to 20 minutes per day. This has resulted in a 51 per cent increase in customer service due to the extra hours available for customer interaction. The automation of the external collectors' morning routine has increased efficiencies in their workload alone by 96.3 per cent, and doubled collections capabilities.

Mobile Workforce is successful for collections because it was customized to accommodate the collection team's feedback to ensure full automation and ease-of-use. Some of the features include:

Route Optimization: Service orders for external collectors are generated and printed pre-sorted according to how they need to be distributed.

Real-Time Updates: Once service orders are completed in the field, they are automatically updated in the customer billing system.

Reassignment of Service Orders: Internal collections representatives can reassign service orders to a different external collector when needed.

Electronic Templates: Service orders were customized to be identical to the paper service orders that external collectors had been using in the past.

End-of-Day Reporting: The system automatically captures all tasks completed by the external collectors, including their notes. The report can be filtered by date or date ranges and is exportable to Excel.

Regulatory Reporting: Digital service orders contain all required fields for regulatory audits and can easily be exported and printed.

Real-time updates from external collectors provide internal representatives with a 360-degree view of where a customer is or has been in the collections cycle. Custom information, including the last collection activity, date last paid and net amount due, are included in reporting. This information has provided staff with the knowledge they need to appropriately support customers when discussing payment arrangements, disconnections and reconnections.

Tailored features and seamless adoption

In addition to the increased information staff have available to them, customers also benefit from the digitization of red cards, yellow cards and customer letters, which reduces the number of payment errors due to illegible writing. Customers with high-priority service orders, such as reconnections, receive more timely service because of the team's ability to dispatch and reassign service orders instantly.

"The efficiencies and real-time information that Mobile Workforce has given our staff allow them to provide our customers with better service. At a high-level, we can cover more territory with the same resources," says Luke Seewald, Director of Customer Service and Metering. "Part of what made Mobile Workforce successful was the early involvement of the internal and field collections team ahead of development. Features were tailored to their needs, which made the adoption of the platform seamless."

Another benefit is that London Hydro's carbon footprint has improved as a result of the considerable reduction in printed service orders. In the collections department, an annual savings of \$4,425 was netted through the reduction of paper and ink required in daily tasks. The department is down from 300 pieces of paper a day to two, saving nine trees a year.

"It's a great accomplishment to be one of the first utilities to develop a mobile application to support in-the-field activities," says Vinay Sharma, CEO. "The staff who worked on building Mobile Workforce and embraced this leading-edge technology, once released, were dedicated to improving our internal processes. We're happy to be constantly enhancing our services for our customers."

Mobile Workforce was first introduced as a pilot for the Overhead Line department at London Hydro in 2014 that became an enterprise-wide initiative. Departments that have been successfully moved over to the Mobile Workforce technology

include Forestry, Electrical Underground Services, Substation Maintenance, Construction, Electric Metering, Dispatch and Collections. [D](#)

About London Hydro Inc.

London Hydro Inc. delivers safe and reliable electricity to over 159,000 customers. We are committed to being a trusted energy source provider through innovation, customer focus and operational excellence. [@LondonHydro](#)

Winsted
Control Room Consoles
CUSTOM DIVISION

CONTROL ROOMS FOR POWER
CONSOLES • FURNITURE • RAISED FLOORS & MORE

800.447.2257 | winsted.com | info@winsted.com

Download our **FREE** design software: winsted.com/WELS **WELS**



COVID-19-related issues continued to be a major focal point for EDA advocacy over the summer. (Photo by @mbaumi on Unsplash)

PANDEMIC-RELATED ADVOCACY PRIORITIZES LDC LIQUIDITY

Over the summer, the EDA advocated on members' behalf with the Ontario Energy Board on both the scope and proper disposition of the COVID deferral account. Member concerns were presented and followed up in a detailed submission.

The EDA conducted an ongoing survey of LDC members to get a deeper understanding of the sector's financial position, of changes to it during the pandemic, and of the sector's ability to settle wholesale power bills with the IESO. The EDA thanks members for completing the survey to provide the required data.

The aggregated data have been instrumental in keeping key government officials updated, and in helping to identify solutions that will ensure LDCs can continue to manage their IESO power bills. [D](#)

ELECTRIFICATION WILL DELIVER MULTIPLE BENEFITS

Advancing electrification was an important theme in EDA's recent input to the Jobs and Economic Recovery Committee of Cabinet. Beyond the environmental benefits of displacing fossil fuels, there is the added benefit of making productive use of surplus baseload generation, and of helping to moderate Global Adjustment increases.

The EDA has called on the provincial government to actively lead a drive towards electrification, with a particular focus on transportation. LDCs, the EDA has noted, are uniquely positioned to intelligently control and adjust to large-scale electrification, and it has proposed two specific policy changes to facilitate this: First, allowance for LDCs to rate-base strategic investments in electrification technologies where a business case exists; and second, a review of existing customer class structures and the establishment of a specific rate class for "public fast charging." [D](#)

THE EDA ADVOCATES FOR UTILITIES ON CUSTOMER CHOICE TRANSITION

The suspension of time-of-use (TOU) electricity rates was continued with a June 1 switch to a new fixed COVID-19 Recovery Rate of 12.8 cents per kilowatt hour. This fixed rate applies to TOU customer bills 24 hours a day, seven days a week, providing stability and certainty for consumers as the government restarts the economy and supports individuals and families who continue to spend more time at home.

The COVID-19 Recovery Rate will be in place until October 31, 2020, followed by a new customer choice initiative. Starting November 1, 2020, customers will be able to choose a plan that best suits their household and lifestyle with the option of either TOU electricity rates or tiered pricing, which will provide a set rate for electricity up to a certain level of consumption.

The EDA continues to contribute to the development of implementation details around the customer choice transition. Among those implementation details, the EDA is seeking sufficient flexibility for utilities to meet the program's objectives, and is emphasizing the importance of customer communication and education. [D](#)

THE EDA AND MEMBERS ENGAGE TO SUPPORT CEAP SUCCESS

Over the summer, the Government of Ontario confirmed \$9 million in funding for the COVID-19 Energy Assistance Program (CEAP), to support residential customers struggling to pay their energy bills as a result of the pandemic. The EDA supported the establishment of this program, which is consistent with its calls for a customer-centric pandemic response strategy.

CEAP provides a one-time, on-bill credit to eligible residential electricity and natural gas customers to help them meet their energy bills and resume regular payments. The program is being delivered by electricity distributors, gas distributors and unit sub-meter providers (USMPs), in accordance with OEB rules. Utilities and USMPs began accepting applications for CEAP in July.

The EDA also supported the creation of the COVID-19 Energy Assistance Program for Small Business (CEAP-SB). The EDA and its members were actively engaged over the summer to help establish the details and eligibility requirements for this new initiative that complements the residential program. [D](#)

ASK THE EXPERT: AMERESCO CANADA INC.

ONE SAFE PREDICTION: THE FUTURE WILL BE DISTRIBUTED, DIGITAL AND DYNAMIC

By Jim Fonger Vice President – Asset & Advanced Technology Development



Isn't it ironic that 2020 is synonymous with perfect vision? Who could have predicted the massive changes this year brought to our personal and professional lives? Certainly not me. I agree with Peter Drucker that trying to predict the future is "like trying to drive down a country road at night with no lights while looking out the back window." Yet I am quite sure that as we look forward to 2021, we will continue to see climate concerns and capital markets drive the transformation of the energy industry.

Ontario's electricity sector will continue to innovate at a dramatic pace because of the imperatives to dramatically reduce carbon and electrify the transportation sector, along with rapid technological transformations, tectonic socio-economic shifts caused by pandemics and workforce changes, and the integration of climate risk into financial decisions. And there will be winners and losers. The local distribution companies (LDCs) that will thrive will be those that are the most resilient. We believe that helping electric utilities adjust to the challenge lies in the investment in three key resiliency strategies.

1. Support large customers by strategically deploying distributed generation projects

The cost and capabilities of distributed energy resources (DERs) are improving at a rapid pace. Intelligent DERs can deliver services to local area feeders, providing LDCs with a new, more efficient way to operate distribution systems. Developing DERs in industrial parks, downtown cores and near other large consumers provides energy security, resiliency and emission reductions. [Ameresco](#) has developed and implemented complex DER solutions that solve an array of challenges for our customers. These projects include a solar farm with the New Hampshire Electric Cooperative (NHEC), a landfill gas site for the BMW Manufacturing facility in South Carolina, plus battery storage and microgrids deployed at several military bases.

LDCs have a major role to play in the DER future, but doing it alone is likely to raise the ire of the regulators and other stakeholders. Some LDCs may decide to use their affiliates to build out these projects, whereas others will look to partner with experienced firms like Ameresco to focus on their core business.

Private companies can bring additional required equity into projects and provide access to attractive debt that does not encumber utility debt. Given the significant funding shortfalls that are now being experienced by municipalities, many are going to be looking to their LDCs for greater dividends. It is unlikely that profits will be allowed to stay in the LDC to invest in other ventures.

2. Install battery energy storage systems (BESS) on the distribution grid as a non-wire alternative

Systems operators across North America are now offering project developers the option to receive compensation for the capacity value to the distribution system and/or the transmission system from these storage systems. Deploying DERs as non-wire alternatives (NWAs) to traditional distribution network infrastructure has moved from the hypothetical to the tangible due to the evolution of market rules, enhanced economics and advances in available technologies. For example, we knew that we could confidently deploy this kind of system for a range of different customers after bringing our Newmarket BESS project into service in May 2019.

Not only has the Newmarket BESS project enabled Ameresco to be an IESO market participant, but we will soon be participating in both the energy and operating reserve markets. Other ancillary services, such as the Fast Ramping, Regulation, and Reactive Support and Voltage Control Service will be brought online once the IESO has installed the required software, following its Market Renewal completion. Ameresco hopes to work with Newmarket Tay Power to design innovative

programs where the battery could provide backup services to the utility's customers connected to the same feeder.

3. Create distribution-level markets

The current IESO and Alectra distribution system operator pilot is testing a simplified representation of a distribution level system operator. Moving to more local planning and operation of the market not only better supports distributed resources, but it is also more agile, resilient and efficient.

Local markets are big opportunities for LDCs moving forward as DERs with excess energy require a functional local market. The digital infrastructure is already in place to facilitate this, and it could be a lucrative business for forward-thinking LDCs. Ameresco is currently developing and arranging financing for BESS and other DER projects to move forward in this capital-constrained environment.

What will the business model of the future LDC look like? While no one can predict with complete certainty, it is clear the future will be distributed, digital and dynamic. Thankfully most LDCs have started their journey to become versatile energy companies that provide a range of complete energy solutions for their customers. We would like to join you on that journey. [D](#)



Planning your transition to the LDC of the future?

Our advisors at Ameresco can help:
Jim Fonger, Vice President - Asset & Advanced
Technology Development, Ameresco Canada
Inc. (647) 271-2665 jfonger@ameresco.com

ASK THE EXPERT: GRANT THORNTON LLP

WHAT DOES A DISTRIBUTOR'S RISK PROFILE LOOK LIKE IN A COVID-19 WORLD?

While risk is nothing new to local distribution companies (LDCs), COVID-19 has pushed enterprise risk management (ERM) back to top of corporate agendas. Here, **David Florio, Partner & Advisory Services Leader**, at Grant Thornton LLP, explains how ERM can help mitigate key risks – both now and into the future.

Q: What is enterprise risk management (ERM)?

David: Organizations can reduce the likelihood of risks occurring and mitigate their potential impact by engaging in risk management. In essence, this involves identifying, evaluating and prioritizing key risks, and then implementing appropriate processes and controls to manage them.

Enterprise risk management (ERM) involves applying a formal risk management framework across the organization

or enterprise. As a rule of thumb, organizations should review their ERM process at least once a year – and more frequently in the face of uncertainty, such as the current pandemic. This could involve comparisons against leading practices such as the ISO 31000 Standard or any requirements from regulators such as the Ontario Energy Board.

Q: Why is ERM important to an organization?

David: ERM is important because it allows management to proactively identify risks and manage them to an acceptable level. Without proactive management, LDCs may face risks that negatively impact their financial position, reputation and ability to operate and pivot.

The truth is that you don't know what you don't know. If you don't take time to effectively identify and manage key risks, you likely won't be prepared to face them.



Q: Why is a formal ERM program more important now than ever?

David: COVID-19 has given rise to a growing number of organizational risks and threats, and exacerbated others. Specifically, we've seen an increase in risks related to cash flow, financing, operations, human resources, fraud, technology and cybersecurity. With businesses moving most of their operations to a remote workforce, there has been a significant impact on the risk profile of the organizations. As these risks mount, the need to manage and control them grows as well.

Here are just a few areas where risks have increased significantly:

- operational risks related to workforce availability;
- difficulty securing financing to fund ongoing operations and manage cash flow;
- ineffective process and technology controls to manage risk related to the rapid deployment of workflow and communications systems;
- ineffective controls to identify and monitor systems and networks, resulting in increased ransomware and phishing attacks; and
- lack of processes to identify risks or incidents and recover from them.

In addition to giving you the time, space and capacity to identify and mitigate risks, the ERM process also allows you to identify and take advantage of emerging opportunities and prepare for the future.

Q: Which stakeholders should be involved in the development of our ERM program?

David: The development of a formal ERM program requires the involvement of the right stakeholders. This means seeking input from senior management, the audit and/or risk

committee, and business function management (e.g., finance, compliance, human resources, operations, information technology, procurement, etc.). It also makes sense to loop in board directors and potentially gain shareholder approval.

As municipal organizations, LDCs should also consult with municipal stakeholders and regulators such as the Ontario Energy Board.

Q: What should we consider in developing an ERM program?

David: To develop an effective ERM program, it's important to follow some best practices. You may want to:

- adopt an agile, flexible approach by looking at unlikely areas to uncover risks you wouldn't normally consider;
- formally identify potential risks – and avoid excluding those that seem far-fetched;
- include appropriate people across the organization;
- develop a formal action plan to address risks once identified.

Now, more than ever, organizations in virtually every industry are under mounting pressure to identify potential risks and take steps to minimize them. By implementing a formal ERM program, LDCs can go a long way towards allaying stakeholder concerns and identifying opportunities to thrive into the future. 



For more information, or to discuss how to develop an effective ERM program for your organization, please contact:
David Florio, Partner & Advisory Services
Leader, Southern Ontario
(416) 369-6415 David.Florio@ca.gt.com

Re-scheduled, Re-tooled and as Valuable as Ever



Women Connected will be back this fall for its eighth year, this time in a virtual format.

We've all been working in dramatically different ways since the onset of the pandemic, and these altered practices and procedures will likely be needed for some time to come. That's meant many changes for the EDA's CON::NECT event series.

The EDA would like to once again thank sponsor-partners Aird & Berlis, Grant Thornton and KPMG. They stepped up with the subject matter expertise that made it possible for us to offer a series of well-attended webinars on valuable pandemic-related topics, over the course of the spring and summer.

Thanks, too to everyone who completed a recent events survey, the results of which have been very helpful to us in retooling our strategy (see infographic). Given pandemic realities, there are still some TBDs, and we'll continue to adjust plans as needed. But here's the outlook for the next few months.

Postponed Events Back on Track

Two events originally scheduled for the spring were necessarily postponed, but will proceed digitally:

- Mergers and Acquisitions Forum, a members-only event presented in partnership with Grant Thornton and Aird & Berlis, is now scheduled for October 22.
- *Women Connected*, our long-standing annual event focused on professional development and advancement from the perspective of women in the electricity sector, is now scheduled for November. Please check womenconnected.ca for specific date, program and registration information.

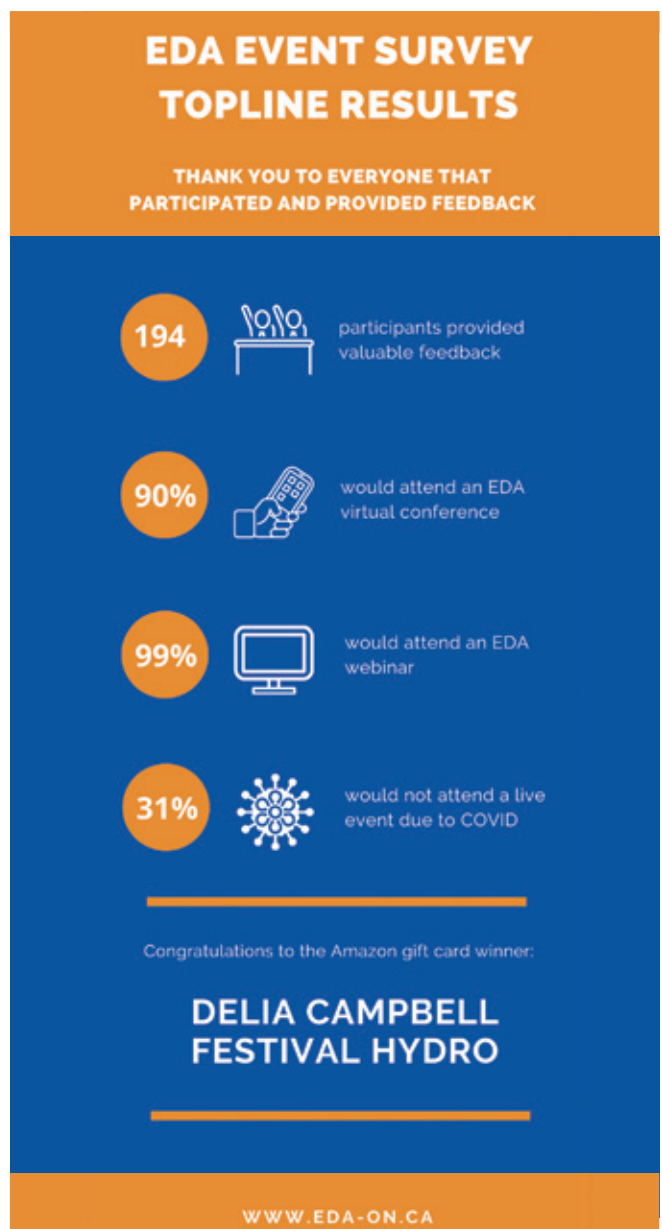
CUEE Re-scheduled for 2021

The Canadian Utility Engineering & Equipment (CUEE) Trade Show Marketplace – one of the largest events of its kind – has now been re-scheduled from September 29-30, 2020, to June 8-9, 2021, at the International Centre in Toronto. With appropriate health and safety protocols, we expect to be able to offer this event live at that time, retaining the in-person and hands-on features that make it so valuable for exhibitors and attendees alike.

Stay Tuned for Details on Other Events

Planning continues for 2021 events, including assessment of virtual and in-person options. Stand by for confirmation in the weeks ahead.

And watch for further updates, and event and registration details for all of the above at www.eda-on.ca/EVENTS.



Training Programs are Resuming!

Following careful consideration and extensive work and planning, we are pleased to announce The MEARIE Group's exclusive Professional and Trades training programs will be resuming beginning this Fall. In partnership with Hydro One, our trades training partner, and Novotel Vaughan, we have implemented a number of safety protocols and procedures ensuring the training environment is safe for both participants and instructors.

Trades & Technical Programs: Class size is now limited to 8 participants and additional sanitation and social distancing procedures have been implemented.

Professional & Managerial Programs: Meeting rooms provide delegates with 6 feet of seating distance, boxed meals are individually prepared and additional sanitation and social distancing procedures have been implemented.

Our Fall course schedules have been updated. Visit www.mearie.ca/training for the latest information.



Managing risk
together

Online Registration Coming Soon for 2021 Training Programs!
www.mearie.ca/training

COLLABORATION

INTEGRATION

Idea

Develop

Technology

INNOVATION

Invention

Research

Experin

Creativity

Improvement

Next Generation Utility Software

Electric Water Gas Municipal Tax

Implemented on JOMAR Private Cloud

SaaS Model
Virtual Marketplace
High Availability
Disaster Recovery
Cyber Security
Managed Services



Self-Service Portal
Customer Information System
Meter Data Management
ERP Financials
Integration Web Services:
AMI MDM/R GIS SCADA OMS

On Premise solution available

J O M A R

INNOVATIVE SOFTWARE

38 years 10 countries 4 continents



'Innovation Creates
Opportunities'

sales@jomarsoftcorp.com

www.jomarsoftcorp.com

Tel: 519-740-0510