



“The Electrical Safety Challenge in 2014 and Beyond”

REMARKS TO ONTARIO ENERGY NETWORK LUNCHEON

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CHECK AGAINST DELIVERY

Thank you, David.

David McFadden has been a tireless contributor to so many important industry initiatives. I appreciate you taking the time to introduce me today.

Thank you to David Reid and the Ontario Energy Network for inviting me to kick off the fall cycle of luncheons.

I hope I can generate the same enthusiastic response that I did a few weeks ago when I dumped a bucket of ice water on my head for ALS Canada!

Thank you, Elizabeth Mills and Peter Gregg for that challenge.

Before I begin my formal remarks, I want to acknowledge a few people in the audience.

I'm joined today by a number of members of the ESA Board of Directors including our Chair, Charlie Cipolla.

Also in attendance are some of ESA's executive team and senior staff.

This is my third occasion speaking at the OEN since becoming President & CEO of the Electrical Safety Authority.

I first addressed this group in February, 2010, when I had been in the role for just 8 months.

Then again in October, 2011, when I introduced our newly launched five-year strategy.

And now I am back before you as we are wrapping up that strategy, and preparing to launch our next five year plan.

Today, I will review:

- the progress ESA has made on the goals of our five-year strategy;
- the priorities we've defined for the years ahead;
- and the critical role that industry must play in the evolving challenge of electrical safety in Ontario.

When this group meets or there are discussions among members of the electricity sector, the typical themes are cost, reliability, new sources of generation, smart grids, and new technology.

But safety tends not to dominate those discussions.

We live in a modern, high-tech world in which electricity is ubiquitous, easily available, and highly reliable.

The fact is that electricity is taken for granted by the average Ontarian.

They expect it to be readily and safely available to turn on the lights, power the computer, run the factory, or warm the home.

Our research finds that Ontarians worry more about someone breaking into their home than about its electrical risk.

Achieving that comfort level is the outcome of decades of hard work by industry and government.

Over the years, electrical systems, products and work have been made progressively safer due to:

- improved production,
- standards and regulations,
- best work practices,
- and other hard work by many organizations, including some represented here today.

Achieving a state in which electrical safety can be taken for granted is a great achievement.

But it's also a challenge.

Because the fact is that this year almost 2,000 people will go to an emergency room in Ontario with an electrical injury.

And last year 18 Ontarians died from electricity – half from electrical contact and half from fires linked to an electrical source.

In fact, just a few weeks ago, an individual doing work on the exterior of a building in Toronto touched an overhead 27.6 kV powerline and was killed.

These events are rarer than they were 20, 30 or 40 years ago, but they continue to occur.

Each fatality is a tragic reminder of the awesome power of electricity to kill, maim and damage when it becomes uncontrolled.

So while we can take comfort in the progress of electrical safety over the decades, we cannot become complacent. Complacency is the enemy of safety and the harbinger of risk.

Safety must keep pace with changes in the marketplace.

New electrical products debut almost every week. Think of the electronics, appliances, and systems that have come into our homes and businesses during our adult lives.

Much manufacturing has moved offshore so that our standards have had to extend internationally.

We are seeing the steady increase in electrically-powered vehicles on our roads.

I don't have to tell this audience how distributed generation and smart grids have transformed the sector.

We are experiencing a profound shift from a world where the electrons flowed in one direction to a complex inbound and outbound system. And where power storage is becoming a new and urgent need.

You know how these changes have challenged the generation, transmission and distribution systems.

Well, they challenge the safety system, too.

How do we manage electrical safety in a dynamic environment?

Five years ago, ESA's Board and leadership asked the same question. We asked: what is the best role for the Electrical Safety Authority? Where can the greatest public benefit be achieved?

The result of those discussions was the establishment of ESA's five-year Harm Reduction Strategy.

It was based on three core principles:

- First, that we had to focus on the persistent areas where injuries, fatalities and fires were most often occurring.
- Second, that in order to set those priorities, ESA had to operate from a position of knowledge about the rate and nature of electrical events.

- And third, that improvements in electrical safety could not be achieved by the regulator alone. They required the regulator and industry working in concert and in acknowledgement of the gaps that remained to be closed.

This last point – that ESA could not eliminate the remaining electrical safety problems itself – is merely an acknowledgement of what has been the pattern for decades.

Industry has always done more to move safety forward than regulators or governments have ever been able to do on their own.

Industry and regulators working together has been the necessary partnership to improve electrical safety.

And in that partnership, the regulator has a number of roles.

But the most important is: catalyst. To be the voice that says *‘we’ve done well, but not good enough.’*

Nobody else in the safety system can focus solely and exclusively on electrical safety. We do.

Nobody else has been given a mandate by government to enhance electrical safety for the province as a whole. We have. With that in mind, we recognized that ESA had to be more than just an enforcer of rules -- although, make no mistake that remains an important role for us.

We also had to be an advocate and organizer for the mission of improved electrical safety.

So we created The Harm Reduction Strategy in 2010 with that mission in mind.

We set a clear goal: to see a 30 per cent improvement in the rate of electrical fatalities in Ontario over five years.

We identified and named the major areas that were generating the majority of electrical deaths, injuries and fires.

They were: powerline contact, electrical worker incidents, electrical products, and aging wiring in older homes.

Contact with powerlines most often involves those in the construction sector, but also landscapers and tree trimmers, roofers and others. The fatality a few weeks ago is just the latest tragic example.

The frequency of powerline contact events has declined on a steady basis over the past decade but continues to lead the electrical fatalities.

The second major harm area is workers being injured or killed on the job. Ontario averages five workplace electrocutions every year.

Typically these events involve electrical workers doing repair and maintenance on live systems. In fact, at least one electrician or apprentice is killed each year in this province working live.

Electricians and apprentices dominate the occupational incident stats, but they're not alone. HVAC and lines people have also been killed or critically injured in recent years.

The third major harm area was fires related to the use of electrical products. The data shows a cluster of events occurring with electric stovetops. We take for granted something as innocuous as a coil burner on a stove. But a moment of inattention can lead to a devastating fire.

Our fourth area of focus was aging electrical infrastructure in older homes. This is the older wiring that is now trying to carry the electrical load of the 2014 household.

These ‘major harms’, as we labeled them, have provided ESA with focus for our own efforts, but also as a basis for engaging others in industry and the safety sector.

For example, we established the Community Powerline Safety Alliance with local distributions companies, and the Infrastructure Health and Safety Association.

Two years ago the group launched Powerline Safety Awareness Week. This past May, 30 LDCs representing three quarters of Ontario electricity customers actively took part with ESA and IHSA in powerline safety outreach activities.

In the area of workplace safety, ESA partnered with the mining sector to create a mobile work tool. It prompts an industrial electrical worker to follow the steps of the Canadian Standards Association’s Z462 repair work standard.

That tool, called e WorkSAFE, has been implemented at more than 500 organizations including hospitals and large and small manufacturing plants. And now it is being adapted into a version for independent electrical contractors.

If anyone here is interested in more information about eWorkSAFE, our VP, Operations Earl Davison will be happy to tell you all about it.

In the area of electrical product safety, ESA partnered with leaders in the fire sector: the Office of the Ontario Fire Marshal, and the Fire Marshal's Public Fire Safety Council.

Together we are supporting the development of a new stovetop element that will significantly reduce the risk of fires.

And in the area of tackling aging home infrastructure, ESA has produced a geospatial map of electrical fire events in Ontario. It has been shared with the fire service community to assist with targeting prevention efforts.

These are just some examples of how ESA has implemented this priority-driven approach.

In each case we recognized the power of partnership -- with industry, other safety organizations, and other regulators.

A current example of regulatory co-ordination will be known to many in this room.

When the Ontario Energy Board introduced plans for a new performance scorecard for electricity distributors it included a public safety measure.

I want to thank Rosemarie Leclair and the OEB for their vision in incorporating public safety as a performance measure.

An ESA project team is working with industry members and the OEB this fall to finalize the specifics.

So, if ESA's Harm Reduction Strategy established a focus on priority setting, insight, and collaboration, what has been achieved in the almost five years since?

Our overall goal was a 30 per cent reduction in electrical fatalities over five years. As of last year, fatalities had decreased 33 per cent.

Powerline contacts are down 19 per cent since 2010.

Electrical worker-related fatalities and critical injuries are down 41 per cent.

Electrical product fires have decreased 24 per cent.

And fires in older homes caused by electrical wiring have declined 11 per cent.

This is excellent progress. But there is more work to do.

Eliminating the fatalities and injuries that are still occurring requires targeting persistent behaviours, and exposing blind spots in everyday practices.

It won't be easy and it can't be done by edict.

It requires commitment across industry and the safety sector.

That's why I am asking everyone here today and the organizations you represent to actively commit to the further improvement of electrical safety in Ontario.

This requires going beyond how you train and supervise your own people, to taking responsibility for the others who come near your assets, businesses, or work sites.

As members of the electricity sector, we have harnessed an extraordinarily powerful resource. Our daily exposure to electricity causes us to respect its power.

But the ubiquity and daily use of it by those outside our sector leads to complacency.

It is only by working together that we can see a further reduction in electrical safety events in the next five years.

That will take us closer to an Ontario where everyone can live, work and play safe from electrical harm.

ESA's Harm Reduction Strategy set an ambitious but necessary goal for improving safety in Ontario.

It also established the approach ESA would use to fulfill its role as safety regulator.

While ESA has a broad mandate to enhance safety as a whole, our regulatory role and powers are specific. We administer four regulations on behalf of the province:

- The Ontario Electrical Safety Code, which, prescribes how new electrical work will be done on the customer side of the system.
- We license electrical contractors and master electricians. The license establishes an expectation for doing work consistently and it safely, and protecting the interests of the consumer.
- We oversee aspects of electrical product safety, particularly for industrial products, while the federal government now handles consumer products.
- And, as the LDCs in the room will well know, we regulate electrical distribution safety.

ESA executes its regulatory responsibilities in many ways. We use analysis, auditing, data assessment, training, prevention and awareness. But more than half our workforce is in-the-field: Inspectors who meet face to face with contractors, engineers, businesses and homeowners.

While a typical day is spent on scheduled inspections all over the province, there a lot of a-typical days.

In an operational meeting early last December, I congratulated the team on surviving what we were already calling the ‘Year of the Storms.’ By that point, there had been point a record number of floods and major storms requiring rapid ESA response. I hoped they could rest and recover over the Christmas holidays.

Little did I know that the storm of the year had yet to happen.

I am very proud of the ESA team's response to the Christmas ice storm. Handling a major weather event of that nature is the fundamental test of a safety regulator: how do you balance regulation, safety risk, with widespread disruption, discomfort and consumer distress?

We struck that balance.

We worked in tight co-ordination with government, emergency responders, and LDCs. We never abandoned the requirements for safety and due process, but we were responsive, open and accessible.

Our Inspectors were out in force across the affected areas, our call centre worked evenings, weekends, and holidays and our crisis response team was active around the clock.

The best possible outcome was that there were no fatalities or critical injuries due to electricity. That's a tribute to everyone involved in the response efforts.

But it's not just during storms that we make our regulatory execution responsive to context and the marketplace.

It is part of our inherent approach to regulation, compliance and enforcement.

We apply risk-based approaches, wherever possible so we prioritize effort where need and risk are greatest.

We compel good players in the system to take accountability for their compliance to regulation and integrate it into regular operating practices.

ESA seeks to work in an open and responsive manner with industry to ensure compliance efforts are achieving their intended goals and also the greatest positive benefit for the people of Ontario.

We meet with stakeholders in standing Advisory Councils so that the channels of communication are open.

These themes – advancing safety through the targeting of major harms; progressive regulatory compliance; and engaging openly with stakeholders – have shaped ESA’s strategy and actions for the last five years.

And I can tell you today that they will continue to be at the heart of our strategy for the next five years, too.

ESA’s new corporate strategy, which will begin in April of next year, will centre on three goals:

First, ESA will seek continued improvement in electrical safety in Ontario. The rate of electrical fatalities and critical injuries is declining about 13 per cent per year. We want to speed up that rate of decline.

We will continue to put particular focus on the areas that see the majority of incidents:

- powerline contacts;
- electrical workers doing repair and maintenance;
- and electrical fires in the home.

Second, ESA will seek to increase the rates of compliance to regulation where it is required and to improve electrical safety.

Continuing our commitment to risk-based regulation means targeting areas where non-compliance creates risk to the public.

For example, there is an underground economy in this province where work is unpermitted, uninspected, unregulated and unseen. It is estimated that as much as 50% of residential renovation work is done outside the regulatory framework.

At ESA, we recognize that improving compliance to regulation requires effective enforcement but also clear communication of regulatory requirements, and uncomplicated compliance processes. There are improvements we need to make in those areas and we have committed to do so.

Our third strategic goal relates to our role as an organization granted powers and responsibilities by the provincial government. ESA is publicly accountable and must operate in a responsible, transparent and fair way.

Our goal is to ensure strong public accountability. And our measure of performance will not be our own opinion, but that of our stakeholders.

We have already dedicated significant effort to ensure we operate in a responsible, transparent and fair fashion. Our Board of Directors has led in setting progressive policies, principles and oversight mechanism.

But this needs to be an important area of ongoing diligence for any regulatory entity.

So to recap, three goals: accelerating improvements in safety, improving compliance to regulation where needed, and ensuring strong public accountability.

The new strategy also describes the approach we will be taking to achieve those goals and fulfill our mandate.

Let me read an excerpt. You will hear many echoes of the themes I have touched on today:

The Electrical Safety Authority will use its insights, expertise and passion for safety to achieve our vision of an Ontario where people can live, work and play safe from electrical harm.

We recognize that achieving that vision requires both establishing safe environments where people can live and work, and for people and industry to behave in a safe fashion. We will tackle both.

ESA will act directly where we can make meaningful positive impact. Where we need others to act, we will be a catalyst to compel them to do so. And we will act as part of Ontario's safety system. This includes dovetailing with the work of other regulators, subject matter experts, and safety organizations.

ESA will foster among the public and industry accountability for their own electrical safety and those they impact.

We will apply risk-based approaches -- applying greatest effort to areas of greatest potential harm. To do that, we will have a strong understanding of the causes of electrical injuries, deaths and fires in Ontario.

The scope of powers ESA was granted at our establishment in 1999 is broad and varied: inspection, training, authorization, investigation, registration, enforcement, audit, and others.

We will judiciously apply the tools and resources at our disposal to make maximum positive impact on safety for Ontario.

We will earn and retain the trust and confidence of our stakeholders.

We will be fiscally responsible.

We will act with the public benefit foremost in mind.

That statement of approach will appear in the opening of ESA's new corporate strategy. It reflects our learnings over the last four-and-a-half years and our commitment for the years ahead.

We have seen that a mission-driven approach moves the state of safety forward tangibly.

Clear goals give focus to our actions and efforts.

Allocating effort by risk garners maximum benefit.

In the weeks ahead we will release our strategic plan and you will see those ideas expanded and supported with fresh and aggressive targets for the next five years.

As you will have detected through my remarks, industry commitment and collaboration are critical to achieving the future improvements needed in electrical safety in Ontario.

Every major safety achievement— whether in aviation, vehicle safety, or building standards – was made when industry, regulators, and the safety sector worked together in common purpose.

Such is the case with electricity. Eighteen people died last year from electricity. Each of those deaths was preventable.

I am asking you to join with ESA in preventing more deaths and critical injuries in the years ahead.

I appreciate the time and platform that the OEN has given me on now three occasions. It is an invaluable opportunity to turn attention to the needs and challenges of electrical safety.

I hope that my remarks today made clear ESA's priorities and plans. But equally important I hope they helped to improve understanding of the need for continued effort in electrical safety, and of the perils of complacency both inside and outside the sector.

I look forward to working with all of you on this important cause.

Thank you.

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