

August 26, 2016

## **Complexity Review of the Compliance Processes Related to the Ontario Electrical Safety Code, and Contractor Licensing**

### **Executive Summary**

ESA is publishing this document as its response to the report tabled by Deloitte LLP regarding the *Complexity Review of the Compliance Processes Related to the Ontario Electrical Safety Code, and Contractor Licensing*.

ESA has responded to the major recommendations outlined in the report, with commentary where they do, or do not align with ESA's direction.

As a general statement, ESA agrees with and fully supports the move towards a risk based oversight (RBO) model that applies an appropriate level of electrical safety oversight proportional to the risk.

ESA also agrees to increase its oversight on those that choose to operate outside the regulatory framework. An emphasis on increasing compliance requires resources be diverted from current activities, which is made possible through moving to a RBO model for regulation of the Ontario Electrical Safety Code (OESC).

However, ESA believes the Tiered Model of Compliance proposed by Deloitte does not go far enough in the level of analysis and insight regarding potential risk which must be included in a comprehensive framework. ESA have identified 9 different attributes of risk affecting installations, whereas the Tiered model considers only two; contractor performance as measured by defect rate, and permit volume as measured by subscription fees.

## Introduction

In October 2015, ESA contracted Deloitte LLP to conduct a review of the Compliance processes related to the OESC and Contractor Licensing. Deloitte LLP presented their final report (“the Report”) in April of 2016 to ESA management.

## Objectives:

ESA set out with the following objective and goals from the project:

*“The objective is to conduct a review of the compliance systems for the OESC and Contractor Licensing to identify elements which most impede stakeholders meeting their regulatory obligations, with a view to making it easier to do business with ESA.”<sup>1</sup>*

The deliverables to be provided by Deloitte were:

*“The review is to provide the ESA executive management team with:*

- *A high level mapping of all the interactions with ESA which stakeholders must use in order to comply with the OESC and Contractor Licensing*
- *A consultation with selected Stakeholders to obtain their impressions of pain points*
- *A comparison of the current processes with other best practice regulators in terms of complexity and difficulty in complying with the OESC, and the Contractor Licensing requirements*
- *A recommended multi-year improvement plan to reduce complexity, improve ease of access and reduce administrative burden for those wishing to comply with the OESC and Contractor Licensing*
- *The review would also include examining documents and communicating with ESA staff as necessary to respond to the following questions related to robustness of the process.*
- *Which processes present the greatest administrative or financial burden by stakeholders to comply*
- *What investments should ESA make in people, process and technology to make improvements in the compliance experience”<sup>2</sup>*

Deloitte set out to conduct the review over a four month timeframe, with the initial draft report for comment submitted to ESA in February 2016, and the final report published April 27, 2016.

The initial draft report has been reviewed within ESA, as well as stakeholders over the February-April 2016 time period.

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<sup>1</sup> Request for Proposal: Complexity Review of Compliance Procedures to the Ontario Electrical Safety Code, and Contractor Licensing, RFP # ESA 2015-0004, Page 3

<sup>2</sup> Request for Proposal: Complexity Review of Compliance Procedures to the Ontario Electrical Safety Code, and Contractor Licensing, RFP # ESA 2015-0004, Page 6

- ESA Executive Management Team February 2016
- ESA's Regulatory Affairs Committee of the Board February 24, 2016
- Contractor Advisory Committee February 18, 2016

## Key Findings

Deloitte detailed guiding principles upon which their recommendations were based<sup>3</sup>:

1. *“Enable risk-based approaches to electrical safety: As the electrical work industry continues to grow within the Ontario economy, the ESA will need to develop a more risk-based approach to compliance, providing incentives to working safely, while focusing inspection efforts on higher risk areas.*
2. *Provide fair and equitable services to customers: To be viewed as a trusted and informed regulatory body, the ESA needs to provide services to customers in a manner that is consistent, dependable and deemed as fair, especially when considering the services performed and fees charged.*
3. *Promote transparency and visibility: Although the ESA strives to be inclusive of the opinions of stakeholders, there is a belief that operational management is a ‘black-box’, and to truly meet the needs of the stakeholders, the ESA needs to follow up on stakeholder feedback.*
4. *Foster stable and constructive working relationships: The ESA has multiple stakeholders that impact operations (ex. OEL, ECRA, etc.), by developing mutually beneficial working relationships the ESA can increase awareness, gain buy-in and therefore reduce non-compliance.*
5. *Adopt a culture of continuous operational improvement: As the ESA strives to achieve its 5-year strategic plan, it will continue to build on the incremental improvements made, therefore, a culture of continuous improvement needs to be embraced to deal with the change and make the needed shifts.”*

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<sup>3</sup> Deloitte LLP: Complexity Review of Compliance Procedures to the Ontario Electrical Safety Code and Contractor Licensing, Apr 2016, Page 19

The key recommendations from Deloitte were<sup>4</sup>:

<b>Initiative</b>	<b>Description</b>
<b>1. Compliance Model Evolution Program</b>	<ul style="list-style-type: none"> <li>• Evolve the current model of compliance to a new Risk-Based, Tiered Model of Compliance.</li> </ul>
1.1 Address Operational Strain	<ul style="list-style-type: none"> <li>• Hire additional flexible staff to reduce operational strain/ scheduling issues during model evolution.</li> </ul>
1.2 Define Detailed Compliance Model	<ul style="list-style-type: none"> <li>• Complete detailed design of Tier system; define the levels of risk, and level of oversight for each of the tiers</li> <li>• Confirm and socialize the design with the stakeholder groups</li> </ul>
1.3 Define Data Usage & e-Records	<ul style="list-style-type: none"> <li>• Refine the data needs to enable the new risk-based approach</li> <li>• Identify where any gaps in data exist</li> <li>• Develop the 'use' or process for using the data to define customer tiers</li> </ul>
1.4 Implement Subscription-Based Fee Structure	<ul style="list-style-type: none"> <li>• Complete detailed design of subscription-based fee structure</li> <li>• Validate and revise with stakeholder groups, and propose changes to Ontario Government</li> <li>• Implement the revised design of the fee structure &amp; develop the new process for billings</li> </ul>
1.5 Modernize Scheduling/ Inspection Process	<ul style="list-style-type: none"> <li>• Revise scheduling &amp; Inspection process to align with sampling method.</li> <li>• Enhance communications to customers throughout Inspection process</li> <li>• Once model is implemented and less inspections are needed, reduce flexible staff volume</li> </ul>
1.6 Communication on Model Go-Live	<ul style="list-style-type: none"> <li>• Actively communicate with stakeholders throughout evolution.</li> <li>• Address any questions or comments in a timely fashion</li> </ul>
<b>2. Develop Inspector &amp; Call Centre Training</b>	<ul style="list-style-type: none"> <li>• Increase frequency of the annual training program for inspectors to bi-annually</li> <li>• Implement an on-going training program for CSR's</li> <li>• Develop instant Customer Feedback Survey for inspections</li> </ul>
<b>3. Deliver Awareness Campaign</b>	<ul style="list-style-type: none"> <li>• Develop mechanisms to frequently and formally gather feedback from stakeholders</li> <li>• Continue efforts on awareness and education campaigns to general public</li> </ul>
<b>4. Enhance Enforcement Tactics</b>	<ul style="list-style-type: none"> <li>• Increase the enforcement efforts by focusing on reviewing and revising escalation activities</li> <li>• Allocate gained resources to investigations to increase potential rate of catching non-compliant behaviour.</li> </ul>

In support of their recommendations, Deloitte identified a number of “pain points”, as expressed by the 18 stakeholder groups consulted during the four month process. ESA accepts these are the views of the stakeholders, as expressed by them to the Deloitte team.<sup>5</sup> While we may disagree with the factual

<sup>4</sup> Deloitte LLP: Complexity Review of Compliance Procedures to the Ontario Electrical Safety Code and Contractor Licensing, Apr 2016, Page 18

<sup>5</sup> Deloitte LLP: Complexity Review of Compliance Procedures to the Ontario Electrical Safety Code and Contractor Licensing, Apr 2016, Pages 59-71

accuracy of some of the statements, we accept them as perspectives offered in the spirit of helping ESA to understand the current concerns within the stakeholder community.

## Assessment

### Compliance Model Evolution

#### Flexible Staff to Alleviate Operations Strains

ESA has recognized there are strains within our current operation. These strains are exacerbated by a number of factors within related issues, for example:

- Inspections are viewed as transactions by Licensed Electrical Contractors (LECs) – they pay for a permit, and expect an inspection unless it is part of the Authorized Contractor Program (ACP) or Continuous Safety Services (CSS).
- Inspections are requested on as little as 24 hours notice – which exceeds ESA’s capacity to deliver in such tight timeframes. Very few organizations provide an on demand safety service with as little notice as the prior day.
- A large number of inspections are for work low considered to be low risk.
- In order to access an inspector, LECs/Customers request an inspector attend within a specific 4 hour block during the day (0800-12:00, 10:00-14:00, 12:00-16:00 hours). This puts further time pressure on the inspector’s schedule.

ESA’s overall long term approach is to apply the appropriate level of electrical safety oversight that is proportional to the risk and employ a broader series of investigative activities to encourage those currently working outside the regulatory framework to come into compliance. Better utilizing the existing ESA staff focused on risk is more palatable to the industry than adding staff in a never ending spiral that attempts to match the economic activity of the province.

In terms of a flexible work force, ESA already extensively uses the Hiring Hall (HH) provisions of our labour relations agreement with the Power Workers Union (PWU). The HH is a contingent workforce, able to scale up and down based on workload demand. The HH staff levels routinely run in the range of 10-12 individuals, primarily in southern Ontario.

### **Risk Based Oversight (RBO)**

ESA endorses the Report's broad thrust to move towards a model that adjusts the degree of our oversight with a LEC - or any industry participant - based on the relative risk of the installation, skill level (licence holder v homeowner) and the degree to which the participant either does, or attempts to work within the regulatory framework. This proportional response is consistent with the strategic direction ESA has included within its Strategic Plan. ESA has long held the view the current Inspection model places too much emphasis on transaction based oversight that does not adequately assess effort against risk – instead treating most installations as transactions rather than risk events.

While no specific risk model was proposed, Deloitte often refers to ESA's ACP as one example of a risk based approach, albeit from a narrow perspective focusing on transaction volume and defect rate. ESA does agree the challenges with the current compliance model both can and must be overcome. Specifically ESA supports the concept that for it to become more risk based, effort is required to:

1. Ensure any risk-based approach or program is mandatory for all LECs
2. Determine appropriate variables to assess an LEC's comprehensive level of risk
3. Differentiate the level of oversight between LECs based on their associated level of risk and compliance
4. Work within the marketplace to drive those operating outside the regulatory framework into compliance.

Secondly, ESA also endorses the recommendation to move to a Five Year Licensing Period, with annual renewal periods and has already begun its implementation.

### **Risk Assessment**

Deloitte proposed a mechanism whereby LECs are placed in one of four "tiers" representing their relative risk level, based on assessment criteria that include number/value of jobs, defect ratios, internal governance within the LEC organization, licensing compliance, etc. Based on the tier an LEC is assigned, the degree of oversight would be scaled

In general, ESA finds the tiered model to be lacking:

- It is almost solely focused on the contractor organization or the volume of work.
- LEC performance is included, using the volume of work and the standard defect ratio. Based on past learnings from the ACP, these are broad brush approaches that do not necessarily indicate superior LEC performance.
- The nature of the installation, the degree of exposure to both the environment and people are serious issues that are not adequately addressed in the tiered model.

ESA believes in fact there are nine factors that should be included within the risk assessment methodology for any electrical work:

1. Type of Installer: is the person or entity performing the work a LEC or a home owner.
2. The demonstrated performance of the installer and the effectiveness of the oversight provided by the LEC's DME: this can be assessed on many levels, but the historical defect rate for the installer is relevant. For LECs, while ESA's preference would be to collect this information at the tradesperson level, we recognize the appropriate data does not exist at this time. Licensed trades are mobile, often working for more than one entity over time. ESA does feel that the appropriate licensing regime is already in place, which requires a DME to be registered for each LEC entity. The duties of the DME are detailed in documents provided to the industry by the Electrical Contractor Registry Agency (ECRA) of ESA.<sup>6</sup>
3. Scope of work: large or small jobs, number and type of equipment being installed. This is more an indicator of the size of projects, as it affects the performance of the LEC organization.
4. Accessibility: is the installation at ground level, or out of reach without the use of aids such as ladders or aerial lift equipment.
5. Work Complexity: ranges from simple installations with few devices, to industrial installations with hundreds of devices.
6. Era of the facility: new build versus aging infrastructure with old equipment which has not been replaced for a significant period of time.
7. Building Classification: new home or residence, commercial or industrial installation, hazardous environment.
8. Degree of Public Exposure: no exposure to the general public or workers. High degree of exposure such as in a park, arena or public facility with a high degree of direct contact by large numbers of people.
9. Environment: indoor or outdoor facility, residence or commercial/industrial facility, hazardous location such as a petro-chemical plant.

ESA has commenced a two year project to apply a risk ranking system to all wiring related activities<sup>7</sup>.

1. By April 2017, ESA will build & test a program putting risk-ranked wiring inspection notifications in an internal data system. In preparation for deployment in 2017/18, ESA will develop the necessary supporting policy and procedures, change management, financial and IT implications, stakeholder engagement.
2. Advancing the application of risk-based compliance oversight in commercial and residential wiring work. In 2016/17 ESA will conduct two pilots in the commercial renovation sector using a logbook compliance approach and automated risk ranking by our Risk Informed Model (RIM.) Based on positive pilot results, we will complete a detailed business case to expand the program across Ontario as the new ESA Commercial Renovation Program;
3. Complete a review of the Authorized Contractor Program including gathering stakeholder feedback and developing changes that will support the advancement of risk-based approaches and address stakeholder needs.

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<sup>6</sup> Guideline to the Duties and Responsibilities of Licensed Electrical Contractors (LECs) and Designated Master Electricians (DMEs), Electrical Contractor Registry Agency, Section 3.2, Pages 21-24

<sup>7</sup> Electrical Safety Authority, Business Plan, April 2016-March 2017, Page 12



## Fee Structure

Deloitte recommended a migration from the current fee structure to a “Subscription based fee model” using the following as a basis for charges to an LEC:

- Number of jobs completed
- Type of jobs performed/ complexity of inspection needed
- Value of the job completed
- Customer Tier (Level of Oversight/ frequency of inspections)

ESA would then be expected to develop a model that calculates Expected Revenue from Subscription Fees, and adjust fees as necessary to break-even/ generate small surplus.

## Current Fee Model

ESA agrees the current fee model is flawed, and has largely grown out of a historical context for the inspection function. The current fee structure is tied to a transaction based model that links specific ESA activities to fee related items. As a result when an LEC pays a fee to ESA, there is an inherent expectation a “service” or inspection visit will be delivered in return. In the event an inspector judges no visit is required, there is both the frustration of lost effort by the contractor who is waiting for the inspector to arrive, and the disconnection between the “fee paid” and the “service delivered”.

The current fee model is especially troublesome were ESA to move to a RBO model wherein an Inspector's need to visit is driven by a comprehensive risk assessment for a specific installation - not by the simple fulfillment of a transaction (inspection visit).

One thing is clear; ESA believes all industry participants need to contribute to the regulatory framework in a fair and proportionate manner.

## *Future actions – Fee Model*

There is much work left to define an appropriate fee model that will provide ESA with the funds it needs to sustain the organization tasked with industry regulation while being fair to industry regarding the monies they pay for effective oversight. ESA is in the process of assessing how different fee models might work as applied to an RBO model for compliance. In the final design, the fee model must be fair, proportionate to the safety impact, and the degree of oversight required based on the performance of the LEC.

## Modernize Inspection Scheduling Process

ESA has recognized there are difficulties in the current Request for Inspection process:

1. Requests for inspection are made by LECs on as little as 24 hours notice (call today for an inspection tomorrow). This expectation for a short turnaround has developed over a significant historical time period.
2. Workload volumes have increased over time such that on some days of the week, and at certain times of the year the volume of work assigned to an inspector does not allow them to reliably

meet all the scheduled commitments in a business day. A material portion of the inspector’s daily workload is devoted to low risk installations.

3. Set appointment times in four hour blocks are available for a constrained set of transactions, but are frequently booked well into the future.

### **Future Actions – Scheduling**

ESA is undertaking the following approach in response to the findings:

Short Term	Medium Term	Long Term
<ul style="list-style-type: none"> <li>• Four performance measures identified and implemented (completed April 01, 2016)</li> <li>• Identify “hot spot” areas with poorest performance on measures defined above (completed April 01, 2016)</li> <li>• Add resources in short term (completed July 21, 2016 - 8 inspectors will graduate from ITP 12 and have been assigned to each of the Hotspots)</li> <li>• Implemented “24 hr” notice. Completed April 01, 2016, on time and as announced to industry. This process advises ACP contractors ESA will not be making a visit where they give us requests 48 hrs in advance. Approximately 400 advance notices are issued daily at current course and speed</li> </ul>	<ul style="list-style-type: none"> <li>• Request for Information written for a “scheduling system” and to be issued to street in Summer 2017, which includes capacity constraints and planning tools</li> <li>• Business Processes to accompany Scheduling system are underway</li> <li>• Resolution of Labour Relations issues are in progress</li> <li>• Shift Wiring work to CSS where contracts and delivery frequency permit. This will move workload from Wiring to CSS inspectors</li> </ul>	<ul style="list-style-type: none"> <li>• Implement Scheduling system and capacity constraints in FY18               <ul style="list-style-type: none"> <li>○ Implement a Risk Based Oversight model across all wiring related activities</li> </ul> </li> </ul>

### **Develop Inspector & Call Centre Training**

ESA agrees with the recommendation to continue with ongoing training and development for both the Inspection and Contact Center staff.

Since electrical work is present in almost all walks of life, it is not surprising there are many different levels of expertise within the clients who deal with Inspectors or contact our call center. Inspectors are very comfortable and knowledgeable when it comes to dealing with LECs who, like themselves, are professionals within the trade. ESA recognizes the need to be more mindful of the needs of those sectors whose line of business is not dominated by the electrical installation. The typical examples are the heating, ventilating and air conditioning, as well as the sign industries.

ESA’s training regimen for new staff entering the company is as follows:

- Inspectors: 11 weeks, plus increased supervision during the first two years in the field
- Contact Center: 6 weeks training followed by monthly coaching sessions based on monitored calls and performance

In addition, Inspectors are taken out of the field three times annually for refreshed technical training.

What is yet to be added is specific training to those external groups who are required to utilize ESA for oversight of their industry, but are not licensed electricians or LECs.

### Enhance Enforcement Tactics

ESA supports and agrees with Deloitte's recommendations to increase enforcement efforts on those parties who do not comply with the regulatory framework). One of the benefits of moving to a risk based oversight versus the transaction approach to notification for inspections is existing resources will be more able to spend time on regulatory compliance and enforcement. This is completely in line with our FY2016-2017 Business plan commitment:

*... to bring more underground economy wiring work into the compliance system (with focus on Ontario Electrical Safety Code and contractor licensing) demonstrating progress to 2020 goal of overall 7.5% target. ESA will create a detailed business case based on the findings from two investigation pilots conducted in 2016/17 that enhances compliance enforcement efforts in commercial activities.<sup>8</sup>*



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<sup>8</sup> Electrical Safety Authority, Business Plan, April 2016-March 2017, Page 12