Case Study:
Influence of Bill 70 on Fire Alarm Industry

By: David Sylvester, Morrison Hershfield

The New Master Electrician Licensing Regulations
Benefits to Electrical Contractors Sector and Ontarians
Catalyst for Fire Alarm Industry Licensing

1. Situation:
The Ontario Electrical Safety Authority (ESA) and the Ontario Ministry of Consumer and Business Services (MCBS) developed a new provincial licensing system for Electrical Contractors and Master Electricians. Bill 70 received Royal Assent on November 30, 2004. On November 7, 2005, Regulation 570/55 established a province wide master licensing system. ESA started accepting master license applications on July 1, 2006. Regulation 570/50 requires all Electrical Contractors and Master Electricians to have a “Contracting Licence” by January 1, 2007. The current understanding is that without a “Contracting Licence” ESA will not accept applications for permit and inspections under Rule 2-004 of the Ontario Electrical Safety Code.

This Case Study outlines my personal opinion of the key issues regarding both the positive and negative influences Bill 70 may have on our specialized fire alarm industry. As such, it should be noted the following discussion is not the opinion of the Canadian Fire Alarm Association (CFAA).

Prior to Bill 70, twelve municipalities licensed Electrical Contractors on the basis of the Contractor either being or employing a Master Electrician. The Electrical Contractors Registration Agency (ECRA) “reciprocal recognition” program ensured that each of these twelve municipalities recognized each other’s Contracting Licence. All other municipalities had either their own standards or no licensing requirements at all.

The electrical industry looked to ESA and the Ministry (MCBS) to mitigate both the cost of licence duplications and general confusion this existing system created for consumers.

The ESA and the Ministry’s intent are simply to improve public safety and eliminate duplication by creating a consistent and enforceable framework for electrical contractor licensing in Ontario. Certainly this is a noble objective for both the public and the electrical industry.

2. Problem:
So how does Bill 70 and more specifically Regulation 570/55 (province wide licensing for Electrical Contractors) influence the fire alarm industry in Ontario?

Are some fire alarm service companies currently providing turnkey fire alarm installation solutions? Perhaps a fire alarm turnkey solution would include:

1) Supply of manufacturer’s system product
2) Installation of all raceways and wire
3) Installation of all fire alarm devices
4) Program system structure
5) Verification of system (verification individual is not the same installing individual)
6) Maintenance of warranty

Clearly, the answer is yes – and quite often in Ontario.

Now, you could go back to the “FA Technician – Can Do and Cannot Do” CFAA article from a few years ago to reference this issue.
CFAA Technicians are not Licensed Construction and Maintenance “309A” (Licence #) Electricians and more importantly, 309A Electricians are not certified to perform Fire Alarm Technician work. These prescriptive requirements are not new. In fact, during the late 1970s, the Government of Ontario began a process of updating the province’s health and safety laws. Some could say Bill 70’s new provincial licensing system for Electrical Contractors and Master Electricians is a continuation of these safety laws. Separate laws covering different sectors were replaced with a comprehensive law covering almost all Ontario workplaces. This law, the Occupational Health and Safety Act (OHSA), was passed in 1978 and has been in force since 1979. The philosophy behind the law is known as the ‘internal responsibility system’. Although this term is not mentioned in any legislation, the Ministry of Labour’s guide to the act makes it clear that the government expects employers and workers to cooperate to control occupational health and safety hazards. The evolution of health and safety laws is as follows:

- 1976 Bill 139 establishes the Employee’s Health and Safety Act. The Minister can order joint committees.
- 1978 Bill 70 establishes the Occupational Health and Safety Act. Mandatory joint committees are prescribed in many workplaces.
- 1990 Bill 208 amends the Occupational Health and Safety Act, broadening the requirement for joint committees. Establishes certified members and the right to stop work.

A certified CFAA Technician does not qualify under the Occupational Health and Safety Act and Regulations for Construction Projects, Trades Qualification and Apprenticeship Act (TQAA Reg. 1051), the Electricity Act, and Bill 70 (Reg. 570/55) to be an Electrical Contractor. The Electrical Safety Code defines an “electrical contractor” as any person engaged in the business of performing work on any electrical installation and/or electrical work under Ontario’s Electrical Safety Code (Ont. Reg. 164/99).

Typically these “turnkey” fire alarm companies have Licensed Electricians under their employ. And yes, typically CFAA certified Technicians assist these Electricians with the installation work.

Perhaps in this scenario, compliance to Bill 70 is simple. Require the “turnkey” fire alarm company to become an “Electrical Contractor.”

If you were to suggest this to any one fire alarm company’s CEO, they would simply say, “We don’t want to be Electrical Contractors. We offer a team of highly specialized disciplined Technicians servicing a very prescriptive industry. Shouldn’t we be exempt from these requirements?”

OK, are there fire alarm companies out in our industry right now with no “Licensed”, “Certified Trade”, “Construction and Maintenance Electricians” performing “electrical work” as defined in OESC Reg. 164/99?

Answer: Yes.

Does a certified CFAA Technician understand the nuances of Section 12, Wiring Methods, or even Table 8, 9 and 10 regarding conduit fill and deration of conductors in the Ontario Electrical Safety Code?

Answer: Probably not.

Why? Because CFAA Technicians are not trained to install raceway and wire, perform conduit fill calculations or even bend EMT raceway. Qualifications for this work is identified under the Legislation: Occupational Health and Safety Act and Regulations for Construction Projects, Trades Qualification and Apprenticeship Act (TQAA Reg. 1051) the Electricity Act and Bill 70 (Reg. 570/55).

The Occupational Health and Safety Act and Regulations for Construction Projects require electrical work to be performed by persons qualified under the TQAA.

OHSA (O. Reg. 213/91, s. 181 (1): O. Reg. 631/94, s. 6) states:

“No worker other than an electrician certified under the Trades Qualification and Apprenticeship...
Refer to the following Table for a clearer understanding of the legislation:

**CONSTRUCTION INSTALLATIONS INCLUDING NEW FIRE ALARM SYSTEMS**

Occupational Health and Safety Act and Regulations for Construction Projects (OHSA)

Qualifies who can perform Electrical Work

Section 181 “No worker other than an electrician certified under the Trades Qualification and Apprenticeship Act to do electrical work or a person with equivalent qualifications by training and experience shall connect, maintain or modify electrical equipment or installations”

Regulations for “Certified Trades”

Outlines training and testing requirements for 309A Electrician Licence and other Certified Trades

Defines “Electrician” Scope

Including in-school training and apprenticeship requirements

OESC and ESA Enforcement

Identifies the Ontario Electrical Safety Code (OESC) as the enforceable Code in Ontario with the Electrical Safety Authority (ESA) responsible for Electrical Safety in Ontario

OESC Section 0 Defines Electrical Contractor

Electrical contractor means “any person, corporation, company, firm, organization, or partnership performing or engaging to perform, either for their or its own use or benefit, or for that of another, and with or without remuneration or gain, any work with respect to an electrical installation or any other work to which this Code applies”

Province Wide Master Licensing System

Bill 70 amends the Business Corporation Act and the Electricity Act. All Electrical Contractors and Master Electricians are to have a “Contracting Licence” by January 1, 2007. The current understanding is that without a “Contracting Licence” ESA will not accept applications for permit and inspections
Act to do electrical work or a person with equivalent qualifications by training and experience shall connect, maintain or modify electrical equipment or installations (O. Reg. 213/91, s. 181 (1); O. Reg. 631/94, s. 6)."

The TQA's Reg. 1051 outlines the training and apprenticeship requirements to perform such electrical work.
So under current legislation a CFAA Technician is not qualified to perform electrical installation work.

If you take this one step further, then a CFAA Technician or perhaps a fire alarm company with only CFAA Technicians on the payroll, does not meet the criteria described in (OESC Reg. 164/99) to be an “Electrical Contractor”. As such, even if a fire alarm company were to apply for a Electrical Contracting licence, the ESA/ECRA would more than likely reject the application due to lack of applicable qualifications.

Typically, in my life experiences, fire alarm service company customers prefer to have life safety system devices re-worked or removed and re-installed by the “turnkey” fire alarm service company, not the in-house Maintenance Electrician who generally performs replacement work such as ballast for the fluorescent lighting.

Legislative qualifications or not, this author assumes that somewhere in Ontario today a certified CFAA Technician is pulling armoured cable to relocate a bell for a minor renovation.

I personally would not recommend to the CFAA Board to support or encourage such activity. Since this activity is clearly outside of the Technician's training and qualifications as mandated in the 1997 Ontario Fire Code (0,Reg. 388/97, as amended) Sentence 1.1.5.3. (1).

But perhaps there is a solution to these complexities.

3. Solution:

Why not explore both the exemptions and exceptions to Bill 70? After all, we are a very specialized industry with a paramount focus on protecting life from the ravages of fire.

Currently Bill 70 exemptions include:

1) Refrigeration and air conditioning businesses performing electrical work.
2) Sprinkler installers performing electrical work under TQA Reg. 1078.
4) Work on telephone equipment [ESC-2-000(b)].
5) Appliance work that plugs into an electrical source up to and including 240 volts.

Perhaps, one could argue, if you connect a fire alarm control unit as a plug and play device it applies as appliance work. I don’t think placing a twist lock 120 volt receptacle and cord cap on a fire alarm system will get a Bill 70 exception or enhance the life safety of the building occupants, not to mention comply with Rule 32-108 of the OESC.

However, clearly the Fire Alarm Industry could make a case with these Authorities regarding our specialized industry and unique scope of services.

A discussion with ESA, the Ministry of Consumer and Business Services (MCBS), Electrical Contractors Registration Agency (ECRA), and the Ministry of Training, Colleges and Universities could be beneficial.

What would be proposed?

I believe that the fire alarm industry has now come to a turning point, a milestone in our evolution as ethical professionals providing noble work to protect society from fire.

Why are Hairdressers licensed under the TQA but Fire Alarm Technicians are not?

The TQA does not recognize Fire Alarm Technicians as a Qualified Trade. After all, it was not until the 1997 OFC was released that Sentence
1.1.5.3. (1) required certification.

It's time to take Bill 70 and all its issues forward and propose a solution to the Ministry of Training, Colleges and Universities. Perhaps we should request a meeting with the Honourable Chris Bentley, Minister of Training, Colleges and Universities, to highlight this issue.

The TQAA could be amended to provide “Licensed” Fire Alarm Technicians recognition for “Certified Trade” skills applicable to some types of fire alarm installation work. Limited low voltage wiring training and specialized technological programming skills training could be developed for this licence.

Potentially a new Fire Alarm Technician could pursue two training opportunities:

1. Initially CFCAA certification under current 1997 OFC requirements.
2. Following CFCAA certification pursue TQAA fire alarm specialized “Licence” covering specific installation practices.

4. Evaluation

Perhaps if the Fire Alarm Industries’ approach regarding the influences of Bill 70 was on two fronts, we could be even more successful:

1. Exemption from Bill 70 for the next 2 – 3 years for negotiations.
2. Pursuit of “Licences” for Fire Alarm Technicians and amendments to Bill 70 for some install work associated with fire alarm systems.

We could finally achieve a new level of pre-eminence in the construction industry and further protect society from the ravages of fire through better training.

These solutions, among their many benefits, will streamline the regulatory process for Fire Alarm Technicians. It will mitigate confusion for our customers, i.e., “certified is not licensed” providing a simple clarification. Further, we will be able to clearly identify ourselves as Fire Alarm Technicians qualified under these evolutionary legislative models, i.e., Ontario Fire Code/Fire Prevention Act, OHSA, and TQAA.

Worst Case Scenario:

Without approved and closed ESA electrical inspection permits, the local fire service or Authorities Having Jurisdiction will not provide Occupancy Permits.

Fire Alarm Companies will be refused payment, people will not occupy the building until the issue is resolved and the “Lawyers for each party” may circle like vultures.

In closing, I shall end this article with a few proverbs and thoughts:

1) Necessity is the mother of invention
   Bill 70 triggers CFCAA Licence for Fire Alarm Technicians.

2) Never to late to learn
   CFCAA Certification first, TQAA Fire Alarm Licence Second.

3) Nothing ventured, nothing gained
   The Fire Alarm Industry must meet now with the ESA and the applicable Ministries to resolve the influences of Bill 70.

Jewett Technologies/Maxamfire

A Canadian source for fire alarm inspection and service test equipment

Simple and clear online pricing of every item we carry.
You can order right off our website, print out a fax order form or just call 416-779-1441 to order by phone.
Distributing a variety of manufacturers’ products at competitive prices.
We offer many unique and traditional products, for example:

- Solo Test Equipment
- Prosafe Log Books
- ZTS Battery Capacity Meters
- Fire Detection Devices, Heat Detectors and Test Equipment
- Fire Forms report generation software line
- Air-Pressure Meter Kit for testing Duct Smoke Detectors

Fax (905) 305-9212
www.maxamfire.com