Demand Side Legislation – The Public Safety Act and associated Regulations

What is Demand Side Legislation?

PEGNL considers Demand Side Legislation to be clauses in government Acts and Regulations that mandate the services of an engineer or geoscientist to undertake an activity or certify something as meeting a required state or standard.

Governments at all levels- federal, provincial and municipal- find that demand side legislation is an effective tool for enhancing public safety and welfare.

Among the legislation requiring the services of engineers and geoscientists are the Public Safety Act and its associated Regulations. These include the Amusement Rides and Elevating Devices Regulations, the Boiler, Pressure Vessel and Compressed Gas Regulations and the Electrical Regulations.

Public Safety Act

While the short version of the Act’s title is the ‘Public Safety Act’, its long version is ‘An Act To Provide For The Safety Of The Public With Respect To The Use And Operation Of Elevating Devices, Amusement Rides, Pressure And Electrical Systems.’

The Act primarily provides a framework for the Regulations under the Act to regulate practices with respect to the devices noted in the Act long title. There is no reference to geoscientists in the Act and the references to engineer in the Act are focused on its use with respect to power or what was known as stationary engineers ( as opposed to ships engineers).

Amusement Rides and Elevating Devices Regulations

While many aspects of the Regulations may deal with engineering matters, from a demand side legislation perspective the following excerpt directly references the requirement for a professional engineer licensed in the province to stamp drawings and specifications for installation and operation of an amusement device or elevating devices, as well as major alterations of these devices.
‘Registration of designs

5. (1) The owner of an amusement ride or elevating device shall register with the government service centre each amusement ride and elevating device

(a) before its installation and operation; and
(b) before a major alteration.

(2) To facilitate registration required in subsection (1) the owner shall submit drawings and specifications of the amusement ride or elevating device to the government service centre that shall

(a) be prepared and stamped by a professional engineer licensed to practise in the province;”

Boiler, Pressure Vessel and Compressed Gas Regulations

These regulations generally address the items noted in the Regulations title.

Of note in the regulations are references to both ‘power engineer’ and ‘registered professional engineer’. Important in the legislation is the definition of a power engineer as one who has a certificate of competency issued under the regulations. However also in the regulations is the following clause that distinguishes the power engineer from one registered under the Engineers and Geoscientists Act

‘General requirements

7. (1) A power engineer holding a valid certificate of competency shall maintain it in the registered plant.

7 (2) Nothing in these regulations shall be construed to permit any person to use a name, title or description that may lead to the belief that the person is qualified or entitled to practice professional engineering as defined in the Engineers and Geoscientists Act.’

The following part of the regulations notes the requirement that a registered engineer engaged in the practice of mechanical engineering authenticate designs. Even though the designs may be done outside the province, the Engineers and Geoscientists Act requires that engineering done in or for the province be signed by an engineer registered with PEGNL.

Authentication of designs

31. (1) Drawings and specifications of designs of boilers, pressure vessels, fittings, fired heater pressure coils and pressure piping shall be submitted by the
manufacturer to the government service centre and shall include the signature and seal of a professional engineer.

(2) Drawings and specifications of boilers, pressure vessels and fittings designed and fabricated outside of the province shall include the signature and seal of a professional engineer who is a registered member of a recognized association of engineers and who is engaged in the practise of mechanical engineering.

Similarly, in the following excerpt from the regulations note the requirement for the seal of a professional engineer on documents required to be submitted as part of design registration under the regulations.

Design registration

76. (1) Plans and specifications of the design, in duplicate, shall be submitted to the chief inspector for registration for

(a) gas installations in buildings designated as public assembly;
(b) filling plants;
(c) container refill centres; and
(d) gas installations having a total heating value of 633,000 kilojoules and over.

(2) Drawings and specifications shall include

(a) piping layout for each floor, including vertical runs servicing all floors;
(b) calculation of pipe size to prove adequate supply of gas to all appliances if requested;
(c) details showing location of gas piping supports, detail of piping supports and protection of piping and tank;
(d) number and location of cylinders or tanks;
(e) schedule of fittings and valves showing registration as required by Part IV of these regulations;
(f) the manufacturer, listing agency, the file number and thermal rating of appliances included in the system;
(g) a statement that the installation is to be made by personnel holding the proper certificate as required by these regulations; and
(h) the signature and seal of a professional engineer.

Similarly, in the following excerpt from the regulations note the requirement for the seal of a professional engineer on documents for
medical gas systems required to be submitted as part of design registration under the regulations.

Design registration

87. (1) Prior to starting the installation of a new medical gas system or the extension or alteration to an existing installation, the person doing the installation, extension or alteration shall submit the design in duplicate to the chief inspector, and shall include the signature and seal of the professional engineer responsible for the design.

Electrical Regulations

These regulations address electrical work covered within the scope of the Canadian Electrical Code Part 1. It is also a mechanism by which the current version of the Canadian Electrical Code Part 1 becomes a legal requirement in the province.

4 (4) The standard for design, construction, installation and maintenance of all electrical work performed in the province shall be in accordance with the Canadian Electrical Code, Part 1 as amended.

Further, the following clause mandates the requirement for CSA or similar certification for all electrical equipment within the province.

(5) Where a person offers for sale, sells or installs electrical equipment and appliances in the province the person shall ensure that equipment or appliances are certified by an agency that has been accredited by the Standards Council of Canada.

There is only one reference to engineering in these regulations and that is as follows

7. (1) The chief inspector may, where he or she considers it appropriate, require a registered contractor to certify his or her work through a representative appointed by the chief inspector in accordance with subsection (2).

(2) A person is eligible for appointment as a representative if the person

(a) holds an electrical certificate;

(b) is an employee of a registered contractor; and

(c) has at least 4 years of experience in electrical work relevant to his or her electrical certificate; or

(d) holds a degree in Electrical Engineering and is a member in good standing of the Association of Professional Engineers and Geoscientists for the province and has at least 2 years experience related to electrical work and who
certifies that he or she considers himself or herself competent to represent fully and properly a registered contractor