



APEGA Recommended Discipline Order

APEGA members and permit holders are required to practise engineering and geoscience skillfully, ethically, and professionally. They must meet all prescribed requirements and follow all applicable legislation and regulations, such as the [Engineering and Geoscience Professions Act, General Regulation, Code of Ethics, and APEGA bylaws](#). Investigation and enforcement—followed by, when necessary, judgment based on a fair hearing of the facts—are requirements of ours in service to the public interest. For more information, please visit www.apega.ca/enforcement/discipline-decisions.

Date: July 26, 2019

Discipline Case Number: 19-013

**IN THE MATTER OF A RECOMMENDED DISCIPLINE ORDER OF THE ASSOCIATION OF
PROFESSIONAL ENGINEERS AND GEOSCIENTISTS
OF ALBERTA**

Pursuant to the Engineering and Geoscience Professions Act,
being Chapter E-11 of the Revised Statutes of Alberta 2000
Regarding the Conduct of [A PROFESSIONAL MEMBER] P.ENG.

The Investigative Committee of the Association of Professional Engineers and Geoscientists of Alberta (“APEGA”) has investigated the conduct of a Professional Member (the “Member”) with respect to a complaint of unskilled practice of the profession pursuant to Section 44(1) of the Engineering and Geoscience Professions Act (the “Act”), initiated by an individual, (the “Complainant”) dated June 21, 2019 (the “Complaint”).

A. THE COMPLAINT

This investigation related to an allegation that the Member engaged in unskilled practice of the profession with respect to their testing of electrical equipment while employed at an APEGA permit holder (the “Permit Holder”).

The Investigative Committee investigated the following allegation (the “Allegation”) outlined in the Complaint:

1. Whether the Member failed to identify that an electrical cable, with exposed wires, was energized.

The Investigative Committee separately investigated the actions of the Responsible Member for the Permit Holder, also brought forward by the Complainant.

B. AGREED STATEMENT OF FACTS

(i) Background:



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2. The Member holds a Bachelor of Science Degree from 2010 in Mechanical Engineering and a Master of Engineering Degree from 2013 in Electrical and Computer Engineering – both from the University of Alberta.
3. The Member was employed by the Permit Holder from May 2016 to March 2018.
4. The Member obtained his professional designation with APEGA on October 7, 2016.

(ii) Facts Relating to the Allegation:

Whether the Member on March 3, 2017, failed to identify that an electrical cable, with exposed wires, was energized.

5. The Complainant became concerned prior to the incident in question with the Member's competency as it related to their testing of electrical equipment in the Permit Holder's workshop.
6. The Complainant raised their concerns with the Responsible Member and requested they hire another Professional Member with more experience.
7. The Responsible Member refused the Complainant's request and stated that they had full confidence in the Member.
8. On March 3, 2017, the Member, was testing equipment in the Permit Holder's workshop.
9. The Member failed to detect the hazard of a live lead wire containing full bus voltage of 700 volts, while handling an electrical cable, which then contacted a metal door frame, causing an arc flash.
10. No injuries resulted however, if the Member or other company employees in the workshop had touched the live lead wire, serious injury or death may have occurred.
11. The incident in question was immediately discussed amongst all employees present, including the Complainant, and with the Responsible Member by teleconference. The Member generated an incident report, drafted an isolation procedure and two days later, a company meeting occurred with all employees to discuss the incident and safety procedures.
12. The Responsible Member stated that the Member had made a mistake and it was an isolated incident.



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13. A former employee reported that a general untidiness of the workshop, which was shared with another company, may have contributed to the incident in question.
14. The Member had been testing the equipment for several months. They encountered many technical challenges which left them feeling, at times, discouraged and finding his work to be “an exercise in futility.”
15. Only after the incident in question did the Responsible Member for the Permit Holder consider the formal implementation of a hazardous energy isolation procedure, commonly referred to as a “Lock Out Tag Out” procedure, as referenced in the Alberta Occupational Health and Safety Code, 2009.
16. The Alberta Occupational Health and Safety Code, 2009, states the following:

Part 15 Managing the Control of Hazardous Energy:
Isolation

212(1) If machinery, equipment or powered mobile equipment is to be serviced, repaired, tested, adjusted or inspected, an employer must ensure that no worker performs such work on the machinery, equipment or powered mobile equipment until it has come to a complete stop and

- (a) all hazardous energy at the location at which the work is to be carried out is isolated by activation of an energy-isolating device and the energy-isolating device is secured in accordance with section 214, 215, or 215.1 as designated by the employer, or
- (b) the machinery, equipment or powered mobile equipment is otherwise rendered inoperative in a manner that prevents its accidental activation and provides equal or greater protection than the protection afforded under (a).

212(2) An employer must develop and implement procedures and controls that ensure the machinery, equipment or powered mobile equipment is serviced, repaired, tested, adjusted or inspected safely if

- (a) the manufacturer’s specifications require the machinery, equipment or powered mobile equipment to remain operative while it is being serviced, repaired, tested, adjusted, or inspected, or
- (b) there are no manufacturer’s specifications and it is not reasonably practicable to stop or render the machinery, equipment or powered mobile equipment inoperative.



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Verifying isolation

213 A worker must not perform work on machinery, equipment or powered mobile equipment to be serviced, repaired, tested, adjusted or inspected until

- (a) the actions required by subsection 212(1) are completed,
- (b) the machinery, equipment, or powered mobile equipment is tested to verify that it is inoperative, and
- (c) the worker is satisfied that it is inoperative.

Securing isolation

Securing by individual workers

214(1) Once all energy-isolating devices have been activated to control hazardous energy in accordance with section 212(1), an employer must ensure that a worker involved in work at each location requiring control of hazardous energy secures each energy-isolating device with a personal lock.

214(2) Once each energy-isolating device is secured as required by subsection (1), the worker must verify that the hazardous energy source has been effectively isolated.

214(3) If more than one worker is working at each location requiring hazardous energy to be controlled,

- (a) each worker must attach a personal lock to each energy-isolating device, and
- (b) the first worker applying a lock must verify that the hazardous energy source has been effectively isolated.

214(4) If a worker who has placed a personal lock is reassigned before the work is completed, or the work is extended from one shift to another, an employer must ensure that

- (a) another worker, authorized by the employer to do so, attaches a personal lock to the energy-isolating device prior to removal of the reassigned or departing worker's lock, or
- (b) there is an effective and orderly transfer of control of the reassigned or departing worker's lock.



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214(5) An employer must ensure that each personal lock used has a unique mark or identification tag on it to identify it as belonging to the worker to whom it is assigned.

214(6) An employer must ensure that the name of the worker to whom a personal lock or identification tag is assigned is readily available during the time a hazardous energy source is isolated.

214(7) Upon completing the work requiring isolation of hazardous energy, an employer must ensure that the machinery, equipment or powered mobile equipment is returned to operation in accordance with section 215.3.

C. Conduct

17. The Member freely and voluntarily admits that:
- At all relevant times they were a Professional Member of APEGA and was thus bound by the *Engineering and Geoscience Professions Act* and the *APEGA Code of Ethics*.
 - The Member acknowledges that they failed to identify and confirm that an electrical cable with exposed wires, was de-energized.
 - The Member acknowledges that failure to identify an energized electrical cable is a significant safety risk.
18. The Member acknowledges that the conduct described above constitutes unprofessional conduct and / or unskilled practice as defined in Section 44(1) of the *Act*:

Section 44(1) Any conduct of a professional member, licensee, permit holder, certificate holder or member-in-training that in the opinion of the Discipline committee or the Appeal Board,

- is detrimental to the best interests of the public,*
- contravenes a code of ethics of the profession as established under the regulations,*
- harms or tends to harm the standing of the profession generally,*
- displays a lack of knowledge of or lack of skill or judgement in the practice of the profession, or*
- displays a lack of knowledge of or lack of skill or judgement in the carrying out of any duty or obligation undertaken in the practice of the profession whether or not that conduct is disgraceful or dishonorable, constitutes either*



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unskilled practice of the profession or unprofessional conduct, whichever the Discipline Committee or the Appeal Board finds.

19. The Member acknowledges that the conduct described above breaches Code of Ethics #1 which states:

1. *Professional engineers and geoscientists shall, in their areas of practice, hold paramount the health, safety and welfare of the public and have regard for the environment.*

D. Recommended Orders

20. On the recommendation of the Investigative Committee, and by agreement of the Member with that recommendation, and following a discussion and review with the Discipline Committee Case Manager, the Discipline Committee hereby orders that:

1. The Member shall successfully complete the following within one (1) year from the date that this Order is approved by the Discipline Committee Case Manager:
 - I. "Electrical Safety Training System (ESTS) Electrical Worker 2018 – Canada, Arc Flash & Shock" offered through Alberta WHMIS.

The Member may apply to the Director of Enforcement for an extension prior to the one (1) year deadline. Any extension will be granted within the sole discretion of the Director of Enforcement. If the course is not successfully completed within one (1) year or after the agreed to extension, the Member shall be suspended from the practice of engineering until the above noted course is successfully completed.

2. The Member will receive a Letter of Reprimand, a copy of which will be maintained permanently in the Member's registration file and be considered at any future date by APEGA.
 3. This matter and its outcome will be published by APEGA as deemed appropriate and such publication will not name the Member.
21. Although there is a presumption that Recommended Orders should be published in a manner that identifies the name of the Member who is subject of the Recommended Order, publication without name is being recommended in this case. The publication of the Member's name is not required in this instance to protect the public interest.



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Signed,

[PROFESSIONAL MEMBER], P. Eng.

IAN BUTTERWORTH, P. Eng.
Panel Chair, APEGA Investigative Committee

THOMAS SMEKAL, P.Eng.
Case Manager, APEGA Discipline Committee

Date: July 26, 2019