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25 Sheppard Avenue W., Suite 1000 Toronto, Ontario M2N 6S9 Tel: (416) 224-1100 (800) 339-3716

Editor: Eric Newton Staff Contributors: Roger Barker, P.Eng. Ian Eng, P.Eng. Discipline Committee of the Association of Professional Engineers of Ontario

In the matter of a hearing under the Professional Engineers Act, R.S.O. 1990, Chapter. p.28

And in the matter of a Complaint regarding the conduct of a member of the Association of Professional Engineers of Ontario, and a holder of a Certificate of Authorization

SUMMARY OF DECISION AND REASONS

panel of the Discipline Committee of the association met in the offices of the association on February 16, 1999, to hear allegations of professional misconduct and incompetence against a member (the member), and a holder of a Certificate of Authorization (the holder).

All parties were represented by legal counsel.

The hearing arose as a result of the holder's retainer of a professional engineer (hereinafter referred to as Engineer A) the principal of an engineering consulting company (hereinafter referred to as Company B) with respect to the conducting of a Ground Potential Rise (GPR) study at a site in Ontario (the project).

Engineer A carried out the GPR study and prepared a report dated April 22, 1997, which was copied verbatim and inserted into the holder's report dated April 25, 1997, which did not attribute the report to Engineer A or Company B.

On April 27, 1997, Engineer A prepared an addendum attaching a sketch showing a revised

grounding layout for the new substation and proposed duct bank ground. On May 9, 1997, the holder issued an addendum to its April 25, 1997, GPR report by letter attaching a sketch faxed by Engineer A to the member. The aforementioned May 9, 1997 letter from the holder repeated verbatim large portions of Engineer A's April 27, 1997 fax report to the member and included Company B's sketch with minor revisions. The letter made no reference and gave no credit to Engineer A or Company B with respect to the content.

The alleged facts and allegations of professional misconduct and incompetence set out in Appendix A to the Notice of Hearing and filed as an Exhibit are summarized as follows:

- 1. At all material times, both the member and the holder were properly licensed by PEO.
- 2. On or about April 1, 1997, the member in his capacity as a project manager employed by the holder spoke by telephone with Engineer A, the principal of Company B with respect to the conducting of a GPR study

- with respect to the project.
- 3. On or about April 4, 1997, Engineer A faxed to the member a Quotation for the GPR study, which included determination of the electrical environment that telephone company cables would be exposed to at the project site, determination of telephone cable protection requirements, providing protection recommendations to ensure proper operation of critical tripping circuits to the power utility, and addressing personnel safety aspects in terms of cable grounding and other issues which became apparent.
- 4. On or about April 4, 1997, the member faxed to Engineer A a Purchase Order for "field test analysis and quick GPR estimate" and "GPR calculations and report preparation".
- 5. On or about April 18, 1997, the member sent a fax to Engineer A requesting a draft report because the member had committed to providing some form of a report promptly to an employee of the project owner.
- 6. Engineer A prepared the Company B GPR report (Company B's report), which was picked up by an employee of the holder on or about April 22, 1997.
- 7. The holder and the member revised Company B's report in a form substantially identical to that report, save that statements in the report to the effect that it had been prepared by Engineer A and Company B were replaced by statements to the effect that the report had been prepared by the member and the holder. The revised report made no reference and gave no preparation credit to Engineer A and Company B.
- 8. On or about April 25, 1997, the member and the holder caused the said revised report to be issued with respect to the project.
- 9. By fax dated April 25, 1997 from the member to Engineer B, the member acknowledged receipt of Engineer B's report and advised Engineer B that an approximate 300 foot loop of 3/0 bare copper was to be installed in the bottom of a duct bank outside the Ground Floor "G" Mechanical Room and attached a sketch illustrating the said loop. The member in that fax

- asked that Engineer B advise him with respect to how much the added loop would contribute to the GPR and whether there would be any gain by installing added ground rods to the loop.
- 10. A fax dated April 27, 1997 from Engineer A to the member attached a sketch showing a revised grounding layout for the new substation and the proposed duct bank ground, and advised as follows:
 - a) the resistance of the 27.6 kV sub, the new grid and the duct bank was calculated to be 0.3719 Ohm, assuming the same soil resistivity model;
 - b) the 27.6 kV electrode was modelled at a depth of 1.8 m;
 - c) all other new conductors were at a 1.5 m depth;
 - d)the five new ground rods were assumed to be 20' rods;
 - e) with the neutral connected, the ATP model gave a GPR value of 357 V;
 - f) with no neutral connection, the value of the GPR was 816 V;
 - g) it appeared that the arrangement would meet the 1,000 V target without the neutral;
 - h)it was assumed that the resistivity test data was valid over the area of the site electrodes; and
 - a few additional 10' or 20' rods along the duct ground would have a significant effect since they would be remote from most of the other electrodes, and would provide an additional design margin if added.
- 11. By letter dated May 9, 1997, the holder issued a letter addendum to its April 25, 1997 GPR report attaching the sketch faxed by Engineer A and advised that a 40.2 metre section of additional grounding electrode had been added in the concrete duct bank. The holder in that letter further stated that "the proposed ground grid now includes the extension of the electrode into the duct bank and as such a revised calculation has been performed to show the change in the GPR".
- 12. Included in the May 9, 1997 letter from the member was a verbatim repetition of large portions of Engineer

- As April 27, 1997 fax with respect to the revised grounding layout for the new substation and proposed duct bank ground. The letter made no reference and gave no credit to Engineer A and Company B with respect to the preparation of the letter.
- 13. It appears that the member and the holder:
 - a) copied the Company B April 22, 1997 GPR study report, making some changes in format and minor changes in text, and presented it to their client on April 25, 1997, as a GPR report prepared by them;
 - b) acted in a dishonest and unacceptable manner by claiming or inferring, to have performed work which was actually performed by Engineer A and Company B;
 - c) failed to demonstrate an understanding of their professional ethical responsibilities by not giving credit for the work performed by Engineer A and Company B; and
 - d) failed to seal and sign the April 25, 1997 final GPR report, contrary to Section 53 of Regulation 941.
- 14. It was alleged that the member was guilty of incompetence as defined in Section 28(3)(a) and that the member and the holder were guilty of professional misconduct as defined in Section 28(2)(b) of the Professional Engineers Act, R.S.O. 1990, Chapter p.28.
- 15. "Incompetence" is defined in **Section 28(3)(a)** as:
 - "The member or holder has displayed in his or her professional responsibilities a lack of knowledge, skill or judgment or disregard for the welfare of the public of a nature or to an extent that demonstrates the member or holder is unfit to carry out the responsibilities of a professional engineer".
- 16. The sections of Regulation 941 made under the said Act and relevant to this misconduct are:
 - **Section 72(2)(a):** negligence as defined at Section 72(1): In this section, "negligence" means an act or omission in the carrying out of the work of a practitioner that constitutes a failure to maintain the standards that a reasonable and prudent practitioner would maintain in the circumstances;

Section 72(2)(g): breach of the Act or regulation, other than an action that is solely a breach of the code of ethics;

Section 72(2)(h): undertaking work the practitioner is not competent to perform by virtue of the practitioner's training and experience;

Section 72(2)(j): conduct or an act relevant to the practice of professional engineering that, having regard to all the circumstances, would reasonably be regarded by the engineering profession as disgraceful, dishonourable or unprofessional;

Section 53: every holder of a licence who provides to the public a service that is within the practice of professional engineering shall sign, date and affix the holder's seal to every final drawing, specification, plan, report or other document prepared or checked by the holder as part of the service before it is issued.

The aforementioned documents were entered as exhibits at the hearing.

In giving evidence at the hearing, Engineer A confirmed that he carried out a GPR study and prepared both the original Company B report and subsequent revisions. He confirmed that he was working under contract with a hydro electric utility and that the utility employee had brought the member's report to his attention whilst he was employed with the hydro electric utility. He confirmed that the member's report set out verbatim, the report prepared by Engineer A. The enclosures, which were attached to the engineer's report, were copied into the holder's paper. Engineer A further testified that the hydro electric utility was aware that the report was based on the work which he (Engineer A) had carried out, and that the utility was not deceived. In addition, whilst he was aware that everyone whom he envisioned receiving the report knew that he had prepared it, his reason for complaining to PEO was that there was no attribution in the report to the work carried out by him.

The member's secretary of eight years gave evidence with respect to the subject reports indicating that she had never been asked by the member to plagiarize any report, noting that it was the member's practice not to plagiarize work but to place anything attributed to any other person in quotations. She confirmed that she

typed the GPR study and report on the holder's letterhead, which study was prepared by the member. She was later asked by a technologist employee (the employee) of the holder, to retype Company B's report word for word, changing the opening sentence to indicate that the study was prepared by the holder. She testified that the employee signed the report because the member was out of the office. She indicated that the coversheet indicating that the report was prepared by the member was a template cover and his name appeared on it because he was the project manager.

Whilst she did not think that the report should be going out without some attribution, she did not talk to anyone at the holder's company, because everyone was very busy at the time. She also confirmed that she incorporated the revisions from Company B, copying the drawings, and believes that it was possible that she received the direction from the employee.

The member in giving evidence, testified that he was the project manager and spent the bulk of his time in March, April and May of 1997 at the project, away from his office.

In late March it was determined there was a need for a GPR study. He testified that he retained Engineer A after inquiring of the hydro electric utility supplier who would be able to carry out the study. Once retained, he testified that Engineer A would be carrying out the study and preparing a report. He testified that Engineer A attended a number of meetings. The member testified that he never has plagiarized a report and that he had not knowingly plagiarized the holder's report.

He testified that Engineer A prepared the report dated April 22, 1997 and provided it together with a disk. He testified that when they received the report, he saw it and asked either the employee or his secretary to have the report reformatted with paragraph numbers.

He said there was a policy of attribution and that the paragraphs of Engineer A's report should have been included in the holder's report in quotations with attribution to Engineer A and Company B.

He testified that he did not see the report in its final form and first found out that it had been sent without attribution when he received the complaint from PEO.

He testified that the employee did not inform him that he was attaching a cover indicating that the report was prepared by him and when he instructed the employee, he had not considered it necessary to tell him not to plagiarize.

He stated that when the holder's report was completed, signed and sent, he was probably away from the office, on site.

He testified that if Engineer A had called him, he would have recalled the report and re-submitted it.

He testified that he did not receive Company B's revision dated April 27, 1997, or the holder's addendum dated May 9, 1997.

On cross-examination, the member admitted that the holder's report and the addendum were not acceptable. He stated that on the face of those reports, they represented expertise on the part of the holder, which they did not have. He agreed that there was no limitation on distribution and nothing in the reports indicating that they were preliminary. He agreed that a preliminary report should state that it is preliminary.

While he knew that the report prepared by Company B was being reformatted and sent out, he did not expect the report to go out in the format that it did

He further stated that there was no intention to claim credit for the report and there was no intention in the firm to claim that the report was its work product.

On further cross-examination, he stated that all of the major players involved in the project knew that Company B was involved in the study and prepared the reports.

The employee of the holder testified on behalf of the holder. The Committee did not find his testimony to be at all credible, finding him to be evasive and noting that there were a number of inconsistencies in his evidence. The Committee found Engineer A and the secretary to the member to be credible witnesses. They found the evidence given by the member to be generally credible.

After careful consideration of the evidence, the Committee concluded that the member was aware that Company B's report was being reformatted and was aware that attribution was necessary. He failed to ensure that attribution was given,

having directed his staff under his supervision to reformat the report.

The Committee found that there was a lack of communication between the member, his employee and his secretary.

With respect to the holder, the Committee concluded that there were no policies, protocols or procedures in place for the supervision of non-engineers when the supervising engineer was out of the office, and that the holder's report purported to be a GPR study prepared by the holder.

While the Committee believed that the member intended the report to go out with attribution to Company B, he failed to ensure that this was done.

With respect to the member, the Committee found him not guilty of incompetence as defined in Section 28(3)(a) of the Professional Engineers Act, R.S.O. 1990, Chapter P.28.

The Committee found the member guilty of negligence as defined in Section 72(2)(a) of Regulation 941.

The Committee found the holder not guilty of a breach of Section 72(2)(g); 72(2)(h); and 72(2)(j).

With respect to the holder, the Committee found it not guilty of incompe-

tence as defined in Section 28(3)(a) of the Professional Engineers Act, R.S.O. 1990, Chapter P.28.

The Committee found the holder guilty of negligence as defined in Section 72(2)(a) of Regulation 941.

The Committee found the holder not guilty of a breach of Section 72(2)(g); 72(2)(h); and 72(2)(j).

After hearing submissions from legal counsel with respect to penalty, the Committee ordered that the member be reprimanded and that the Decision and Reasons of the Committee with respect to the member be published in summary without names.

The Committee ordered that the holder be reprimanded and that the Decision and Reasons of the Committee be published with names. However, the Committee was prepared to accept an undertaking on behalf of the holder to submit written explanation of protocols and procedures implemented by the company to avoid recurrence of this misconduct and that if submission be made to the satisfaction of the Registrar within 60 days, then the order for publication with names is revoked and the Decision and Reasons of the Committee with respect to the holder is to be published in summary without names.

Dated at London this 31st day of May, 1999.

William A. Rutherford, P.Eng. (Chair) (for and on behalf of the Committee)

Kam Elguindi, P.Eng.

Roydon Fraser, P.Eng.

Daniela Iliescu, P.Eng.

Gregory P. Wowchuck, P.Eng.

Note from Manager, Legal Affairs

After being served with the Committee's Decision and Reasons, the holder appealed the Decision to the Ontario Court of Justice (Divisional Court). The appeal and subsequent leave to appeal to the Ontario Court of Appeal were dismissed. Costs were awarded to the association in the amount of \$3,500.

The holder subsequently provided an acceptable Protocols and Procedures document to PEO, with the result that the Decision is published without names.

The reprimands against the member and the holder have been carried out.

Professional Practice Committee withdraws several PEO Guidelines

The Professional Practice Committee agreed during its September 19, 2000 meeting that the guideline *Arenas: Structural Adequacy* had served its purpose and should be withdrawn. Council and the Ontario Ministry of Labour have been informed of this decision and neither objected. The guide was introduced in 1981 to assist professional engineers performing investigations of older arenas that might have been structurally inadequate due to non-compliance with code or deterioration of structural members. Few arenas still require inspections and this practice is limited to a few practitioners.

The Professional Practice Committee (PPC) agreed during its January 16, 2001 meeting that the guideline for *The Use of Document 6C (Standard Form of Agreement Between Architect and Consultant)* should be withdrawn. The guideline is no longer relevant, since the Royal Architectural Institute of Canada (RAIC) has discontinued Document 6C and replaced it with Document 9. The PPC has decided that a guideline for use of Document 9 is not necessary. In August 2000 the Professional Practice Committee issued a revised guideline for *Use of Agreements Between Clients and Engineers for Professional Engineering Services* that covers the same subject as the withdrawn document

Comment sought on Guideline under revision

The Professional Practice Committee is preparing a document to replace the *Guideline for Professional Engineers Providing Reports as Required by Regulation 450/97 Amending Sections 7 & 8 of Regulations for Industrial Establishments, Regulation 851 of the Ontario Occupational Health and Safety Act.* A new guideline is required because the previous Regulation has been amended by Regulation 528/00, which substantially changed the role of engineers performing pre-start health and safety reviews. A subcommittee recently began developing the new guideline, which is expected to be available in several months. To be added to the mailing list to receive the draft Guideline for comment, contact Bernard Ennis, P.Eng., Manager Professional Practice, at 416-224-9528, ext. 499, or 800-339-3716 or via email: bennis@peo.on.ca.