

AN ENGINEER'S OBLIGATIONS WHEN PERFORMING ENGINEERING WORK OUTSIDE REGULAR EMPLOYMENT

By José Vera, P.Eng., MEPP

Performing engineering services outside of regular employment is a complicated issue for employee-engineers. There are a number of possible issues that could impact the professional obligations of employee-engineers if they were to perform engineering work outside of regular employment.

Consider this example: Andrew, an engineer, has worked his entire professional career for the biomedical engineering department of a well-known hospital in Ottawa, Ontario. As a side interest, he owns a commercial building in nearby Kanata. For some time now, Andrew has been considering selling the building to fund his early retirement plans. Andrew's realtor believes this is a good time to sell but recommends investing in renewable energy to cut the building's energy costs, thereby making the building more appealing to buyers. With this goal in mind, Andrew hires Contractor ABC to install a solar collector array on the roof of his commercial building. Contractor ABC then engages Structural Engineering Firm XYZ to perform the structural design of the installation. Contractor ABC obtains a building permit for this solar collector project.

Once the installation is completed, Andrew offers to sell the building to Jane, whose software company is a long-time tenant in the building. Jane is interested in buying the building. However, Andrew's realtor informs him that the building permit remains outstanding and this issue needs to be addressed before selling. Andrew contacts the municipality for more information and a building inspector advises him that the municipality requires a project completion notice from a professional engineer confirming that general review has been carried out in accordance with the *Professional Engineers Act*.

Andrew contacts Michelle, the owner of Contractor ABC, and asks if Structural Engineering Firm XYZ provided general review of construction services. Michelle explains that Structural Engineering Firm XYZ was only engaged to do design and that no one performed a general review. She says: "Andrew, aren't you an engineer? Why don't you prepare the project completion notice? After all, it will be cheaper for all of us." What should Andrew's answer to Michelle be?

COMPETING INTERESTS AND INDEPENDENT REVIEW

Engineers have an obligation to provide independent opinions and to disclose or avoid conflicts of interest. This obligation is spelled out in Regulation 941, specifically section 77 which states:

3. A practitioner shall act in professional engineering matters for the practitioner's employer as a faithful agent or trustee and shall regard as confidential information obtained by the practitioner as to the business affairs, technical methods or processes of an employer and avoid or disclose a conflict of interest that might influence the practitioner's actions or judgment.

Engineers shall avoid or disclose a conflict of interest that might influence their actions or judgment. Andrew, as the owner of a building, has an interest in the outcome of a general review. Furthermore, the building inspector may raise doubt that Andrew can perform a reasonably independent review. Consequently, Andrew may choose to avoid the situation altogether by recommending another engineer perform the general review, or he may decide to disclose his interest as owner of the building to the appropriate parties, such as the contractor, the municipality and prospective buyers.

Engineers also have an obligation to only undertake work they are competent to perform. This obligation is spelled out in Regulation 941, specifically section 72 which states:

- (2) For the purposes of the act and this regulation, "professional misconduct" means, ...
 - (h) undertaking work the practitioner is not competent to perform by virtue of the practitioner's training and experience...

Based on the above, Andrew, as an engineer who has worked in biomedical engineering projects his entire career and has never worked on structural engineering projects in buildings, could be reasonably perceived as being unable to undertake projects for general review of construction. Consequently, Andrew may have a duty to inform Michelle how he obtained the competency required to undertake this work or decline altogether.

CONSIDERING COMPETENCY

For the sake of argument, what if Andrew had worked for a structural engineering department of a public housing agency and had performed general review of construction for similar buildings in the past? What should Andrew's answer to Michelle be then? In other words, if Andrew was competent to undertake general review, could he simply say yes? Or does Andrew need to obtain a certificate of authorization (C of A) from PEO to do this work?

A C of A is required to offer professional engineering services to the public. The public is anyone other than the practitioner or the practitioner's employer. In the above example, Andrew, as the owner of the building, would be providing professional engineering services to himself not to the public. Therefore, Andrew would not require a C of A for this project. In contrast, Structural Engineering Firm XYZ, by providing structural engineering design services to Contractor ABC, is providing services to the public and therefore does require a C of A. However, is the fact

that Andrew does not require a C of A a determining factor in his decision to undertake this work or not?

AN ENGINEER'S OBLIGATIONS

Based on the above example, performing engineering services outside of regular employment is a complicated issue for employee-engineers. We've addressed the issue of competing interest and independent review, the issue of competency, and whether a C of A may or may not be required. However, are these the only considerations? When complicated issues arise, it is important that we, as professionals, ask the right questions. Otherwise, we may miss key facts that should have been considered during the decision-making process, and the decision made may be challenged.

One important question to ask is: What are Andrew's obligations to his engineering employer, if he is considering practising engineering outside of regular employment?

PEO's Code of Ethics contains requirements for employee-engineers considering performing professional engineering work outside of regular employment:

77(5) A practitioner who is an employee-engineer and is contracting in the practitioner's own name to perform professional engineering work for other than the practitioner's employer, must provide the practitioner's client with a written statement of the nature of the practitioner's status as an employee and the attendant limitations on the practitioner's services to the client, must satisfy the practitioner that the work will not conflict with the practitioner's duty to the practitioner's employer, and must inform the practitioner's employer of the work.

From the above, it follows that Andrew needs to inform his employer of the work he intends to perform, even if the work is for his own building, since it is "professional engineering work for other than the practitioner's employer." Furthermore, Andrew must ensure the work will not conflict with his duty to his employer. Finally, while contractual disputes are outside of the *Professional Engineers Act*, it is worth noting as an employee Andrew should familiarize himself with his employer's policies or contractual restrictions regarding working outside of regular employment, which may have an impact on their contract. The purpose is to manage conflicts if these arise by using disclosure.

Another issue to consider is if an engineer does not require a C of A, is there no requirement for professional liability insurance either? C of A holders are required to carry professional liability insurance as laid out in the regulations under the *Professional Engineers Act*. However, as previously noted, Andrew does not require a C of A for performing engineering work in his own building; therefore, it follows that Andrew is not required to carry professional liability insurance either. Yet again, are we asking ourselves the right questions? Rather than asking if carrying professional liability insurance is a requirement, Andrew should be asking himself: Is carrying professional liability insurance a good idea in this case?

AVOIDING POTENTIAL RISKS

A key fact is that Andrew wants to sell his building to Jane and use the profits for early retirement. By performing general review of construction in his own building, Andrew assumes both professional responsibility and liability for his work. If something were to go wrong with his work, like all engineers, Andrew, being accountable for his work, could face a complaint or civil liability. However, unlike engineers working for their employer, Andrew could also face a personal lawsuit, since he is not doing work under a corporation, which could protect him from personal liability. By contrast, if Contractor ABC engaged Structural Engineering Firm XYZ to perform general review of construction, it would be Structural Engineering Firm XYZ who assumes professional responsibility and liability. Engaging Structural Engineering Firm XYZ might be a costlier solution initially, but it might be a less risky one in the end.

Due to these potential risks, if Andrew decides to undertake the work he may consider obtaining professional liability insurance for this project as well as legal advice to minimize these risks. What if no insurance company is willing to provide professional liability coverage to Andrew for this project? Yet again, are we asking the right questions? As someone who is considering early retirement, should Andrew be considering assuming these potential risks at this point in his career? Or is it simply better to engage Structural Engineering Firm XYZ and accept that the costlier option might be the less risky one in this case?

Employee-engineers need to understand their professional obligations if they choose to perform engineering work outside of their regular engineering employment. In this article, we covered requirements involving independence, disclosure, competency, as well as C of A requirements, and requirements to inform the employer. However, a potentially overriding factor to consider is legal risks and civil liability employee-engineers may assume when working outside of regular employment.

PEO's practice advisory team is available by email at practice-standards@peo.on.ca and is happy to assist employee-engineers looking for more information on their duties when working outside regular employment. However, engineers looking for assistance on resolving legal problems occurring in specific, concrete situations should always contact their lawyer. [e](#)

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