

**IN THE MATTER OF THE PROFESSIONAL GOVERNANCE ACT, S.B.C. 2018,
CHAPTER 47**

and

**IN THE MATTER OF PETER GORDON KOVACIK, P.ENG, ENGINEERS
AND GEOSCIENTISTS BC FILE NO. T18-024**

REASONS FOR DECISION

Corrected Reasons for Decision: The text of the Panel's Reasons for Decision dated June 12, 2024, was corrected at paragraphs 5 and 286.c. where changes were made on November 7, 2024.

Date and Place of Hearing:

April 4 to 8, 2022

July 18 to 22, 2022

April 4, 2023

Written Submissions concluding September 12, 2023

By Videoconference

Discipline Committee Panel (the "Panel")

Frank Denton P. Eng., Chair

Pierre Gallant, Lay Committee Member

Counsel for Engineers and Geoscientists BC:

Lindsay Waddell

Counsel for the Respondent:

Jagmeet Virk

Independent Legal Counsel for the Panel:

Fritz Gaerdes

A. INTRODUCTION

1. This panel of the Discipline Committee (the "Panel") of the Association of Professional Engineers and Geoscientists of the Province of British Columbia doing business as Engineers and Geoscientists BC was convened to conduct a hearing concerning Peter Gordon Kovacik, P.Eng. (the "Respondent") pursuant to section 75 of the *Professional Governance Act*, S.B.C. 2018 Chapter 47 (the "PGA").
2. The citation dated May 27, 2021 (the "Citation") describes the particulars of the allegations against the Respondent as follows:

AND TAKE NOTICE that the allegations against you are that:

1. You have demonstrated unprofessional conduct, incompetence, or negligence by:
 - a. Failing to comply with *Occupational Health and Safety Regulation*, B.C. Reg. 296/97 ss. 14.2 and 14.77 (the "Regulations"), when you did not ensure the welding on a set of Pecco S35/S212 crane anchor stools (the "Anchor Stools") at [REDACTED] (the "Project"), was carried out in accordance with CSA W59 and CSA 47.1 or equivalent standards as required by CSA 2248- 2004 pursuant to the *Regulations*;
 - b. Failing to comply with CSA W47.1 standards as required by CSA 2248-2004 pursuant to the *Regulations* when you failed to test the welding consumable used for the Project, as is required for material not certified by the Canadian Welding Bureau; and
 - c. Signing and sealing an inspection report dated August 8, 2017 recommending the Anchor Stools for service:
 - i. when the Anchor Stools were not serviceable;
 - ii. when the weld repairs had not been completed;
 - iii. without referencing a recognized standard or a documented equivalent; and

- iv. when you knew or ought to have known that the fabricator was not certified by CWB and you took no steps to mitigate this issue.
 2. The conduct set out above at paragraphs 1(a) - (c) was contrary to section 14(b) of the Engineers and Geoscientists BC Bylaws, as it stood at the time, which required that members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:
 - (2) regular, documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.
 3. The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 1 of the Engineers and Geoscientists BC Code of Ethics, as it stood at the time, which required that members and licensees hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace.
 4. The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 3 of the Engineers and Geoscientists BC Code of Ethics, as it stood at the time, which required that members and licensees provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction.
 5. The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 6 of the Engineers and Geoscientists BC Code of Ethics, as it stood at the time, which required that members and licensees keep themselves informed in order to maintain their competence, strive to advance the body of knowledge within which they practice and provide opportunities for the professional development of their associates.
3. For the reasons that follow, the Panel finds that Engineers and Geoscientists BC has proven the allegations set out in paragraphs 1(c)(i), 1(c) (ii), 3 and 4 of the Citation to the requisite standard.

4. The Panel determines that with respect to the proven allegations contained in paragraphs 1(c)(i), 1(c) (ii), 3 and 4 of the Citation the appropriate finding is that the Respondent committed unprofessional conduct.
5. The Panel also finds that the allegations set out in paragraphs 1(a),1(b), 1(c)(iii), 1(c)(iv), 2 and 5 of the Citation have not been proven on a balance of probabilities and are dismissed.

B. LEGAL FRAMEWORK

Quorum of the Panel

6. The Panel convened to conduct the discipline hearing was constituted pursuant to s. 77(1) of the PGA. At the time the Panel was convened it consisted of the Chair, Frank Denton P. Eng., and Panel Members Thomas Morrison P. Eng. and Pierre Gallant.
7. The discipline hearing was originally scheduled for December 6 to 10, 2021. At a pre-hearing conference on October 18, 2021, the Panel granted the Respondent's request to adjourn the hearing to accommodate his counsel's availability. The hearing was adjourned to April 4 to 8, 2022.
8. All three Panel Members heard evidence over those five days in April 2022, continuing for a further five days in July 2022 and one day in April 2023.
9. All three Panel Members received submissions and decided several interim matters, including the admissibility of a late filed expert report, production of file materials of the Respondent's experts, and leave to adduce reply evidence. Written closing submissions were delivered to all three Panel Members from May to September 2023.

10. In April 2024 Panel Member Thomas Morrison P. Eng. became unable to continue with the discipline hearing. On April 17, 2024, independent legal counsel for the Panel informed counsel for the parties that the Panel Chair sought submissions from them on whether the two remaining Panel Members had jurisdiction to proceed with the discipline hearing and to make determinations with respect to the allegations against the Respondent set out in the Citation.
11. Both parties provided written submissions. They agree that the Panel Chair Frank Denton P. Eng. and Pierre Gallant, the Lay Committee Member, constitute a quorum that continues to have jurisdiction to make determinations with respect to the allegations set out in the Citation.
12. The Panel agrees.
13. The *PGA* and Engineers and Geoscientists BC's Bylaws set out the Panel's authority and the requirements for its composition.
14. Section 77(1) of the *PGA* provides that a discipline committee of a regulatory body may establish panels to conduct discipline hearings. Section 77(2) provides that such a panel must include at least one lay member, and that the panel may exercise any power or authority a discipline committee may exercise under the *PGA*.
15. Section 77(3) empowers Engineers and Geoscientists BC's Board to make bylaws for the appointment and composition of panels. Section 1 of the Bylaws, and section 1.1 of Schedule B to the Bylaws, define a "Discipline Hearing Panel" as "a panel of at least 3 members of the Discipline Committee, one of whom must be a Lay Committee Member...".
16. A quorum is the minimum number of members who must be present for a body to exercise its powers validly [CED 4th, *Administrative Law*, "Improper Constitution of the Delegate - Technical Requirements and Quorum" at §27 (March 2024)].

17. Neither the *PGA* nor the Bylaws contain any provision about the quorum of a discipline hearing panel, or whether the remaining members has jurisdiction to proceed and make conduct determinations should one or more panel members become unable to continue to serve on the discipline panel during the course of the hearing, or any provision clarifying whether a discipline hearing panel must act unanimously or may act by majority.
18. In the absence of any provisions to the contrary, interpretation of the *PGA* and Bylaws is governed by the *Interpretation Act*, R.S.B.C. 1996, c. 238 (the "Interpretation Act"). Section 2(1) of the *Interpretation Act* provides that it applies to "every enactment" unless a contrary intention appears either in the enactment or in the *Interpretation Act*.
19. The Bylaws are an "enactment" within the meaning of the *Interpretation Act*. Section 1 of the *Interpretation Act* defines an "enactment" to include a regulation and a "regulation" to include a bylaw enacted in execution of a power conferred under an Act. Moreover, the status of bylaws as "regulations" was confirmed by the Supreme Court of Canada in *Canadian Pacific Ltd. v. Matsqui Indian Band*, [1995] 1 S.C.R. 3 at para. 51 (dealing with a substantively identical provision of the federal *Interpretation Act*, R.S.C. 1985, c. 1-21, and bylaws enacted under the *Indian Act*, R.S.C. 1985, C. 1-5).
20. Section 18 of the *Interpretation Act* provides:
 - Majority and quorum
 - 18 (1) If in an enactment an act or thing is required or authorized to be done by more than 2 persons, a majority of them may do it.
 - (2) If an enactment establishes a board, commission or other body consisting of 3 or more members, in this subsection called the "association", the following rules apply:

(a) if the number of members of the association provided for by the enactment is a fixed number, at least 1/2 of that number of members constitutes a quorum at a meeting of the association;

(b) if the number of members of the association provided for by the enactment is not a fixed number, at least 1/2 of the number of members in office constitutes a quorum at a meeting of the association, as long as the number of members is within the maximum or minimum number, if any, authorized by the enactment;

(c) an act or thing done by a majority of the members of the association present at a meeting, if the members present constitute a quorum, is deemed to have been done by the association;

(d) a vacancy in the membership of the association does not invalidate the constitution of the association or impair the right of the members in office to act, if the number of members in office is not less than a quorum.

21. The Panel agrees with Engineers and Geoscientists BC's submissions that applying the above-mentioned provisions of the *Interpretation Act* to the Panel, it is clear that:

- a. The Panel may exercise its powers by majority: section 18(1).
- b. Any decision made by the majority of the Panel, if quorum is met, is deemed to have been made by the Panel: section 18(c).
- c. Section 18(2)(b) applies rather than s. 18(2)(a) because the Bylaws do not fix the number of members of a disciplinary hearing panel, providing only that it must be "at least 3". Accordingly, two members of the Panel constitute a quorum of the Panel: section 18(2)(b).

- d. A vacancy in the membership of the Panel does not invalidate the constitution of the Panel or impair the right of the remaining Panel members to act, if the number of remaining Panel members is not less than two: section 18(d).
22. Such an approach is further consistent with the existing case law.
23. In this regard, similar provisions of Manitoba's *Interpretation Act*, C.C.S.M. c. 180 were applied by two panel members in the disciplinary process underlying *Jhanji v. The Law Society of Manitoba*, 2022 MBCA 78 ("*Jhanji*") after the third panel member was appointed to the Bench and therefore unable to continue (see: paras. 70-71). The two remaining panel members decided that they could continue to hear the matter and retained jurisdiction (see: para. 71). Notably, as in this case, the two remaining members included the lay member required to be included on the panel in question.
24. The Manitoba Court of Appeal confirmed that the panel was correct in holding that it had jurisdiction to continue: "when an unforeseen vacancy arises on an administrative tribunal, the 'remaining members of the body can continue to act for it, provided that their numbers are at all times sufficient to satisfy the requirements of the applicable *quorum*'" (see: para. 72), citing *Re Ballard and Arkin* (1973), 34 D.L.R. (3d) 758 (Man. CA) at pp. 760-761.
25. Moreover, in *Bhullar v. British Columbia Veterinary Medical Assn.*, 2012 BCCA 443 ("*Bhullar*"), the Court of Appeal found that a decision rendered by four of the seven original members of the body was validly rendered, applying provisions on the necessary quorum from the regulatory authority's bylaws (see: para 91). *Bhullar* further confirms that a quorum specified as sufficient "at a meeting" of a disciplinary

body is also sufficient for the purpose of rendering a decision of that disciplinary body (paras: 85-90).

26. Accordingly, considering the above provisions on the *Interpretation Act*, the Bylaws and relevant case law, the Panel finds that the remaining two Panel Members constitute a quorum that continues to have jurisdiction to make determinations with respect to the allegations set out in the Citation.

Burden and Standard of Proof

27. Further, the Parties agree and the Panel finds that Engineers and Geoscientists BC bears the burden of proving the allegations set out in the Citation on a balance of probabilities. In other words, Engineers and Geoscientists BC must establish that it is more likely than not that the allegations are true (*Kaminski v. Assn. of Professional Engineers and Geoscientists of British Columbia*, 2010 BCSC 468 at para 52, citing *F.H. v. McDougall*, 2008 SCC 53 [*“McDougall”*]). In *McDougall* the Supreme Court of Canada held that the “evidence must be sufficiently clear, convincing and cogent to satisfy the balance of probabilities test”.
28. Engineers and Geoscientists BC's role is to regulate the standards and practices of engineers and geoscientists in the province. The disciplinary process plays a central role in enforcing the professional standards for engineers practicing in British Columbia (*Salway v. Association of Professional Engineers and Geoscientists of British Columbia*, 2010 BCCA 94 at para. 31).
29. On February 5, 2021, the PGA came into force and replaced the *Engineers and Geoscientists Act*, RSBC 1996, c. 116 (the "EGA" or the "Act"), along with the previous Engineers and Geoscientists BC's Bylaws.

30. Despite the repeal of the *EGA*, both it and the Engineers and Geoscientists BC's Bylaws in effect at the time, continue to govern registrants' practice and conduct that took place before February 5, 2021.
31. The Citation was issued under the *PGA*. The Respondent's conduct that is at issue in the Citation occurred when the *EGA* was in force. In accordance with sections 35 and 36 of the *Interpretation Act* the substantive provisions of the *EGA* (and the Bylaws and Code of Ethics as they applied at that time) apply to this proceeding. However, with respect to matters of procedure governing this proceeding the *PGA* is the governing legislation.
32. Section 33(1) of the *EGA* authorizes the Panel to make determinations regarding a respondent's conduct:

33 (1) After an inquiry under section 32, the discipline committee may determine that the member, licensee or certificate holder [...]
(b) has contravened this Act or the bylaws or the code of ethics of the association, or
(c) has demonstrated ... negligence or unprofessional conduct.

Negligence

33. The discipline panel in *Re Foreman* adopted the following test from *Davidson v. British Columbia*, [1995] B.C.J. No. 1806, with respect to the meaning of negligence under s. 33(1)(c) of the *EGA*:

97 ... the standard of skill and care which a professional man is required to exercise may be defined as follows: that degree of skill and care which is ordinarily exercised by reasonably competent members of the profession, who have the same rank and profess the same specialization (if any) as the defendant. If the standard is formulated in this way, it is fair to both parties. The professional man will not be held liable in the absence of personal fault on his part. The client is adequately protected, because it is normally actionable negligence if a professional man undertakes work beyond his competence. [Emphasis added].

Unprofessional Conduct

34. There is no definition of “unprofessional conduct” in the EGA. However, in *Re Foreman* the discipline panel provided the following definition of “unprofessional conduct”:

[93] The Association's Code of Ethics Guidelines addresses the standard of professional conduct as follows:

The APEGBC Code of Ethics serves several purposes. It designates the standard of conduct expected of engineers and geoscientists in easily understandable terms. It distinguishes appropriate professional conduct from that which fails to meet a required standard. The Code also provides a basis on which allegations of unprofessional conduct are adjudicated by the Discipline Committee or other groups charged with responsibilities related to the conduct of members.

[94] Hence, unprofessional conduct is that which does not meet the standard expected through application of the Code of Ethics. The Panel accepts the submission of the Association, based on *Law Society of British Columbia v. Martin*, 2005 LSBC 16, that professional misconduct is established when there is a marked departure from the standard to be expected of a competent professional and that minor or inadvertent failure to comply with professional standards does not constitute unprofessional conduct.

[Underlining added]

35. The standard for unprofessional conduct articulated in *Re Foreman* has been consistently adopted and applied by the discipline panels of Engineers and Geoscientists BC, including recently in *Re Syed* (May 9, 2020) at para. 50.
36. In *Salway*, the Court of Appeal clarified that older cases requiring proof of conduct that is “dishonourable, disgraceful, blatant or cavalier” no longer govern allegations

of unprofessional conduct. Rather, it is for the Panel to decide on the appropriate standards of professionalism for members of the profession:

[32] The reasonableness standard of review acknowledges that there is “a range of possible, acceptable outcomes which are defensible in respect of the facts and law”. Reasonableness requires courts to give deference to a professional body’s interpretation of its own professional standards so long as it is justified, transparent and intelligible. The pre-Dunsmuir decisions relied on by the respondent, including Reddoch, no longer set the standard for professional misconduct as conduct that is dishonourable, disgraceful, blatant or cavalier. Rather, it is the disciplinary body of the professional organization that sets the professional standards for that organization. So long as its decision is within the range of reasonable outcomes—i.e., it is justified, transparent and intelligible—it is not for courts to substitute their view of whether a member’s conduct amounts to professional misconduct.

37. The Panel recognizes that in assessing whether conduct is unprofessional, it must use its own judgment and expertise, should be guided by the content of the *Code of Ethics*, and should focus on what should be expected of a professional person in the circumstances. Engineering standards should be considered but those standards are not determinative. The Panel also recognizes that part of the assessment is whether there has been a marked departure from the standard to be expected of a competent professional. A minor or inadvertent failure to comply with professional standards does not constitute unprofessional conduct. The Panel considers that standards of professionalism are not required to be written down. Consistent with the approach in *Salway*, it is open to the Panel to draw upon its own professional experience and common sense in assessing whether a member has acted unprofessionally.

Engineers and Geoscientists BC's *Bylaws* and *Code of Ethics*

38. Section 14(b) of Engineers and Geoscientists BC's *Bylaws* in effect at the relevant time provided, among other things, that:

(b) Members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:

- (1) retention of complete project documentation which may include, but is not limited to; correspondence, investigations, surveys, ... reports, data, background information, assessments, designs, specifications, field reviews, testing information, quality assurance documentation, and other engineering and geoscience documents for a minimum period of 10 years; and
- (2) regular, documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.

39. Further, Engineers and Geoscientists BC's *Code of Ethics* in effect at the relevant time provided, among other things, that:

Members and licensees shall act at all times with fairness, courtesy and good faith to their associates, employers, employees and clients, and with fidelity to the public needs. They shall uphold the values of truth, honesty and trustworthiness and safeguard human life and welfare and the environment. In keeping with these basic tenets, members and licensees shall:

- 1) Hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace;
- 3) Provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction.
- 6) Keep themselves informed in order to maintain their competence, strive to advance the body of knowledge within which they practice and provide opportunities for the professional development of their associates;

40. The provisions in the Bylaws and the *Code of Ethics* should be given their ordinary meaning, and the Panel must bring its own experience in assessing whether the Respondent has violated any of the Bylaws or ethical principles.

Multiple Determinations Available

41. The ultimate issue before the Panel is whether, on the evidence presented, the Respondent demonstrated negligence or unprofessional conduct, and/or breached the Engineers and Geoscientists BC's *Code of Ethics* in force at the time by engaging in the conduct alleged in the Citation.
42. Where the same conduct could result in multiple determinations, it is preferable to make a singular determination about each allegation and not characterize the conduct as meeting two or more types of conduct as described in section 33 of the EGA.

C. EVIDENCE

Witnesses called by Engineers and Geoscientists BC:

43. Engineers and Geoscientists BC called several witnesses.
44. Mr. Jeremy Miller provided the following evidence:
 - a. He is an investigator who assisted the Investigation Committee during the investigation into the conduct of the Respondent.
 - b. He is not aware of any correspondence that shows how Dr. Smith came to be retained as an expert for Engineers and Geoscientists BC.
 - c. Engineers and Geoscientists BC, through their investigator, Jesse Romano, provided the names of the complainant, Ryan Stewart, and the Respondent, to Dr. Smith.

45. Mr. Jesse Romano provided the following evidence:
 - a. He was the investigation manager with Engineers and Geoscientists BC in 2017.
 - b. Engineers and Geoscientists BC's investigative committee tries to avoid conflicts of interest when retaining an expert, and enquires into:
 - i. Ongoing business relationships between the expert and the individuals involved;
 - ii. Long standing personal relationship between individuals involved;
 - iii. Any potential profit or benefit for the expert as a result of the potential outcome of the investigation.
46. Engineers and Geoscientists BC also called Mr. Ryan Stewart. They did not ask the Panel to qualify Mr. Stewart as an expert. He tendered his evidence as a lay witness regarding his own conduct. His evidence and the documents tendered into evidence included the following:
 - a. Mr. Stewart is a professional engineer and owner of Arsenal Engineering. On or about August 2, 2017, he was approached by Darrell Fornwald of PC Cranes Services to inspect two sets of newly manufactured anchor stools for one of PC's tower cranes, including the Anchor Stools that are the subject of the Citation. The Anchor Stools were to be inspected at NS Machining in Surrey, British Columbia, the site of their manufacture.
 - b. The design drawing for the Anchor Stools, prepared by Ted Newell and Associates is identified as design drawing A5543 (the "TNAI Design") and specifies the dimensions, weld sizes and other details to be followed in the construction of the Anchor Stools. Among other things, the TNAI Design set

out the following requirements:

Welds to be magnetic particle tested following installation of root pass and following weld completion to verify compliance with CSA W59 dynamic criteria.

All installations using foundation anchors detailed must have site-specific installation drawings sealed by Ted Newell and Associates Inc.

Material to meet or exceed requirements of G40.20M 300W

Welding electrodes to be E7018 or pre-approved wire.

Welding will be done by certified welder accredited by the Canadian Welding Bureau.

All welds to be inspected for size, profile & defects to verify compliance with CSA W59-1989 Inspection Requirements.

Ted Newell and Associates Inc. must be notified of any changes to or deviations from this drawing.

- c. Mr. Stewart's handwritten inspection report completed on site on August 2, 2017, indicates that he inspected the Anchor Stools based on the TNAI Design which Mr. Stewart indicated was provided to him at or before the time of his inspection.
- d. In conducting his inspection of the Anchor Stools at NS Machining on August 2, Mr. Stewart noted that, upon his arrival, the Anchor Stools were already largely complete and that he therefore could not inspect the root pass per the TNAI Design's specifications.
- e. Mr. Stewart's handwritten inspection report indicates that he found a number of undersized welds, weaved welds and gouges on the Anchor Stools and details repairs required before certification. These included:

- i. All undersized welds to be built up with stringer beads to the weld sizes specified in the TNAI drawing;
 - ii. The 8 weaved welds are to be removed by grinding or gauging and re-welded;
 - iii. All gauged areas to be ground to a smooth contour, unless notes to be weld filled first before grinding to a smooth contour;
 - iv. All welding to be performed with E7018-1 electrodes or equivalent;
 - v. All welding to be performed in accordance with CSA W59-2013 "Welded Steel Construction"; and
 - vi. All certifications and welded certifications to be provided to Arsenault Engineering prior to certification.
- f. After his inspection, he requested certain repairs to the S35 Anchor Stools in order for them to be certified. He requested welder qualifications, shop certification and documentation respecting the materials used and testified that he was told by an individual whom he believed to be the owner that they would obtain the requested documentation.
- g. By the time of his departure none of the documentation had been produced.
- h. Mr. Stewart also testified that, upon hearing of his required repairs, the welders present simply "threw the stools up" and started welding on them without any pre- heat or other preparation. This, coupled with the absence of standard documentation caused him to be concerned about the skill and knowledge of those performing the work.
- i. That evening, Mr. Stewart checked NS Machining's certification status online

and found that it was not a CWB certified fabrication shop. This lack of shop certification, he noted, would have the effect of invalidating any CWB tickets for welders performing the work on site.

- j. After making this discovery, Mr. Stewart finalized his inspection report for the Anchor Stools.
- k. He declined to certify the Anchor Stools. He testified that it was because:
 - i. They (the owner) lied to me and told me they were CWB certified.
 - ii. "They were not able to do this work".
 - iii. They couldn't provide information at the time of inspection.
 - iv. They were not CWB Certified.
- l. Mr. Stewart's final inspection report notes the same defects recorded in his handwritten report and confirms that fabrication was to be in accordance with the TNAI Design. It further documents that he conducted both visual and magnetic particle inspections of the Anchor Stools and notes:

Following the inspection, it was determined that neither NS Machining, nor their welding personnel, were CWB certified. In addition, mill certifications for all materials used could not be provided. Based on these non-conformances, the above inspected anchor shoes cannot be certified and are to be removed from service.

- m. The final inspection report further notes that Mr. Stewart's inspection of the Anchor Stools was performed in accordance with CSA Z248-2004 *Code for Tower Cranes* (the "Code").
- n. During his inspection on August 2, 2017, Mr. Stewart took several photographs of the Anchor Stools. Some, but not all, of the photographs are

reproduced in his final report.

- o. Although the final report is dated August 2, Mr. Stewart says he authored that report on August 2, 2017, or the next day (August 3, 2017).
- p. At some point after Mr. Stewart declined to certify the Anchor Stools for service, the owner of the Anchor Stools approached Kova to inspect them.
- q. Ryan Tinkley of Kova attended NS Machining on August 8, 2017 to inspect the Anchor Stools on behalf of Kova. A purchase order filled out by Mr. Tinkley suggests that his initial inspection took place on August 8, 2017 and that he performed a repair check on the Anchor Stools on August 10, 2017. A technical report dated August 8, 2017, and bearing Mr. Tinkley's name provides:

A visual examination of magnetic particle inspection was performed on the above described, newly fabricated anchor stools. Fabrication was performed by NS Machining personnel (Jagjit S. Brhing) in accordance with drawings provided by TNAI Engineering. All welding was performed using YHE71T Flux Cored Wire. Our findings reveal multiple undersized welds.

- r. The second page of the same report indicates that:

Repairs: were performed by NS Machining personnel. All undersized welds were built up using YHE71T Flux Cord Wire. Re-inspection of repairs reveals satisfactory workmanship with no further effects (sic) noted.

- s. Another technical report bearing Mr. Tinkley's name, this one dated August 10, 2017, provides:

Repairs were performed by NS Machining personnel. All noted lap, undercut and undersized welds were prepared by grinding and re- welding using YHE71T Flux Cord Wire. Re-inspection of

repairs reveal satisfactory workmanship with no further effects noted.

- t. Both the August 8 and August 10 reports state that a formal report will follow.
- u. Later in August, 2017, (Mr. Stewart, relying on his later typed notes, believed it to be on August 22, 2017), while attending at the relevant crane yard to inspect another tower crane, Mr. Stewart observed a set of anchor stools that were set-up and appeared to be prepared for use and which looked to be the same S35 Anchor Stools that he had previously failed.
- v. Mr. Stewart noted that all the Stool components were assembled (including the bolts, base plates, nuts, etc.) and the Anchor Stools had been both painted and put into a "template." Mr. Stewart testified that he was "flabbergasted" to see the Anchor Stools apparently ready for use. Mr. Stewart testified that he took photos and went to get Mr. Fornwald, the owner of PC Cranes, who was on site. He asked the owner if these were the same Anchor Stools he had previously rejected, and he confirmed that they were. Mr. Stewart then proceeded to explain that he had failed them for a reason.
- w. Mr. Stewart testified that the owner of the Anchor Stools told him that Kova had inspected and certified the Anchor Stools after Mr. Stewart had failed them. Mr. Stewart showed the owner some of the defects he observed and left Mr. Fornwald to contact Kova to come back and have another look.
- x. The defects observed by Mr. Stewart, and reflected in his August 22 photographs, included a lack of weld fusion, roping and stringy welds (suggesting that they were put in "a little too cold" and might not have

adequate penetration), welds of inconsistent size with poor weld profile, and areas of excessive undercut.

- y. Mr. Stewart testified that, in addition to taking photographs, he performed some magnetic particle testing on the Anchor Stools on August 22, 2017, the results of which affirmed his concerns. Magnetic particle dust from Mr. Stewart's testing can be seen in some of his August 22 photographs.

In late August 2017, Mr. Stewart was again at the PC Cranes yard checking a different crane, and again saw the Anchor Stools on site. In respect of the exact date, Mr. Stewart testified "I think it was the end of August". His later typed notes indicate it to be August 31, 2017. He said he noted that some repairs appeared to have been performed and asked the owner of the Anchor Stools about them. He testified that Mr. Fornwald confirmed that that they were the same S35 Anchor Stools which had been previously rejected by Mr. Stewart.

- z. The owner indicated that Kova had come back out, looked at the Anchor Stools, performed some repairs and approved them again.
- aa. Mr. Stewart took another series of photographs and then called Kova manager, Paul Walchuk, whom he knew from his time working at Kova. Mr. Stewart testified that he advised Mr. Walchuk that he had previously failed the Anchor Stools and Mr. Walchuk indicated that he understood that to be the case. Mr. Stewart further testified that he asked Mr. Walchuk about some of the defects in the welding and that Mr. Walchuk agreed the welding was not particularly good but that the Respondent had approved it.

- bb. The defects Mr. Stewart continued to observe during his August 31, 2017 visit suggested, among other things, that repairs had been performed without fully grinding off the paint. In some places it appeared that repairs had been performed simply by putting an additional weld pass overtop of problematic areas. Mr. Stewart also observed areas where the original problematic weld appeared not to have been removed before repair. He also observed a lack of fusion and undercut in various places and continued to see spaghetti-like weld passes with a poor weld profile. In his opinion the Anchor Stool welding, as visible in the photographs was not acceptable to him.
- cc. Mr. Stewart stated that he took the Exhibit 1 Tab 5 photographs on August 22, 2017. He also relied on his later typed notes in recalling this date. He said he did not make his notes contemporaneously, but later on "in October, probably of 2017". Mr. Stewart also said he thinks he took the Exhibit 1 Tab 10 photographs at the end of August 2017. His typed notes indicate he was at the PC Cranes yard again on August 31, 2017 checking a different crane, when he again saw the Anchor Stools in the yard.
- dd. Mr. Stewart was very concerned about the Stool's apparent certification or approval in their state. As a result, he lodged a complaint with the Canadian Welding Bureau respecting Kova's inspection of the Anchor Stools and made inquiries with Engineers and Geoscientists BC about whether he was obliged to report his concerns. After Engineers and Geoscientists BC advised Mr. Stewart that he did have a duty to report, he filed the complaint

that led to Engineers and Geoscientists BC's investigation and ultimately the issuance of the Citation.

47. Mr. Stewart also testified that:

- a. He used to be employed by Kova Engineering from 2007 to 2014.
- b. On termination of his employment with Kova he took without permission files belonging to Kova which resulted in civil litigation.
- c. After his initial inspection of the Anchor Stools he considered them to have certain defects, but those defects could be repaired. Also, that he had three concerns regarding the Anchor Stools:
 - i. Mill certifications;
 - ii. Welder certification; and
 - iii. Fabricator or contractor certification.
- d. He further testified that Kova Engineering is the biggest player in the Lower Mainland for tower crane inspection, followed by Applus and Arsenal Engineering. If one competitor's reputation is damaged, other competitors would gain from such a damage.
- e. Also, Arsenal Engineering and Kova compete for the same clients and do similar overlapping work.
- f. He said he was not "really happy" about the Respondent or Kova in light of the result from civil litigation.
- g. He co-authored the annual equipment inspections guideline in 2020 with Dr. Mathew Smith.
- h. He met with Dr. Smith regularly while working on the guidelines and developed a friendship where they talked about work projects.

- i. He considers himself (Arsenal Engineering) in competition with Dr. Smith (Applus) since they compete for the same work.
48. Dr. Mathew Smith was called by Engineers and Geoscientists BC as an expert witness.
49. Dr. Smith holds Master and PhD degrees in physics from the University of British Columbia. Dr. Smith is a CWB certified Welding Engineering for steel CSA W59/W47.1; for aluminum W59.2/W47.2 and rebar W186 which certifications he received in 2017 and 2018. He became a registrant with Engineers and Geoscientists BC in 2016 with declared areas of practice in Welding, materials, materials handling, engineering physics. He is the engineer of record for the annual inspection and testing of hundreds of devices on an annual basis and supervises the work of several inspectors attending to lifting devices in British Columbia, He is the primary author of Engineers and Geoscientists BC's Guidelines on the annual inspection and certification of equipment in British Columbia and qualifies welders in welding procedures for the repair of lifting device components. Certifying welding companies is "the bread and butter of what Dr. Smith does".
50. The Panel qualified Dr. Smith as an expert in welding engineering and in the inspection of cranes.
51. Dr. Smith was provided with 16 documents and asked to prepare a report in response to several questions, on, among other things:
 - a. What regulations or standards apply to the welding or manufacturer of anchor stools;
 - b. The role of a professional engineer tasked with inspecting the manufacturer and welding performed on anchor stools;
 - c. Whether the Respondent's inspection and certification of the Anchor Stools met

those standards;

- d. Whether the Anchor Stools were safe for use when the Respondent first certified them on August 8, 2017;
- e. Whether the Anchor Stools met the applicable CSA standards on August 22, 2017 and were safe for use on that date;
- f. The risks that could have been posed by a failure to properly inspect and certify the Anchor Stools; and
- g. Whether the Respondent documented his inspection and certification of the Anchor Stools to the standard expected of a reasonably competent engineer.

52. In response to these questions, Dr. Smith identified the first applicable regulation to be section 14.2(6) of the *BC Occupational Health and Safety Regulation*. In Dr. Smith's view, section 14.2(6) of the *Regulation* in turn requires that a tower, hammerhead crane or self-erecting tower crane must meet the requirements of CSA Standard Z248-2004. Dr. Smith further opined that section 4.4 of CSA Z248- 2004 applied to the inspection of the newly fabricated Anchor Stools, requiring that "all welding shall be done in accordance with CSA W59 and CSA W47.1 or equivalent standards."
53. Dr. Smith described the role of a professional engineer inspecting the manufacturer of, and welding performed on, anchor stools to be ensuring that the stools met the requirements of the design engineer's specifications and meet the requirements of the applicable regulatory standards identified above.
54. In this case, Dr. Smith noted that the TNAI Design engineer required that: the materials used meet or exceed requirements of G40.21M 300W; that welding electrodes be E7018 or preapproved wire; that welding be done by a certified welder

accredited by the CWB; and that all welds be inspected for size, profile and defects to verify compliance with CSA W59-1989 inspection requirements.

55. On the question of what standards apply to the inspection, repair and certification of the Anchor Stools, Dr. Smith's opinion was that section 14.77(1) of the Regulation was also applicable. Section 14.77 demands that,

...before the erection of a tower crane, the structural components of the crane must be

- (a.) inspected to determine their integrity by a qualified person using non-destructive testing (NOT) methods meeting the requirements that the Canadian General Standards Board (CGSB), and
- (b.) certified by a professional engineer as safe for use after the inspection in paragraph (a) and any necessary repairs.

Given that the Anchor Stools in question here were newly constructed, Dr. Smith's opinion was that section 14.2(6) of the *Regulation* and the CSA Standards referentially incorporated therein (like CSA W59 and CSA W47.1) also applied.

56. On the question of whether the Respondent's inspection and certification met those standards, Dr. Smith's expert opinion was that the welding used in fabrication did not comply with, and was not equivalent to, CSA W47.1 and CSA W59. In his view, it therefore could not have been in compliance with CSA Z248 or section 14.2(6) of the *Regulation*.
57. In particular, Dr. Smith noted in his report that, at the time of welding, the fabricator of the Anchor Stools, NS Machining, was not a CWB certified company. As such, the only way for the Respondent to meet the requirements of section 14.2(6) of the

Regulation (and therefore CSA 2248-2004) would be to establish that the welding was performed pursuant to standards equivalent to CSA W59 and CSA W47.1. This, in Dr. Smith's opinion, would require that the Respondent confirm the presence of a qualified and competent welding supervisor, the use of qualified and competent welders, the use of mechanical testing to confirm the materials properties of non-CWB certified consumables used, the existence and use of welding procedures, and ensuring final quality of the weld through inspection and quality control.

58. Dr. Smith was of the view that the documentation indicated that the welding company did not have qualified or competent welding supervision; that at least one of the welder tickets had expired at the time of fabrication and that, in any event, neither CWB welder ticket was valid by virtue of the fact that NS Machining itself was not CWB certified. Although generally correct for the application, Dr. Smith observed that the consumables apparently used were not CWB certified at the time of the Anchor Stools' manufacture and that no testing had been performed to confirm its material properties as required by W47.1.
59. Moreover, Dr. Smith was of the view that there was no welding procedure in use at the time of the welding, making it impossible to establish an equivalency to the relevant standards after the fact. Finally, in Dr. Smith's view, the visual and magnetic particle inspections used by the Respondent would not have picked up internal weld defects, including cracking, lack of penetration and lack of fusion. In Dr. Smith's view, the only way to ensure the final weld quality would have been through strict adherence to a welding procedure.
60. Dr. Smith's conclusion was that, for all of these reasons, the Stools did not meet the requirements of the applicable CSA standards when the Respondent certified them, and they were not safe for use at that time. Although further inspections and repairs to the welds on the Anchor Stools had taken place by August 22, 2017, Dr. Smith

was of the view that deficiencies in the fabricator's welding program had not been addressed and, as such, the Stools did not meet the relevant or equivalent standards and were not safe for use as at that date.

61. Although actual failure of the Anchor Stools was not alleged, on the seriousness of the risks posed by a failure to adhere to the relevant standards respecting the manufacture and inspection of the Anchor Stools, Dr. Smith opined that a failure to adhere to these standards could have resulted in welding defects that would not readily be detected through the inspection methods used by the Respondent. In a worst-case scenario, Dr. Smith was of the view that "such defects could have ultimately led to the failure of the welds in the Anchor Stools, which in turn could have caused the tower crane to overturn or collapse." Dr. Smith considered the likelihood of such an occurrence to be remote, but the potential consequences to be catastrophic.
62. Lastly, on the question of the adequacy of the Respondent's documentation, Dr. Smith's report noted some discrepancy between reported dates of inspections and the certification itself. He described the inspection reports to be deficient in that they did not reference a recognized standard to which inspection was performed and made the same observation with respect to the Respondent's certification of the Anchor Stools.
63. Engineers and Geoscientists BC submits that Dr. Smith's testimony, and report, were unbiased and objective. He conceded reasonable points in cross-examination and demonstrated comprehensive knowledge of the relevant welding and certifications required, acknowledging limitations in his experience specifically relating to tower cranes (as opposed to welding of tower crane components). Engineers and Geoscientists BC submits that Dr. Smith's evidence and report on

the welding inspection and certification at issue should be given considerable weight.

64. After calling these four witnesses, Engineers and Geoscientists BC closed their case.

The Respondent's Witnesses

Mr. Gordon Kovacik, P. Eng

65. The Respondent testified in his defense. His evidence was the following:
- a. He received his bachelor's in metallurgical engineering in 1983 and is registered to practice as a professional engineer in British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Yukon, Northwest Territories and Nova Scotia.
 - b. He qualified as a professional engineer in 1987.
 - c. He has, or had in the past, the following tickets:
 - i. Level 3 Visual Inspector W178.2 inspector designation since 1990.
 - ii. Level 2 Magnetic particle inspection ticket.
 - iii. Ultrasonic inspection.
 - d. He worked as a welder's help after his graduation from Engineering school and eventually found a job as an engineer.
 - e. He has been working solely with cranes and lift equipment since he started his first engineering job.

- f. He was one of the co-founders of Kova who now has a nationwide presence with several offices across most provinces and territories.
- g. He has worked on tower cranes internationally including several states in United States, China, Africa, Sudan, Kyrgyzstan, and several other countries
- h. He has worked on designing several cranes of different types including tower cranes, spreader bars, lift equipment, crane foundations, cranes and crane components. He has designed fall protection plans, lift plans and procedures, scaffolding, reshoring, framework, structural inspection for articulating boom cranes, crawler cranes, rough terrain cranes, self-erecting cranes, overhead cranes, tip cranes, lift trucks, aerial lifts, concrete pumpers, diggers, derricks.
- i. He has also produced repair procedures for damage to all these types of cranes.
- j. He has worked on several failure analysis and accident analysis.
- k. He has designed several versions of tower crane anchor stools.
- l. He found out about the Anchor Stools from Mr. Ryan Tinkley, a Level 2 Visual inspector (W178.2 level 2 ticket), Level 2 Magnetic Particle inspector and Level 2 Ultrasonics inspector, employed with Kova.
- m. He has worked with Mr. Tinkley for the past 10 years.
- n. Mr. Tinkley called him regarding the Anchor Stools and they discussed the issues with the welding. The two of them concluded that the welding to the Anchor Stools could be repaired.
- o. Later, Mr. Tinkley would have investigated the welding company, welders, collected mill certificates and he and Mr. Tinkley would have discussed weld procedure for the repairs.

- p. He testified that he had previously dealt with NS Machining, the fabricator, a few times.
- q. The Respondent also testified that he received a call from Mr. Paul Walchuk, a senior inspector with Kova. This was about a week after the first phone call from Mr. Tinkley. He had a Facetime video call with Mr. Walchuk.
- r. After discussing and reviewing the welds, he and Mr. Walchuk agreed that the welds were structurally sound but cosmetic repairs to the welds to improve appearance would be desirable.
- s. After the cosmetic repairs were complete, Mr. Tinkley conducted the final inspection of the Anchor Stools on August 17, 2017.

66. The Respondent's evidence was further that:

- a. Once he found out that the fabricator was not CWB certified, and therefore the welders, although tested and ticketed, were not in compliance with W59 and W47.1 he used an alternative approach. He utilized his over 30 years of experience in inspecting, repairing, and engineering this type of items; applying his metallurgical engineering knowledge and experience to the type of material used, electrodes used, and he determined that the weld anomalies and discontinuities could be repaired in this case.
- b. He is certain that the final Anchor Stools approved were service worthy and he saved 1000 lbs. of steel going to waste for no reason.
- c. He has designed and certified similar stools several times over and is aware that this particular design would have a safety factor of 3.
- d. He explained that Kova got involved with the Anchor Stools after they had already been fabricated. He became aware that the flux core wire (the

consumable) was a Chinese made wire that came off certification in January of 2017. He believes that the fabricator purchased it prior to the certification was lost/revoked but does not know the exact date.

- e. He further testified that his initial review of the welds on the Anchor Stools was that the welds run hot, therefore there was good penetration. The three welders have tickets, had training and qualifications necessary to make the welds.
- f. On August 17, 2017 he was contacted to do the final review. He reviewed the final report from Mr. Tinkley and signed the final acceptance letter. Kova's system would then send the letter to the client and generate an invoice. He produced a copy of the email exchange approving the final letter.
- g. He said he did not have any concerns regarding the Anchor Stools after the August 17, 2017, inspection and did not authorize any further repairs on the Anchor Stools.

67. During the course of his testimony the Respondent was shown photographs He testified that:

- a. He did not take the photographs.
- b. The photographs showed S35 type stools.
- c. He would not accept the anchor stools shown in some of the photographs for service since there are certain anomalies and discontinuations in the welds.

68. He described certain repairs for some of the anomalies and discontinuations. He provided similar answers for the remaining photographs.

69. The Respondent could not confirm that the S35 stools in the photographs were the Anchor Stools that are the subject of the Citation.
70. The Respondent stated that he would recommend repairs to the welds shown in the photographs.
71. The Respondent was shown more photographs and testified that:
 - a. He did not take the photographs.
 - b. The photographs showed a S35 type stool, but he cannot be sure that these are the Anchor Stools which are the subject of the Citation.
 - c. He prescribed certain repairs for some of the anomalies and discontinuations.
72. He provided similar answers for the remaining photographs he was shown.
73. The Respondent also testified that he would not accept the anchor stools shown in the photographs for service and would recommend repairs.
74. The Respondent confirmed that he provided his final acceptance for the S35 and S16 stools on August 17, 2017.
75. In response to paragraph 1(a) of the Citation the Respondent says that he followed the required regulations, Z248, and that Z248 does not specifically require compliance with W59. He deemed the Anchor Stools to be part of the foundation, and Part 5 (section 5) of Z248 allows a professional engineer to use his judgment and experience to inspect, repair and accept anchor stools for service. Further even if W59 was applicable by virtue of Part 4 (section 4) of Z248, W59 allows the professional engineer to disregard strict requirements of W47.1 and use his experience and professional judgment to accept the welds.

76. In response to paragraph 1(b) of the Citation the Respondent stated that the consumable was CWB approved when it was purchased. The consumable does not go bad on the shelf unless the packaging is damaged. He did not have any concern because the electrode was CWB certified to the W59 standard.
77. In response to paragraph 1(c)(i) of the Citation the Respondent says that he signed the acceptance for service letter on August 17, 2017 when all the repairs had been completed and the inspection by a certified visual and magnetic particle inspector confirmed that the Stool were fit for service.
78. In response to paragraph 1(c)(ii) of the Citation the Respondent says that when he accepted the Anchor Stools for service on August 8, 2017, the weld repairs were complete.
79. In response to paragraph 1(c)(iii) of the Citation the Respondent says that the WorkSafe Regulations as of August 17, 2017 did not require inclusion of the standard in the final acceptance letter. In any way, such inspections are conducted to only one standard, Z248.
80. In response to paragraph 1(c)(iv) of the Citation the Respondent says that although the fabricator was not certified to CWB, he has worked with the fabricator previously, all welders were qualified and had the experience necessary for this type of welding, and used his own 30 years of experience to apply section 6 of W59 to accept the weld when the fabricator was not CWB certified, or use section 5.2.2 of Z248 to accept the structural component.
81. In response to paragraph 2 of the Citation the Respondent states that the file clearly indicates that they (Kova) inspected, analyzed, reinspected, and provided welding procedure, and that he personally signed a letter accepting the Anchor Stools for service. Kova has used this process for the last 30 years and has used it to train

their inspectors and engineering. There is documentation. It is written documents. Although in 2017, BC did not require a written engineering practice quality control procedure, Kova nevertheless had a written procedure for that.

82. In response to paragraph 3 of the Citation, the Respondent says that it is part of Kova Engineering's credo that they are responsible to the public and they hold public safety paramount. In fact, if he had failed to apply his engineering judgment to save 1000 lbs. of steel from landfill, he would have been in dereliction of his duty to protect the environment. The Respondent has no doubt that he did not put public safety and welfare at risk.
83. In response to paragraph 4 of the Citation the Respondent says that he applied his 30 years of experience, training, and knowledge to decide to accept the Anchor Stools for service on honest belief that they were fit for service.
84. In response to paragraph 5 of the Citation, the Respondent says that he has adhered to the requirements of Engineers and Geoscientists BC. He takes additional training every year. He has served on committees for CSA, ASTM, attended WorkSafe meetings, he has volunteered his time and his knowledge regularly for the industry, and he has trained several engineers and inspectors himself.
85. During cross examination the Respondent testified that the crane that was erected on the S35 stool foundation, completed its terms of about two years. When the crane completed its work as it was designed to do, the crane was dismantled and moved to a new location where it was needed. The Anchor Stools remained in the concrete, and the top part of the crane was removed from the foundation.
86. The Respondent also testified that he is not involved in billing at all.

Ryan Tinkley

87. The Respondent also called Mr. Tinkley as a witness who testified the following:
- a. He has two diplomas from BCIT. He has a magnetic particle Level 2 ticket and Visual Inspection Level 2 ticket (W178.2).
 - b. He started working with Kova Engineering in 2011 and obtained his Magnetic particle level 2 in about 2014.
 - c. He also has a liquid penetrant level 2 as well as ultrasonic level 2 tickets. He inspects many things including crane equipment. He underwent months of training with a senior technical prior to working in the field.
 - d. On August 8, 2017, he was scheduled to attend NS Machining, along with a junior technician.
 - e. First, he established the scope of the inspection and then requested all the necessary documents from the owner of the Anchor Stools.
 - f. There were several other stools at the NS Machining facility.
 - g. He conducted a visual inspection and then magnetic particle inspection of the Anchor Stools and determined welds were undersized. After discovering non-conformities, he called the Respondent, who determined that the non-conformities were repairable and gave him the repair procedure to complete the repairs. The repair procedure was very standard.
 - h. He then prepared a report and gave it to the owner of the Anchor Stools. He also met with the fabricator and the owner of the fabrication facility.
 - i. He again attended NS Machining on August 10, 2017. Repairs had been made. After visual inspection and magnetic particle inspection, he determined that the welds were structurally sufficient for service. He then generated a report.
 - j. He had concerns regarding the esthetics of the welds and called Mr. Paul

Walchuk to discuss the esthetic look of the welds.

- k. The owner of the NS Machining took a photocopy of the welder's qualification card and gave it to him along with the other documents.
- l. He took a photograph of the Red Seal welder card at PC Crane Services yard, either on August 14th or 17th
- m. Since Paul Walchuk was not available on August 10, 2017, Mr. Walchuk and he attended the PC Crane Services yard on August 14 to inspect the Anchor Stools. Mr. Walchuk was present there along with the owner of the Anchor Stools. Mr. Walchuk started a Facetime video conference with the Respondent and a decision was made to make some cosmetic repairs to improve the look of the welds.
- n. There were about half a dozen different sets of anchor stools at PC Crane Services' yard.
- o. He has dealt with the specific welder at PC Crane Services' yard, several times. He has a red seal ticket and is very reputable.
- p. On August 17, 2017 he conducted another inspection of the Anchor Stools. He conducted a visual inspection and magnetic particle inspection. He determined that the welds were esthetically better and structurally sound. He then completed a report and printed it to put it in the Kova manila folder.

Paul Walchuk

- 88. The Respondent further called Mr. Walchuk as a witness, and he provided the following evidence:
 - a. He is a technologist with mechanical engineering technologist and non-destructive testing (NDT) tech with experience in crane inspection. He is

also the CEO of Kova.

- b. He obtained his ultrasound level 1 ticket in 2000; Magnetic Particle inspection ticket in 1998; Visual inspection level in early 2000's and Level 2 Visual Inspection in the mid-2000's.
- c. He commenced employment as a trainee learning to inspect cranes in 1996 and eventually rose to the rank of CEO.
- d. The complainant Ryan Stewart is an ex-employee of Kova, who worked at Kova for about 7 years. After he decided that he was not happy with his employment at Kova, it took Mr. Stewart several months to terminate his employment. In or about December 2014, the IT consultant for Kova reported to Mr. Walchuk that there has been a data breach and that the entirety of the Kova files and database, a terabyte of data, was copied from Kova's computer system. It was discovered that Mr. Stewart had taken all Kova's data and posted certain of Kova's photographs on his website, claiming it to be his work. Mr. Ryan Stewart had to admit to stealing all the data from the Kova Engineering's servers, sign a statutory declaration that he did in fact steal all the data. He then was required to to destroy all Kova's files in the presence of an IT consultant, and had to remove all Kova's photographs from his website.
- e. Kova has done work with NS Machining and with PC Crance Servies prior to 2017.
- f. Over the years Kova Engineering has developed its own proprietary document management system. Kova used handwritten field reports using physical folders. Then Kova Engineering moved to computer typed filed reports but still utilized physical folders for each job. Now it's an automated

document control system with documents in file folder index.

- g. At some point, all old physical file folders with physical paper documents were scanned and saved into the digital system. During a move from one location to another, most of the physical files, which had been scanned, were destroyed by a document shredding company.
- h. On August 10, 2017, Ryan Tinkley called Mr. Walchuk and requested a second opinion on a set of S35 anchor stools. Paul Walchuk attended the PC Crane Services yard on August 14, 2017 where he performed a visual inspection and determined that there were no structural issues with the Anchor Stools. The cosmetic issues could be repaired easily. He had a Facetime video conference with Mr. Kovacik to show the welds. Mr. Kovacik was also of the opinion that the cosmetics should be repaired. Mr. Walchuk gave the weld procedure to the welder on site.
- i. Mr. Stewart called Mr. Walchuk and complained that he had rejected the Anchor Stools and therefore Kova should not certify the same, or else he would not be paid for his work.
- j. In late 2017, Mr. Walchuk became aware of Mr. Stewart's complaint to the CWB, and upon request from CWB, provided CWB with all documents regarding certification of the Anchor Stools. CWB then asked certain questions, which Mr. Walchuk responded to. CWB dismissed the complaint, and he did not hear anything further from CWB.
- k. After becoming aware of the complaint to CWB, Mr. Walchuk instructed another Kova level 2 Visual inspector and level 2 Magnetic particle inspector to attend the site where the Anchor Stools were installed and conduct an inspection. That inspector conducted the inspection and found no defects in

the Anchor Stools.

- l. In the Kova document management system in place in 2017, if someone opened a file, it would still have the footer date as the original document; however, if someone pressed save, the date on the footer would change to a new date. This was a bug in the system that had to be fixed. The print function could cause a problem with the system.
- m. There is no way to go and change the contents of a file that has been previously saved to the document management system. The only thing that could change is the footer date based on whether the file was saved or not.
- n. Mr. Walchuk caused several inspections of the Anchor Stools because a complaint had been launched, Mr. Walchuk investigated and then felt justified that Kova had made a correct decision.
- o. After the project was complete, the cranes were removed and re-located to new locations.
- p. Mr. Walchuk testified that he did not attempt to influence or have discussions with Mr. Ball or Mr. Richards. Mr. Walchuk further testified that Mr. Richards does not own any shares in Kova Engineering. Kova's reputation would not have any monetary effect on Mr. Richards.
- q. Under cross examination:
 - i. Mr. Walchuk stated that Kova gets paid for its services regardless of whether the Anchor Stools were accepted or rejected.
 - ii. He testified that there were two or three other tower crane anchor stool assembly at the PC Crane Services yard when he attended on August 14, 2017. However, his recollection is that he looked at the

S35 stool assembly at the front of the yard. However, the photographs show the Anchor Stool's location at the back of the yard.

Darin Richards

89. The Respondent called Mr. Darin Richards to testify an expert witness. Mr. Richard's evidence included the following:
- a. He is a professional engineer who graduated from University of Alberta in 1990 and became a professional engineer in Alberta in 1993 and then in British Columbia in 1995. He is also a professional engineer in several other provinces.
 - b. After completing his bachelors, he pursued studies on additional subjects such as structural design of Steel Structures; welding metallurgy; welding process; and Fracture of Metals.
 - c. For the past 30 years, he has been involved with crane and rigging engineering including inspection, design of components of tower cranes and other cranes.
 - d. He has served on the investigating committee for three years; has spoken to graduating engineers on professional ethics.
 - e. He also developed Alberta Engineer's practice guideline for professional engineers providing equipment certification as required to Alberta's Occupational Health and safety Code.
 - f. He was employed by Kova after graduating from engineering school where he obtained his professional designation.
 - g. He has worked on crane inspection, certification, and design for the past 30 years. He then started his own company Red Associates Engineering Ltd., which company was acquired by Kova in May 2022.

- h. He is on his way to retirement and currently is the vice president of Red Associates Engineering Ltd.
 - i. He has worked with tower cranes in all capacities for over the past 30 years.
90. Mr. Richards also tendered a written expert report. During cross examination Mr. Richards testified that:
- a. He understands that the change of ownership between the two organizations (i.e. between Red Engineering and Kova) could be perceived as a conflict of interest.
 - b. In February 2022 while he was preparing his expert report, he was negotiating for the sale of his business with Kova.
 - c. In February 2022 he had a financial interest in his dealings with Kova, although in his opinion it was unrelated to this case.
 - d. Kova eventually bought the shares of Red Engineering.
 - e. Part of the deal with Kova acquiring Red Engineering was him also taking on his current the role as vice president of regulatory affairs with Kova.
 - f. He does not report to the Respondent.
91. In response to Engineers and Geoscientists BC's counsel's question what would have happened if his expert opinion of March 4, 2022, painted the namesake of Kova in an unflattering light, Mr. Richards acknowledged that maybe it would have killed the deal. Mr. Richards also acknowledged that some people may perceive his relationship and the purchase of his business by Kova with concern.

Dr. Bruce Ball

92. The Respondent further called Dr. Bruce Ball as an expert witness. Dr. Ball also prepared a written expert report. Dr Ball's evidence was as follows:

- a. He is a retired professional engineer, by profession, but is currently registered as a professional engineer with Alberta. He had been previously registered as a professional engineer in British Columbia, and most other provinces and territories in Canada.
- b. He received a BSc. in Metallurgical Engineering in 1969 and PhD in Metallurgical Engineering in 1973. He is a member of American Society for Mechanical Engineers, American Society of Metals, American Welding Society (AWS), Canadian Institute of Nondestructive examinations, National Association of Corrosion Engineers.
- c. He has been a professor at University of Alberta where he taught courses in Physical metallurgy and application on physical metallurgy including welding.
- d. He has participated as an expert witness in over 30 matters.
- e. Although now resigned due to his retirement, he was a level 3 visual inspector certified under W178.2 and also under AWS QC1.
- f. He is also certified pressure vessel inspector, responsible inspector for propane cylinder manufacture under the Government of Canada and responsible inspector for manufacture and rebuild of dangerous goods cylinder.
- g. He has taken several additional courses such as welding quality control and inspection; application and limitations of ultrasonic testing; flexibility analysis and effective stress under ASME.
- h. He inspected his first crane in 1972. By 1982 he prepared a manual for

technicians and technologists in-house to inspect cranes and how to make repairs. He has inspected thousands of cranes personally. He has produced certain original designs for cranes.

- i. He has presented courses in university and trade school setting related to the standards W47.1 and W59, including at places where CWB courses are not available.
- j. The Respondent called him in the fall of 2021 to ask him if he would talk to the Respondent's lawyer to see if he could be involved with this hearing. He then talked with the Respondent in March of 2022 to figure out what the hearing was about.
- k. Dr. Ball explained that S35 anchor stools are part of the foundation since they are imbedded in the foundation.
- l. In his report, Dr. Ball also states that since the anchor stools are really a part of the foundation, the section 6.4.2 of Z248: inspections prior to erection, the regulation requires a professional engineer to verify that the necessary repairs have been completed to his satisfaction and the components are ready for service. The key is engineering decision and inspection done by an inspector certified in non-destructive testing.
- m. Further, Dr. Ball opines that section 5.3.1 of Z248 requires that the crane foundation assembly shall be inspected by a professional engineer prior to concrete pour.
- n. Dr. Ball had difficulty with W47.1 being applied to crane erection, where an anchor stool has to be installed, in rural area or far north where no CWB certified welding companies exist.
- o. In his report, Dr. Ball further states that the question which asks "What is

the role of a professional engineer tasked with inspecting the manufacturing of and welding performed on the anchor stool” is leading since the Panel is required to ultimately reach this conclusion.

- p. In his report, Mr. Ball provides a detailed analysis to finally conclude that the Respondent's inspection and eventual certification of the Anchor Stools did meet the applicable standards.
 - q. In response to the risk posed by failure to adhere, Mr. Ball states that there is an assumption built into the questions itself and compliance with, or non-compliance with the standards does not significantly change the risk.
 - r. With respect to the certificate, Dr. Ball's opinion is that he considers the document produced by the Respondent to be satisfactory.
 - s. During Cross-Examination:
 - i. Dr. Ball stated that he always knew the anchor stools were part of the foundation, but reviewing the CSA Z248 standard, particularly page 56 of Z248.04 Item A, he was convinced this interpretation is correct.
 - ii. Dr. Ball confirmed that in his opinion section 4.4 (adherence to W47.1 and W59) of Z248 does not apply to section 5.2.2 or 5.3.
93. In response to a question from the Panel, Dr. Ball stated that even though the certification for the consumable manufacturing company had lapsed, the consumable was still certifiable material. In response to a further question from the Panel, he indicated that he had seen the photographs of the welds but had not examined them, was not asked to comment on the quality of the welds and had not done so.

Nick Greuter and Desimir Begovic

94. The Respondent further listed and provided will-say statements for two individuals from whom he also procured expert reports. These were Nick Greuter and Desimir Begovic. On the last two days of the discipline hearing, the Respondent withdrew his reliance on these experts and indicated that he would not be calling either to give evidence.
95. A single page report from Mr. Greuter was delivered to Engineers and Geoscientists BC on March 4, 2022, and included in the Respondent's hearing book of documents. Engineers and Geoscientists BC submits that that single-page report did not appear to contain a conclusion and was not signed, sealed, or dated by Mr. Greuter. At the time that he produced his expert report in early March of 2022, Mr. Greuter was employed as an engineer with Kova. After detailing the various documents that he reviewed and setting out his facts and assumptions, including that Kova arranged to have the Anchor Stools later re-welded by a qualified fabricator to mitigate future risks, Mr. Greuter went on to explain that he had made calculations regarding the safety factor for the welds in question and determined that they exceeded the minimum required safety factor for tower crane anchors. In addition to his expert report, the will-say statement provided for Mr. Greuter in advance of the hearing stated that he would also provide evidence about his involvement in "the manufacture and certification of the anchor stools."

D. ANALYSIS AND FINDINGS

Adverse Inference from Respondent's Failure to Call Witnesses

96. Engineers and Geoscientists BC submits that it is apparent from the documents produced by the Respondent that Mr. Greuter was the engineer at Kova who signed and sealed the design for the crane's foundation and placement.

97. The Respondent's evidence at the hearing was that the Anchor Stools, as part of the foundation, were not subject to section 4.4 of CSA Z248. Engineers and Geoscientists BC submits that considering his role as the engineer responsible for the crane's foundation and placement, it is clear that Mr. Greuter would have the best evidence of whether the Anchor Stools were properly considered part of the foundation and, if so, whether they were excluded from the requirement set out in section 4.4 of CSA Z248. His will-say statement further suggests that Mr. Greuter may have had some involvement in the manufacture and certification of the Anchor Stools.
98. Engineers and Geoscientists BC further submits that on the subject of what "expert" evidence he might have given about the applicable standards and regulations governing the Respondent's inspection of the Anchor Stools, Mr. Greuter's expert file is revealing. It says it is apparent from his expert file that his signed report initially provided to the Respondent and his counsel was two pages in length, and that the second page of his report states "although I do agree that tower crane anchor stools should be fabricated in accordance with W59 and W47.1, it is my opinion that Mr. Kovacik's actions were reasonable and in line with the current industry standard for evaluating and certifying existing tower crane components." Engineers and Geoscientists BC says Mr. Greuter's statement to the effect that the Anchor Stools were required to be fabricated in accordance with W59 and W47.1 contradicts the Respondent's evidence and theory of the case.
99. Engineers and Geoscientists BC submits that the Panel ought to draw an adverse inference with respect to both Mr. Greuter's expert evidence on the need to comply with W59 and W47.1 and his more direct lay evidence about (a) whether the Anchor Stools were in fact considered an integral part of the foundation and (b) any direct involvement in "the manufacture and certification" of the Anchor Stools as described

in his will-say statement. Specifically, Engineers and Geoscientists BC argues that the Panel should infer that Mr. Greuter would have affirmed that the Respondent was required to inspect for compliance with W59 and W47.1. Engineers and Geoscientists BC also submits that the Panel should infer that Mr. Greuter would have affirmed that the Anchor Stools were a component of the tower crane and not to be treated differently simply by virtue of the fact that they were to be affixed to the foundation.

100. With respect to Mr. Begovic, Engineers and Geoscientists BC submits that the Respondent indicated an intention to call him both as an expert and a lay witness until the very last day of hearing. Mr. Begovic, who was employed by TNAI Engineering, the designer of the Anchor Stools, provided a single page "expert" report disclosed to Engineers and Geoscientists BC on March 4, 2022. Engineers and Geoscientists BC says that expert report offers little that would be of assistance to the Panel but it does cast doubt on whether the consumable used met his design requirements. In particular, Mr. Begovic's report notes that "this needs more detailed analysis depending on crane loads in this case."
101. Engineers and Geoscientists BC says that Mr. Begovic's expert file reveals that his report was drafted by Mr. Paul Walchuk based on an email from Mr. Begovic. In his email he provided the Respondent's counsel's assistant and Mr. Walchuk with his bulleted responses to eight points. His email is qualified by his statement at the bottom noting "my expertise is not testing an approval of tower crane hardware", which comment was not included in his report drafted by Mr. Walchuk. Mr. Begovic further notes at the bottom of his email that "even now WSBC is allowing us to use old CSA Standard Z248-004". The "allowing us to use" language suggests a view that CSA Standard Z248 is mandatory.

102. Engineers and Geoscientists BC submits that an adverse inference may be drawn where a party fails to call a witness that is within their control and has key evidence to give without legitimate explanation. It relies on *Helgesen v. British Columbia (Superintendent of Motor Vehicles)*, 2002 BCSC 1391 where the Court held that while courts will be cautious in drawing adverse inferences in criminal proceedings, "adverse inferences are more readily available in administrative proceedings where the standards and objectives are fundamentally different from the criminal forum".
103. Engineers and Geoscientists BC argues that while adverse inferences are most often sought to be drawn against a party bearing the burden of proof, whether to draw an adverse inference involves a "highly discretionary fact-based assessment". It submits that in the extraordinarily unusual circumstances of this case and having regard to the more flexible administrative law approach to evidence, it is appropriate for the Panel to draw an adverse inference about what Mr. Begovic and Mr. Greuter might have said about both Engineers and Geoscientists BC's and the Respondent's theory of the case. In particular, Engineers and Geoscientists BC submits that having been presented as expert witnesses, both individuals were within the exclusive control of the Respondent. Moreover, Mr. Greuter was at the time of his report an employee of Kova. Neither witness was therefore accessible to Engineers and Geoscientists BC. Further, as noted above, it says there is no question that these two individuals had material evidence to give as lay witnesses and, about their expert evidence, their expert files provide an indication of what their evidence might have been on issues central to this dispute.
104. The Panel is not satisfied that it is appropriate to draw the requested adverse inferences in the circumstances of this case.
105. Engineers and Geoscientists BC bears the burden of proof with respect to their allegation that the Anchor Stools, as part of the foundation, were subject to section

4.4 of CSA Z248, and also whether the consumables used met the Anchor Stools' design requirements. The burden of proof does not shift to the Respondent. As explained in greater detail in other parts of these reasons, Engineers and Geoscientists BC's evidence, including the evidence of their expert Dr. Smith, is not sufficiently clear, convincing, and cogent to satisfy the balance of probabilities test with respect to those allegations. Drawing an adverse inference based on a scarcity of clear, convincing, and cogent evidence provided by Engineers and Geoscientists BC to support their allegations will have the same effect as impermissibly reversing the burden of proof. The Panel accordingly declines to do so.

106. Additionally, the Respondent has provided an adequate explanation for not calling Mr. Greuter as a witness, making it inappropriate to draw an adverse inference from his failure to do so. As explained by Respondent's counsel, the only evidence Mr. Greuter, as an expert for the Respondent, was being called to give was about his calculation of the "safety factor"; however, that became unnecessary due to the testimony of the Respondent himself explaining the safety factor.
107. Lastly, the Panel agrees with the Respondent that Engineers and Geoscientists BC, if it was of the view that Mr. Greuter and Mr. Begovic were key witnesses who had with material evidence could and indeed should have called them to provide their testimony. As pointed out in the parties' submissions, there is no property in a lay witness, and even another party's expert witness may be approached if the party's counsel notifies the opposing party's counsel that they intend to contact the opposing party's expert witness. The information before the Panel is that Engineers and Geoscientists BC never approached the Respondent's counsel to request that they be allowed to contact Mr. Greuter or to advise that they wanted to call him as a witness in their own case.

Admissibility of Expert Evidence

Darin Richards

108. Further, as noted, the Respondent tendered Darin Richards as an expert in the inspection of tower cranes, delivering his expert within the timelines provided for in the Bylaws. Mr. Richards was not provided with the photographs taken by Ryan Stewart to review in preparation of his report. Engineers and Geoscientists BC submits that Mr. Richards lacks the independence that is required of an expert, even in more flexible administrative law settings. In particular, as noted in evidence at the hearing, Mr. Richards was at the time when he prepared his report in negotiations with Kova for the purchase of his company, Red Associates Engineering Ltd. At the time of hearing, he was also in a senior position at Kova. Engineers and Geoscientists BC says these facts relating to the relationship between the Respondent and Mr. Richards are more than sufficient to meet the legal test to have an expert's evidence deemed inadmissible because of lack of independence. Alternatively, it submits that, if Mr. Richards' report and evidence are admitted in any form, they ought to be given no weight whatsoever for the same reasons.
109. Engineers and Geoscientists BC acknowledges that in most cases the mere existence of an employment relationship between a proposed expert and the party seeking to adduce their evidence may not reach the threshold required to render that evidence inadmissible. A financial interest tied to the outcome of the litigation will be far more concerning.
110. In this regard, it relies on *0790482 BC Ltd. v. KBK No. 11 Ventures Ltd.*, 2021 BCSC 1301 ("*KBK No. 11 Ventures Ltd.*"), in which the Court considered an application to strike the affidavit of an expert in a case involving allegations of deficiencies in window and curtain wall systems at the Shangri-La Hotel building in Vancouver. The proposed expert was one of two principals of Brook Dalen & Associates Limited who had been engaged to design the curtain wall system for the

building. The Court refused to admit the proposed report because of Mr. Brook's connection with the design of the curtain wall system in the building, Brook Van Dalen's potential liability and Mr. Brook's potentially associated financial exposure. The Court also found that Mr. Brook's prior and ongoing relationship with the developer crossed the line set by the Supreme Court of Canada's decision in *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23 respecting their requirement for expert independence.

111. Similarly, in *Casurina Ltd. v. Rio Algom Ltd.*, [2002] OJ No. 3229, affirmed [2004]. OJ No. 77 (Ont. CA) a financial advisor assisting Rio Algom was not considered sufficiently neutral to be properly qualified as an expert witness. In *Kirby Lowbed Services Ltd. v. Bank of Nova Scotia*, 2003 BCSC 617, a proposed expert who had a long standing and close relationship with the party calling him was prohibited from giving evidence.
112. Engineers and Geoscientists BC submits that the evidence and report of Mr. Richards should be deemed inadmissible in accordance with the above case law. In the alternative, if Mr. Richards' evidence and report are deemed admissible by the Panel, Engineers and Geoscientists BC says that the proximity and nature of Mr. Richards' relationship to Kova and the Respondent are such that his evidence should be accorded almost no weight at all. It submits that objectivity, neutrality, and independence are what mark and give value to expert evidence. An individual providing an expert report to aid a party with whom he is negotiating the sale of his company lacks the neutrality and independence necessary to fulfill the role of expert who can be of use to the Panel.
113. The Respondent submits that Mr. Richards' evidence should be admitted. He has over 30 years of experience in working with tower cranes, including design, fabrication of components, erection, and certification, in addition to experience with

and knowledge of welding regulations, and particularly W47.1 and W59. He teaches ethics courses at university level. He has been a member of investigative committees in Alberta.

114. The Respondent says Mr. Richards' evidence was given pursuant to his experience, knowledge, and skills in relation to the tower cranes and anchor stools. His analysis was based on sound interpretation and application of regulations starting with *Occupational Health and Safety Regulation* and *Z248*.
115. The Respondent further submits that Mr. Richards was forthright about his dealings with Kova. He certified that he understands his duty to the Panel, and he stated that he has provided his evidence in an unbiased way. The Respondent says that Mr. Richards will not gain anything from a positive or negative result for the Respondent in this hearing. He says Engineers and Geoscientists BC was not able to challenge the contents of Mr. Richards' opinion in any meaningful way during the cross-examination. Accordingly, the Respondent submits that Mr. Richards' evidence is highly relevant, reliable, and probative to this hearing.
116. The Respondent also argues that *KBK No. 11 Ventures Ltd.* is distinguishable from the facts of this case. In that case the Court was dealing with an affidavit and not an expert report. One party introduced an affidavit which it claimed to be fact evidence and not expert opinion. The Court decided that the affidavit had opinion evidence and therefore is considered an expert report. There was no attestation from the affiant that he would abide by his duty to stay neutral or that he is aware of such a duty.
117. The Respondent relies on *White Burgess Langille Inman v. Abbott and Haliburton Co.*, 2015 SCC 23 ("*White Burgess*") in which the Supreme Court of Canada said:

10. In my view, expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence. They must be aware of this duty and able and willing to carry it out. If they do not meet this threshold requirement, their evidence should not be admitted. Once this threshold is met, however, concerns about an expert witness's independence or impartiality should be considered as part of the overall weighing of the costs and benefits of admitting the evidence. This common law approach is, of course, subject to statutory and related provisions which may establish different rules of admissibility.

118. The Respondent submits that Mr. Richards has provided an attestation that he is aware of his duty to the Panel, and he has provided an independent report. He submits Mr. Richards did not discuss this report with anyone other than the counsel for the Respondent, all correspondence of which was disclosed to the counsel for Engineers and Geoscientists BC. The Respondent further submits that Mr. Richards will not gain any monetary benefit from the result of this hearing. The result of this hearing would not impact Mr. Richards' financial situation, one way or the other.
119. The Panel agrees that *White Burgess* is the guiding authority on admissibility of expert witnesses and sets out the appropriate approach to admissibility of expert evidence. As noted, the Supreme Court of Canada expressed that "expert witnesses have a duty to the court to give fair, objective and non-partisan opinion evidence". *White Burgess* establishes a two-step test, involving the threshold admissibility criteria from *R. v. Mohan* as step one, and the gatekeeper cost-benefit analysis as step two.

Step One

120. The Supreme Court of Canada described the first step as follows:

[46] I have already described the duty owed by an expert witness to the court: the expert must be fair, objective and non-partisan. As I see it, the

appropriate threshold for admissibility flows from this duty. I agree with Prof. (now Justice of the Ontario Court of Justice) Paciocco that “the common law has come to accept . . . that expert witnesses have a duty to assist the court that overrides their obligation to the party calling them. If a witness is unable or unwilling to fulfill that duty, they do not qualify to perform the role of an expert and should be excluded”: “Taking a ‘Goudge’ out of Bluster and Blarney: an ‘Evidence-Based Approach’ to Expert Testimony” (2009), 13 Can. Crim. L.R. 135, at p. 152 (footnote omitted). The expert witnesses must, therefore, be aware of this primary duty to the court and able and willing to carry it out.

[47] Imposing this additional threshold requirement is not intended to and should not result in trials becoming longer or more complex. As Prof. Paciocco aptly observed, “if inquiries about bias or partiality become routine during Mohan voir dres, trial testimony will become nothing more than an inefficient reprise of the admissibility hearing”: “Unplugging Jukebox Testimony in an Adversarial System: Strategies for Changing the Tune on Partial Experts” (2009), 34 Queen’s L.J. 565 (“Jukebox”), at p. 597. While I would not go so far as to hold that the expert’s independence and impartiality should be presumed absent challenge, my view is that absent such challenge, the expert’s attestation or testimony recognizing and accepting the duty will generally be sufficient to establish that this threshold is met.

[48] Once the expert attests or testifies on oath to this effect, the burden is on the party opposing the admission of the evidence to show that there is a realistic concern that the expert’s evidence should not be received because the expert is unable and/or unwilling to comply with that duty. If the opponent does so, the burden to establish on a balance of probabilities this aspect of the admissibility threshold remains on the party proposing to call the evidence. If this is not done, the evidence, or those parts of it that are tainted by a lack of independence or impartiality, should be excluded. This approach conforms to the general rule under the *Mohan* framework, and elsewhere in the law of evidence, that the proponent of the evidence has the burden of establishing its admissibility.

[49] This threshold requirement is not particularly onerous and it will likely be quite rare that a proposed expert’s evidence would be ruled inadmissible for failing to meet it. The trial judge must determine, having regard to both the particular circumstances of the proposed expert and the substance of the proposed evidence, whether the expert is able and willing to carry out his or her primary duty to the court. For example, it is the nature and extent of the interest or connection with the litigation or a party thereto which matters, not the mere fact of the interest or connection; the existence of some interest or a relationship does not automatically render the evidence

of the proposed expert inadmissible. In most cases, a mere employment relationship with the party calling the evidence will be insufficient to do so. On the other hand, a direct financial interest in the outcome of the litigation will be of more concern. The same can be said in the case of a very close familial relationship with one of the parties or situations in which the proposed expert will probably incur professional liability if his or her opinion is not accepted by the court. Similarly, an expert who, in his or her proposed evidence or otherwise, assumes the role of an advocate for a party is clearly unwilling and/or unable to carry out the primary duty to the court. I emphasize that exclusion at the threshold stage of the analysis should occur only in very clear cases in which the proposed expert is unable or unwilling to provide the court with fair, objective and non-partisan evidence. Anything less than clear unwillingness or inability to do so should not lead to exclusion, but be taken into account in the overall weighing of costs and benefits of receiving the evidence.

Step Two

121. The second step of the *White Burgess* test involves balancing the potential risks and benefits of admitting the evidence. The Supreme Court of Canada stated:

[54] Finding that expert evidence meets the basic threshold does not end the inquiry. Consistent with the structure of the analysis developed following *Mohan* which I have discussed earlier, the judge must still take concerns about the expert's independence and impartiality into account in weighing the evidence at the gatekeeping stage. At this point, relevance, necessity, reliability and absence of bias can helpfully be seen as part of a sliding scale where a basic level must first be achieved in order to meet the admissibility threshold and thereafter continue to play a role in weighing the overall competing considerations in admitting the evidence. At the end of the day, the judge must be satisfied that the potential helpfulness of the evidence is not outweighed by the risk of the dangers materializing that are associated with expert evidence.

122. The threshold requirement at the first step of the enquiry is not onerous. The Panel is not satisfied that Mr. Richards' evidence should be found inadmissible at this first stage of the inquiry. The Panel accepts that he is able and willing to carry out his primary duty to the Panel.

123. The Panel however remains concerned that the benefit in admitting his evidence does not outweigh the potential harm to the hearing process. At the second step of the *White Burgess* process the Panel must determine whether the benefits in admitting the evidence outweigh any potential harm, including, to the hearing process. Where the probative value of the expert opinion evidence is outweighed by its prejudicial effect it should be excluded.
124. The Panel acknowledges that Mr. Richards' evidence is relevant to these proceedings. The Panel also recognizes that Mr. Richards possesses a significant amount of experience and expertise working with tower cranes, including design, fabrication of components, erection, and certification, in addition to experience with and knowledge of welding regulations, and particularly W47.1 and W59.
125. That said, the Panel considers the risk in admitting Mr. Richards' evidence in the face of his current working and business relationship with the Respondent to be dangerous. As noted, the evidence before the Panel establishes that Mr. Richards was at the time when he prepared his expert report in negotiations with Kova Engineering for the purchase of his company, Red Associates Engineering Ltd. The evidence establishes that he had a financial interest in his dealings with Kova and that Kova eventually bought the shares of Red Engineering. Mr. Richards himself acknowledged that the change of ownership between the two organizations (i.e. between Red Engineering and Kova) could be perceived as a conflict of interest. Mr. Richards also acknowledged that if his expert opinion of March 4, 2022, painted the namesake of Kova in an unflattering light, maybe it would have killed the deal. Mr. Richards further recognized during testimony that some people may perceive his relationship and the purchase of his business by Kova with concern.
126. A principal purpose of professional discipline hearings is protection of the public. The public may perceive that an individual providing an expert report to aid a

Respondent in a discipline hearing with whom he is negotiating the sale of his company, lacks the neutrality and independence necessary to fulfill the role of expert to be used by the Panel in that discipline hearing. The Panel is accordingly concerned that the public's perception of the fair administration of justice would be impaired if any weight was given to Mr. Richard's evidence by the Panel in this hearing.

127. The Panel is also satisfied that admitting his evidence is not necessary, and that the Respondent will not be prejudiced by not admitting it. As set out below, the Panel finds the expert evidence of Dr. Ball admissible. That evidence provided the Panel with expert evidence relating to the principal issues in dispute, particularly whether the Anchor Stools are part of the crane's foundation and regarding the interpretation and application of the relevant Regulations including W47.1 and W59. Accordingly, the Panel has decided not to admit Mr. Richard's expert evidence.

Dr. Bruce Ball

128. Dr. Bruce Ball's expert report was tendered about two weeks before the start of the discipline hearing. The report was a response to the expert report of Dr. Mathew Smith filed by Engineers and Geoscientists BC. At the commencement of the hearing, the Panel heard submissions from both parties and determined that it would hear evidence from Dr. Ball and permit his late-filed expert report to be tendered. It did not make an express finding with respect to the admissibility of or weight to be given to Dr. Ball's evidence or his report.
129. Engineers and Geoscientists BC submits that the Panel made its decision without knowledge that the Respondent had contacted Dr. Ball in the fall of 2021 and confirmed his willingness to assist at that time. In these circumstances, Engineers and Geoscientists BC says it would be manifestly unjust to admit Dr. Ball's report or evidence at all because the Respondent was clearly capable of and did contact Dr.

Ball over six months before the hearing. Engineers and Geoscientists BC argues that in failing to draw this fact to the Panel's attention when representing that contact had only recently been made with Dr. Ball, the Respondent misled the Panel and ought not now to be permitted to rely on Dr. Ball's evidence at all.

130. However, if Dr. Ball's evidence and report are admitted, Engineers and Geoscientists BC submits that his evidence should be given little weight by the Panel for the following reasons. First, far from expressing a neutral and objective opinion, Dr. Ball's report evidences a lack of neutrality and appreciation for the role of an expert by repeatedly taking issue with and arguing about the questions posed of Dr. Smith. Such views are entirely unhelpful to the Panel.
131. Further, Dr. Ball admitted during his testimony that he fundamentally disagrees with aspects of CSA Z248, particularly the inclusion of welding standards through section 4.4. Dr. Ball testified in cross-examination that he was "a little alarmed" when requirements for welding in accordance with CSA W47.1 were added to Z248 in the early 1990's and wrote to the committee responsible for these amendments to Z248 as a result. In his view, smaller companies would find it economically unreasonable to obtain CWB certification as required by W47.1.
132. Any expertise Dr. Ball may once have had was no longer current as at the date of hearing. In particular, Dr. Ball was presented by the Respondent's as the only expert being tendered with experience as a CSA W178 inspector. However, in cross-examination, Dr. Ball conceded that he ceased to have any W178 inspector certificate in or about 2005 and 2006, some 15 years before the hearing. He further agreed that he was no longer qualified to undertake the inspection work performed by the Respondent which was the subject of the proceedings.

133. The Respondent submits that Dr. Ball's resume speaks for itself. He is a highly qualified and reputed professional engineer and an academic whose experience is on point with respect to inspection, design, and erection of tower cranes and with respect to welding.
134. The Respondent says the fact that Dr. Ball has not been a practicing professional engineer for the past 15 years but is an academic who teaches students application of W59 and W47.1, does not in any way imply that he has lost all his education and experience. To the contrary, his achievements, skill and education speaks volumes about his knowledge of tower cranes and welding. The Respondent submits that Dr. Ball has been an expert witness in over 30 matters. His understanding of the law regarding expert reports is absolutely correct. He correctly identified the questions which were designed to usurp the ultimate decision of the Panel. The Respondent submits that the opinion of Mr. Ball is extremely helpful and in fact necessary for this panel. He has unparalleled experience and knowledge which he has brought to bear in his report. Despite several attempts, the counsel for Engineers and Geoscientists BC was unable to shake Dr. Ball from his opinion during the cross examination. Dr. Ball was forthright and very open in his opinion and his evidence to the Panel. Consequently, the opinion of Mr. Ball should be accepted and given full weight by the Panel.
135. Lastly, the Respondent's submits that he did not state that he first contacted Dr. Ball in March 2022. He contacted Dr. Ball in fall of 2021, before Dr. Ball was leaving for his winter abode down south. At that time, Respondent's counsel was not intending to be acting in this proceeding. By the time Respondent's counsel agreed to act for the Respondent, Dr. Ball had left for his winter house in Arizona.
136. The Panel does not accept Engineers and Geoscientists BC's arguments that Dr. Ball's evidence should not be certified as an expert, and his evidence not admitted.

The Panel agrees with and accepts the Respondent submissions. The Panel finds the Respondent has not misled the Panel regarding Dr. Ball's availability. The Panel also finds that Dr. Ball is unbiased and has the necessary expertise to provide expert opinion evidence in this matter. The Panel further finds and qualifies Dr. Ball as an expert in welding engineering and inspection of cranes.

137. The Panel is satisfied that Dr. Ball is able and willing to carry out his primary duty to the Panel, and that his evidence is relevant, necessary, reliable, and unbiased. Accordingly, the Panel accepts his opinion evidence.

Dr. Mathew Smith

138. As noted, after commencement of the hearing the Panel qualified Dr. Smith as an expert in welding engineering and in the inspection of cranes. At that time the Respondent objected to Dr. Smith being qualified principally on two bases. First, that Dr. Smith is not properly qualified. Second, that he is not an unbiased expert because he is in essence a competitor of Kova Engineering.
139. The Panel did not accept the Respondent's position because the Panel agreed with Engineers and Geoscientists BC that the evidence established that Dr. Smith has experience, expertise, and training relevant to some of the guidelines or standards that are before the Panel and could therefore be of assistance to the Panel in determining whether or not the Respondent complied with those particular guidelines and standards. Further, the Panel was not satisfied that simply being a competitor of other persons or engineering firms performing similar work would render the proposed expert biased. Additionally, the Panel agreed with Engineers and Geoscientists BC that the Respondent would during the discipline hearing have the opportunity to lead opposing expert evidence to contest Dr. Smith's opinion and also to argue that no or little weight should be given to it.

140. In his closing submissions, the Respondent again submits that Dr. Smith's evidence is biased and should be completely disregarded or accorded no weight. He argues that Dr. Smith's motive in providing the expert report is not clear. He failed to disclose his relationship with the complainant and his competition with Kova to Engineers and Geoscientists BC. The Respondent says Dr. Smith attempted to hide these conflicts until they were brought out in other ways. The Respondent further says that Dr. Smith accepted that he was a competitor to Ryan Stewart and Arsenal Engineering and to Kova, and logically, he would gain monetarily if Kova's reputation is harmed.
141. The Panel is not satisfied that simply being a competitor of other persons or engineering firms performing similar work would render the proposed expert biased. The Panel is accordingly not willing to hold that Dr. Smith's opinion is compromised by his competitive situation vis-à-vis the Respondent, nor by his competitive situation vis-à-vis Mr. Stewart.
142. The Panel will next turn to determination of the allegations in the Citation.

Allegations - Paragraph 1 (a) of the Citation

1. *You have demonstrated unprofessional conduct, incompetence, or negligence by:*
 - a. *Failing to comply with Occupational Health and Safety Regulation, B.C. Reg. 296/97 ss. 14.2 and 14.77 (the "Regulations"), when you did not ensure the welding on a set of Pecco S35/S212 crane anchor stools (the "Anchor Stools") at 122209 Industrial Road, Surrey, British Columbia (the "Project"), was carried out in accordance with CSA W59 and CSA 47.1 or equivalent standards as required by CSA Z248- 2004 pursuant to the Regulations;*

143. Engineers and Geoscientists BC submits that the role of a professional engineer inspecting newly manufactured tower crane components is to ensure that fabrication has been carried out to the specifications required by the design and to the applicable regulations and standards. It says the Respondent failed to to comply with *OHS Regulation* sections 14.2 and 14.77. It submits *Occupational Health and Safety Regulation*, B.C. Reg. 296/97 (the "*Regulation*") was enacted under the *Workers Compensation Act*, R.S.B.C. 1996, -c. 492, s. 225.

144. Engineers and Geoscientists BC says section 14 of the *Regulation* sets out the province's occupational health and safety requirements with respect to cranes and hoists. Section 14.2(1) of the *Regulation* provides that:

(1) Except as otherwise required by this Regulation, a crane or a hoist must be designed, constructed, erected, disassembled, inspected, maintained and operated as specified by the manufacturer or a professional engineer, and to meet the requirements of the applicable standard listed in subsections (2) to (15).

[Emphasis added.]

145. Subsections 2 to 15 of section 14.2 of the *Regulation* set out requirements for specific types of cranes or hoists. Subsection (6), which applies to tower cranes, provides:

(6) A tower, hammerhead crane or self erecting tower crane must meet the requirements of *CSA Standard Z248-2004, Code for Tower Cranes*.

[Emphasis added.]

146. Section 14.77(1) of the *Regulation* further requires that, before the erection of a tower crane, the structural components must be:

- (a) inspected to determine their integrity by a qualified person using non destructive testing (NDT) methods meeting the requirements of the Canadian General Standards Board (CGSB), and

- (b) certified by a professional engineer as safe for use after the inspection in paragraph (a) and any necessary repairs.

147. Engineers and Geoscientists BC submits that by virtue of section 14.2 of the *Regulation*, the Code (Z248-2004) must be applied in the design, construction, installation, inspection, testing, maintenance, and safe operation of tower cranes.

148. It says that the Code is divided into the following sections:

- i. Scope
- ii. Reference publications
- iii. Definitions
- iv. Design and construction
- v. Erection, dismantling, and climbing
- vi. Inspection, testing and repairs
- vii. Maintenance and repair
- viii. Safe operation.

149. Within the section addressing design and construction, section 4.4 provides that:

All welding shall be done in accordance with CSA W59 and CSA W47.1 or equivalent standards.

[Emphasis added]

150. The definition for "base" set out in section 3 of the *Code* says, in specific relation to a tower crane, that it is "the lowermost supporting component of the crane."

151. Engineers and Geoscientists BC further submits that in inspecting the newly manufactured Anchor Stools, part of the Respondent's role was to ensure compliance with CSA Z248-04, including section 4.4, and therefore compliance with W59 and W472 (or equivalents) during manufacture of the Anchor Stools.

152. Engineers and Geoscientists BC argues that CSA W59 is the standard applicable to welded steel construction and sets out quality requirements for such welding in

addition to addressing design, electrodes, workmanship, technique, contractor qualification, repair, and welding procedures, among other things.

153. It points to section 3.1.1, under the General Requirements heading of CSA W59, which provides that:

All Contractors performing work under this Standard shall the meet the requirements of Clause 6.

154. It also points to section 6.1 of Clause 6, which states that:

The Contractor shall be certified for welding fabrications when so stipulated in the governing design standard. In the absence of specific requirements in the governing design standard, the Fabricator shall, at the option of the Engineer, either:

- (a) be certified under the requirements of CSA Standard W47.1, Certification Of Companies For Fusion Welding Of Steel Structures; or
- (b) provide evidence to satisfy the Engineer that he is competent to produce the required welded fabrication.

[Emphasis added]

155. Engineers and Geoscientists BC submits that by virtue of section 14.2 of the *Regulation*, the governing design standard applicable to the Anchor Stools was CSA Z248-04, which stipulates that "all welding shall be done in accordance with CSA W59 and CSA W47.1 or equivalent standards." Section 4.4 is found in the section of the *Code* specifically speaking to construction and does not carve out any component of a tower crane from this requirement.

156. Engineers and Geoscientists BC further submits that CSA W47.1 sets out standards applicable to the certification of companies (i.e. contractors) for fusion welding of steel and the qualifications of their personnel and welding procedures.

157. Engineers and Geoscientists BC says that with respect to the certification of companies or contractors, section 5.5.2 requires that a certified company prepare and keep on file for review a report evidencing the name of all welders, the processes and welding positions in relation to which each of them maybe engaged, the expiry date of their qualifications and the qualifying authority for each of them if other than the CWB.
158. CSA W47.1 section 7.1 also requires that certified companies employ a welding supervisor with a minimum of five years of welding related experience pertinent to the company's type of operations. The welding supervisor, in turn, is responsible for ensuring that personnel are qualified and working with approved welding procedures.
159. Section 8 of CSA W47.1 sets out criteria for welder qualification. Section 8.3.3.1 provides that a welder's qualification will remain in effect for two years absent a reason to question their ability. As noted on welding tickets issued by the CWB, when a welder has completed their qualification, their certification is valid only when working for a contractor or shop that is itself certified pursuant to CSA W47.1.
160. In addition to requiring the employment of a welding supervisor and the use of certified welders, section 10 of CSA W47.1 also requires that companies use approved welding processes.
161. Finally, Engineers and Geoscientists BC submits that section 11.8.1 of W47.1 requires the use of CWB certified welding consumables be used (i.e. consumables certified to the requirements of CSA W48 "or in the absence of a CSA standard, to the requirements of the applicable AWSA5 specification"). Where non-certified electrodes or consumables are being considered for use, section 11.8.2.1 sets out a number of steps to be taken to satisfy the CWB with respect to the electrode in

question.

162. Engineers and Geoscientists BC argues that the Respondent, by his own admission, did not adhere to CSA W59 in inspecting the Anchor Stools, nor did he inspect them for compliance with CSA W59 during their manufacture. Rather, the Respondent consistently professed to have used CSA W59, like CSA Z248-04, as merely a guidepost. He considered himself able to depart from the standard without justification or explanation simply by virtue of the fact that he was an engineer retained by the crane's owner and possessed 30 years of experience in the crane inspection industry. Again, by the Respondent's admission he did not seek to apply any equivalent standard.
163. While Engineers and Geoscientists BC submits that these admissions are dispositive of the question of whether the Respondent breached section 14.2 of the *Regulation* by failing to comply with W59, it argues that there is ample additional evidence of the Respondent's failure to comply with this particular CSA standard.
164. First, as outlined above, it says W59 requires that a contractor, in this case NS Machining, be certified to the governing design standard. As noted earlier, the governing design standard applicable to the Anchor Stools was CSA Z248-04 which requires that all welding be performed in accordance with both W59 and W47.1, or an equivalent.
165. Engineers and Geoscientists BC submits that the Respondent admitted that the Anchor Stools were manufactured by a contractor he knew was not certified pursuant to W47.1.
166. It says the Respondent further admitted that welding on the Anchor Stools was performed by welders whose CWB tickets were - at best invalid by virtue of the

fact that they were not working for a CWB certified contractor or, at worst (with respect to one of the welders) expired at the time of fabrication.

167. Engineers and Geoscientists BC submits that the Respondent also admitted that the Anchor Stools captured in the August 22, 2017 and August 31, 2017 photos did not meet the visual weld quality standards set out by W59, were not acceptable or safe for use. It argues that while the Respondent refused to agree that that the photos were, in fact, of the Anchor Stools at issue, it was the uncontradicted evidence of Ryan Stewart that the photographs were taken on August 22 and August 31 (after the issuance of the Respondent's certification letter). It was further Mr. Stewart's uncontradicted evidence that the stools in the photos were the Anchor Stools at issue. The Respondent tendered no evidence capable of casting doubt on this fact.
168. Finally, Engineers and Geoscientists BC submits that the preponderance of evidence at the hearing establishes that manufacture of the Anchor Stools was carried out by NS Machining without proper welding supervision and without approved welding processes, both of which would have been required had the Respondent sought to establish reliance on an equivalent standard.
169. It says the Respondent admitted that he did not take steps to ensure that welding in the manufacture or repair of the Anchor Stools was carried out in accordance with CSA W59 and CSA W47.1. Simply put, he admits that he did not ensure the welding on the Anchor Stools was carried out in accordance with CSA W59 and or W47 but says that he was not required to inspect for compliance with these standards.
170. Engineers and Geoscientists BC argues that if the Panel finds that section 14.2 of the *Regulation* required him to inspect for compliance with Z248-04 and therefore

W59 and W47.1, the Respondent will have effectively admitted the remainder of its case and the charges against him.

171. Further, while the Respondent asserted that the Anchor Stools were acceptable for service on August 17, 2017, he acknowledged both in direct and cross examination that he did not consider the Anchor Stools shown in the photographs taken by Mr. Stewart on August 22 and August 31 to comply with W59. Thus, if the Panel is satisfied that the photos are in fact images of the same Anchor Stools taken on August 22 and August 31 of 2017 respectively, Mr. Kovacik has effectively admitted that, as at the time he certified them (which he says was on August 17, 2017) they did not comply with TNAI's Design because did not comply with W59.
172. The Respondent disputes Engineers and Geoscientists BC's allegations. He submits that he did not demonstrate unprofessional conduct, incompetence or negligence as alleged in paragraphs 1(a) and (b) of the Citation. The Respondent says that he followed the required regulation, Z248. He says that Z248 does not specifically require compliance with W59. The Respondent submits he deemed the Anchor Stools to be part of the foundation, and Part 5 of Z248 allows a professional engineer to use his judgment and experience to inspect, repair and accept stools for service. Further, he says that even if W59 was applicable by virtue of Part 4 of Z248, W59 allows the professional engineer to disregard the strict requirements of W47.1 and use his experience and professional judgment to accept the welds.
173. The Respondent submits that the allegation in paragraph 1(a) of the Citation has not been proven because strict adherence to CSA 47.1 is not necessary. He says by using any of the following approaches, he is allowed to accept the Anchor Stools which would comply with W59 and Z 248 and "equivalent standard to W47.1".

i. The first approach:

- a. The Anchor Stools form part of the foundation. As explained by Dr. Ball in response to Question 5 of his report, the drawing in S248.004 at page 56, Item A clearly shows that the anchor stool is part of the foundation.
- b. Therefore, part 5 of Z248, erection, dismantling and climbing of crane is applicable.
- c. Section 4 of the Z248 applies to construction of new cranes by the manufacturer of the cranes.
- d. Section 5.2.2 of Z248 states:

5.2.2 Component integrity

The following requirements shall be met to ensure component integrity:

- a. Prior to erection, the crane manufacturer or the crane owner shall provide a certificate stating that the critical structural components of the crane have been inspected and tested by a professional engineer or a qualified person designated by the professional engineer, using approved methods of nondestructive testing in accordance with CAN/CGSB-48.971 2. A copy of the report, signed and sealed by the professional engineer, shall accompany the certificate and shall be available upon request.
 - b. Structural damage and defects found shall be repaired in accordance with the manufacturer's specifications and instructions or in accordance with the specifications of a professional engineer.
 - c. Repair and damage to all structural components that affect the crane's strength and stability shall be inspected by a professional engineer or qualified person designated by a professional engineer. The professional engineer shall sign and seal the report confirming that all defects have been corrected.
- e. Dr. Ball, who has several decades of experience in dealing with this type of crane and this type of anchor stools, opines that the Respondent must meet the requirements of this section in order to fulfill his duty as a professional

engineer.

- f. The anchor stool is not manufactured by the crane manufacturer.
 - g. It does not travel with the crane, in the sense that the anchor stool is designed and fabricated for a particular foundation.
 - h. It usually arrives in advance of the crane, while the foundation is being prepared. It is such a major part of the foundation and so critical to the foundation, that prior to the pouring of the concrete, the anchor stool must be seated in the foundation.
 - i. When the concrete is poured into the foundation, almost the entirety of the anchor stools is embedded in concrete. Therefore, it must be inspected and accepted for service prior to the pour of the concrete, well in advance of the crane even arriving at the site.
 - j. After the crane is completed its project, the crane is dismembered and moved to a new location, while the anchor stool stays with the foundation, embedded in the concrete in the foundation.
 - k. It would be odd, and perhaps even absurd, to say that while the balance of the foundation must be inspected pursuant to section 5.2.2, its most critical component (the anchor stool) does not have to be inspected pursuant to section 5.2.2 but rather according to part 4 and to a completely different standard.
174. The Respondent submits he used all his skill, over 30 years of knowledge and experience, to determine that the anchor stools are fit for service. In his initial inspection, there were certain anomalies and discontinuations. He provided a repair procedure and finally accepted the Anchor Stools after all the repairs were completed to his satisfaction.

175. The Respondent also submits that he satisfied himself that the welders had the requisite skill, knowledge and experience.

- i. One welder was a journeyman welder with a red seal. Dr. Ball, the Respondent and Mr. Tinkley are of the opinion that this red seal means that the welder had more than sufficient knowledge, skill and experience for this type of weld.
- ii. One welder had a valid ticket from CWB and therefore, he had passed the requisite testing required by CWB.
- iii. The third welder's CWB ticket had lapsed, and was renewed as of August 4, 2017 therefore demonstrating requisite skill and knowledge.

176. Second, after reviewing the mill certificates, the Respondent understood that he was dealing with mild steel in the middle of summer. The heating and cooling conditions are not that significant.

177. Dr. Ball and the Respondent expressed their view that the welding procedure for this type of material in summer would be fairly "usual" and "regular".

178. The Respondent, Mr. Tinkley and Mr. Walchuk testified to providing the weld procedure to the welds involved in the repair.

179. Third, looking at the consumable used, it was a Chinese made consumable.

180. The CWB registration for the consumable had lapsed in January 5, 2017, some 8 months prior to being used.

181. Dr. Smith opined that such consumable would easily last for at least one year and would not require re-testing within one year of purchase.

182. The Respondent and Dr. Ball are of the opinion that this type of consumable could

potentially last for a few years.

183. The photographs of the consumable box show an intact box without any damage.
184. The Respondent testified that it is his belief that the consumables were manufactured prior to January 5, 2017 and that the fabricator, NS Machining, purchased this consumable prior to the certification being lapsed.
185. Fourth, the welds were inspected by three different W187.2 certified visual inspectors, namely, the Respondent, Mr. Walchuk and Mr. Tinkley.
186. Further, the Anchor Stools were tested by Mr. Tinkley using his magnetic particle testing ticket.
187. All three were satisfied that the repairs were satisfactorily complete prior to the Respondent accepting the Anchor Stools for service.
188. Therefore, the Respondent submits he ensured that the Anchor Stools complied with the necessary regulations and was satisfied they were fit for service.

ii. The second approach:

- a. W59 allows, by virtue of section (6), the engineer to disregard the requirement of W47.1 if the engineer has alternative evidence to accept a component:

6. Qualification of Contractor

6.1 The Contractor shall be certified for welded fabrications when so stipulated in the governing design standard. In the absence of specific requirements in the governing design standard, the Fabricator shall, at the option of the Engineer, either:

- (a) Be certified under the requirements of CSA Standard W47.1 Certification of Companies for Fusion Welding of Steel Structures; or

(b) Provide evidence to satisfy the Engineer that he is competent to produce the required welded fabrication.

b. The "Engineer" is defined as "professionally qualified designated representative of the regulatory authority or of the Purchaser, as applicable.

c. The "Purchaser" is defined as the Owner or Owner's representative.

189. The Panel agrees with the Respondent that this case is in essence about the intricacies of tower crane, foundation design, tower crane erection and failure analysis, and that at the heart of this entire case is the question "What did Mr. Kovacik do, and was he allowed to do so as a competent engineer?"

190. Engineers and Geoscientists BC bears the burden of proof with respect to their allegation that the Anchor Stools, as part of the foundation, were subject to section 4.4 of CSA Z248. The burden of proof does not shift to the Respondent.

191. The Panel is not satisfied that Engineers and Geoscientists BC has proven this allegation on a balance of probabilities with clear, convincing, and cogent evidence.

192. The Panel has determined that Dr. Ball is an expert in welding engineering and inspection of cranes. Dr. Ball's expert evidence, which the Panel found clear, convincing, and cogent, is that section 4 of Z248 does not apply to a tower cranes' anchor stools. Dr. Smith holds a contrary opinion.

193. The Panel agrees with the Respondent that while Dr. Smith is an expert in welding and welding procedure, he is not an expert in anchor stools, tower cranes, application of Z248, design and certification of foundation or inspection of any component of a tower crane. While the Panel finds Dr. Smith's evidence generally to be unbiased and objective, it agrees with the Respondent that he is not an expert with respect to the inspection of welding on tower cranes.

194. The Panel also agrees with the Respondent that Dr. Smith can provide his expertise on welding in general, and his opinion on CWB 47.1 and W59. However, Dr. Smith does not have special expertise regarding what sections of Z248 apply to the tower crane stool foundation assembly. This is supported by the evidence that he has never participated in an anchor stool design, manufacturing, or installation. The evidence further shows that Dr. Smith:

- i. has never certified a tower crane;
- ii. has never inspected a tower crane;
- iii. has never worked with Z248 (code for tower cranes) in relation to erection or dismantling a tower crane; and
- iv. just one, out of hundreds, of his clients fabricates stools for cranes, and that's the extent of his involvement with tower crane anchor stools.

195. Dr. Smith's limited experience with Z248 (the code for tower cranes) has been when he reviewed it to become familiar with it for the purpose of co-authoring his guidelines for annual inspections.

196. The Panel accepts the Respondent's submission that Dr. Smith therefore does not have the necessary expertise to definitively opine on or determine whether section 4 or section 5 of Z248 applies to a tower crane's anchor stool's design, manufacture and installation.

197. The Panel finds that Engineers and Geoscientists BC has thus failed to provide clear, convincing, and cogent evidence that section 4 of Z248 applies to the Anchor Stools.

198. Accordingly, the Panel finds that Engineers and Geoscientists BC has failed to

prove the allegations contained in paragraph 1(a) of the Citation on a balance of probabilities.

Allegations – Paragraph 1 (b) of the Citation

1. *You have demonstrated unprofessional conduct, incompetence, or negligence by:*

b. Failing to comply with CSA W47.1 standards as required by CSA 2248-2004 pursuant to the Regulations when you failed to test the welding consumable used for the Project, as is required for material not certified by the Canadian Welding Bureau;

199. Engineers and Geoscientists BC submits section 11.8.1. of CSA W47.1 requires that companies use welding consumables certified by the CWB. It says the Respondent admitted that the consumables he asserts were used in the manufacture of the Anchor Stools were no longer CWB certified at the time of the Anchor Stools' manufacture. The Respondent's position is that the certification status of the consumable as at the time of manufacture is of no moment. In his view, it is necessary only that consumables used have been certified at the time when they were purchased by the manufacturer. However, he admitted that he had no knowledge of when the consumables used in the fabrication of the Anchor Stools were purchased and clearly took no steps to assess the same. In these circumstances, Engineers and Geoscientists BC says the Respondent clearly knew - or ought to have known that the consumable used was no longer CWB certified and should have taken appropriate steps to comply with the testing requirements of section 11.8.2.1 of CSA W47.1 to compensate. He clearly did not, and he accordingly failed to comply with W47.1.

200. Engineers and Geoscientists BC argues that it was the uncontroverted evidence of Dr. Mathew Smith that any standard to be used as an equivalent to CSA W47.1

would need to incorporate welding supervision, welding procedures, and quality control with respect to consumables and welder qualification. It says that although the Respondent agrees that the requirements of W47.1 were not met, he neither referenced an alternative standard in certifying the Anchor Stools nor ensured that the basic components of CSA W47.1 were present.

201. In addition to the standards and regulations referenced above, Engineers and Geoscientists BC submits the TNAI Design requirements includes the following with respect to the Anchor Stools' fabrication:

Welds to be magnetic particle tested following installation of root pass and following weld completion to verify compliance with CSA W59 dynamic criteria.

Welding electrodes to be E7018 or pre-approved wire.

Welding will be done by certified welder accredited by the Canadian Welding Bureau.

All welds to be inspected for size, profile & defects to verify compliance with CSA W59-1989 Inspection Requirements.

Ted Newell and Associates Inc. must be notified of any changes to or deviations from this drawing.

Emphasis added.

202. It argues that where CSA Z248-04 section 4.4 may leave room for the use of equivalent standards, the TNAI Design does not. Engineers and Geoscientists BC submits that on this basis alone, the Respondent failed to fulfil one of his primary duties in inspecting the Anchor Stools, namely, to ensure compliance with TNAI's Design specifications.

203. The Respondent disputes Engineers and Geoscientists BC's allegations. He submits that no testing is required for the consumables as alleged in Citation 1(b).

204. The CWB registration for the consumable had lapsed in January 5, 2017, about 8

months prior to being used.

205. In Dr. Smith's opinion such consumables could easily last for at least one year.
206. The Respondent, and Dr. Ball are also of the opinion that this type of consumable could potentially last for a few years.
207. The photographs of the consumable box show an intact box without any damage.
208. The Respondent testified that it is his belief that the consumables were manufactured prior to January 5, 2017 and that the fabricator, NS Machining, purchased this consumable prior to the certification being lapsed.
209. There is also no clear and cogent evidence provided by Engineers and Geoscientists BC's as to when the consumables were manufactured even though the necessary information to track the batch numbers for the consumables is visible in the photographs.
210. In Dr. Ball's opinion lapsed certification does not mean materials supplied under the certification are no longer usable.
211. Further, since this material does not age and deteriorate and fall into pieces in storage, even if it didn't have CWB certification active at the time it was used, it is still certifiable material.
212. Dr. Smith testified that the consumables at issue should not have been used on a project where CWB certification was required. Dr. Smith further testified that it may be unnecessary to discard the expired consumables, because they could be tested to ensure fitness for use although the Respondent did not order these types of tests. Dr. Smith agreed that consumables could last for one year on the shelf. Dr. Smith's opinion was that any consumable for which the certification had lapsed should be tested before being used in a situation where

certification was required.

213. The Panel finds that, clearly, the consumable was not certified. However, given its previous approval, its relatively recent date of expiry and the evidence that the package was intact and undamaged, another competent professional might have determined that its use was acceptable without further testing. This was, therefore, not a marked departure from the standard to be expected of a competent professional.
214. Accordingly, the Panel finds that Engineers and Geoscientists BC has failed to prove the allegations contained in paragraph 1(b) of the Citation on a balance of probabilities with clear, convincing, and cogent evidence.

Allegations – Paragraph 1 (c) of the Citation

1. *You have demonstrated unprofessional conduct, incompetence, or negligence by:*

c. *Signing and sealing an inspection report dated August 8, 2017 recommending the Anchor Stools for service:*

- i. *when the Anchor Stools were not serviceable;*
- ii. *when the weld repairs had not been completed;*
- iii. *without referencing a recognized standard or a documented equivalent; and*
- iv. *when you knew or ought to have known that the fabricator was not certified by CWB and you took no steps to mitigate this issue.*

215. Engineers and Geoscientists BC alleges that the Respondent demonstrated unprofessional conduct or negligence when he signed and sealed a letter dated August 8, 2017 recommending the Anchor Stools for service in circumstances where: (i) the Anchor Stools were not serviceable; (ii) weld repairs had not been completed; (iii) he knew or ought to have known that NS Machining was not

certified by the CWB (and he took no steps to mitigate) and (iv) without referencing a recognized standard or documented equivalent.

216. Engineers and Geoscientists BC submits that the Respondent admitted the Anchor Stools were not serviceable as at August 22, 2017, shortly after he says he approved them, and also admitted that he was aware NS Machining was not certified and he took no steps to mitigate this issue by seeking to ensure that NS Machining was certified to an equivalent standard. Engineers and Geoscientists BC says the Respondent further admitted that the photos taken on August 22, 2017 showed the Anchor Stools still in need of repair. Lastly, it argues that there was no dispute at the hearing that the Respondent failed to refer to any standard pursuant to which his inspection was conducted when certifying the Anchor Stools.

217. Engineers and Geoscientists BC submits that it was improper for the Respondent to sign and seal his August 8, 2017 letter in these circumstances. In doing so, Engineers and Geoscientists BC submits that the Respondent engaged in unprofessional conduct and/or negligence.

218. The Respondent denies Engineers and Geoscientists BC's allegations in paragraph 1(c)(i) to 1(c)(iv) of the Citation.

219. He submits that he finally accepted the Anchor Stools for service on August 17, 2017, which is evidenced by an email exchange between him and his administrative assistant.

220. The Respondent points out that Mr. Stewart provided two sets of photographs:

- a. One set of photographs at Exhibit 1 pages 17 to 39 ("First Set of Photos"); and
- b. One set of photographs at Exhibit 1 pages 74 to 96 ("Second Set of Photos").

221. The Respondent argues that Mr. Stewart at first could not recall the exact date that

he took the First Set of Photos and the Second Set of Photos. However, when counsel for Engineers and Geoscientists BC led Mr. Stewart to a computer typed three-page document Mr. Stewart recalled that he took the First Set of Photos on August 22, 2017 and that he took the Second Set of Photos on August 31, 2017.

222. Mr. Stewart stated that he typed this document in October 2017. The document is undated. Mr. Stewart testified that he was advised by the owner of the Anchor Stools on both the dates that the stools in the photographs were in fact the Anchor Stools rejected by Mr. Stewart.
223. The Respondent submits that the Panel heard from Mr. Stewart and from Mr. Walchuk that Mr. Stewart is a disgruntled ex-employee who was caught red-handed taking all Kova Engineering's data from its servers. The Respondent submits that Mr. Stewart had to suffer the humiliation of executing a statutory declaration, a sworn statement, that he is guilty of stealing such data and that he has destroyed all copies of such data.
224. The Respondent says that the burden of proof rests with Engineers and Geoscientists BC. He says that despite their knowledge that this is a highly contentious point, perhaps the sole factual dispute in this proceeding, Engineers and Geoscientists BC failed to provide any evidence to substantiate Mr. Stewart's claim that the photos were taken on August 22, 2017, and on August 31, 2017. For example, the Respondent submits that Engineers and Geoscientists BC decided not to call the owner of the Anchor Stools. The Panel notes that the Respondent could also have called on the owner with respect to this issue but did not do so. As a further example, the Respondent says that Engineers and Geoscientists BC failed to disclose any date information for the photographs. He argues that even rudimentary cameras have the capacity to display the date of the photograph on the photograph. However, Engineers and Geoscientists BC did not produce such

photographs. The Respondent argues Engineers and Geoscientists BC is aware of this feature because their counsel demanded that Mr. Tinkley provide copies of his photographs with date information. He further argues that Engineers and Geoscientists BC failed to show any metadata associated with the photographs to unequivocally prove the date on which Mr. Stewart took the photographs.

225. The Respondent theorizes that either the photographs were not taken on the dates suggested by Mr. Stewart, or the photographs captured stools that are not the Anchor Stools which are the subject of this hearing.
226. The Respondent argues that as a disgruntled ex-employee out to seek revenge for his recent humiliation, Mr. Stewart seized the opportunity to humiliate and professionally destroy him by simply misstating the dates of his photographs.
227. The Respondent submits that although he testified that he would not have accepted the anchor stools shown in the First Set of Photos and the Second Set of Photos, Engineers and Geoscientists BC did not provide any evidence other than testimony of Mr. Stewart, even though there were, as discussed above, several other ways to prove the date of the photographs.
228. The Respondent submits that he, Mr. Tinkley and Mr. Walchuk testified that by August 17, 2017, when he signed the letter all the repairs were completed, and the Anchor Stools were acceptable for service. Also, several inspections conducted by Kova Engineering, with the Anchor Stools in service, show that the welding on them did not show any defect during service, and even post service.
229. The Respondent submits that Engineers and Geoscientists BC decided not to have any inspection of the Anchor Stools in service by a W178.2 certified visual inspector or magnetic particle inspector.
230. He says Engineers and Geoscientists BC has accordingly failed to prove on a

balance of probabilities that he signed an acceptance letter when the repairs were not completed and the Anchor Stools not ready for service.

231. The Panel disagrees. The Panel found Mr. Stewart's evidence to be given in a straightforward and believable manner. His apparent reluctance to initially name Kova in launching his complaint with Engineers and Geoscientists BC suggests that his motives were not founded on animosity. The evidence before the Panel is that he only made a complaint to Engineers and Geoscientists BC after he was advised he had a duty to report.
232. Accordingly, the Panel does not accept the Respondent's allegations that Mr. Stewart was a disgruntled employee who seized on an opportunity to humiliate or destroy the Respondent by being untruthful about the dates he took the photos or otherwise. The Respondent did not put this allegation to Mr. Stewart during cross-examination. It would be unfair to the trier of fact to give it any weight or consideration without Mr. Stewart also having had an opportunity to provide a response to the allegation.
233. The Panel accepts Mr. Stewart's evidence that the photos of the Anchor Stools were taken on August 22, 2017, and at the end of August 2017, that is, on August 31, 2017, and that the owner of the Anchor Stools confirmed to him that they were the S35 anchor stools that he had previously rejected and that are the subject of the Citation. The Panel finds that Mr. Stewart's evidence in this regard is clear, cogent, and convincing, and that it was not undermined on cross-examination.
234. The Panel also finds the Respondent's evidence that he would not have accepted the Anchor Stools shown in the First Set of Photos and the Second Set of Photos, Engineers and Geoscientists BC clear, cogent, and convincing.
235. The Panel acknowledges that there is an inconsistency between Mr. Stewart's

evidence that the First Set of Photos and the Second Set of Photos were taken on August 22, 2017 and August 31, 2017, and Mr. Tinkley and Mr. Walchuk's testimony that on August 17, 2017, when the Respondent signed the certification letter that all the repairs were completed, and the Anchor Stools were acceptable for service.

236. The evidence before the Panel establishes that the Respondent certified the Anchor Stools for service solely by relying on the description of the weld quality and the assurance of their suitability for service that were provided to him by Mr. Tinkley and Mr. Walchuk on August 14, 2017 through means of a Facetime call and a subsequent report. The evidence further establishes that the Respondent did not inspect the Anchor Stools in-person himself on August 14 or on August 17, 2017 to ensure the weld repairs were indeed completed and the Anchor Stools were in fact serviceable before he signed the certificate on August 17, 2017 indicating they were. The Respondent is accordingly unable to personally confirm with certainty that on August 17, 2017 the weld repairs were indeed complete and the Anchor Stools were in fact serviceable.
237. However, what the Respondent did personally confirm, after he looked at the detailed photos of the welds on the Anchor Stools that Mr. Stewart took after August 17, 2017, is that those welds were not adequately repaired and that the Anchor Stools were not suitable for service.
238. The Panel finds that Mr. Stewart and the Respondent's evidence establishes, on a balance of probabilities, that the Respondent signed and sealed an inspection report dated August 8, 2017, recommending the Anchor Stools for service when they were not serviceable and when the weld repairs had not been satisfactorily completed.

239. Accordingly, the Panel finds that Engineers and Geoscientists BC has proven the allegations set out in paragraphs 1(c)(i) and 1(c) (ii) of the Citation to the requisite standard.
240. The Panel finds that in assessing whether conduct is unprofessional, it must use its own judgment and expertise, should be guided by the content of the *Code of Ethics*, and should focus on what should be expected of a professional person in the circumstances. Engineering standards should be considered but those standards are not determinative. The Panel also recognizes that part of the assessment is whether there has been a marked departure from the standard to be expected of a competent professional. A minor or inadvertent failure to comply with professional standards does not constitute unprofessional conduct. The Panel considers that standards of professionalism are not required to be written down. Consistent with the approach in *Salway*, it is open to the Panel to draw upon its own professional experience and common sense in assessing whether a member has acted unprofessionally.
241. Paragraph 3 of the Citation alleges that the Respondent's conduct outlined in paragraph 1(c) is also contrary to Principle 1 of the Code of Ethics. Engineers and Geoscientists BC submits that Principle 1 of the Code of Ethics that was in force at the relevant time required that the Respondent hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace. It says it was evident that the Respondent's approach to inspection mirrored that taken by Dr. Ball who first trained him. That approach was to treat CSA Z248-04 as a guide to be followed only when desirable.
242. Engineers and Geoscientists BC submits that both the Respondent and Dr. Ball expressed the view that the *Code* often caused more problems than it solved. It says it was clear from the Respondent's testimony that he considered his job - not

to be focused on adherence to standards enacted for the express purpose of ensuring safety - but to find a way to permit the Anchor Stools to be used, despite their non-compliance with the applicable standards. In these circumstances, Engineers and Geoscientists BC submits that the Respondent's failure to comply with the *Regulation* constitutes not only unprofessional conduct and negligence but also a breach of Principle 1 of Engineers and Geoscientists BC 's then Code of Ethics.

243. The Respondent submits that Engineers and Geoscientists BC's submission in this regard is false and devoid of any underlying evidence. The Respondent says he and Dr. Ball never stated that they follow Z248 only when desirable. The Respondent says he and Mr. Ball clearly stated that any analysis starts with Z248. This is the regulation that is applicable for all tower cranes in BC.
244. The Respondent submits the point where Dr. Ball and Engineers and Geoscientists BC differ is on their interpretation of Z248 and what sections apply to the fabrication and testing of anchor stools.
245. He submits there is not a single reference on the record by him, or by Dr. Ball, where either of them stated that Z248 does not apply to tower cranes in BC.
246. The Respondent further submits that Engineers and Geoscientists BC's statement that "...it is clear from Mr. Kovacik's testimony that he considered his job - not focused on adherence to standards enacted for the express purpose of ensuring safety - but to find a way to permit the stools to be used, despite their non-compliance with applicable standards" is borderline libel falsehood.
247. The Respondent submits that he explained at length how he applied Z248 and W59 to ensure that 4 serviceable stools are not wasted causing environmental degradation. He says he provided a reasoned approach to his work.

248. The Respondent says Engineers and Geoscientists BC's submissions are disrespectful and highly offensive to him, an engineer who has spent the past 30 years helping the industry move in a positive direction.
249. As already outlined above, the Panel has determined that the evidence establishes on a balance of probabilities that the Respondent signed and sealed an inspection report dated August 8, 2017 recommending the Anchor Stools for service when they were not serviceable and when the weld repairs had not been satisfactorily completed.
250. The Panel also finds that by doing so the Respondent breached Principle 1 of the *Code of Ethics to hold paramount the safety, health and welfare of the public*. The Panel finds that the Respondent did not hold public safety "paramount", as is required by Principle 1 of the *Code of Ethics*.
251. The Panel further finds that the Respondent's proven conduct in doing so was not a minor or inadvertent failure to comply with a professional standard but a marked departure from the standard to be expected of a competent professional engineer and it accordingly constitutes unprofessional conduct.
252. Further, paragraph 4 of the Citation alleges that the Respondent's conduct as outlined in paragraph 1(c) is also contrary to Principle 3 of the *Code of Ethics*, which required that the Respondent provides an opinion on a professional subject only when it is founded on adequate knowledge and honest conviction.
253. Engineers and Geoscientists BC submits it is clear from the Respondent's own testimony that he operates primarily in areas where the *Code* does not apply and lacked appreciation for its requirement that it be applied.
254. Engineers and Geoscientists BC further submits that the Respondent provided an opinion, expressed in his certification letter of August 8, 2017, either without

adequate knowledge of the *Code* and the relevant circumstances relating to the Anchor Stools' construction or willfully chose to disregard them.

255. The Respondent denies these allegations. He submits that he has been working in the field of tower cranes for the past 30 years. He says that not only does he have the experience, but the knowledge and skill to apply that experience all around the world.
256. He says that he explained, in a reasoned way, his approach to the application of Z248 to anchor stools. He submits that disagreement as to how a code is applied does not mean lack of knowledge. He further submits that his position is supported by a very experienced expert in their field, Dr. Ball. He says that even Dr. Smith conceded to his approach when he accepted that the Respondent may disregard CSA 47.1 by virtue of section 6 of W59.
257. The Respondent further submits that if Engineers and Geoscientists BC's submission that he breached Principle 3 is accepted he, Dr. Ball, and Dr. Smith, all lack adequate knowledge. The Respondent submits that Engineers and Geoscientists BC has failed to establish, to any level, that he lacks adequate knowledge.
258. The Panel disagrees.
259. As noted, the evidence establishes that the Respondent certified the Anchor Stools for service solely by relying on the description of the weld quality and assurance of their suitability for service provided to him by Mr. Tinkley and Mr. Walchuk through means of a Facetime call on August 14, 2017 and a subsequent report. On his own admission the welds on the Anchor Stools subsequently photographed by Mr. Stewart were not sufficient or suitable for service.
260. It would have been clear to the Respondent from the fact that the Anchor Stools

had to undergo several repairs and that they also had to be inspected multiple times by several different inspectors, and rejected by one, that there were potentially significant shortcomings with the weld quality and their suitability for service. In these circumstances, the Panel finds that it was incumbent on the Respondent to establish with more certainty whether the weld repairs were indeed completed and the Anchor Stools in fact suitable for service before he certified that they were. The Panel finds that by failing to do so the Respondent breached Principle 3 of the Code of Ethics, in particular, the Panel finds that the Respondent failed to obtain adequate knowledge on the weld repairs and suitability for service of the Anchor Stools before issuing the relevant certificate certifying that they were suitable for service.

261. The Panel further finds that his proven conduct in doing so was not a minor or inadvertent failure to comply with a professional standard but a marked departure from the standard to be expected of a competent professional engineer. It accordingly constitutes unprofessional conduct.
262. The Respondent denies the allegation in paragraph 1(c)(iii) of the Citation that that he demonstrated unprofessional conduct, incompetence, or negligence by signing and sealing an inspection report dated August 8, 2017 recommending the Anchor Stools for service without referencing a recognized standard or a documented equivalent.
263. The Panel agrees and accepts the Respondent's submission that Engineers and Geoscientists BC has not provided any evidence of a regulation, code, publication, or directive that in August 2017 required him to refer to a particular standard in his final acceptance letter.
264. The Panel accepts Dr. Ball's evidence that the Respondent in his certification letter

documents his engineering services in relation to the inspection certification of the Anchor Stools to the standard reasonably expected of a professional engineer.

265. The Panel agrees with and accepts the Respondent's submission that his certification letter issued in August 2017 should not be judged by today's standards.
266. Accordingly, the Panel finds that Engineers and Geoscientists BC has failed to prove the allegation contained in paragraph 1(c)(iii) of the Citation on a balance of probabilities.
267. The Respondent further denies that he, as alleged in paragraph 1(c)(iv) of the Citation, demonstrated unprofessional conduct, incompetence, or negligence by signing and sealing an inspection report dated August 8, 2017 recommending the Anchor Stools for service when he knew or ought to have known the fabricator was not certified by CWB and that he took no steps to mitigate this issue. He submits that this allegation is factually incorrect because as outlined above he established an elaborate and exhaustive method to inspect and approve the stools as discussed above with respect to Citation 1 (a).
268. The Panel believes it to be fundamental that the Engineer charged with certifying the construction of the Anchor Stools ensure that they comply with the requirements of the designer (TNAI). In this regard, it is clear that the welding was not done by CWB certified welders, as required by the design. The Panel is not satisfied that adequate mitigative measures were taken, even if mitigative measures had been allowed by the designer. In respect of allegation 1(c)(iv), however, the Panel is not convinced that the Respondent's conduct is a "marked departure from the standard to be expected of a competent professional" and is, therefore, not proven.

Allegations – Paragraph 2 of the Citation

2. The conduct set out above at paragraphs 1(a) - (c) was contrary to section 14(b) of the Engineers and Geoscientists BC Bylaws, as it stood at the time, which required that members and licensees shall establish and maintain documented quality management processes for their practices, which shall include, as a minimum:

(2) regular, documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.

269. Engineers and Geoscientists BC submits that section 14(b) of its Bylaws which was in effect at the relevant time required that members and licensees establish and maintain documented quality management processes including processes to ensure retention of complete project documentation and regular documented checks of engineering and geoscience work using a written quality control process appropriate to the risk associated with the work.
270. Engineers and Geoscientists BC also says there can be no question based on the documentation and evidence given during the course of this hearing that the Respondent failed to maintain complete project documentation relating to his inspection of the Anchor Stools such that he was completely unable to say with certainty when they were certified, or if the Panel accepts his evidence that he agreed to certify them by his "looks ok" email of August 17, to enable him to track and indeed produce during the course of the inspection all documents relating to his inspection, including signed originals.
271. Engineers and Geoscientists BC further submits that the Respondent's failure to cite relevant standards when certifying the Anchor Stools and to properly document his conversations with and supervision of his inspectors is further is a breach of section 14(b)(2) of the Bylaws. It argues that his documentation practices were in

fact so challenged that he was unable to explain how signed and sealed copies of his certification letter bearing different dates and different footers were related to one another. Such failures made the investigation and prosecution of the Respondent unnecessarily long and expensive. Considering the impact his documentation practices had on Engineers and Geoscientists BC's investigation and ultimate prosecution, it submits that his breach of section 14(1)(b) of the Bylaws is more serious than it otherwise might be.

272. The Respondent denies these allegations. He submits that his and Mr. Walchuk's evidence establishes that Kova Engineering updated its document management and storage system continuously over time. Kova went from manual hard paper files, to digitizing all their old documents, and now creating a state-of-the-art proprietary document management system that automatically saves documents to proper folders and automatically indexes them. Just as rolling out any new systems, there have been hiccups and bugs, but the same have been ironed out and fixed over time.
273. The Respondent submits that Kova had a written documented quality management procedure even before this requirement was enforced in British Columbia because Kova had created the system for Alberta office and implemented it in BC.
274. He argues that Engineers and Geoscientists BC did not lead any evidence to show that Kova lacks a documented quality management procedure, and unfortunately, this citation was never explored by Engineers and Geoscientists BC in its questioning.
275. The Respondent submits that Engineers and Geoscientists BC appears to equate documented quality management process with maintaining each and every scrap of paper, email, draft, revision of all documents, emails, or correspondence.

276. He says that deleting an internal administrative email between himself and his administrative assistant does not show lack of documented quality management process.
277. Further, he submits that both he and Mr. Tinkley testified that there are documented quality control processes and systems applicable at Kova.
278. He further submits that Engineers and Geoscientists BC equates failure to cite relevant standard in the final approval letter as breach of section 14(b)(2). However, as already noted, there was no regulation in place in August 2017 that required him to do so.
279. The Respondent says Mr. Walchuk explained the document management system to the Panel. He further submits that not only did he provide disclosure of all documents relevant to the Anchor Stools, but eventually provided disclosure of several other files that had reference to the S35 stool. He submits that he has bent over backwards to accommodate requests by Engineers and Geoscientists BC.
280. The Panel accepts the Respondent's submissions. It finds that although the evidence establishes that there were issues with respect to the retention and dating of relevant project documents, which were primarily caused by Kova switching from a manual to digitized document management system, the Panel is not satisfied that the evidence establishes on a balance of probabilities that Kova breached section 14(b) of the Engineers and Geoscientists BC's *Bylaws*. The Panel accordingly dismisses the allegations contained in paragraph 2 of the Citation.

Allegations – Paragraph 3 of the Citation

3. *The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 1 of the Engineers and Geoscientists BC Code of Ethics, as it*

stood at the time, which required that members and licensees hold paramount the safety, health and welfare of the public, the protection of the environment and promote health and safety within the workplace.

281. The Panel has addressed its findings and determinations with respect to this allegation in the section above dealing with the allegations contained in paragraphs 1 (c)(i) and 1(c) (ii) of the Citation.

Allegations – Paragraph 4

4. The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 3 of the Engineers and Geoscientists BC Code of Ethics, as it stood at the time, which required that members and licensees provide an opinion on a professional subject only when it is founded upon adequate knowledge and honest conviction.

282. The Panel has addressed its findings and determinations with respect to this allegation in the section above dealing with the allegations contained in paragraphs 1 (c)(i) and 1(c)(ii), of the Citation.

Allegations – Paragraph 5 of the Citation

5. The conduct set out above at paragraphs 1(a) - (c) was contrary to Principle 6 of the Engineers and Geoscientists BC Code of Ethics, as it stood at the time, which required that members and licensees keep themselves informed in order to maintain their competence, strive to advance the body of knowledge within which they practice and provide opportunities for the professional development of their associates.

283. Engineers and Geoscientists BC submits that Principle 6 of the *Code of Ethics* required that the Respondent keep himself informed to maintain his competence. It argues that for the same reasons given with respect to Principle 3 above, the Respondent's conduct also constitutes a violation of Principle 6 of the *Code of Ethics*.

284. The Respondent disputes these allegations. He submits that he attends all necessary continuing education programs and keeps his tickets current. He submits that through Kova he trains new engineers, technologists, and technicians. He reiterates that having an opinion and a different interpretation of the rules and regulations, where applicable, is certainly advancing the body of knowledge. He says that Engineers and Geoscientists BC has not stated as to what more he is supposed to do to comply with this alleged requirement.

285. The Panel agrees with and accepts the Respondent's submissions in this regard. The Panel finds that Engineers and Geoscientists BC has not provided sufficiently clear, convincing, and cogent evidence to satisfy the balance of probabilities test with respect to the allegations made in paragraph 5 of the Citation and it dismisses those allegations.

E. Summary of Panel's Determination

286. In summary, the Panel's conclusions in this matter are as follows:

- a. Engineers and Geoscientists BC has proven the allegations in paragraphs 1(c)(i), 1(c) (ii), 3 and 4 of the Citation on a balance of probabilities.
- b. The Panel determines that with respect to the proven allegations contained in paragraphs 1(c)(i), 1(c) (ii), 3 and 4 of the Citation the appropriate finding is that the Respondent committed unprofessional conduct.
- c. The allegations set out in paragraphs 1(a),1(b), 1(c)(iii), 1(c)(iv), 2 and 5 of the Citation have not been proven on a balance of probabilities and are dismissed.

F. Penalty and Costs

287. Having made a determination under section 33(1) of the EGA, the Panel will next

determine the sanctions which should be imposed on the Respondent and whether costs are payable.

288. The Panel requests that Engineers and Geoscientists BC provide written submissions on the appropriate penalty and costs in accordance with the following schedule:

- a. Engineers and Geoscientists BC must provide their submissions on penalty and costs to the Respondent and the Panel within 21 calendar days from service of this order;
- b. The Respondent must provide his submissions on penalty and costs, if any, to Engineers and Geoscientists BC and the Panel within 21 calendar days after service of Engineers and Geoscientists BC's submissions on him; and
- c. Engineers and Geoscientists BC must provide any reply submissions to the Respondent and the Panel by no later than 7 days after service of the Respondent's submission on them.

289. All submissions may be delivered by email to the other party and to Fritz Gaerdes, independent legal counsel to the Panel.

<original signed by>

Frank Denton P. Eng., Chair

<original signed by>

Pierre Gallant

**CORRIGENDUM TO THE REASONS FOR DECISION OF THE PANEL DATED
JUNE 12, 2024**

290. This is a corrigendum to the Panel's Reasons for Decision initially signed and dated on June 12, 2024 (the "Reasons for Decision").

291. Paragraphs 5 and 286.c. of the Reasons for Decision is deleted and replaced with the following:

5. The Panel also finds that the allegations set out in paragraphs 1(a), 1(b), 1(c)(iii), 1(c)(iv), 2 and 5 of the Citation have not been proven on a balance of probabilities and are dismissed.

286 ...

c. The allegations set out in paragraphs 1(a), 1(b), 1(c)(iii), 1(c)(iv), 2 and 5 of the Citation have not been proven on a balance of probabilities and are dismissed.