CITATION: St Clair Boating v. Michigan Electric, 2017 ONSC 23
COURT FILE NO.: 7234/13
DATE: 20170103

ONTARIO

SUPERIOR COURT OF JUSTICE

BETWEEN:	
St. Clair Boating & Marina, a Division of 1537768 Ontario Ltd.	J. Manson and A. Cofman, for the Plaintiff
Plaintiff	
– and –	R. Bell and J. Madhany, for the Defendants Acuity Brands Inc., Acuity Brands Lighting Inc. and Lithonia Lighting Products Company of Georgia
Michigan Electric Supply Co., Steve Demers, Agri-Urban Buildings Inc., The Electrical Safety Authority, Acuity Brands Inc., Acuity Brands Lighting Inc., Lithonia Lighting Products Company of Georgia, General Electric Canada Company, General Electric Company, Philips Canada Ltd., Philips Lighting Company, and Philips Electronics North America Corporation	
Defendants	
	HEARD: December 2, 2016.

RAIKES J.

[1] The defendants, Acuity Brands Inc., Acuity Brands Lighting Inc. and Lithonia Lighting Products Company of Georgia ("the Acuity defendants"), move for summary judgment. As part of its responding material, the plaintiff filed two affidavits by Vincent Rochon ("Rochon") containing expert reports dealing with the origin and cause of the fire which is at issue in this litigation.

[2] The Acuity defendants move to exclude the evidence of Rochon, on four bases:

i. He is not qualified to opine as to whether the lighting products at issue met the electrical code and CSA standards;

ii. He is not independent and impartial;

iii. He shows bias in his methodology and conclusions reached; and

iv. His evidence is unreliable given his theory of cause of the fire; viz. an implausible theory of a ricocheting fragment of quartz from a lamp (light bulb) distant from the known site of the fire.

[3] Dealing first with his expertise to opine as to whether the lighting products met the electrical code and CSA requirements, at pages 15 and 19 of his November 3, 2015 report, Rochon wrote:

> "The luminaire and the lamp installation did not meet electrical code and CSA standards."

[4] In addition, at page 19, he also indicated that the luminaire did not have any warning labels and the specification label affixed indicated that a Type E HID lamp could be used. He did not observe the luminaire when installed or at any time before the fire so it is difficult to understand how he could testify or depose to that fact.

[5] Counsel for the Acuity defendants did not dispute Rochon's expertise in fire loss investigations. His expertise was only in issue to the extent indicated above.

[6] In oral argument, plaintiff's counsel agreed that Rochon's report should be amended to delete the references in paras 3 and 4 above.

Background to Action

Layout of Building

[7] On December 20, 2011, a fire destroyed a warehouse owned by the plaintiff in which approximately 60 boats and a number of vehicles were stored.

[8] The storage building (shed no. 2) was erected in 2001. It was a pre-engineered building 100 x 300 feet. It was made of corrugated steel. It had no windows. It had six gas-fired radiant heaters that were mounted at ceiling level. The eaves of the shed were 20 feet high and the peak was 30 feet high.

Witness Account

[9] Shortly before 7 a.m. on December 11, 2011, John Goethals entered shed no. 2 to do some work on a boat (the Vale boat) located near to the back of the shed approximately 200 feet from where he entered. When he arrived, Mr. Goethals turned on some but not all of the banks of lights.

[10] The temperature of the shed was generally kept at 45° F. He turned up the heater near where he was working by a few degrees.

[11] Soon after he adjusted the heater, Mr. Goethals noticed an abnormal noise, a "whirring, cracking". He looked to see if the heater was malfunctioning but it appeared normal. He

then noticed grey smoke at the ceiling level rolling back to where he was located. He moved forward to investigate. He noticed an orange glow up high at the westerly end of the shed. He was then 30-50 feet from the glow. He wisely decided to exit the building. As he did, he saw flames on top of the Tolbert boat which was stored in the southwest part of the shed.

[12] The Tolbert boat was a large 35' cabin cruiser. It was stored close to an old MG automobile. At the time of the fire, the outside of the cabin was covered in canvas, as was the area behind the main radar arch of the boat. There was also a canvas cover on the windshield. There was a plastic tarp covering the top of the boat.

OFM Investigation and Report

[13] The fire destroyed the shed. The site was fenced off and the Office of the Fire Marshall ("OFM") conducted an investigation. The OFM concluded that the fire was of an accidental electrical cause. At page 25 of 30 of the OFM report, under the "Conclusion" heading, the author wrote:

> "...the most credible cause of this fire was the ignition of combustible materials (namely plastic and boat top canvas) by electrical means. Specifically, the most probable cause of ignition is determined to be a catastrophic failure (arc tube rupture) of a metal halide light bulb in an open style luminaire (fixture) where the hot particles being ejected from the bulb at the time of the failure were not contained and fell onto combustible material below (polyethylene plastic and acrylic canvas); however due to the level of fire damage, other possible electrical causes in the very well defined area of origin could not be credibly eliminated."

Early Involvement of Rochon

REI Structure and Relationship to Adjusters

[14] The owner of the shed notified its insurer of the fire. The insurer appointed Granite Solutions as adjusters. The insurer also engaged Rochon Engineering Inc. ("REI"), a forensic investigation engineering firm, which was then a sister company to Granite Solutions. As at December 11, 2011, Rochon and his brother, Michael Rochon ("Michael") owned 1 % of REI.

[15] In 2011, both Granite Solutions and the remainder of REI were owned by Genstar Capital, a California based private equity group. Genstar had undertaken a corporate reorganization and established a head office in Toronto called Granite Global Solutions. Granite Solutions (the adjusters) and REI operated independent of one another but reported to "the same bean counters" at Granite Global Solutions' Toronto head office.

[16] REI had two divisions: the investigations side of the business which was managed by Rochon, and the environmental side which was headed by Michael. The investigations side dealt with origin and cause investigations. The environmental side dealt with clean up and remediation issues.

[17] The larger corporate structure and structure of REI is central to the Acuity defendants' assertion of lack of impartiality and lack of independence.

Scope of REI Investigations

[18] The OFM released control of the site to Granite Solutions and REI on December 23, 2011. By then, REI had been engaged to advise the insurer with respect to the origin and cause of the fire as well as environmental clean-up and removal of debris.

[19] On the origin and cause investigation of the warehouse fire, Vincent delegated the initial work to an engineer under his supervision, Andrey Rudenko ("Rudenko"). Rudenko reported to and took instructions from Rochon until Rudenko's departure from REI in late March, 2012.

[20] Rudenko attended the site of the fire on December 23 and 28, 2011. Representatives of other known interested parties including a representative of Granite Solutions were also present. No one from the Acuity defendants was present as their involvement in the manufacture of the lights in the shed was not then known. The purpose of the December site visits was to identify the area of origin of the fire.

[21] Given the information provided by the OFM, Rudenko concluded that the southwest corner of the shed where the Tolbert boat was stored was the likely potential area of origin. Rudenko did not interview Mr. Goethals or the owner of the property.

[22] Rudenko reported his findings to Rochon who never attended the site at any time before he was retained as an expert by the plaintiff in May 2014.

[23] Rudenko conducted a last inspection of the site on March 23, 2012. Again, a representative of the adjuster was present as were approximately 10 other experts who had been engaged by adjusters for various insurers of boat owners.

[24] The March inspection lasted 4-5 hours. The protocol followed was:

a. As an artifact of interest was found by any of the experts, the rest would be summoned to that location;

b. The experts would decide by consensus whether the artifact was relevant to the determination of the potential origin and cause of the fire;

c. If so, the artifact was collected;

d. Rudenko and the other experts present located and removed five bags of artifacts which together fit into a single box; and

e. The site inspection was stopped once they felt that they had sufficient information to identify the manufacturer of the lamps used in the building.

[25] Rudenko was cross-examined as part of the summary judgment motion to which this motion to exclude relates. In his cross-examination, Rudenko testified that:

a. They were able to identify Lithonia Acuity as the manufacturer of the lamps;

b. They stopped the inspection at that point so that the Acuity defendants could be notified and given the opportunity to participate;

c. It was entirely inconsistent with NFPA 921 to destroy the scene before giving the Acuity defendants the opportunity to attend and go through more of the debris; and

d. He was no longer at REI when the debris was removed and the site cleaned.

[26] As mentioned, Rudenko left REI in late March, 2012 before the origin and cause investigation was complete.

[27] In April, 2012, the site was cleared of all debris from the fire. The removal was done by a firm recommended by REI and hired by the adjuster, Granite Solutions.

[28] The Acuity defendants were not notified of the fire until July 2012. Thus, they never had the opportunity to inspect the site before it was cleared. Their experts are critical of the failure to:

a. De-layer the debris to recover more physical evidence;

b. Notify the Acuity defendants of their potential exposure so that they could investigate;

c. Allow them to investigate to determine the origin and cause of the fire; and

d. Consider and investigate alternate potential sources of fire of which there were many.

They conclude, *inter alia*, that it is impossible to assign responsibility for the cause of the fire to the lamps on the evidence recovered especially given the failure to preserve the remains of the warehouse.

[29] I turn now to Rochon's role and actions as expert witness.

Rochon as Expert

[30] Rochon never visited the site of the fire before it was cleared of debris and did not participate in the investigation by REI beyond his supervision of Rudenko. Rochon was terminated by REI in May, 2012. Thereafter, he had no contact with any of the parties or their representatives until May 2014 when he was engaged by the plaintiff through counsel to provide an expert opinion as to the origin and cause of the fire.

[31] After he was retained by the plaintiff, Rochon attended a visual only inspection of the artifacts with other experts on May 14, 2014. The artifacts included the remains of a lamp and pieces of its arc tube. One of Acuity's experts, Steven Wright, was also present for that inspection.

[32] During the inspection in May, 2014, Rochon examined "everything" that had been collected and retained. At that point, he suspected that the lamp and arc tube were the likely cause of the fire. More specifically, he suspected that the arc tube in one of the lights located near the Tolbert boat had suffered a non-passive failure; viz. it burned out and exploded.

[33] On June 25, 2014, Rochon visited the adjoining shed that was virtually identical in design, layout and size as the shed that suffered the fire.

[34] On September 15, 2014, Rochon and other experts attended a joint inspection and destructive testing of some of the artifacts.

[35] Before completing his initial report dated November 3, 2015, Rochon reviewed the OFM report, the witness statement of Mr. Goethals, site notes, photographs and other documents as well as reports by three of the expert witnesses for the Acuity defendants. This was done in addition to the above mentioned steps.

November 3, 2015 Report

[36] In his November 3, 2015 report, Rochon concludes that the probable cause of the fire was a failure of a lamp (bulb) and the ejection of hot arc tube particles which ignited the combustible canvas bimini top and plastic drop sheet on the bridge of the Tolbert boat.

[37] He indicates at page 8 of that report that: "The determination of the cause of the fire is based on scientific and engineering principles established in NFPA 921."

[38] The November 3, 2015 report is also critical of the three defendant expert reports. In the course of those criticisms, Rochon opines that very hot arc tube fragments likely came from a luminaire located in the vicinity of the Tolbert boat and an MG car stored next to that boat; however, the fragments did not originate from the luminaire situate almost directly over and closest to the Tolbert boat. What is referred to in his report as the "subject luminaire" or likely source of the hot metal fragments is a luminaire that hung in the southwest corner near to but some distance from the Tolbert boat.

[39] At page 14 of his report, Rochon wrote:

> "In my opinion, the fire was caused by a non-passive arc tube failure of the lamp located at the southwest corner of the building by the Carver (Tolbert) boat and "MG" automobile car. When this occurs, hot particles are violently ejected from the lamp. These can ignite surrounding combustible materials and cause a fire. There was a luminaire (subject luminaire) very close to the 35 foot Carver (Tolbert) boat, if not directly on top of it. Since the light was an open luminaire, a General Electric 1000W Type E lamp should not have been used and an additional

> quartz shroud should have been implemented around the arc tube to prevent the fragments from breaking the outer glass bulb....
>
> The physical location of recovery of the bulb was on top and inside of the "MG" automobile. At the time of rupture, the "MG" automobile was located in close proximity to the Carver (Tolbert) boat. The remains of a light ballast was found on top of the "MG" automobile. The partially melted and fractured lamp (arc tube) was discovered behind the passenger seat of the "MG" automobile. Although pieces of the arc tube were not recovered from the remains of the Carver (Tolbert) boat (area of fire origin), it is likely that a non-passive failure of the arc tube ejected hot particles onto the bimini top that were not recovered during the OFM investigation.
>
> ...
>
> The ruptured arc tube was consistent with a non-passive failure of the arc tube. The dirt and markings were similar inside and outside of the arc tube. If the arc tube was broken during investigation, it would have been cleaner inside. In addition, the glass stem of the lamp in which the shattered arc tube was found was deformed due to high levels of heat. From the dirt on the shattered edges and inside the arc tube, the markings on the tube, and the melting of the glass, it can be concluded that the physical damage was not a result of human manipulation..."

December 7, 2015 Report

[40] Following receipt of Rochon's initial report, the experts retained by the Acuity defendants produced four supplementary reports in response to Rochon's November 3, 2015 report. Those reports were highly critical of the conclusions that Rochon reached and the methodology that he followed. In particular, Mr. Wright opined that Rochon's approach reflected either or both of confirmation bias and expectation bias contrary to NFPA 921. In short, Rochon came to a premature conclusion and sought evidence to confirm that conclusion, or he tailored the evidence to get to an expected result while ignoring other evidence to the contrary.

[41] One of the criticisms levelled at Rochon was that his initial report completely ignored alternative potential causes of the fire. There were a number of other electrical devices in the shed that could not be ruled out as the cause of the fire. The destruction of the scene precluded the foreclosure of those alternative potential sources.

[42] Another criticism was that Rochon had done no calculation nor had he considered the likely dispersion radius for the arc fragments if the lamp that ruptured was indeed the one identified by Rochon as the likely culprit in the southwest corner of the shed. The lamps had at least a partial shield which would have acted as a deflector of fragments. It was highly unlikely or impossible for a fragment to have landed atop the canvas and plastic cover above the Tolbert boat given the distance involved, the height of the Tolbert boat, the likely trajectory and the effects of gravity.

[43] Rochon produced a supplementary report dated December 7, 2015 in which he responded to the further reports produced by the defendant's experts which were critical of his initial report.

[44] In the December 7, 2015 report, Rochon indicated that:

a. The OFM identified the origin of the fire as being at the top of the bimini of the Tolbert boat. Sources of ignition such as the DC and AC wiring systems were eliminated as possible sources of ignition for the fire. The Tolbert boat was not connected to shore power while it was in storage and its batteries were disconnected. As such, it was an unlikely source of ignition;

b. He considered all other reasonable ignition scenarios;

c. He considered the 240V shed electrical system as a possible ignition source but eliminated it based on the fact that the branch circuit wiring was protected by armour cable and each circuit was protected by a breaker;

d. He was satisfied that the entirety of the investigation by the OFM was comprehensive and thorough; and

e. He denied having stated at the September 15, 2014 laboratory examination what was the "subject light"; viz. before completion of his investigation.

[45] In addition, Rochon cited a paper dealing with the challenges faced by a fire investigator when confronted with a large commercial warehouse using metal halide lighting. That article addressed the potential "dispersion cone" for arc fragments which would be limited somewhat by the shape of the luminaire reflector. He noted that the defendants' experts failed to consider the probability that arc tube pieces will ricochet. At pages 2 –3 of this report, Rochon quoted the following passage from the Albrecht-Litchfield paper:

> "...Understanding that this "dispersion cone" exists is an important consideration when trying to locate arc tube fragments. In this case, processing an area larger than the area of origin may increase the likelihood of recovering the majority of arc tube fragments. While it is impossible to provide a fixed formula for determining the area of interest, one could start by considering the height of the fixture and the configuration of the deflector. Fragments that eject out of the lamp at greater than 45° will, in most arrangements, hit the reflector and be deflected downwards. Using this trajectory as a starting point will generally encompass the majority of the fragments."
>
> Rochon notes that the paper further stated: "in the case of uncontained arc tube ruptures, lamps that were located outside the fire area of origin, may still need to be considered."

[46] Rochon denied any confirmation or expectation bias in reaching the conclusions that he did as to the probable origin and cause of the fire. In his view, he simply followed the evidence to its most likely and probable cause.

[47] Rochon was cross-examined on the affidavits he swore for the summary judgment motion. Counsel for the Acuity defendants submits that Rochon "shifted his testimony" to suit a new theory: he started with a particle of the lamp travelling a relatively straight path from the luminaire to the canvas atop the Tolbert boat, but then changed to a ricocheting particle that hit the Tolbert boat and "jumped 20 feet up to the canvas or top of the Tolbert boat" where it "nestled down" on the canvas to start the fire.

[48] Counsel for the Acuity defendants also emphasizes that Rochon testified that "it doesn't matter" in answer to a question whether it would have be helpful to process the fire scene to look for the quartz particle that he thinks started the fire to determine whether any fragments of the arc tube above the MG in fact ended up in the Tolbert yacht. He submits this demonstrates bias: viz. Rochon turned a blind eye to whether the physical evidence supports his theory. He does so to defend a flawed and incomplete origin and cause investigation that happened on his watch at REI.

[49] Finally, the Acuity defendants argue that Rochon did no testing of his ricochet theory. There are no published peer reviewed articles of ricochets involving non-passive failures of halide metal lamps. His theory is at best "novel science".

[50] Plaintiff's counsel takes issue with the characterizations and accuracy of the contentions made by counsel for the Acuity defendants. I will deal with these points below in the analysis section.

[51] Finally, Rochon executed a Form 53 by which he acknowledged and agreed to comply with the obligations on an expert.

Law re Expert Evidence

[52] The admission of opinion evidence from an expert requires that:

i. the evidence meets the threshold requirements established in *R. v. Mohan*, [1994] 2 S.C.R. 9 (S.C.C.) at pp. 20-25;

ii. the benefits of admitting the evidence outweigh its potential risks: *R. v. Abbey*, 2009 ONCA 624.

[53] In *R. v. Mohan, supra*, the court held that there are four threshold requirements that the party tendering the evidence must establish in order for proposed expert opinion evidence to be admissible:

i. relevance;

ii. necessity in assisting the trier of fact;

iii. absence of an exclusionary rule; and

iv. a properly qualified expert.

[54] In addition, where the proposed opinion is based on novel or contested science or science used for a novel purpose, the proponent of the evidence must establish on a balance of probabilities the reliability of the underlying science for that purpose: *R. c. J. (J.L.)*, 2000 SCC 51 at paras 33, 35 – 36 and 47.

[55] Relevance at the threshold stage deals with logical relevance: *R. v. Abbey, supra*, at para 82. Necessity at the threshold stage requires more than mere relevance or helpfulness: *R. v. D. (D.)*, 2000 SCC 43 at para 46.

[56] In *R. v. Abbey, supra*, Doherty J. outlined the two-stage analytical framework to be employed in determining whether to admit expert evidence. That analytical framework has been adopted with modest modification by the Supreme Court of Canada in *White Burgess Langille Inman v. Abbot and Halliburton Co.*, 2015 SCC 16 at paras 22 – 24.

[57] The second stage of the analysis for the admissibility of expert evidence, also known as the gatekeeping step, requires the trial judge to decide "whether expert evidence that meets the preconditions to admissibility is sufficiently beneficial to the trial process to warrant its admission despite the potential harm to the trial process that may flow from the admission of the expert evidence": *R. v. Abbey, supra*, at para 76; see also *White Burgess Langille Inman, supra* at para 24.

[58] The "cost-benefit" analysis at the gatekeeping step is case specific. The judge must consider factors such as relevance, necessity, reliability and the absence of bias. At the gatekeeping step, relevance refers to legal relevance: viz. the evidence is not only logically relevant but is sufficiently probative to justify its admission: *R. v. Abbey, supra*, at paras 82 – 84.

[59] The "benefit" side of the analysis requires a consideration of the probative potential of the evidence and the significance of the issue to which the evidence relates including the subject matter of the evidence, the methodology used, the expertise of the expert and the extent to which the expert is shown to be impartial and objective: *R. v. Abbey, supra*, at para 87.

[60] The "cost" side of the analysis considers the risks of admission of expert opinion evidence: the risk that the trier of fact will be unable to make an effective and critical assessment of the evidence, the risk that the trier of fact will abdicate its fact-finding role to the expert, and prejudice to the trial process by unduly protracting and complicating proceedings: *R. v. Abbey, supra*, at paras 90 – 91.

[61] In *White Burgess Langille Inman, supra*, the Supreme Court of Canada confirmed the scope of the duties owed by an expert and clarified at what stage(s) the court should consider any lack of impartiality or bias by the expert from whom opinion evidence is sought to be tendered.

[62] An expert owes a duty to the Court to provide opinion evidence that is fair, objective and non-partisan: Ontario Rules of Civil Procedure, r. 4.1.01(1)(a); *White Burgess Langille Inman, supra,* at para 30. That duty to the Court overrides any obligation owed by an expert to a party: r. 4.1.01(2).

[63] In *White Burgess Langille Inman, supra,* Cromwell J. for the court wrote at para 32:

> "Underlying the various formulations of the duty are three related concepts: impartiality, independence and absence of bias. The expert's opinion must be impartial in the sense that it reflects an objective assessment of the questions at hand. It must be independent in the sense that it is the product of the expert's independent judgment, uninfluenced by who has retained him or her or the outcome of the litigation. It must be unbiased in the sense that it does not unfairly favour one party's position over another. The acid test is whether the expert's opinion would not change regardless of which party retained him or her... These concepts, of course, must be applied to the realities of adversary litigation. Experts are generally retained, instructed and paid by one of the adversaries. These facts alone do not undermine the expert's independence, impartiality and freedom from bias."

[64] For expert evidence to be inadmissible, there must be more than "a simple appearance of bias" The test is whether the expert's lack of independence renders him or her incapable of giving an impartial opinion in the specific circumstances of the case: *Mouvement laique quebecois v. Saguenay (City)*, 2015 SCC 16 at para 106.

[65] Until the decision in *White Burgess Langille Inman, supra,* there was some divergence in the case law as to when and how to deal with concerns of lack of impartiality or bias on the part of an expert: was it a factor to be considered in determining admissibility of the evidence or was it to be considered as part of the weight which one might attach to that evidence. In *White Burgess Langille Inman*, the Court clarified that lack of impartiality or bias must be considered in both steps in the admissibility analysis and, even if the evidence is found to be admissible, it may bear upon the weight to be attached to that evidence: paras 34, 40 and 45.

[66] The following principles apply:

a. An expert witness is required to be aware of his or her primary duty to the Court to be fair, objective and non-partisan, and be able and willing to carry it out;

b. The burden of proof rests on the party tendering the expert evidence to meet this threshold usually by evidence or, as in Ontario, by the expert signing a Form 53;

c. The burden then shifts to the party seeking to exclude 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":

d. If the party seeking exclusion does so, the burden remains on the party proposing to call the evidence to establish on a balance of probabilities that the expert is willing and able to meet his or her obligations to the court;

e. Concerns related to the expert's duty to the Court and his or her willingness and capacity to do so are part of the "qualified expert" criterion established in *R. v. Mohan, supra*;

f. A proposed expert witness who is unable or unwilling to fulfil the primary duty to the court is not qualified to be an expert;

g. The threshold requirement is not onerous and it will likely be rare that proposed evidence would be ruled inadmissible for failing to meet it;

h. 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;

i. The mere fact of an interest or connection with the litigation or a party is, on its own, insufficient. The inquiry focuses on the nature and extent of the interest or connection with the litigation or party; and

j. An expert who assumes the role of an advocate for a party is clearly unwilling and/or unable to carry out the primary duty to the Court.

(see *White Burgess Langille Inman, supra*, at paras 46-50)

[67] In *White Burgess Langille Inman*, the court emphasized that exclusion at the threshold stage should only occur in very clear cases. Anything less than a clear unwillingness or inability to fulfil the primary duty owed to the court should be taken into account at the gatekeeping step as part of the cost-benefit analysis: para 49.

[68] Finally, the decision whether an expert should be permitted to give evidence despite having an interest or connection with the litigation is a matter of fact and degree. The test is not whether a reasonable person would think the expert was not independent. Rather, the issue is whether the relationship or interest prevents the expert from being able or willing to carry out his or her primary duty to the Court: *White Burgess Langille Inman, supra*, para 50.

[69] From the above, it can be seen that the issue of bias or inability/unwillingness to provide the court with fair, objective and non-partisan evidence must be considered first at the threshold stage as part of whether witness is a qualified expert. If the court concludes that the witness is unwilling or incapable of fulfilling that obligation, the evidence must be excluded. If the court is satisfied that the witness is willing and capable of fulfilling his or her primary duty to the Court, the court must nevertheless further consider the nature of the relationship or interest that the witness has with the litigation or parties as part of the cost-benefit analysis at the gatekeeper stage. If the court concludes that the benefits of the

evidence are outweighed by the prejudice to the trial process, the evidence must be excluded. Finally, even if the expert's evidence is admitted, the court may consider the nature of the interest or relationship between the expert and the party or litigation in assessing the weight to be attached to that evidence.

Analysis

[70] The origin and cause of the fire is at the core of the liability determination in this case. The Acuity defendants cannot be liable if the plaintiff cannot show on a balance of probabilities that the fire was caused by the failure of the lights manufactured by them. That is not the end of what the plaintiff must prove to establish liability but without establishing that fact, it cannot succeed.

[71] The proposed evidence of Rochon is relevant and material to that core issue. Fire investigators have long been accepted as necessary to assist the trier of fact where the cause of the fire is not readily apparent. Certainly, this court does not have that expertise and would benefit from expert opinion evidence as to the cause of the fire. Further, there is no applicable exclusionary rule which would prevent the admission of this expert evidence. Subject to the issue of "novel science", the first three of the four threshold *Mohan* criteria are met and are not in dispute on this motion.

[72] The following issues must be determined in this case:

a. Is Rochon a "qualified expert"?

   i. Is Rochon willing and able to fulfill his primary duty to the court?

   ii. Does Rochon's proposed expert evidence show that he is unwilling or unable to comply with his duty as an expert?

b. Is Rochon's proposed evidence "novel science"? If so, is it sufficiently reliable to be admissible?

c. Should Rochon's evidence be admitted on a cost-benefit analysis under the gatekeeper step?

d. Are the defendants precluded from advancing these positions by the rule in Browne v. Dunn?

Is Rochon a "qualified expert"?

[73] It is undisputed that Rochon has substantial experience as a fire investigator. His credentials and expertise/experience as a fire investigator are not in issue. He is "qualified" by his training, education and experience to opine as an expert on the origin and cause of fires. The fight here is restricted to lack of impartiality and alleged bias.

Is Rochon willing and able to fulfill his primary duty to the court?

[74] Rochon signed a Form 53 acknowledging his awareness of and commitment to adhere to his obligations to the court; viz. to be fair, objective and non-partisan. That Form makes clear that the expert's duty to the court trumps all other obligations he or she may owe to the party who retained him or her. By signing that Form which has been placed before the court as part of his evidence, the plaintiff has satisfied the initial burden on it.

[75] The Acuity defendants submit that there is a realistic concern that Rochon will not and/or cannot fulfill his duty to the court as:

a. Rochon was at the material time a shareholder in REI which is a sister company to Granite Solutions, the adjuster for the plaintiff's insurer;

b. Like Granite Solutions, REI's mandate presumably included saving the insurer money by finding someone on whom to pin responsibility for the fire;

c. From December 23, 2011 until his departure from REI in May, 2012, Rochon was responsible for controlling the site of the fire and the origin and cause investigation. He was directly supervising Rudenko;

d. The origin and cause investigation by REI in that period was sloppy and inadequate;

e. The site was not properly safeguarded from the elements or third parties to preserve and protect the available evidence from which the origin and cause of the fire could be determined;

f. The site was cleared before the Acuity defendants were notified and without giving those defendants the opportunity to inspect and investigate the origin and cause of the fire as contemplated by NFPA 921;

g. The investigation of the origin and cause of the fire was incomplete when the site was cleared;

h. Rochon and/or REI prematurely permitted the site to be cleared;

i. Rochon's opinion as to the likely origin and cause of the fire reflects his interest in brushing aside the above shortcomings and errors for which he and REI bear responsibility. Those shortcomings and errors make determining the likely cause of the fire impossible per the defendants' experts.

[76] Dealing first with Rochon's financial interest in REI and REI's relationship with the adjuster, I am not satisfied that either fact raises a concern that Rochon is unable or unwilling to act consistent with his duty to the Court. I note that:

a. Rochon sharehold interest in REI at the time was very modest;

b. There is no evidence from which it can be reasonably inferred that REI would benefit from fixing responsibility for the origin and cause of the fire on anyone;

c. There is likewise no evidence that Rochon stood to benefit financially by doing so;

d. REI was hired to provide expert services to the plaintiff's insurer not unlike an expert retained by counsel for a party;

e. There is no evidence that REI had any relationship with or interest in the plaintiff;

f. Rochon provided his expert opinion after he left REI pursuant to an independent engagement; and

g. It is conceded that no claim has been asserted as against Rochon or REI for their alleged mishandling of the site of the fire.

[77] I turn next to Rochon's role and responsibilities at REI pertaining to this fire which is the subject of this litigation. In my view, the conclusion which the defendants invite requires a significant leap in cynicism. If there were deficiencies in the manner in which the site was protected, preserved and investigated by REI on Rochon's watch, the connection between those deficiencies and the opinions expressed by Rochon in his reports is not apparent.

[78] Rochon did not attend the site at any time prior to his termination of employment. He had no involvement with the investigation of the origin and cause of the fire after the termination of his employment until he was retained two years later by plaintiff's counsel. He then reviewed the documents which formed part of the OFM investigation and the OFM report. He attended inspections and testing of the artifacts that were previously gathered. I see nothing in the evidence before me that rises to a level of a realistic concern that Rochon will not or cannot comply with his obligations to the court as an expert witness. There is no direct evidence that Rochon's opinions were coloured in this regard nor is there sufficient evidence from which I would draw that inference.

[79] My conclusion should not be taken to mean that I find that there were no shortcomings or deficiencies in the investigation that was done, in the collection of the artifacts or their analysis, or the preservation of the site. Those issues will be part of the evidence considered on the summary judgment motion and, depending on its outcome, at trial. They may well militate in favour of a finding that it is impossible to determine the origin and cause of the fire or, more particular to this motion, that the evidence given and conclusions reached by Rochon should be discounted or rejected as improbable.

[80] I next consider whether the opinions expressed by Rochon show that he is unwilling or unable to comply with his duty to the Court; viz. he has assumed the forbidden role of advocate.

Does Rochon's proposed expert evidence show that he is unwilling or unable to comply with his duty as an expert?

[81] I have carefully read both expert reports prepared by Rochon. I have also reviewed and considered the cross-examination of Rochon which was, to put it mildly, fulsome and aggressive. Nothing in the reports or in the evidence which he gave during cross-examination leads me to conclude that Rochon assumed the mantle of advocate. At this stage, I am not concerned with whether Rochon's evidence remained entirely consistent throughout and, if not, the implications of same. That is a matter for argument on the merits. Rather, the focus of my review was on whether in his evidence, Mr. Rochon could be said to have crossed the line from expert witness to advocate. Contrary to the defendant's assertion, I find that he did not do so.

[82] The Acuity defendants ask that I find that the opinions expressed by Rochon reflect confirmation bias and/or expectation bias contrary to the code used by fire investigators (NFPA 921). They point to, for example, his failure to expressly indicate in his first report that he had ruled out other possible causes of the fire (see para 41 above). Similarly, they attack his objectivity which underpins his role as an expert by his answer that "it doesn't matter" that no quartz fragment could be found in the remnants of the Tolbert boat (see para 48 above).

[83] I observe that Rochon expressly addressed the likelihood of alternative causes of the fire in the December 7, 2015 report and provided both an assurance that he had considered same and the rationale for his rejection of those put forward by the Acuity defendants' experts.

[84] In his cross-examination, Rochon explained why, in his view, it did not matter whether a quartz fragment was found in the remains of the Tolbert boat; viz. why it did not affect his findings and opinion (see Transcript of cross-examination held November 3, December 4 and December 8, 2015 at q. 846-850, and 1079-1083).

[85] I appreciate that defence counsel and the defendants' experts take a different view of whether a search should have been made for a piece of the arc tube in the location of the Tolbert boat and the significance of finding or not finding such a fragment. Again, the answers provided by Rochon to this line of questioning do not, in my view, undermine his willingness or ability to comply with his obligation to the court.

[86] The suggestion made by the defendants' experts that Rochon has engaged in confirmation and/or expectation biases strikes me as inextricably intertwined with their disagreement that it is possible to make any finding of probable cause of the fire or to attribute it to any particular electrical source. That disagreement is best addressed in the argument on the merits and does not preclude satisfaction of the threshold requirement for a qualified expert.

Is Rochon's proposed evidence "novel science"? If so, is it sufficiently reliable to be admissible?

[87] The Acuity defendants argue that Rochon's theory that a fragment of the arc tube ricocheted onto the plastic tarp and canvas covering the Tolbert boat defies the laws of physics, and amounts to novel science for which there is no reliable basis.

[88] It is common ground that an arc tube in a metal halide light gets extremely hot and, on occasion, may rupture or explode. Absent a shield to prevent the fragments from dispersing, the quartz fragments may be projected at considerable force and speed from the lamp into the surrounding area. Rochon testified in cross-examination that he has observed such dispersion after it has occurred. He is not aware of any scientific study that has measured the speed or trajectory of these fragments or how they may ricochet when they strike various objects.

[89] Rochon notes, however, that part of his training and experience deals with explosives and the investigation of explosions. He acknowledged in cross-examination that the cover which shields the top of the light could act as a deflector of fragments as they project out from the lamp in a non-passive failure. Rochon testified that in arriving at his theory as to the likely source of the fire, he applied his training and experience in fire investigations and explosions which are based in scientific principles and methodology.

[90] I am satisfied that Rochon's theory that hot quartz fragments projected from a lamp when an arc tube failed, i.e. exploded, and that a fragment propelled in this fashion could ricochet off of a stationary object is not novel science. It is the application of the science already extant that is utilized by fire investigators dealing with explosions. It is not necessary that Rochon be able to re-create the event, something that would place an impossible burden on him. That there are no peer reviewed articles or studies of ricochets of metal fragments from exploding halide metal lamps is not fatal to the reasoning employed by Rochon. He has studied explosions and investigated same. He has applied that knowledge and experience to this situation.

[91] It remains open to the defendants to persuade me on the summary judgment motion that Rochon's theory is implausible and should be rejected. That is a different question than whether that theory or the methodology used to arrive at it are "novel science".

[92] Simply put, I accept the evidence of Rochon that in determining the likely source of the fire, he has applied existing scientific principles to the situation at hand. This is a far cry from the novel science cases contemplated by the Supreme Court of Canada in *J. (J.L.)*, *supra* or *R. v. Abbey*, *supra*.

[93] I find that the plaintiff has satisfied the *Mohan* threshold criteria. I turn now to the cost-benefit analysis.

Should Rochon's evidence be admitted on a cost-benefit analysis under the gatekeeper step?

[94] This motion, like *White Burgess Langille and Inman*, arises in the context of a summary judgment motion. At paragraph 55, Cromwell J. cautioned that a motion's judge hearing a summary judgment application must be satisfied that the proposed expert evidence meets the threshold requirements for admissibility at the first step in the analysis. but should

generally not engage in the second step cost-benefit analysis as that involves assigning weight or at least potential weight to the evidence. That admonition arose in the context of the Nova Scotia rules of court and the jurisprudence in that jurisdiction on summary judgment motions.

[95] Neither counsel suggested that as the judge hearing this motion and the summary judgment motion, I could not or should not engage in the cost-benefit analysis. In fact, both made submissions addressing the application of that step.

[96] I note that I have been appointed case management judge for this action and various companion actions pursuant to r. 37.15. As such, I am designated to hear all motions in the proceedings including the summary judgment motion brought by the Acuity defendants.

[97] I am not familiar with the summary judgment rule in Nova Scotia; however, r. 20.04 of the Ontario rules and, in particular, subrule (2.1) expressly empowers a motions judge on a summary judgment motion to weigh evidence. On the summary judgment motion itself, I am required to first ask whether the matter can be resolved in a fair and just manner on a summary judgment motion. If, on the record, there appears to be a genuine issue requiring a trial, the second step is to consider whether the need for that trial can be avoided by using the powers provided under r. 20.04 (2.1) and (2.2): *Bruno Appliance and Furniture, Inc. v. Hryniak*, 2014 SCC 8 at para 22.

[98] This motion is one step removed from the summary judgment motion and deals solely with the admissibility of evidence tendered on the summary judgment motion. In my view, the judge hearing a summary judgment motion must be empowered to weigh the potential probative benefit of the evidence as part of the determination of the admissibility of that expert evidence. If not, the expanded powers found in r. 20.01(2.1) will be out of reach and useless in circumstances such as this where there is a dispute as to the admissibility of expert evidence for the summary judgment motion. That runs contrary to principles of efficacy and proportionality.

[99] Dealing first with the benefit side of the ledger, I note that:

a. As indicated above, Rochon's evidence is potentially highly probative of an essential element of the plaintiff's claim in this action;

b. That evidence is a based upon his review and investigation consistent with recognized and accepted scientific principles and methodology;

c. Rochon's past experience and expertise as a fire investigator determining origin and cause is acknowledged;

d. Nothing in the evidence raises a concern that Rochon will not or has not complied with his obligation to the court to provide fair, impartial and objective evidence.

[100] On the cost side of the analysis, I observe that:

a. The evidence is tendered in the context of a summary judgment motion to be heard by a judge. There is no jury;

b. The language employed by Mr. Rochon in his reports is not wrapped in jargon and is, at first blush, understandable; and

c. The admission of this evidence will not unduly consume time or add unnecessary complexity on a peripheral issue.

[101] On balance, I am satisfied that the admission of Rochon's expert opinion evidence satisfies the cost-benefit analysis.

[102] Accordingly, the expert opinion evidence of the plaintiff's expert, Rochon, meets both the threshold and cost-benefit requirements and is admissible. The concerns advanced by the Acuity defendants on this motion may inform the weight which will attach to that evidence. At this stage, it is entirely premature to make any findings in that vein. Suffice to say that the issues raised by the Acuity defendants might be taken into account on the summary judgment motion if I engage in a weighing of the evidence as contemplated by the expanded powers in r. 20.

Are the defendants precluded from advancing these positions by the rule in *Browne v. Dunn*?

[103] The plaintiff argued that the issues raised by the Acuity defendants were barred by the rule in *Browne v. Dunn*. Plaintiff's counsel asserted that the defendants failed to put to Rochon that he was incapable of providing fair and objective opinion evidence because of his relationship and involvement with REI, or that the methodology that he employed showed bias.

[104] I will address this issue briefly although I note that the issue is moot given my findings above.

[105] In *R. v. Quansah*, 2015 ONCA 237, Watt J. provided a comprehensive and succinct summary of the rule in *Browne v. Dunn* and the principles that apply. I note specifically paragraphs 75 – 86.

[106] In my view, the position advanced by the plaintiff must fail for the following reasons:

a. The evidence relied upon by the defendants with respect to Rochon's interest and position in REI, and his responsibilities in relation to the site and the origin and cause investigation by REI came almost entirely from the cross-examination of Rochon;

b. There is no unfairness to Rochon in asking the Court to infer from the evidence which he gave that he was unwilling or incapable of meeting his obligations as an expert witness;

c. It was readily apparent from the cross-examination that his past involvement while at REI and his interest in REI would be a live issue as it relates to his independence and impartiality;

d. Because this arose in the context of a summary judgment motion, plaintiff's counsel had in his possession the expert reports of the Acuity defendants which asserted bias before any cross-examination of Rochon was conducted. It was open to plaintiff's counsel to file further affidavit evidence or a further report to address that suggestion to the extent it was not already considered and addressed in Rochon's December 7, 2015 report.

[107] Simply put, I do not agree that in these circumstances it was necessary for defence counsel to essentially put his argument to the witness. It was sufficient that he provided expert reports and cross-examined sufficient to touch upon those areas from which the argument should have been readily apparent. There is no unfairness to the witness, the plaintiff or the court in the circumstances.

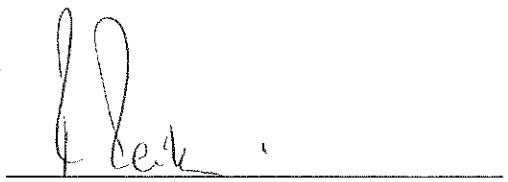
Conclusion

[108] I conclude as follows:

a. The expert evidence of Rochon is admissible on the motion for summary judgment;

b. The defendants' motion to exclude Rochon's evidence is dismissed; and

c. Costs of this motion shall be determined following the summary judgment motion. The parties may make written submissions concerning costs of this motion not to exceed five pages. The timetable for those submissions will be set following the summary judgment motion.



Justice R. Raikes

Released: January 3, 2017.

CITATION: St Clair Boating v. Michigan Electric, 2017 ONSC 23

St. Clair Boating & Marina, a Division of 1537768 Ontario Ltd.

Plaintiff

– and –

Michigan Electric Supply Co., Steve Demers, Agri-Urban Buildings Inc., The Electrical Safety Authority, Acuity Brands Inc., Acuity Brands Lighting Inc., Lithonia Lighting Products Company of Georgia, General Electric Canada Company, General Electric Company, Philips Canada Ltd., Philips Lighting Company, and Philips Electronics North America Corporation

Defendants

REASONS FOR JUDGMENT

RAIKES, J.

Released: January 3, 2017