



## **REASONS FOR DECISION**

[1] This is an appeal under the Safety Standards Act, S.B.C. 2003, c. 39 (the “Act”) concerning one of several issues set out in the review decision issued by the Provincial Safety Manager on January 5, 2012 (the “Review Decision”) on behalf of the British Columbia Safety Authority (the “BCSA”). The issue under appeal pertains to the appropriate way to calculate the power output of roof top units installed at a location in Abbotsford, British Columbia. The Review Decision reconfirmed the Safety Officer’s original decision set out in the original Certificate of Inspection dated November 3, 2011 (the “Certificate of Inspection”), which required that installation permits were needed for the installation of the roof top refrigeration units and that the Appellant obtain the same by January 27, 2012.

[2] These reasons for decision deal with a review of the BCSA’s calculation of the power output for the roof top units in question.

### **Issue**

1. Was the Provincial Safety Manager’s decision to calculate the power output of the rooftop units using the principle of unity reasonable?
2. If not, what should the outcome have been?

### **History of Appeal**

[3] The parties are largely in agreement with respect to the facts that led up to the issuance of the Provincial Safety Manager’s decision dated January 5, 2012. The issue is whether the Provincial Safety Manager acted reasonably when he upheld the decision of the Safety Officer set out in the Certificate of Inspection.

[4] By agreement reached at an Appeal Management Conference held in this matter, this appeal is proceeding on the basis that the facts that led up to the issuance of the Certificate of Inspection are not in dispute.

[5] In addition to the Appellant's filed Notice of Appeal and the BCSA's filed Reply, the Appellant has provided written submissions dated February 28, 2012, which include a number of photographs of the units in question and the BCSA has provided the Board with an Affidavit sworn by the Provincial Safety Manager and its own written submissions.

[6] After reviewing the evidence before the Board and the written submissions provided by the parties, the panel hearing this appeal determined that further information was required. Accordingly, the panel requested further information from the parties, namely:

- a) A copy of CSA 36.10
- b) Any reference available in the CSA material setting out the method for calculating horsepower; and
- c) Confirmation as to whether there is a written policy or direction within the BCSA with respect to the calculations to be used to determine power output in situations such as the one under Appeal.

[7] The parties provided the requested information and confirmed that there is no reference available in the CSA material setting out the method for calculating horsepower and that there is no written policy or direction within the BCSA with respect to the calculations to be used to determine power output in situations such as the one under Appeal.

## **Position of the Parties**

### **Summary of Appellant's Position**

[8] The Appellant agrees with the BCSA that the Power Engineers, Boiler, Pressure Vessel and Refrigeration Safety Regulation (the "Regulation") exempt permitting of refrigeration plants with a capacity of 5kW or less prime mover name plate rating. Where the Appellant and the BCSA diverge is how the output should be calculated when it is not clearly stated on the nameplate.

[9] The compressors in question do not list the horsepower or kW on their nameplates.

[10] The Appellant's position can be summarized as follows:

- a) The regulations refer to the name plate of the motor and not the name plate of the air conditioner or refrigeration system and it is the Kilowatt working rate or horsepower that is referred to not the electrical consumption of the unit;
- b) If the needed information is not available on the motor name plate then further documentation needs to be provided to ascertain the output;
- c) The documentation provided to the BCSA from the manufacturer of the unit in question proves that the compressors do not exceed 5kW prime mover output and therefore the Regulation should exempt the need for a permit.

### Summary of Respondent's Position

[11] As set out in the Provincial Safety Manager's Affidavit, when power output or other performance characteristics are not independently verified by a third party certification agency and recorded on the nameplate the BCSA has chosen to adopt the higher possible calculation so that more, rather than less, safety requirements are applicable and also relies only on independently certified performance characteristics to perform these calculations. Accordingly, when the horsepower rating is not listed on the name plate of a compressor, the BCSA uses the amperage listed on the nameplate of the compressor or rooftop unit and then assume an efficiency factor of 1 and a power factor of 1.

[12] The Respondent's position is that to ensure public safety it will only consider information that has been independently certified by a third party and that where such third party certified information is missing from a name plate that it is reasonable for the BCSA to assume the highest possible calculation or in other words to assume "unity" in the power calculation.

[13] The BCSA acknowledges that despite the assumption that the motor is 100 per cent efficient, which represents the maximum possible KW output, that the motor in reality will not be 100 per cent efficient. However, its position is that to ensure public safety it must not rely on information that has not been independently certified.

[14] Accordingly, the BCSA takes the position that while the Appellant's method of calculating power output and its own method of calculating power output are both technically correct, that the Provincial Safety Manager was reasonable in his decision to use only independently certified information in his calculations and to error on the side of caution by assuming "unity" in the power calculation.

[15] In this regard, the BCSA states that the standard for review of the Certificate of Inspection is reasonableness and that consequently the Safety Manager's decision to uphold the Safety Officer's Certificate of Inspection is entitled to deference, was reasonable and ought not to be varied or reversed on appeal.

### **Analysis**

[16] As submitted by the Respondent, the standard for review of this appeal is reasonableness, which means that the Board must give deference to the discretion the legislation grants to the Safety Manager to enforce the Act and impose monetary penalties.

[17] In addition to granting deference to the discretion of the Safety Manager, pursuant to section 52 of the Act, when considering an appeal, the Board must also consider the maintenance and enhancement of public safety.

[18] Upon a review of all of the evidence submitted in this Appeal, the Board is of the opinion that both the Appellant and BCSA are correct in their calculations of power output. In this regard, the Board notes that it was not referred to any applicable legislation governing how horsepower is to be calculated. As neither party is clearly wrong in its calculations based on the legislation governing this matter, the question becomes whether the Provincial Safety Manager was reasonable in using the calculations that it did to require permits under the Certificate of Inspection.

[19] In the absence of name plate information, the BCSA has assumed "unity" in the power calculation and in doing so has erred on the side of caution. Given that the Board must consider the maintenance and enhancement of public safety in every Appeal that it considers, deference must be given to the Safety Manager's decision.

[20] While understandably frustrating for the Appellant in this Appeal, to allow unverified information to be used in the power calculation would by-pass a cornerstone of the province's safety legislation, namely the need for independent certification of technologies.

## **Conclusion**

[21] The decision reached by the Safety Manager concerning the calculation of the power output of the rooftop units in the Review Decision is reasonable. Accordingly, the appeal is dismissed and the Appellant, if it has not already done so, must obtain the necessary installation permits for the rooftop units.

[22] That being said, the Board agrees with the Appellant that there is a lack of information and legislation concerning the proper formula for calculating the power output in question and strongly recommends that the BCSA issue a policy directive in this regard.