April 18, 2016

VIA EMAIL ONLY: commercialrefrigeration@energystar.gov

Ms. Kirsten Hesla
U.S. Environmental Protection Agency
Washington, DC 20460

Re: Formal Comments on the Commercial Refrigerators and Freezers Draft 1: Version 4.0

Dear Ms. Hesla:

We cannot meet the new proposed energy standards without major redesigns, massive development and manufacturing costs, and substantial equipment cost increases. Since most, if not all, of our customers require Energy Star approval, the proposed changes may effectively terminate our cooler business in the United States.

We propose the "sun-setting" of Energy Star certifications in commercial refrigeration and freezers due to stringent energy requirements by the DOE. At the very least we request that EPA table the proposed standard until after the SNAP rule deadline for the unacceptable use of R134a starting on January 1st, 2019. The combination of the SNAP rule and the new Energy Star proposal will lead to an undue hardship on manufacturers and prevent us from operating our business effectively. Royal Vendors will be required to halt the development of new business opportunities and equipment to develop alternate refrigeration systems, while simultaneously redesigning our current machines to meet new energy consumption standards. While Royal Vendors strongly believes in designing and manufacturing world-class, energy efficient equipment, we feel the strain of these two concurrent events is not warranted and may lead to irreparable damage to our business.

All of our coolers and freezers meet the version 3.0 requirement released in 2014. The new 2017 proposal, just three years later, will require us to go from 3.85 kWh/day to 2.392 kWh/day, a decrease of 1.485 kWh/day (37.88%) on our RVC-027 cooler. For freezers the proposed requirement reduces energy consumption from 11.77 kWh/day to 6.17 kWh/day, a decrease of 5.60 kWh/day (47.58%, almost 50%!). We strongly feel that the proposed Energy Star reductions are unrealistic, and do not presently see how we can meet the new Energy Star proposal within the same time frame as the new DOE requirements. We need more time for technology to "catch-up" and to determine the impact of alternate refrigerants.

We are currently using LED lighting in our both our coolers and freezers and they have already been implemented to meet the previous standard. We already use ECM evaporator fan motors and PSC condenser fan motors in all of our coolers and freezers and these were included to meet the previous Energy Star standards. We could use ECM motors in place of the PSC motors with the following results. Assume a 10 watt saving from PSC to ECM and knowing that the compressor run time on our cooler is 32.5 percent would yield a 0.078 kilowatt savings (10w x 24hrs x 0.325/1000). This is not a significant savings for the added cost.

We are not aware of a higher efficiency compressor than the current Embraco R-134a FFU130HAX. We are beginning work on R-290 which we hope will help us to meet the DOE 2017 standards.

We are opposed to using increased fin density of our coils due to the increased frequency of obstructions (ice and dirt) that will hinder performance, increased service rates, and ultimately increase energy consumption due to “soiling” of the coils from field use.

Our coolers currently use double pane, argon filled, and low-E glass. Our freezers currently use triple pane, argon filled, and low-E glass.

Increasing cabinet wall thickness is a huge investment in redesigning the machine and building new foaming fixtures and will add significant cost for our customers who already capital constrained.

Due to various factors, including increased regulations, the glass door cooler industry has experienced many difficult challenges over the last five to ten years. The proposed new DOE standards will lead to substantial negative impact on employment and general business “health” in the entire industry. The continual issuance of these ever-more-difficult-to-reach standards and regulations continues to decrease industry jobs, stunt and curtail innovation developments, and ultimately leads to an environment that is not conducive to economic growth or manufacturing well-being. These facts, coupled with the actuality that the cooler industry has reduced energy consumption on machines by substantial amounts over the last ten years or so, colors the new regulations as an undue burden on the manufacturing industry and leads to further decline in an already challenging business.

Thank you for your consideration of our comments. Please do not hesitate to contact me should you have any questions.

Sincerely,

Robert J. Linney
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