



Tanja Crk

EPA Energy Star

February 23, 2021

Dear Ms. Crk,

Zero Zone is a manufacturer of vertical open and closed remote refrigerated display cases and refrigeration systems. All our display cases are listed in DOE's Compliance Certification Database and are third party certified by AHRI.

We do not think developing an energy star program for closed remote refrigerated display cases is needed at this time. Our equipment is engineered, and custom produced for customers. During the engineering phase, customers have full access to the energy efficiency of all our products and factor that information into the purchasing decision. Customers can already purchase equipment that would be below the proposed Energy Star limit. The equipment is preempted by federal energy legislation so municipalities will not be able to require end users to buy energy star equipment. Having an energy star program for this equipment will just be an extra cost for the federal government.

Zero Zone's responses to EPA Energy Star Questions that apply to the equipment we manufacture.

1. Our display equipment can be connected to a single matched condensing unit, as a group of cases connected to a larger condensing unit or connected to a rack system. The store size and who owns the facility (leased space or owned space) typically dictates what type of compressor system is used. Small stores with leased spaces typically use smaller matched systems. Mid-sized stores where they own the facility may use larger condensing units on a group of cases. Larger stores where the company owns the building tend to use rack systems.

27. We provide our open cases to a wide variety of applications from gas stations, to small stores to full size grocery stores. Many different products are merchandized in the open units. The most common application would be produce and meat. The tendency for other products is shifting to closed door cases.

28. Very few customers purchase night curtains.

29. We offer two different aftermarket brands of night curtains. We have not measured the energy savings from night curtains. Our testing is focused on providing information for the required compressor capacity during normal operating hours.

30. We do not specifically rate air curtain performance. We look at overall energy consumption of the case. We continue to make minor modifications to the air flow in our case to improve energy consumption. Air flow out of the rear ducts and air flow into the return air grills work in conjunction with the air curtain to determine case energy performance.

31. When we have evaluated competitor cases with dual air curtains the additional fan power cost overshadowed other energy benefits.

32. We have seen these devices in the marketplace but have not had customers ask to use this device.

Thank you for reviewing our responses.

Zero Zone, Inc.

Bruce R. Hierlmeier PE

Director of Regulatory Compliance and Refrigeration Technology