

DOCKETED

Docket Number:	17-BSTD-01
Project Title:	2019 Building Energy Efficiency Standards PreRulemaking
TN #:	221577
Document Title:	Baltimore Aircoil Company Comments on Prescriptive Efficiency Requirements for Cooling Towers and Waterside Economizers
Description:	N/A
Filer:	System
Organization:	Baltimore Aircoil Company
Submitter Role:	Public
Submission Date:	10/20/2017 4:22:57 PM
Docketed Date:	10/20/2017

Comment Received From: Baltimore Aircoil Company

Submitted On: 10/20/2017

Docket Number: 17-BSTD-01

on Prescriptive Efficiency Requirements for Cooling Towers and Waterside Economizers

Additional submitted attachment is included below.



October 20, 2017

Attention Commissioner McAllister and California Energy Commission:

Thank you for the opportunity to respond to your final report for Prescriptive Efficiency Requirements for Cooling Towers and for Waterside Economizers. Similar to previously submitted comments, as a manufacturer of highly-efficient cooling towers, we fully support the increasing use of highly energy-efficient equipment. However, we would like to reiterate our concerns related to the significant increase in efficiency from 42.1gpm/hp to 80gpm/hp.

Efficiency Requirements for Cooling Towers

- 1. Proposed Efficiency Rating for Cooling Towers May Actually Reduce System Efficiency**
 - a. The proposal value of nearly double that in the ASHRAE Standard 90.1 would disallow approximately 50% of offered models. Our current flexibility allows engineers to optimize energy usage for the entire system, including the chiller and pumps. By focusing on cooling towers only, the proposal does not consider chiller energy usage, which accounts for the vast majority of cooling system energy usage. This proposal will encourage the use of larger, more expensive towers with relatively low energy savings when compared to the energy usage of the cooling system. Once the 80gpm/hp is codified, a system designer may instead use a lower cost, less efficient chiller to help offset the added cost of the cooling towers installation. Therefore, we recommend that the efficiency rating remain at 42.1gpm/hp, which is currently 5% higher than ASHRAE Standard 90.1. We are very open to considering a nominal increase due to the air-cooled system limitation; however any efficiency increase will reduce flexibility to optimize system efficiency.
- 2. Cost Premium May Place Undue Burden on Cooling Tower over Other Technologies**
 - a. Evaporative cooling is already the most efficient cooling solution on the market. If these regulations are imposed on evaporative cooling systems, then similar restrictions should be placed on all technologies to ensure that this does not arbitrarily favor less efficient technologies. While the commission did address air-cooled systems, it is important that loopholes do not lead to the favoring of newer technologies that have not been addressed by the code. Also, per comments in item 1 above, efficiency of the entire system should be considered and evaluated, not only the efficiency of the cooling towers, which use far less energy than other system components.



BALTIMORE AIRCOIL COMPANY

7600 Dorsey Run Road Jessup, MD 20794 > tel 410.799.6200 > fax 410.799.6416 > www.BaltimoreAircoil.com

Sincerely,

BALTIMORE AIRCOIL COMPANY

A handwritten signature in black ink, appearing to read 'B. S. Cohen', is written over a light gray rectangular background.

Ben S. Cohen
Manager of Product Marketing, North America