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Comment Received From: Benjamin Cohen
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BAC Comments on Cooling Tower Measures

Please see attached letter and reach out with any questions.

Additional submitted attachment is included below.

BALTIMORE AIRCOIL COMPANY

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September 5, 2023

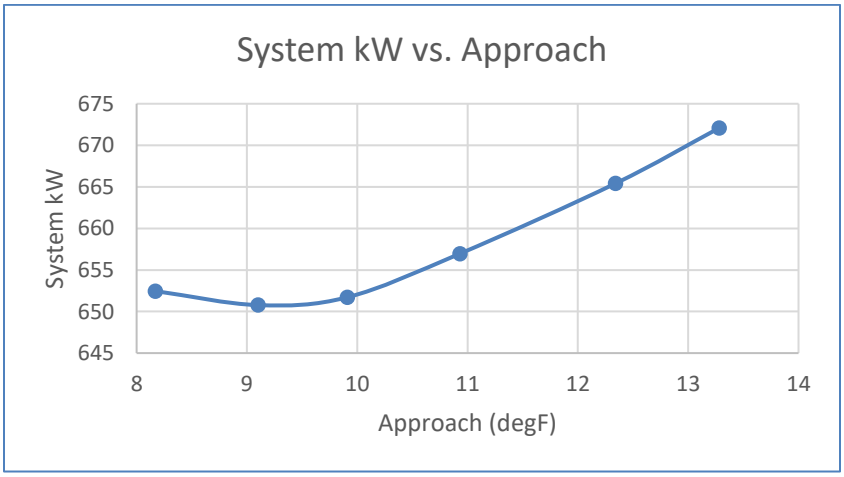
CEC Docket 22-BSTD-01

Dear CEC Staff,

We are pleased to submit comments to supplement those comments previously sent on July 28, 2023 and in response to the Final CASE Report dated August 2023 and the Pre-Rulemaking Workshop held on August 23, 2023.

Our comments on the two proposals are as follows:

- Cooling Tower Efficiency:
  - **Energy usage will increase.**
    According to an experienced manufacturer's representative in CA that regularly evaluates cooling tower and chiller selections on projects to optimize overall energy efficiency at central utility plants, energy usage and costs will generally increase as GPM/HP increases. The key is to minimize system energy, not just the energy of one component, especially a component that accounts for a relatively small portion of the overall energy use.
    The following chart illustrates that when a chiller plant stays within an 8°F to 10°F approach, chiller energy usage is minimized and plant efficiency is optimized. Our experience has been that an unreasonably high, prescribed GPM/HP for the cooling tower may inadvertently increase system energy. Because of this, we recommend evaluating more appropriate ways to improve total system efficiencies in future revisions, such as control sequences found in ASHRAE Guideline 36. Therefore, we respectfully suggest maintaining the current prescriptive requirements listed in Title 24 2022 (i.e., 60 GPM/HP) and delete the proposed energy rating increase.
    We would be glad to provide additional details on our energy analyses if requested by CEC Staff.



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- Blowdown Controls:
    - We are supportive the final proposal regarding blowdown controls, including use of conductivity controls, setting of target cycles of concentration, and overflow alarms. Note as the measure moves through the CEC process, we may provide additional comments in the future.

Thank you for considering our comments and please do not hesitate to reach out with questions.

Sincerely,

Bill McQuade, P.E., LEED® AP, FASHRAE

Vice President of Regulatory Affairs

cc: Haile Bucaneg - Senior Mechanical Engineer