

STANDARDS PROJECT COMMITTEE 207P

Monday, January 3, 2020, 8am-10am, Hilton Orlando, L, Lake Concord A

MEETING AGENDA

- 8:00 Frontmatter:
 - Self Introductions, Roll Call, Membership, Liaisons
 - Approve Minutes: Kansas City
 - Discuss Meeting Times
- 8:15 Roadmap for Completion
- 8:30 Discussion of Continuous Maintenance
- 9:00 Discussion of RTAR for Verification
- 10:00 Adjourn

FRONTMATTER

SELF INTRODUCTIONS, ROLL CALL, MEMBERSHIP, LIAISONS

- Currently 18 Members, quorum is 10 members.

APPROVE MINUTES

- Kansas City Meeting

MEETING TIMES

(all held in Hilton Orlando, L, Lake Concord A)

- | | |
|---------------------------------|---------------------|
| • Full Committee | 8:00 AM - 10:00 AM |
| • Draft Revisions Working Group | 10:00 AM - 12:00 PM |
| • Verification Working Group | 4:30 PM - 6:30 PM |

NOTE: Depending on progress at first two meetings, we may not hold the meeting at 4:30pm.

ROADMAP FOR COMPLETION

- The committee held a Letter Ballot to approve Release of the Draft for Publication Public Review. It was approved by the committee, and was submitted to ASHRAE on June 3, 2019.
- On August 30, 2019 ASHRAE released the Draft Standard for Public Review.

- We received four comments. Some of the comments were substantive, so we need to either:
 - Reject those comments, and document our discussions related to them.
 - Accept the comments (fully or in principle) by amending the draft to respond to those comments, and resubmit the amended draft for public review of “Independent Substantive Changes” (“ISC”—does not open the entire standard up for new comments).
 - Accept the comments (fully or in principle) by amending the draft to respond to those comments and make new changes, and resubmit the amended draft for a new Full Public Review.
- See the attached list of comments and recommended responses drafted by a few committee members. We need to discuss these responses and the proposed edits, and vote to approve them. **(MOTION NEEDED)**.
- We need vote to approve submitting the amended draft for an ISC or full public review. **(MOTION NEEDED)**.
- If we do not have a quorum, we will discuss the changes and accept motions, and take a straw poll, before referring the motions to a letter ballot.

DISCUSSION OF CONTINUOUS MAINTENANCE

- Discussion of options:
 - **Recommend adopting Standard 207 without Continuous Maintenance.** If someone wishes to create Methods of Test for FDD for additional building systems someday, a new committee will have to be established.
 - **Recommend adopting Standard 207 with Continuous Maintenance.** A new chair and roster will be selected. Need to identify champions. The continuing committee can decide whether to:
 - Request creation of new standards for additional building systems
 - Request creation of a standard series to include additional building systems
 - Request a change in Title/Purpose/Scope for 207 to include additional building systems.

DISCUSSION OF RTAR

- High Level: Take the pulse of Full Committee
- Defer details to 10:00 meeting?

ADJOURN

ID	Title	Comment Text / Substantiating Comments	Committee Response / Response Text
17692 0001/ 001	Unit Conversion Error (Supportive)	For both the "High Temperature Test: Damper Allowing Excess Outdoor Air " and "High Temperature Test: Damper Allowing Insufficient Outdoor Air" tests, there was an error in the dual units shown. For both, the Outdoor Air Temperature should read: "85-100 deg F (29-38 deg C)". It currently shows "27-38 deg C".	Accept Comment as Submitted
17696 0002/ 001	Withdraw this Proposed Standard (Not Supportive)	<p>This proposed standard is for a Laboratory Method of Test for Fault Detection and Diagnosis (FDD) for Air Economizers. This standard does not contain any specifications or reference any standards for the specifications of an Air Economizer, ...</p> <p>...nor does it contain specifications or reference any standards for the specifications for Fault Detection and Diagnosis of an Air Economizer. Thus, this proposed standard is attempting to define a method of test for a function that is not defined....</p> <p>...This standard does define some methods for testing sensors, actuators, and dampers that might be used in an air economizer, but these tests will not ensure that the Air Economizer or its FDD system will perform as expected. Thus, this standard does not serve the stated Purpose of the standard to "... provide methods for laboratory testing of Fault Detection and Diagnosis (FDD) systems to determine whether they perform as specified."</p>	<p>Rejected –</p> <p>The definition of the "air economizer" is already provided, and it is almost word for word the definition used in ASHRAE Standard 90.1-2019 for "Economizer, air."</p> <p>With reference to the comment that the proposed standard 207 does not contain "specifications" or "reference" any standards for FDD of an air economizer, we are trying to provide such a specification and a reference in the said document. We cannot reference ourselves within the same document; therefore, this comment will be addressed when and if standard 207 is approved and published.</p> <p>The proposed standard 207 is only testing and verifying functions of the FDD system as installed in an air economizer. The standard does not claim to verify all functions of an air economizer or verify the proper application of the air economizer; the standard only deals with the FDD system.</p>
17712 0003/ 001	High Temperature Tests might not work as defined (Not Supportive)	<p>High Temperature Test: Damper Allowing Excess Outdoor Air</p> <p>Test Code: ECON-HI-EXSOA</p> <p>Outdoor Air Temperature: 85-100 °F (27-38 °C)</p> <p>Return Air Temperature: 72 °F (22 °C)</p> <p>Call for Cooling: YES</p> <p>Fault Present: Economizer Damper Position: HALFWAY OPEN</p>	Accepted in Principle – The way the tests were written was confusing, and they have been rewritten to avoid this confusion. Clarifying language was added to Sections 4.2 and 6.0, and the tests in section 6.5 were revised to be more comprehensive and clear.

ID	Title	Comment Text / Substantiating Comments	Committee Response / Response Text
		<p>Fault Not Present: Economizer Damper Position: FULLY CLOSED MINIMUM POSITION High Temperature Test: Damper Allowing Insufficient Outdoor Air (Note: not applicable for systems with separate minimum outdoor air dampers or fixed louvers) Test Code: ECON-HI-LOWOA Outdoor Air Temperature: 85-100° F (27-38 °C) Return Air Temperature: 72 °F (22 °C) Call for Cooling: YES Fault Present: Economizer Damper Position: FULLY CLOSED Fault Not Present: Economizer Damper Position: HALFWAY OPEN MINIMUM POSITION In both of these tests, the "Fault Not Present" condition listed is another fault. An FDD product might correctly indicate a less specific fault for both of them. By the criteria listed, it would fail the test.</p>	<p>Rebuttal - As to the specific edit suggested, it is not appropriate. Fully closed and half way open were chosen by the committee to avoid minimum position and a percentage of damper open or closed positioned based on airflow. The fully closed and half way open will accomplish the results required in a laboratory environment.</p>
<p>17713 0003/ 002</p>	<p>Low Temperature Test might not work as proposed (Not Supportive)</p>	<p>Low Temperature Test: Damper Allowing Excess Outdoor Air Test Code: ECON-LO-EXSOA Outdoor Air Temperature: 40-55 °F (4-13 °C) Return Air Temperature: 80 °F (27 °C) Call for Cooling: NO Fault Present: Economizer Damper Position: HALFWAY OPEN Fault Not Present: Economizer Damper Position: FULLY CLOSED MINIMUM POSITION The "Fault Not Present" condition is another fault. An FDD product might correctly indicate a less specific fault in this case, but it would fail the test.</p>	<p>Accepted in Principle – The way the tests were written was confusing, and they have been rewritten to avoid this confusion. Clarifying language was added to Sections 4.2 and 6.0, and the tests in section 6.5 were revised to be more comprehensive and clear.</p> <p>Rebuttal - As to the specific edit suggested, it is not appropriate. Fully closed and half way open were chosen by the committee to avoid minimum position and a percentage of damper open or closed positioned based on airflow. The fully closed and half way open will accomplish the results required in a laboratory environment.</p>

Discussion Regarding Rejection of Comment 17696

Kristin Heinemeier

From: Payne, Vance (Wm.) (Fed) <vance.payne@nist.gov>
Sent: Wednesday, December 4, 2019 9:12 AM
To: Kristin Heinemeier; ADRIENNE THOMLE; dushipley@gmail.com; David Yuill; chris.benson@fm.utah.edu; michael.brambley@pnnl.gov; glennremington@live.com; lwang12@uwyo.edu
Subject: RE: Oops...a few comments on 207

SPC 207 Members,

I talked with Roy Crawford about his comments. He is concerned with the fact that there is really no standardized definition of what an Air Side Economizer is or does. He doesn't want some shady operator "playing" or "gaming" the standard to say that their equipment satisfies 207 yet is not even an air side economizer.

We have to add a formal definition of air side economizer to our standard and state that this standard 207 is for testing FDD on this type of equipment only.

I think this will satisfy 75 to 95% of his concerns.

Regards,
Vance

From: Kristin Heinemeier <kheinemeier@frontierenergy.com>
Sent: Monday, December 2, 2019 11:30 AM
To: ADRIENNE THOMLE <athomle@msn.com>; dushipley@gmail.com; David Yuill <dyuill@unl.edu>; chris.benson@fm.utah.edu; michael.brambley@pnnl.gov; Payne, Vance (Wm.) (Fed) <vance.payne@nist.gov>; glennremington@live.com; lwang12@uwyo.edu
Subject: RE: Oops...a few comments on 207

Can I get a hand with this?

Kristin Heinemeier, Frontier Energy
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