

**ENERGY TECHNICAL ADVISORY COMMITTEE
CONCURRENT WITH THE
MECHANICAL TECHNICAL ADVISORY COMMITTEE
TELECONFERENCE MEETING FROM TALLAHASSEE, FLORIDA**

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**AUDIO: DIAL-IN NUMBER 1 877-309-2073
CONFERENCE CODE/MEETING ID: 412-804-309**

**June 20, 2017
10:00 A.M.**

Minutes

ENERGY TAC PRESENT:

Drew Smith, Chairman
Oscar Calleja
Jan Geyselaers
Scott Ranck
David Wojcieszak

Steve Bassett
Bob Cochell
Tim Graboski
Roger Sanders

ENERGY TAC NOT PRESENT:

Kelley Smith Burk

Lawrence Maxwell

STAFF PRESENT:

Mo Madani
Justin Vogel
Chris Howell
Jim Hammers

Thomas Campbell
Norman Bellamy
Marlita Peters

Welcome:

Time: 10:00 a.m.

Ms. Peters welcomed everyone to the concurrent teleconference meeting of the Energy TAC and Mechanical TAC.

Roll Call:

Ms. Peters performed roll call for the Energy TAC. A quorum was determined with 9 members present.

Agenda Approval:

Mr. Calleja entered a motion to approve the agenda as posted for today's meeting. Mr. Geyselaers seconded the motion. The motion passed unanimously with a vote of 9 to 0.

Minutes May 10, 2017:

Mr. Geyselaers entered a motion to approve the minutes as posted from the May 10, 2017 meeting. Mr. Cochell seconded the motion. The motion passed unanimously with a vote of 9 to 0.

To review and accept final draft report for research project titled “Residential Performance Code Methodology for Crediting Dehumidification and Smart Vent Applications”:

Mr. Madani provided a brief summary of the project and then asked Mr. Rob Vieira, of FSEC to provide his presentation.

Rob Vieira, FSEC presented a detailed power point presentation to the TACs with background, goals, expected outcome and impact on the Code with recommendations on energy credits and dehumidification projects/work.

TAC Comments:

Mr. Cochell asked about sizing the dehumidifier and the efficiency.

Mr. Vieira addressed Mr. Cochell's concerns on the sizing and also mandating efficiency to size.

TAC Comments (cont.):

Mr. Wojcieszak stated he appreciated the study however; installing dehumidifiers does not take place of installing the correct size heating and air equipment.

Mr. Grabowski asked if there is any relevance to vented or sealed attics for humidity control.

Mr. Vieira stated they did not model those cases in this study.

Staff questions:

Mr. Madani asked if they will still see ventilation as an issue as we go forward with new construction.

Mr. Vieira stated there will be houses with the new mandatory testing that will be lacking. He further stated some builders will put in ventilators. Mr. Vieira stated there are some builders that are putting them in at the beginning and there are some that do not. He said above code homes typically have ventilation systems.

Mr. Madani ask regarding ventilation and the exhaust approach verses the smart vent or balance system, cost of construction, do they see that builders will go with the smart vent? Also, are there costs differences?

Mr. Vieira stated this was in last year's report and can be sent to Mr. Madani.

TAC Comments:

Mr. Calleja stated the concern is mid-season when the unit is not operating and then bringing the humidity in, he said he felt the dew point should be considered. He asked if this was modeled.

Mr. Vieira stated FSEC is doing a study at this time but do not have the figures at this point but hope to have it in the future.

Mr. Calleja stated when we calculate the outside air we should take all and create an average.

Mr. Vieira stated that is part of this proposal and hopefully will be ready for the 7th Edition.

Mr. Ranck expressed concern over additional cost of power needed to run these systems.

Mr. Vieira responded that this is not a requirement, but this report was on those homes that did have the system. He said there will not be a significant increase.

TAC Comments (cont.):

Mr. Ranck said he read in a prior report that a test in a home with 7 air changes and a test in a home ventilation revealed the leaker home had a better humidity level.

Mr. Vieira stated he was not sure what report he was referring to, however, he did respond to the different scenarios that could be put into the testing.

Public Comment: None

Mr. Cochell entered a motion to accept the report. Mr. Calleja seconded the motion. The motion passed unanimously with a vote of 9 to 0.

To review and accept final draft report for research project titled “Improved Hot Water Code”:

Ms. Peters advised that Jeff Sonne, FSEC will present his final draft report for the TAC.

Mr. Sonne provided a detailed report with a power point presentation that included purpose, goals, approach, literature review, calculation procedure development, a draft of proposed code change language, and comparison charts of energy use, code performance and recommendations.

TAC Comments:

Mr. Calleja asked if the Plumbing TAC has seen this report, he stated they have a better of idea of the systems and costs.

Mr. Madani stated no this is for energy credits and is limited to the Energy TAC.

Mr. Calleja stated when this gets to code modification, they should be included.

Mr. Grabowski stated he noticed in the comparison that they were noting tankless gas heaters, and asked if there were figures on the difference between gas and electric.

Mr. Sonne stated they did not specifically look at that issue. However, there would not be a big difference, so they focused on the circulation of the system.

Mr. Grabowski said that there are a lot of projects that go tankless and the electric seem to use more power and then there are areas that do not have access to natural gas.

Mr. Grabowski asked how the solar water heating and heat recovery units compare.

TAC Comments:

Mr. Sonne stated those have not been included in this report calculation.

Mr. Grabowski asked if you can only select solar hot water or heat recovery unit in the energy gage, what happens if a home has both, will there be credit for both systems.

Mr. Sonne advised he is not sure but would check for them.

Mr. Vieira stated there was no combination credits that he was aware of.

Mr. Ranck asked if the gas tankless condensing unit that is 96% efficient would move similar to that standard tankless.

Mr. Sonne stated there would be similar results.

Mr. Calleja asked how you would balance the water usage versus energy consumption.

Mr. Sonne stated this was a good question; they are looking at the energy impact. He said the spreadsheet will give that value.

Mr. Calleja stated that electric tankless would use more energy but less water would not balance in this calculation as we are using only the type of tank and not the water calculation.

Mr. Sonne stated it is where the water heater is located.

Mr. Cochell stated he had a propane tankless heater installed, but the cost was not a saving as the cost for propane gas was \$5.00 per gallon. He then asked about the heat pump water heater and what happened to the cold air and was it in the calculation.

Mr. Sonne stated that would be correct.

Mr. Cochell asked if we are including the heat pump water heater as one of our options in the 6th Edition.

Mr. Vieira stated you always had a choice; the change is the Federal Standards on the large systems. He provided detail of the efficiency calculation. He said that is not on the small systems. Mr. Vieira provided additional detail on the determination was made.

Public Comments: None

TAC Motion:

Mr. Cochell entered a motion to accept the report. Mr. Sanders seconded the motion. The motion passed unanimously with a vote of 9 to 0.

To recommend and discuss potential research topics for consideration by the Building Commission:

Discussion was held among the TAC on the subjects submitted from FSEC.

Mr. Madani explained the process of selecting the topics for submission to the Commission for consideration.

The seven projects to be discussed are in order of presentation:

1. Residential Prescriptive and Performance Code Methodology for Crediting Smart Thermostats
2. Investigation of Exterior Duct Condensation Potential of Deeply Buried Cold Air Supply Ducts in Florida Vented Attics
3. Energy Impact of Dehumidifier Location
4. Air Leakage and Conductive Impacts of Central Air Deep Media Filter Boxes and Electronic Air Cleaner Boxes
5. Residential Air Leakage Testing and Mechanical Ventilation Verification
6. Improving Water Heating Efficiency in the Residential Performance Code
7. Create an Electronic Storage Protocol for Building Permits

Eric Martin, FSEC along with Mr. Vieira provided detail on each of the topics.

Discussion was held among the TAC on the subjects submitted from FSEC.

The TAC ranked the projects order as 5, 7, 1, 3, 6, 2, 4.

Mr. Ranck entered a motion to submit the projects in the following sequence with the most important first. The ranking was 5, 7, 1, 3, 6, 2, and 4. Mr. Smith seconded the motion. The motion passed unanimously with a vote of 8 to 0 as one member was not present on the line.

There was no further business or comments from the TAC or the public.

Ms. Peters performed the final roll call 8 members remained on the line.

The meeting was adjourned at 12:43 p.m.