

**IECC/DGC Energy Committee Offline Hearing #3  
 April 12, 2022**

**1. Attendees:**

<b>Name of CCD Committee Member</b>	<b>Organization</b>	<b>In Attendance?</b>
Carol Pafford	City and County of Denver (CCD)	
Christy Collins	City and County of Denver (CCD)	X
Chuck Bartel	CCD	X
Allen Yanong	CCD	X
Courtney Anderson	CCD	X
Eric Browning	CCD	X
Antonio Navarra	CCD	X
Tom Gleason	CCD	X
Robby Schwarz	BUILDTank Inc.	
Bill Rectanus	Thrive Home Builders	
John Burns	StanTec	
Jeff Slaugh	EcoLogic	
Kevin Eronymous	SAR Architects	X
Linda Morrison	Mead Hunt	X
John Arent	Noresco	X
Elizabeth Gillmor	Energetics	X
Aaron Esselink	Xcel Energy	X
Mark Rodriguez	Sun Run	X

**2. Meeting purpose:** Not going to be able to discuss all proposals in hearing agendas – having offline discussions to vet proposals for advancement. Want to be transparent, recording meetings and posting minutes so members of the public can know what we’re talking about.

**3. Discussion on IECC/DGC Energy**

**Commercial**

- [#57](#) C403.5 – Economizers
- [#5](#) C403.8.1 - Allowable Fan Power
- [#39](#) C405.3.2 - LPDs IECC and DGC
- [#33](#) C406.6 -DOAS
- [#26](#) DGC 701.4.8 Unregulated energy uses
- [#95](#) DGC 701.4.2 HVAC Minimum Efficiencies
- [#74.2](#) Congregate Roof Penetrations – Updated proposal
- [#62](#) C402.5 Air Barrier Testing – Updated proposal

#### 4. [#57](#) C403.5 – Economizers

##### Discussion:

- a. Proponent: Noresco
- b. This proposal is for the prescriptive path rather than mandatory and would reduce the allowance of systems without economizers (expanding scope of where airside economizers are required for HVAC systems). Expanding from 54,000 BTU's per hour or 4.5 tons down to 33,000 BTU's per hour which is just under 3 tons
- c. Proponent to clean up and revise language to remove redundant language, provide exception for smaller split systems, and align with ASHRAE requirements
- d. CPD staff discussed how this proposal and others may necessitate comcheck updates

##### Action Item:

- a. **Noresco** make revisions/clean-up based on discussion. Update value in #2 of C403.5.1 (Integrated economizer control) 2.2 (unit rated capacity) for consistency with ASHRAE and remove redundant language
- b. **Denver** to share revised version of proposal, when available

#### 5. [#5](#) C403.8.1 - Allowable Fan Power

##### Discussion:

- a. Proponent: Noresco
- b. This proposal revises fan power for energy savings. Prescriptive type requirement
- c. Group had feedback about exclusions and horsepower versus brake horsepower metrics, and thought sharing this proposal in an IECC committee meeting would be beneficial to receive feedback from the mechanical design professionals (both within and outside of the committee)

##### Action Item:

- d. **Noresco**: Clarify language to make clear what applies to existing buildings
- e. **Noresco** bring this proposal back to the larger committee for MEP feedback

#### 6. [#39](#) C405.3.2

##### Discussion:

- a. Proponent: Noresco
- b. About this proposal: LPDs IECC and DGC – lighting power density values recommendation to lower those values to the levels set currently and IGCC. The reduction won't be an exact 5% or 10% drop across the board, but it's roughly 10, 12, 14% reduction in lighting power allowance for these.

- c. The group didn't express concerns with the targets but would like to build them into other compliance options (C406) in order to preserve ability to access Xcel rebates
- d. Group was supportive of moving forward with placing this in C406 with the numerical values as indicated.

Action Items:

- a. Noresco move forward with placing this in C406 with the numerical values as indicated, and then bring in front of the committee

7. [#33](#) *C406.6 -DOAS – Dedicated Outside Air System*

Discussion:

- a. Proponent: Noresco
- b. Proposal would make sure DOAS's are being installed to meet certain minimum criteria including energy recovery with a minimum energy of recovery and disable heating to employ bypass as needed to maintain a 60 degree or cooler supplier temperature.
- c. Group agreed this looked like a good proposal that could be moved forward.

Action Items:

- d. Noresco update table to remove all the other climate zones
- e. Noresco this should be moved forward as part of the package calibrating at a later point

8. [#26](#) *DGC 701.4.8 Unregulated Energy Uses*

Discussion:

- a. Proponent: Noresco
- b. About the proposal: this is an adjustment/addition to the existing Energy Star requirements that are called out for in the DGC. For appliances that have an Energy Star rating, and good market saturation, make the requirements be the most efficient rated appliances/products. Disaggregation of end uses. Energy monitoring
- c. A committee member identified that there are some limitations there when there's a certain model or style that's needed that is not available in Energy Star. Obviously, those kinds of things change. Ex. multifamily ADA units (e.g. combo washer/dryer in one unit), and that exceptions are needed for these circumstances
- d. Group agreed to leave language about disaggregation of end uses as-is and there is a group understanding that the group would have to talk about it again if it gets

targeted to move to mandatory code out from DGC.

Action Items:

- e. Noresco to add language for exception to accommodate appliances for those that don't have the actual products
- f. Noresco bring this proposal back to the IECC offline committee for review

9. [#95](#) *DGC 701.4.2 HVAC Minimum Efficiencies*

Discussion:

- a. Proponent: Noresco
- b. Establishes higher minimum efficiency requirements for packaged HVAC equipment for the voluntary Denver Green Code.
- c. Committee members mentioned the challenge similar to the conversation about lighting – if you mandate it, you take away the opportunity to incentivize it.
- d. Committee member recommended building this into C406 or C407 and allowing people to figure out what's going to be the best fit for the project and then to preserve Xcel incentive programs to help improve the cost effectiveness.
- e. Another committee member offered an alternative perspective that they wouldn't want to prevent something from being put into the Denver Green Code that could help us to evolve the market and support better overall practices through the building stock, and that edits could be made before Green Code policies are potentially added to the base code in future cycles.

Action Items:

- f. Discussion to be continued