Subcommittee Updates:
- Residential Subcommittee
  - Working on guidance documents
    - Balanced ventilation
    - HVAC sizing
  - Licensing for mechanical contractors or other methods to address HVAC oversizing
- Commercial Subcommittee
  - Establishing priorities and early wins
- Multifamily Subcommittee
  - Working on defining which code to use where
  - Determining if there’s an energy advantage to using correctly ascribed code

Presentations:
Midwest Compliance Studies: Kentucky - Alison Lindburg, MEEA
Building Codes and Tiny Houses - Jordan Skelcher

Collaborative Discussion:
Commercial Subcommittee
- Lack of accountability in commercial code enforcement
  - Or lack of understanding?
- Design a flow chart to lead builders through the pros and cons of different code routes (ASHRAE and IECC)***
  - Prescriptive
  - Performance too?
- PE signature enough to ensure code was adequately met?
  - Plan for implementation
  - Should accountability be spilt by trade expertise?
  - Final inspection to ensure plan was implemented correctly
- Architect → Leader, so accountable?
- Commissioning – who’s in charge
  - Raters have this accountability in the residential sector
  - Or all parties meet more frequently
- CEE’s code study entails a preconstruction meeting
- Signed checklist → follow through
  - Architect
  - General contractor

Residential Subcommittee
- Licensing for mechanical contractors
- Use similar flow chart to residential to guide builders ***
- Stakeholders meetings ideally means everyone is on board from the start
- Insurance to HVAC contractors for accountability
- Energy implications of oversizing
  - Large or small impact
- Licensing is a long shot at best
  - Better option \(\rightarrow\) code
  - Licensing by trade/profession
- We need data to support this problem we’ve seen anecdotally ***
  - Let’s sufficient data diagnose a problem before jumping to conclusions
- Get support from building industry
  - Fewer code changes vs. benefits from adaptation
- How do we force education
- Case studies of high performance homes as guidance for builders

Non-licensing option:
- MERC and Xcel both have training requirements for HVAC installation

**Next Steps:**
- Continue to develop guidance documents in subcommittees
- Use full collaborative meeting as means to update group on work completed in the collaborative subcommittees
  - Still meet at least 1-2 times a year
- Establish separate committee to address codes adoption cycle

**Attendees:**

<table>
<thead>
<tr>
<th>Name</th>
<th>Organization</th>
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<tbody>
<tr>
<td>Bruce Nelson</td>
<td>retired (DER)</td>
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<tr>
<td>Sara Curlee</td>
<td>BWSR</td>
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<td>Rebecca Olson</td>
<td>NEC</td>
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<td>Paul Morin</td>
<td>TEC</td>
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<tr>
<td>Mark Anderson</td>
<td>Anderson Sustainable Architecture</td>
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<tr>
<td>Ed VonThoma</td>
<td>Building Knowledge</td>
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<tr>
<td>Anthony Fryer</td>
<td>Dept. of Commerce</td>
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<td>Peter Kulczyk</td>
<td>Green Code Knowledge, LLC</td>
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<tr>
<td>Kevin Brauer</td>
<td>Home Performance Strategies</td>
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<tr>
<td>Lonney Olson</td>
<td>Vital Home</td>
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<tr>
<td>Mike Anderson</td>
<td>Anderson Heating</td>
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<tr>
<td>Vicki Carey</td>
<td>City of Minneapolis</td>
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<tr>
<td>Brian Kirby</td>
<td>U of M</td>
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<tr>
<td>Jared Ellingson</td>
<td>U of M</td>
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<tr>
<td>Alison Lindberg</td>
<td>MEEA</td>
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<tr>
<td>Molly Berg</td>
<td>Habitat for Humanity MN</td>
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<tr>
<td>Joe Scharrer</td>
<td>City of Minneapolis</td>
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<tr>
<td>Tim Manz</td>
<td>City of Blaine</td>
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<td>Allen Jorgensen</td>
<td>City of Blaine</td>
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<tr>
<td>Dori Dufresne</td>
<td>City of St. Paul</td>
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Don Sivigny  Dept. of Labor and Industry
Kevin McDermott  City of Minnetonka
Megan Hoye  CEE