

**Energy Sub-Workgroup
Second Meeting Summary
Date: September 29, 2025
Location: Virginia Housing Center
Time: 10:00 AM - 1:40 PM**

Attendees:

VA Department of Housing and Community Development (DHCD) Staff:

- **Jeff Brown** – Deputy Director of Building and Fire Regulation
- **Florin Moldovan** – State Building Codes Office Director
- **Paul Messplay** – Code and Regulation Specialist, State Building Codes Office
- **Travis Luter** - Code and Regulation Specialist, State Building Codes Office
- **Chris Scott** – Code and Regulation Specialist, State Building Codes Office

Sub-Workgroup Members:

- **Corian Carney** – Independent Alliance of the Electrical Industry (IAEI), VA Chapter
- **Mason Trimble** – Virginia Department of Energy (VDEG)
- **Dwayne Smith** – Department of General Services (DGS), Division of Engineering and Buildings (DEB)
- **D.A. Pierce** - Virginia Building and Code Officials Association (VBCOA), Energy Committee
- **Steve Shapiro** – Apartment & Office Building Association of Metropolitan Washington (AOBA), Virginia Apartment and Management Association (VAMA)
- **Andrew Clark** – Home Builders Association of Virginia (HBAV)
- **Dennis Hart** - Virginia Plumbing and Mechanical Inspectors Association (VPMIA)
- **Bill Penniman** – Sierra Club, VA Chapter
- **Chelsea Harnish** – Virginia Energy Efficiency Council (VAEEC)
- **Eric Lacey** – Responsible Energy Codes Alliance (RECA)
- **Andrew Grigsby** – Viridiant, Sitting in for Andrew Green

Interested Parties:

- **Justin Koscher** - Polyisocyanurate Insulation Manufacturers Association (PIMA)
- **Mike Hamilton** – Virginia Building and Code Officials Association (VBCOA)
- **Ross Shearer** – Virginia Citizen
- **Susan Stillman** – Sierra Club, VA Chapter
- **Stuart Nuckols** – Viridiant

- **Ron Clements** – Chesterfield County
- **Kyle Kratzer** – Virginia Citizen
- **Monica Rokicki** – Better Building Works
- **Christopher Leyen** – Piedmont Environmental Council

Purpose

The Energy Sub-Workgroup convened as part of Virginia’s 2024 code development cycle to review and discuss proposed changes to the state’s energy code provisions. The meeting brought together a diverse group of stakeholders—including state agency staff, builders, advocacy groups, code officials, industry representatives, and citizens—to collaboratively examine energy-related code change proposals prior to deliberations by the General Stakeholder Workgroup and consideration by the Board of Housing and Community Development (Board).

Top-line Themes

1. Holistic vs. Incremental Change

- Several speakers (e.g., Bill Penniman, Eric Lacey) argued that Virginia’s long-standing practice of “carrying-forward” weakening amendments prevents the state from seeing the cumulative benefits of the full model International Energy Conservation Code (IECC) and makes cost analysis difficult.
- Builder and owner representatives (HBAV, AOBA) favored a measured, incremental approach focused on cost and feasibility.

2. Statutory Scope / Minimum Code

- Opponents to proposals on EV-readiness, renewable-energy appendices, and ceiling fans said such measures exceed the Uniform Statewide Building Code’s (USBC) minimum health-and-safety mandate.
- Proponents held that energy savings, air-quality benefits, and consumer cost reductions fall squarely within the Code’s public-welfare charge.

3. Cost-Impact Statements

- Multiple commenters (Ron Clements, HBAV) said several proposals lack concrete cost impact data and documentation, making statutory consideration difficult.

4. Need for Additional Workgroups

- Consensus to ask the Board to form a dedicated EV-readiness task group.
- Informal offline meetings planned on wall-insulation, blower-door testing credentials, and performance-path revisions.

5. Deadline Management

- a. Current deadline for final amendments is October 10th; DHCD staff is considering extending the deadline to allow additional time for stakeholders review and collaboration. Any changes to the deadline will be shared with stakeholders as soon as possible.

Opening Remarks

Bill P observed that several proposals, particularly those involving the thermal envelope and various appendices are interrelated and could serve as the basis for a broader compromise. He urged the group not to dismiss any single proposal outright, noting that the 2024 IECC introduces numerous trade-off options (e.g., simulated performance and Energy Rating Index (ERI) paths) that complicate one-off decisions. Instead, he encouraged participants to integrate related items into a cohesive package that advances energy goals in line with the 2024 IECC's intent.

Andrew C clarifies that we are not taking any votes or recommendations that will be taken to the general stakeholder workgroup meeting on Oct. 3rd.

Florin M notes that the function of sub-workgroups is to provide an opportunity for discussion, collaboration, and compromise before the general stakeholder workgroup meeting. No official votes for support or non-support will be taken. Staff will note support or non-support of individual members, but a support vs. non-support roll call vote will not be counted. If all sub-workgroup members support a proposal, there is the opportunity to have the Energy SWG as a co-proponent on the proposal.

General

Justin K asked how the sub-workgroup's discussion would feed into the upcoming General Stakeholder Workgroup (GSW) meeting.

Florin M explained that the sub-workgroup serves as a forum for dialogue and consensus-building; no formal votes are taken. Comments gathered here are shared with proponents so they can refine their proposals before the General Stakeholder Workgroup (GSW) meeting. Participants were urged to contact proponents directly with support, concerns, or suggested changes.

Jeff B added that today's remarks are for clarity and do not replace testimony at the GSW, where members should formally state their positions.

Justin K then inquired about the final deadline for submitting revised proposals.

Florin M said the current cutoff is October 10th, but staff are considering a brief extension; once a new date is set, it will be announced on cdpVA and other media.

Note: The new submission deadline for proposals to be considered at the next GSW meeting is October 31, 2025.

Commercial Code Proposals

B101.2 — Joseph Willis

Bill P notes that the Sierra Club does not support this proposal and states that this code proposal may conflict with state law.

Justin K agrees with Bill and states that this is an incomplete proposal and will not accomplish the proponent's goals.

Chelsea H opposes this proposal and points out that most building owners do not own their buildings and that other points in the proponent's reason statement do not resemble what we know about commercial buildings.

Eric L and **Monica R** agree with the previous comments.

B101.2(1) — Joseph Wages

Steve S voiced opposition, stating that AOBA would be opposed to incorporating the energy appendices into the body of the code.

Bill P voiced support, stressing the value of development-phase trade-offs.

Ron C argued that the cost-impact statement is inadequate and asked what "cost-effective by PNNL" means.

Andrew C stated that HBAV is against the measure and asked for clarification as to whether the localities would have the discretion to adopt the appendices individually; **Florin M** clarified that the subject proposal would make the appendices mandatory statewide. **Andrew C** reiterated HBAV's opposition, citing weak cost impact and reason statements.

Justin K also objected, contending that the appendices address items, such as renewables and EV-ready wiring, that do not directly affect energy use and would dilute genuine efficiency requirements in the IECC.

Monica R added that, while the appendices may appear tangential to energy efficiency, they contain provisions intended to protect public health and welfare and could influence other parts of the code through feedback loops.

EC-C402.1.6-24 — Bill Penniman

Eric L concurred with **Bill P**, saying the exemption is overly broad and warrants deeper review, especially because it originated from advocacy groups with limited collaboration.

Justin K agrees with **Eric L** and **Bill P**. Anecdotally; PIMA has seen these buildings constructed with higher levels of energy efficiency. There are energy use exceptions in the code already where it would not make sense to put an envelope on a building that's unconditioned or underconditioned. Deleting this and taking a new look may move Virginia's policy goals forward, whereas the way it is currently written may hold back those policy goals.

Chelsea H supports

Andrew C stated HBAV does not have an opinion on this proposal. States HBAV have heard valid arguments for this proposal.

Steve S opposed the measure, asserting that its citation of the 2021 General Assembly implies a mandate to adopt the newest IECC, whereas the legislature only instructed regulators to "consider" the current edition.

EC-C403.7.4.1-24 — Joseph Willis

Bill P expressed reservations, noting that the proponent relies on a 2015 Virginia Mechanical Code allowance for natural ventilation via operable windows, even though most modern buildings lack such windows.

Monica R concurred, pointing out that energy-efficient "tight" buildings typically require mechanical rather than natural ventilation.

Andrew G warned of unintended consequences: using a 1.5-ton air handler to deliver 80 cfm when a building needs only 30 cfm would force the unit to run roughly 14.5 hours a day, increasing operating costs. He urged a cost-effective solution that meets airflow requirements while safeguarding occupant health, safety, and welfare.

EC-C405.17-24 — Joseph Wages & EC-C405.17(1)-24 — Bill Penniman

Bill P outlined his EV-readiness proposal, explaining that it mirrors **Joseph W's** submission but adds key definitions to cover the spectrum from full EV chargers to conduit-only “make-ready” infrastructure.

Steve S opposed both versions, arguing that the USBC is a minimum code and that EV provisions exceed the health-and-safety threshold; he recommended creating a dedicated workgroup, noting fire-service concerns about thermal runaway.

Florin M reported that comments from **Andrew Milliken** had been forwarded to the two proponents.

Andrew C said the Virginia Association for Commercial Real Estate also has reservations, particularly about parking-space ratios.

Ron C contended the proposals fall outside the USBC's statutory scope and lack concrete cost data for the required EV stations.

Bill P countered that future-outlet requirements are common in building codes and that EV readiness serves public health, safety, and welfare. He would support forming a workgroup if the proposals do not advance. He further noted that DHCD staff submitted a proposal last cycle to include EV charging requirements at the request of two legislators.

Florin M clarified that, at times, staff will submit proposals on behalf of legislators as a courtesy, but staff do not submit proposals of this nature on behalf of DHCD.

Steve S asked why the reason statement references the residential code; **Bill P** said the intent is to show consistency across occupancy types.

Monica R backed the concept but agreed that a workgroup is needed, calling EV infrastructure essential for resiliency and emergency response.

Florin M confirmed staff will relay the request for an EV-readiness workgroup to the Board.

Andrew C highlighted the difference between multifamily and one- or two-family dwellings, implying any mandate should distinguish between them.

EC-1301-24 — Bill Penniman

Bill P introduced the proposal which would eliminate all of Virginia’s weakening energy code amendments for new construction and emphasized that this would not affect existing buildings. He further noted that this proposal would require any retained deviations from the model IECC to be re-justified each cycle.

Eric L said Virginia is unusual in perpetuating decades-old amendments whose original analyses are obsolete; significant “weakening” provisions should be reconsidered.

Justin K agreed in principle, arguing that perpetual carry-overs distort baseline cost-effectiveness analyses and make future upgrades appear larger than they are.

Chelsea H supported the proposal, warning that Virginia’s many amendments, combined with new IECC trade-off options, could markedly reduce overall efficiency.

Bill P added that DOE/PNNL studies show each IECC update yields net occupant savings, so realigning with the model code benefits consumers.

Andrew C opposed “wiping the slate clean,” stressing that 2021 Virginia amendments reflect local consensus and that only a handful of states adopt the IECC unamended. He linked code costs to housing affordability.

Steve S viewed the proposal as an indirect attempt to force full adoption of the IECC.

Jeff B addressed previous comments regarding carrying forward amendments approved in previous code cycles in Virginia, noting that existing amendments are part of the legally approved regulation; wholesale deletion would override prior Board decisions.

Ron C said many cost-impact statements lack concrete figures, making statutory evaluation difficult.

Residential Code Proposals

REC-R402.1.2-24 — D.A. Pierce

D.A. Pierce presented his proposal to increase prescriptive wall insulation values (while ceiling insulation would default to R-49 under the 2024 IECC unless separately amended).

Andrew C thanked **D.A. Pierce** and asked whether any ceiling-insulation change would require a separate proposal. **Pierce** confirmed that, absent an amendment, Virginia will automatically move to R-49 for ceilings.

Monica R voiced support.

Justin K described the measure as the sort of incremental improvement needed to phase out older weakening amendments.

Bill P and **Eric L** preferred full adoption of the 2024 IECC wall values statewide but accepted this as a partial step. **Bill P** suggested including a separate option for single-family detached dwellings; **Eric L** noted Virginia has missed two successive national upgrades and that more than 250,000 homes have been built with sub-par insulation since 2012.

Andrew G asked how the change would affect the Performance path baseline.

Florin M replied that it is premature to provide an answer given that there is still time in the process to submit code change proposals, and the Board will not take a position on any of the proposed changes and the existing amendments until later in the process.

D.A. Pierce clarified that builders must choose one of three compliance paths—Prescriptive, Total Building Performance (Performance), or ERI. His proposal alters only the Prescriptive path; ERI still references the 2006 baseline, and Total Building Performance references the current model code.

Bill P questioned whether the ERI and Performance paths indirectly reference the same insulation table; **Eric L** and **Dennis H** answered that ERI does not, but the Performance (Simulated Building Performance) path does, meaning a companion proposal might be needed.

Dennis H said VPMIA fully supports the proposal.

Chelsea H appreciated the effort and, while withholding a formal position, reiterated her organization's desire for higher wall insulation overall.

*Participants agreed to continue offline discussions, with **Bill P** requesting resolution by October 3rd.*

REC-R402.1.2(1)-24 & REC-R402.1.2(2)-24 — Eric Lacey

Eric L outlined his insulation-upgrade proposal but said he is inclined to withdraw it and instead support **D.A. Pierce's** more incremental wall-insulation amendment, even though he would still prefer larger gains in both wall and ceiling R-values.

Bill P endorsed **Eric L's** proposal in principle but recommended deferring this and the following two proposals from the October 3rd General Stakeholder Workgroup agenda.

Monica R said she supports the idea of R-60 attic insulation, “in theory,” yet finds it impractical: thicker insulation can make HVAC equipment harder and riskier to service while offering only marginal energy savings. She believes R-49 is the optimal level and that greater efficiency gains can be achieved by focusing on other parts of the code.

REC-402.1.2(4)-24 – Bill Penniman

Bill P provides an overview of his proposal noting that it is substantively identical to **Eric Lacey's** wall-insulation proposal. He noted that since other proposals covering the same topic areas may be tabled from the October 3rd General Stakeholder Workgroup Meeting, this proposal may need to be tabled, too, while proponents work toward a consensus proposal.

Florin M noted, with regard to tabling proposals from the October 3rd General Stakeholder Workgroup Meeting, that staff will table proposals at the request of the proponent and encouraged those entertaining tabling a proposal inform staff as soon as possible so stakeholders can be notified ahead of the October 3rd meeting.

REC-R402.4.1.2-24 — Eric Lacey

Eric L presented proposal REC-R402.4.1.2-24, which adjusts blower-door testing targets for small dwelling units and addresses tester qualifications.

Steve S said his groups have no position on this proposal and asks whether this code change, which references attached multi-family developments, belongs in the Residential provisions of the VECC.

Eric L responded that his proposal would include dwelling and sleeping units detached or are located in R-2 occupancies, so it could be 3-story, garden style apartments.

Steve S states that those occupancies are outside of the scope of the Residential provisions of the VECC.

Florin M clarified that the amendment falls under the Residential portion of the IECC and therefore applies to all residential occupancies up to three stories, including both R-2 multifamily and single-family homes. If this proposal were to be approved by the Board for inclusion in the USBC, there would be provisions that fall within Chapter 4 of the VECC and Chapter 11 of the Virginia Residential Code (VRC), as there are provisions that would impact single-family dwellings.

Andrew G endorsed the change, noting that small units often struggle to meet the current air-leakage target because the requirement is scaled to building volume, favoring large homes. Notes that Virginia needs to provide flexibility for smaller dwelling units to achieve this standard.

Monica R agreed, stating that tighter targets are harder for small enclosures.

Dennis H said the most pressing issue is who performs the tests; qualifications should be defined. Noted that, compared to the model code language, Virginia's language is more stringent and should be maintained.

Eric L responded that he is open to specifying tester credentials.

Andrew G added that some referenced certifications are being phased out.

Monica R warned against allowing installers (e.g., insulation or mechanical contractors) to test their own work, citing conflict-of-interest concerns.

Eric L noted a similar compromise was reached on duct-leakage testing and is willing to pursue one here.

Bill P indicated support for this and a related proposal submitted by himself on behalf of Sierra Club - VA Chapter, suggesting possible consolidation.

Florin M asked **Eric L** and **Bill P** to consider merging or withdrawing duplicative submissions to reach a single consensus proposal.

Justin K inquired whether jurisdictions keep approved lists of third-party testers.

D.A. Pierce said Roanoke requires testers to complete a registration form before testing.

Steve S explained that "approved" simply means accepted by the local building department; the code mandates a third-party policy in general, but not a formal roster or list of approved third-party testers.

Andrew G noted that some localities do maintain such lists.

Florin M notes that the next proposal, REC-R402.4.1.2(1)-24, authored by **Bill P** and which was not officially announced, is similar to **Eric L's** proposal, REC-R402.4.1.2-24, both in content and in scope.

REC-R403.14-24 — Bill Penniman

Steve S objected, stating that the building code is intended to set minimum standards, and mandating ceiling fans goes beyond that intent.

Corian C opposed the proposal and added that the National Electrical Code (NEC) already requires the installation of ceiling fan boxes where a fan might be placed, giving occupants the choice to install a ceiling fan.

Dennis H questioned what is meant by the term “planned principal living area.”

Kyle K agreed, noting that if such a term is used, it must be clearly defined.

Bill P responded that he would be amenable to limiting the requirement to sleeping rooms only, as ceiling fans can deliver meaningful energy savings by allowing higher thermostat settings.

Eric L acknowledged the effectiveness of ceiling fans and appreciated that the NEC already addresses the necessary infrastructure.

Monica R supported the proposal from an energy perspective but expressed design concerns, mentioning that some clients have safety fears related to ceiling fans.

Corian C pointed out that such concerns are why the NEC requires appropriate ceiling fan boxes, to allow for future safe installation.

REC-R404.5-24 — Bill Penniman & REC-R404.5(1)-24 — Joseph Wages

Florin M announced that the two similar proposals—REC-R404.5-24 from **Bill Penniman** and REC-R404.5(1)-24 from **Joseph Wages**—would be discussed together. **Bill P** then provided an overview of the proposals.

- **Ross S** shared research on the differences between 110V and 220V charging noting a 10% loss when charging on 220V compared to 15-17% on 110V, with the reason being the length of time it takes to charge on 110V.

- **Florin M** shares on the screen proposed new Section 404.5.2.4, which addresses the charging capacity for these installations and requires a 30amp or 208/240V circuit.
 - **Ross S** confirms that the Section shared by **Florin M** on the screen answers his question.
- **Kyle K** asked whether the requirement applies to onsite private parking in multi-family developments and if 50% of those spaces would need to be EV ready.
 - **Bill P** confirmed that was the intent.
- **Kyle K** asked if, in a multi-bay residential garage, only one bay would need to be equipped with EV charging readiness.
 - **Bill P** confirmed that was the intent.
- **Corian C** noted that the NEC is working on EV charging standards for future code editions and stated that IAEI does not support this proposal in its current form. **Kyle K** asked if **Corian C** had a copy of the proposed NEC language and **Corian C** indicated that proposed NEC language is not yet available.
- **Ron C** raised concerns that the proposal may be outside the statutory scope of the building code and stressed that cost impact statements should include actual, concrete compliance costs.

REC-R404.6-24 — Bill Penniman

- **Steve S** noted that there is a reason these solar panel provisions are included in the appendix. They are optional because they are above code requirements. AOBA is in opposition. Further, these provisions are in the appendix to provide guidance to those who choose to have these systems installed.
 - **Bill P** states that since most houses are built as projects, the choice won't be available unless they are a retrofit.

REC-R404.7-24 — Bill Penniman

- **Monica R** expresses support.

REC-R405.2-24 — Eric Lacey

- **D.A. Pierce** stated opposition to the proposal, arguing that it increases requirements beyond the base code.
- **Justin K** noted from a practical standpoint that homeowners have limited options for improving envelope efficiency after construction.
- **D.A. Pierce** asked if this proposal would modify the model code requirements for ERI path requirements.
 - **Eric L** clarified that the proposal does not affect the ERI path, which is rarely used, but only applies to the Performance path (Section R405). He explained that the proposal is aimed at closing loopholes that allow for less stringent outcomes than the prescriptive path.
 - **D.A. Pierce** acknowledged the proposal is complex and thanked **Eric L** for the clarification.
- **Monica R** asked whether the energy savings from the 4% duct allowance within the building enclosure were considered.
 - **Eric L** responded that no specific analysis was provided regarding multipliers or potential free-rider credits, and it is uncertain how many home designs would change as a result; no formal analysis was included.

REC-R405.2(1)-24 – Bill Penniman

- **Florin M** addresses the group and notes that if there are two proposals addressing the same section, such as this proposal and the previous proposal by **Eric L**, staff will identify these proposals for the Board to make them aware of the competing outcomes if both proposals are approved.
 - **Bill P** provides an overview of the proposal, and no further discussion occurred.

REC-R408.2.9-24 — Eric Lacey

D.A. Pierce stated that VBCOA supports this proposal, as well as any measures that provide loopholes for reducing wall insulation requirements.

Bill P interpreted the proposal differently, expressing a preference for retaining the current language in Section R408.2.9. He emphasized that while he does not believe the proposal would undermine the integrity of the thermal envelope, it would reduce overall energy efficiency.

D.A. Pierce reiterated his view that the thermal envelope is a long-lasting building component, so weakening its requirements could have future negative impacts, particularly as HVAC equipment is upgraded with the expectation of certain insulation levels.

Justin K supported deleting the existing provisions, arguing that they diminish long-term energy savings.

Eric L added that, as seen in states like Illinois that adopt the full 2024 IECC, RECA recommends deleting these provisions; he asserted that such measures are not equivalent and that they sacrifice lasting efficiency for short-term benefits.

Monica R likened the trade-off provisions to "blindfolded archery," suggesting they are unpredictable and risky.

Bill P noted that if the 0.60 U-factor from the 2024 IECC is adopted, this change should be viewed as an additive measure—complementary to other proposed improvements in the thermal envelope, not detracting.

Assignments and Next Steps:

Florin M noted that staff will develop a summary of the meeting and will distribute it to the group once completed. He further noted that staff is considering moving the deadline for the submission of code change proposals ahead of the 3rd General Stakeholder Workgroup Meeting until a later date and will notify the stakeholders accordingly. Members of the sub-workgroup were encouraged to meet and continue discussions in furtherance of consensus building. Further, **Florin M** stated that staff are available to attend offline meetings and discussions if available and if requested by the members. Lastly, **Florin M** asked that any proponents seeking to table a proposal from the October 3rd General Stakeholder Workgroup Meeting to notify staff as soon as possible so that stakeholders can be made aware ahead of the meeting.

The meeting concluded at 1:40 PM.