

**Energy Sub-Workgroup
Third Meeting Summary
Date: November 14, 2025**

Location: 4224 Cox Rd, Glen Allen, VA 23060 - Virginia Housing Center

Time: 10:00 AM

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
- **Chris Scott** – Code and Regulation Specialist, State Building Codes Office
- **Rajan Engh** - Training and Development Specialist, Virginia Building Code Academy
- **Amy Fottrell** – Policy Analyst, Policy and Legislative Services

Sub-Workgroup Members:

- **Andrew Clark** – Home Builders Association of Virginia (HBAV)
- **Andrew Grigsby** – Viridian, Sitting in for Andrew Green
- **Bill Penniman** – Sierra Club, VA Chapter
- **D.A. Pierce** - Virginia Building and Code Officials Association (VBCOA), Energy Committee
- **Dennis Hart** - Virginia Plumbing and Mechanical Inspectors Association (VPMIA)
- **Eric Lacey** – Responsible Energy Codes Alliance (RECA)
- **K.C. Bleile** – Virginia Energy Efficiency Council (VAEEC), Sitting in for Chelsea Harnish
- **Mason Trimble** – Virginia Department of Energy (VDEG)
- **Michael Rhodes** - Polyisocyanurate Insulation Manufacturers Association (PIMA)
- **Mike O'Connor** – Virginia Petroleum and Convenience Marketers Association (VPCMA), Virginia Propane Gas Association (VAPGA)
- **Sarah Thomas** – Virginia Association for Commercial Real Estate (VACRE)
- **Scott Pedowitz** - Apartment & Office Building Association of Metropolitan Washington (AOBA), Virginia Apartment and Management Association (VAMA), Sitting in for Steven Shapiro
- **Sydney Roberts** - Southeast Energy Efficiency Alliance (SEEA)
- **William Abrahamson** – American Institute of Architects, Virginia Chapter, Sitting in for Hana Nguyenky

Interested Parties:

- **Bob Shippee** – Private Citizen
- **Chris Leyen** – Piedmont Environmental Council
- **Kara Alley** - HBAV
- **Michelle Coward** - VBCOA
- **Mike Hamilton** – VBCOA
- **Stephen Evanko** – VAEEC
- **Stuart Nuckols** – Viridian
- **Susan Stillman** – Sierra Club, VA Chapter

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).

Proposal Discussions

REC-R402.1.2(1)-24 - Eric Lacey

Eric L provided an overview of the proposal which maintains Virginia’s current ceiling R-value insulation requirements whereas the 2024 International Energy Conservation Code (IECC) increases them.

Bill P noted that projected energy costs will increase and the savings from additional insulation will compound over the years. **Bill P** and **Michael R** were in support.

Scott P was opposed.

REC-R402.4.1.2-24 - Eric Lacey

Eric L provided an overview of the proposal which deletes Virginia specific amendments to the air leakage requirements with the intent to incorporate the 2024 IECC testing requirements.

D.A. Pierce expanded that this proposal is for R-5 use occupancies, which in Virginia are single-family and two-family dwelling homes including townhouses, and R-3 in Virginia for residencies in a mixed occupancy building. VBCOA supports this for R-5 occupancies only and requested that the proposal is amended.

Jeff B clarified that as written, the proposal is eliminating the requirements in this section in the Virginia Energy Conservation Code (VECC) which applies to anything under the International Residential Code (IRC), as well as low-rise residential under the VECC. The testing requirements would apply in the Virginia Residential Code (VRC) to R-5 and the VECC to other R-use groups that fall within the low-rise residential guidelines.

Florin M suggested that it could be beneficial for the Board if **D.A.** could clarify why this proposal is acceptable for a single-family home but not an R-3.

Bill P asked what is an R-3 that is not an R-5.

Florin M provided townhouses over three stories in height, as an example, which are commonly classified as R-3.

Sydney R supported the proposal and stressed that smaller units are at a disadvantage in the 2021 Virginia codes because the ratio of volume per square footage changes as the unit gets smaller and would be at an advantage if the 2024 IECC language were adopted.

Scott P was opposed and preferred the Virginia amendments.

Eric L pointed out that the primary cost of blower door testing is the test itself and that is already in Virginia's code. Going from 5 to 3 air changes per hour are not going to require extra or new materials and Virginia builders are probably already achieving this. Trading off the air leakage in the performance path would be allowed with the 2024 IECC language.

Andrew G concluded that this proposal gives flexibility that would be good for the industry moving forward. The real cost for a tighter home is installing the ventilation system and testing.

REC-R402.4.1.2(1)-24 – Bill Penniman

Bill P stated that this proposal is similar to **Eric L's** proposal, so no additional discussion was needed.

REC-R403.14 - Bill Penniman

Bill P provided an overview of the proposal which adds a requirement for ceiling fans to be installed in each bedroom. This proposal has changed from originally applying to bedrooms and the principal living area to now being limited to bedrooms only.

Scott P was opposed. Stated that this is micro managerial of people's lifestyles and this proposal is legislating people's bedrooms in the code.

Eric L, speaking for himself, supported the proposal as ceiling fans are more likely to have integrated controls if installed during construction.

Andrew C asked if wiring for ceiling fans is installed in new homes currently. After confirmation from the group, **Michael R** asked if the box in the ceiling is adequate for supporting the fan or just the electrical wires for the ceiling fan.

Florin M provided that there was a change in the 2021 IRC and the National Electrical Code (NEC) that if there is an outlet box installed in the ceiling, then the box must be listed and labeled for supporting a ceiling fan, with the exception of where the box is in close proximity to a wall and a ceiling fan cannot be installed.

Andrew C questioned if requiring ceiling fans can be cost prohibitive in the future when the consumer already has a choice to install or not install a ceiling fan and the infrastructure is already there to install a fan if the consumer so chooses.

Bill P countered that hiring an electrician to do the work after the home is built is more expensive than during initial construction.

REC-R404.1-24 - Andrew Clark

Andrew C provided an overview of the proposal which restores the 10 percent allowance from the 2018 VECC for lighting fixtures not to contain high-efficacy lamps.

Dennis H questioned how a code official would enforce it.

Andrew C reminded the room that the requirement was in the code before, thus it would be handled in the same manner it was handled prior.

Andrew G noted that the requirement used to be 50 percent.

Eric L was opposed due to the reduction in efficiency which weakens the standard that currently applies.

Sydney R was also opposed and doesn't see a reason to reserve the 10 percent. She also questioned how this affects inspectors and plan reviewers and how this is implemented.

Dennis H responded that most localities aren't doing trade reviews on residential so it would be up to the inspector, and he would be surprised if it was being looked at in the field.

Scott P supported the proposal.

REC-R404.2-24 - Andrew Clark

Andrew C provided an overview of the proposal which deletes the automatic shutoff control requirements for lighting.

Andrew C also introduced possibly removing exterior lighting controls into his proposal as a floor modification at the final General Stakeholder Workgroup Meeting.

Mike H, speaking for himself, stated that electricians seem to have a challenge selecting and installing the correct sensors and will cause a lot of frustrated homeowners.

Eric L was opposed to any roll back in efficiency in any current Virginia requirements.

Scott P supported the proposal.

Andrew C asked **Eric L** what the driver of his opposition was.

Eric L responded that these things save energy and that is why they are in the code.

Bill P also opposed and expressed that 20 minutes for a light to automatically turn off after an occupant has left a room is a long time.

Michael R, speaking for himself, stated opposition to this proposal as written, but is open to a minor tweak, if possible, instead of eliminating the entire proposal.

Sydney R was also opposed and noted that there may be a relationship between this proposal and proposal REC-R404.1-24. **Sydney R** highlighted that they should

make sure that the code requires controls on non-high-efficacy luminaires if there are exceptions that may get adopted.

REC-R404.5-24 - Bill Penniman

Bill P provided an overview of the proposal which introduces new definitions and requirements for electrical vehicle charging spaces and equipment near new residential developments. The original proposal has been modified by adding language to the exceptions.

Dennis H brought up that newly added Exception 4 to proposed new Section R404.5.2.4, is adding UL 2202 and UL 2594. These appear to be new standards as they are not referenced in the commercial or residential provisions of the 2021 code. Typically, new standards are submitted with proposals so that they can be vetted by the stakeholders and ensure that they do not contain non-enforceable language.

Bill P commented that he did not have copies of UL2202 and UL2594 to share and would remove the standards from the exception if he could not get access to them and that was a concern.

REC-R405.2-24 - Eric Lacey

Eric L provided an overview of the proposal which maintains Virginia's current requirements for the Simulated Building Performance Compliance option and eliminates efficiency tradeoffs for heating, cooling, and water heating equipment that were adopted in the 2024 IECC.

D.A. Pierce opposed the proposal. VBCOA does not agree with changes to the model code requirements with software simulated performance as they do not support adding more stringent requirements for homeowners.

Eric L countered that changing the annual energy cost from 85 percent to 89 percent of the standard reference design is less stringent than the model code, but it removes the equipment tradeoff from the performance path that is not part of Virginia's code. The goal is to keep what Virginia already has but improve efficiency as much as the 2024 model code improves efficiency.

D.A. Pierce simplified the proposal as a removal for the allowance for tradeoffs. He noted his own experience as a plan reviewer, that it is not common for builders to

use these software-based paths of compliance as they use the prescriptive path. And VBCOA's concern is that they don't want to add additional requirements to homeowners if they choose to use the performance path.

REC-R405.2(2)-24 - Eric Lacey

Note: The original proposal number was REC-R405.2(1) but was changed to REC-R405.2(2) due to a naming conflict with another proposal submitted prior.

Eric L provided an overview of the proposal which modifies the 15 percent maximum trade-off cap in the IECC to 8 percent in the performance compliance path for an anticipated adoption of R-20 wall insulation in the 2024 VECC.

Bill P pointed out that this proposal's success might be dependent on the outcome of the wall insulation and air leakage proposals and recommended **Eric L** have a floor modification prepared at the next General Stakeholder Workgroup Meeting.

Florin M added that the fate of any proposal is unknown until the Board makes their decisions. There will be several competing proposals with several different outcomes. Staff will try to highlight competing proposals for the Board's convenience.

Bill P proposed linking proposals if there is broad support.

Florin M reemphasized that the purpose of these meetings is to bring stakeholders together to discuss proposals and facilitate consensus building wherever possible. That may involve a "give and take" between proponents to get consensus on as many proposals as possible. **Florin M** strongly encouraged further discussion outside of this meeting before the final General Stakeholder Workgroup Meeting.

Michael R supported this proposal because envelope trade offs can have unintended consequences.

Sydney R supported this proposal.

Andrew G brought up that wall insulation is the most long-term investment in the home that can be made upfront and the most intrusive to upgrade as the home ages and that working together to reach consensus promotes ongoing affordability.

REC-R408.2.9-24 - Eric Lacey

Eric L provided an overview of the proposal and clarified that the existing provisions only apply where the required wall insulation is greater than R-20. This new section should be deleted as it is not applicable in Virginia.

D.A. Pierce and **Michael R** supported the proposal.

EC-C402.1.6(1)-24 - Bill Penniman

Bill P provided an overview of the proposal which limits the use of Appendix CD Building Envelope Requirements to Groups F, S, and U if they are not equipped to heat the interior to more than 60°F or to cool the interior other than by fans or natural ventilation.

Eric L supported the proposal.

EC-C403.7.4.1-24 - Joseph Willis

Note: the proponent was not in attendance.

Florin M provided an overview of the proposal which adds an exception that non-transient dwelling units, where the ratio of required outdoor air to supply air is less than 10 percent, do not have to be provided with outdoor air energy recovery ventilation systems.

Bill P opposed the proposal because the solution assumes operable windows and a lot of commercial buildings don't have operable windows. **Eric L** agreed and opposed the proposal.

Sydney R opposed the proposal as the solution is narrow when there are a lot of solutions that could meet the outdoor air requirements of less than 10 percent.

Mike Hamilton spoke for himself and asked what ratio of units would be exempt with this language as this could capture a lot of dwelling units.

Bill P responded that the assumption was that was the intent.

Sydney R surmised that it would be close to 100 percent for dwelling units.

EC-C405.15-24 – Steve Shapiro

Scott P, speaking on behalf of **Steve S**, provided an overview of the proposal which removes the requirements for renewable energy systems because of feasibility issues because rooftop structures are not typically designed for these systems.

Bill P opposed the proposal. **Bill P** sent **Steve S** an alternative to the proposal, which keeps Sections C405.15 and C405.15.1 but eliminates Sections C405.15.2 through C405.15.4.

Dennis H was opposed to **Bill P's** proposed modification to the original proposal as battery storage of these energy systems is very expensive and will increase the cost of construction.

Bill P replied that storage is not required, and the goal is to find a simple way to get solar on rooftops to help lower costs.

Sydney R asked if Appendix CB Solar-Ready Zone of the 2024 IECC could be a consensus alternative.

Eric L opposed the original proposal from **Steve S**.

EC-C405.17(1)-24 - Bill Penniman

Bill P provided an overview of the proposal which introduces new requirements related to electric vehicle charging into the code.

Andrew C asked if commercial or multi-family buildings would override the local zoning ordinance requirements on parking.

Bill P answered that it would not, and it addressed shared parking with gas powered vehicles.

EC-C409-24 - William Abrahamson

William A, speaking for himself, provided an overview of the proposal which introduces a new, separate compliance path for commercial and residential buildings based on Phius' software.

D.A. Pierce inquired how this is different from the Total Building Performance option already in the code.

William A responded that the Total Building Performance path has a different criteria and reporting path.

Bill P supported the proposal because it offers a way to achieve a net zero energy building.

Dennis H remarked that there is no current path in either the commercial or residential provisions to get to the new Section 409 that is being proposed. Charging statements are needed in the proposal.

Florin M asked the proponent if this new option will also require compliance with all the other energy code requirements; and whether the intent was for this to be a separate and distinct compliance path, in addition to those already allowed by the code?

William A declared that the prescription compliance path is included in Phius, and it is equal to or better than what is required in the 2024 IECC. The intent was for this to be an additional compliance path.

Florin M noted that floor modifications are allowed to be introduced at the General Stakeholder Workgroup Meeting and if that was the intent, recommended to add language to the proposal, in Section C401.2.1, indicating that the Phius path is a separate compliance option as an alternative to the compliance options that already exist.

Mike H, speaking for himself, had concerns regarding certifications that require payment to a private organization which results in a “pay to comply” structure.

Michael R, speaking for himself, asked why the requirements and documentation need to be added to the code as an additional path if this new path already complies with the requirements of the code.

D.A. Pierce vocalized that in Section R405.3.1 Compliance software tools, a building official can accept any software path of compliance so long as it demonstrates that it meets or exceeds the minimum requirements of building codes.

Dennis H reiterated **Mike H's** concern that the proposal is specifically inserting Phius into the code as a “pay to play” option that verifies compliance with the code. There is already a pathway to use software in the code to achieve this. **Dennis H** recommended that Phius provides training to code officials to familiarize them with the software.

Eric L opposed the proposal and opposed stand-alone alternatives.

EC-1301-24 - Bill Penniman

Bill P stated that this proposal deletes Virginia amendments to the IECC. Many parts of this proposal have already been discussed separately so there is no need to discuss them in this proposal.

EB805.2.1.1 – Allison Cook

Note: the proponent was not in attendance.

Florin M provided an overview of the proposal which intends to provide an additional exception in the Virginia Existing Building Code (VEBC) regarding allowing visual inspections of the building envelope to be acceptable for meeting the air sealing criteria for additions.

Bill P was opposed to visual inspections as the only criteria.

Sydney R suggested that there be consideration with respect to the size of the addition in relation to the existing building or gut rehabilitation.

Florin M, in response to questions from the group, summarized that the VEBC baseline requirement is that the building envelope assemblies must comply with the requirements of new construction which includes testing, and this proposal adds an exception to the baseline requirement, and further clarified that the proposal applies to additions, not alterations.

Andrew C supported this proposal.

REC-R402.1.2-24 – D.A. Pierce

D.A. Pierce informed the group that they are collaborating with stakeholders offline and would like to carry the proposal over to the General Stakeholder Workgroup meeting without additional discussion during this meeting.

REC-R402.1.2(2)-24 – Eric Lacey

Eric L informed the group that no discussion was necessary as the success of this proposal depends on **D.A. Pierce's** proposal.

REC-R402.1.2(4)-24 – Bill Penniman

Bill P informed the group that no discussion was necessary as the success of this proposal depends on other proposals already discussed.

REC-R402.1.3 – Andrew Clark

Andrew C provided an overview of the proposal which introduces exceptions to a new section in the 2024 IECC and the 2024 IRC, specifying insulation requirements for roof truss framing separating conditioned and unconditioned spaces.

Eric L pointed out that a similar proposal was submitted for the 2027 IECC that was not approved and recommended that **Andrew C** verify the similarities as it could have an impact on the fate of the proposal if there are similarities.

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. Members of the Sub-Workgroup were encouraged to continue discussions in furtherance of consensus building. **Florin M** stated that staff will make every effort to attend offline meetings and discussions if available and if requested by the members. Further, **Florin M** asked any proponents seeking to add floor modifications to notify staff no later than a few days before the final General Stakeholder Workgroup Meeting so there would be time to prepare potential documentation.

Florin M expressed appreciation to the group for their time and efforts throughout the process and for their dedication towards improving Virginia's codes and encouraged everyone to attend the General Stakeholder Workgroup meetings on December 11-12, 2025.