

Resiliency Sub Workgroup

July 28, 2022 9:00 a.m. – 11:00 a.m.

Virtual Meeting: <https://vadhcd.adobeconnect.com/va2021cdc/>

ATTENDEES:

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

Paul Messplay: *Code and Regulation Specialist, State Building Codes Office (SBCO)*

Florin Moldovan: *Code and Regulation Specialist, SBCO*

Richard Potts: *Code Development and Technical Support Administrator, SBCO*

Jeanette Campbell: *Administrative Assistant, Building and Fire Regulations (BFR)*

Sub Workgroup Members:

KC Bleile – *Viridiant *alternate voting member standing in for Andrew Grigsby*

Angela Davis: *Virginia Department of Conservation and Recreation (DCR)*

Joel Andre: *American Institute of Architects (AIA), Virginia*

Paula Eubank: *FEMA *alternate voting member standing in for Charles Baker*

Raka Goyal: *Virginia Department of General Services (DGS), Division of Engineering and Buildings (DEB)*

Steve Shapiro: *Apartment and Office Building Association (AOBA); Virginia Apartment and Management Association (VAMA)*

Steve Sunderman: *Resilient Virginia*

Sub Workgroup Members not in attendance:

Charles Baker: *Federal Emergency Management Agency (FEMA) Region 3*

Debbie Messmer: *Virginia Department of Emergency Management (VDEM)*

George Homewood: *City of Norfolk, Planning Director*

John Harbin: *Hampton Roads Planning District Commission (HRPDC)*

Kenneth Somerset: *Virginia Floodplain Management Association (VFMA)*

Ellis McKinney: *Virginia Plumbing and Mechanical Inspectors Association (VPMIA)*

Casey Littlefield: *International Association of Electrical Inspectors (IAEI), Virginia*

Andrew Clark: *Home Builders Association of Virginia (HBAV)*

Rebecca Quinn: *Federal Emergency Management Agency (FEMA)*

Richard Gordon: *Virginia Building and Code Officials Association (VBCOA)*

Traci Munyan: *DHCD, Resiliency*

Welcome:

Paul Messplay: Welcomed the group and thanked them for their participation. He let them know that the purpose of the final meeting of this Sub Workgroup is to review all the proposals in the 2021 Code Cycle with Positive Resiliency Impact Statements, and determine if they agree or disagree with those statements and if the proposals do have a positive impact on resiliency. This information will be given to the Board of Housing and Community Development to assist them with their analysis of the proposals.

Steve Shapiro: Asked Paul what the Board of Housing would do with proposals that are Non Consensus and/or may not even be “good” proposals, but are determined by this group to be nonetheless resilient. He also said that he thinks there’s a difference between “energy efficient” and “resilient” that should be addressed.

Paul: This will simply be supporting information presented to the Board. There isn’t a general consensus on whether or not energy proposals are resilient. That will be determined on a case by case basis by the group.

The proposal reason statements will be summarized, followed by summaries of the positive resiliency impact statements. The group members will vote to determine if there is a positive impact on resiliency (all thumbs up or no thumbs down); a neutral impact on resiliency (all thumbs down, or split decision thumbs up & down); or a negative impact on resiliency (determined by additional discussion and unanimous decision).

Proposals / Votes:B3302.4-21

- Clean up of Chapter 33 language (fire safety during construction) to relocate construction provisions from the SFPC and correlate better with the SFPC and VEBC.
- By improving Chapter 33 of the VCC, the resiliency of communities is increased by protecting them from the hazards associated with poor fire safety practices during construction.

Vote: Positive impact on resiliency – no thumbs down

EB1209.1-21

- Clean up of Section 1209.1 to provide 2021 language and reference the SFPC for fire flow and associated details. It also correlates better with the VCC and SFPC.
- By improving the fire safety provisions of the VEBC, the resiliency of communities is increased by protecting them from the hazards associated with poor fire safety practices during construction.

Vote: Positive impact on resiliency – no thumbs down

EC-C401.2-21

- Requires all new commercial buildings to be all-electric, removes fossil fuel language for pool heaters and lighting, and clarifies that low-energy buildings must also be all-electric.
- All electric buildings will become less carbon intense as they age, unlike buildings with fossil fuel combustion, lessening their impact on climate change and they will operate on clean renewable energy.

Vote: Neutral impact on resiliency – Joel Andre and Angela Davis: thumbs up, Steve Shapiro: thumbs down

EC-C403.3-21

- Requires dedicated outdoor air systems (DOAS) in specific use groups.
- Dedicated Outdoor Air Systems increase energy efficiency, reducing strain on the electric grid. As peak demand typically coincides with periods of high usage, this would increase the resiliency of the grid.

Vote: Positive impact on resiliency – only thumbs up

EC-C403.4.1.6-21

- Requires thermostats in commercial buildings to have demand control functionality that can be used to adjust thermostat set-points.
- Demand controlled thermostats will help integrate building loads with available production, lowering energy demand. Therefore, this proposal increases resiliency by reducing overall demand on the grid.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

EC-C403.15-21

- Provides indoor grow facilities with a range of efficient dehumidification strategies that meet federal minimum efficiency requirements.
- Dehumidification of indoor agricultural facilities will reduce energy demand of these facilities and therefore increase resiliency by reducing overall demand on the local grid.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

EC-C404.11-21

- Requires electric water heaters with integrated storage tanks over 20 gallons to have demand control functionality.
- Demand responsive controls allow utilities to send buildings signals to ramp up or down set points based on a variety of conditions, which increases resiliency.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

EC-C405.4-21

- This proposal provides efficiency requirements for permanently installed horticulture lighting.
- This will reduce energy demand of these facilities and therefore increase resiliency by reducing overall demand on the local grid.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

EC-C405.10-21

- Provides electric charging readiness for use of electric vehicles (EVs) by way of at-home charging to residents and at-work charging for workers.
- EV batteries connected to the grid can provide grid balancing and back up in the future. EVs reduce CO₂, CO, SO₂, particulates, methane, and other harmful emissions from fossil fuel combusting vehicles.

Steve Shapiro: Said that given the risk of the batteries catching fire, and producing toxic runoff, he doesn't think this is resilient.

Steve Sunderman: Thinks people may be confused about mitigating the causes of climate change (sustainability) vs. mitigating the impacts of climate change (resiliency).

Vote: Neutral impact on resiliency – only thumbs down, and KC Bleile “neutral” in chat

EC-C405.13-21

- Requires onsite renewable energy of 1.5W/s.f. of the three largest floors of all commercial buildings, which will supply on average 30% of building energy use.
- This local power can support resiliency by providing life supporting functions of medical devices, allowing cell phone charging to stay in touch in an emergency, and keeping the lights on for safety and security.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

EC-C405.16-21

- Puts electrical infrastructure in place so that owners can convert to all-electric buildings in the future, and allows for unitized gas water heaters to be replaced with high-performance heat pump water heaters.
- Electric-ready construction will allow owners to decide on timing to switch fuel sources, based on the market fluctuations.

Steve Sunderman: Thinks this is more of a sustainability issue vs. resiliency.

KC Bleile: Thinks that it does speak to resiliency, because of the infrastructure.

Steve Shapiro: Agrees with Steve Sunderman.

Vote: Neutral impact on resiliency – Steve Shapiro, Steve Sunderman and Paula Eubank: thumbs down, others: thumbs up

EC-C407.6-21

- Activates appendix for buildings constructed and sold or leased as "zero energy" or "net zero energy" or equivalent labels. Activates appendix for "zero energy" buildings.
- Increases resiliency with less energy consumption, producing zero-carbon renewable energy, self-supplying energy and retaining heat or cooling during utility outages, and lessening risk of economic harm from fluctuating energy prices.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up

FP107.11-21

- Updates the fee schedule for the State Fire Marshal's Office.
- The proposed increase in fees will be critical to the future services provided by the State Fire Marshal's Office and to better maintain safe buildings across Virginia.

Vote: Neutral impact on resiliency – Steve Shapiro, Angela Davis and Paula Eubank: thumbs down, others: thumbs up

FP3303.3.1-21

- Clean up of Chapter 33 language around fire safety during construction. Removes construction provisions and correlates better with the VCC and VEBC.
- By improving the SFPC, the resiliency of communities is increased by protecting them from the hazards associated with poor fire safety practices during construction.

Vote: Positive impact on resiliency – only thumbs up

REC-R401.2.5-21

- Puts electrical infrastructure in place so that owners can convert to all-electric buildings in the future, and allows for unitized gas water heaters to be replaced with high-performance heat pump water heaters.
- Improves resiliency by allowing single-family and small multifamily homes to take advantage of the greening grid while spreading out the costs, and they will be able to operate on clean renewable energy.

Vote: Neutral impact on resiliency – KC Bleile: thumbs up, Steve Shapiro, Steve Sunderman and Joel Andre: thumbs down

REC-R401.2-21

- Requires new residential buildings to be all-electric

- All-electric single-family and low-rise multifamily homes support better indoor air quality. Better indoor air quality is directly linked to better health of residents, increasing overall resilience.

Vote: Neutral impact on resiliency – only thumbs down, and KC Bleile “neutral” in chat

REC-R402.1.2 (1)-21

- Increases wall insulation requirements.
- Increased insulation reduces burdens on low-income families, grid impacts, ice-dams, and condensation, limiting mold and mildew.

KC Bleile: May not agree with the proposal, but does agree that it is resilient.

Steve Sunderman: Thinks this is a resiliency issue, since people can remain in the building for a longer time in a weather event when more insulation is present.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up

REC-R402.2-21

This proposal was withdrawn.

REC-R402.4-21

- Brings standards for air leakage rates and testing into compliance with the 2021 IECC.
- The 3 ACH standard will increase resiliency by improving energy efficiency better than 5 ACH. Reducing the volume of air to be reheated or cooled every day will reduce energy usage and cost burdens.

Steve Sunderman: The improved thermal envelope would allow people to stay in the building for a longer time - same as R402.1.2 (1). He thinks this would have a positive impact on resiliency.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up

REC-R403.1.1.1-21

- Requires thermostats to be supplied with demand responsive control infrastructure
- Demand controlled thermostats will help integrate building loads with available production, lowering energy demand. Therefore, this proposal increases resiliency by reducing overall demand on the grid.

Vote: Neutral impact on resiliency – KC Bleile: thumbs up, others: thumbs down

REC-R403.1.2-21

- Requires heat pump installation and restricts installation of electric resistance heating that activate resistance back-up when outdoor temperatures are above 40°F.
- Heat pumps reduce peak demands on utilities in the winter, which reduce risks of utility outages. Heat pumps also provide year round comfort with both heating and cooling.

Vote: Neutral impact on resiliency – Steve Shapiro, Steve Sunderman and Paula Eubank: thumbs down, Joel Andre: thumbs up, and KC Bleile “neutral” in chat.

REC-R403.5.4-21

- Requires tanked water heaters to be supplied with demand responsive control infrastructure.
- Pre-heating water when demand, price or carbon emissions are at their lowest in can assist with grid resiliency, reduce costs and help reduce carbon emissions and climate impact of water heating.

Vote: Neutral impact on resiliency – Steve Shapiro, Steve Sunderman and Paula Eubank: thumbs down, Joel Andre and KC Bleile: thumbs up

REC-R404.2-21

- Requires residential homes to be solar-ready.
- Residences with solar-generated energy lower their energy and occupancy costs, reduce risk of lease and mortgage defaults and can power a house during power outages, supporting a utility's regional reliability.

Steve Sunderman: Thinks this is resilient for same reason previously discussed – people can stay in the buildings longer.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up, and KC Bleile: “neutral, as most solar systems are grid tied” in chat.

REC-R404.4-21

- Requires residential homes to be solar-ready.
- Local power production can provide life supporting functions of medical devices, allow cell phone charging to stay in touch in an emergency, and keep the lights on for safety and security.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up

REC-R402.4.1.2-21

- Improves the baseline envelope tightness requirement from 5 ACH to 3 ACH.
- Provides better indoor air quality, improves long-term durability of the home and reduces the volatility of indoor temperature swings for more livable conditions during power outages.

Vote: Neutral impact on resiliency – Steve Shapiro: thumbs down, others: thumbs up

REC-R403.1.4 (2)-21

- Requires electric heat pumps to be installed as the primary space cooling and heating system in any dwelling in which central, ducted air conditioning would otherwise be installed.
- This will reduce carbon and other greenhouse gas emissions, which harm lives, property, economy and natural heritage.

Vote: Neutral impact on resiliency – only thumbs down, and KC Bleile: “neutral” in chat.

REC-R403.1.4-21

- Precludes the use of on-site combustion of fossil fuels as the primary heat source in new residential construction
- This will save energy; increase reliance on zero-carbon energy sources for heating; help mitigate climate impacts; and prepare buildings and economy the least energy usage and related pollution possible.

Vote: Neutral impact on resiliency – only thumbs down

REC-R404-21

- Requires homes to be "electric ready" by requiring branch circuits and outlets for electric water heaters, dryers, and cooking equipment.
- This will facilitate a reduction of GHG emissions that are threatening Virginia's citizens, property, heritage and economy.

Vote: Neutral impact on resiliency - only thumbs down, and KC Bleile: “neutral” in chat.

REC-R503.1.2.1-21

- Requires new heating and cooling equipment that are part of an alteration to comply with the International Energy Conservation Code.
- This reduces reliance on energy and reduces carbon emissions directly and indirectly, lessening the impact on climate change. It may also reduce energy use in peak demand, increasing the resiliency of the grid.

Vote: Neutral impact on resiliency – only thumbs down, and Angela Davis: “neutral” in chat.

REC-R503.1.2-21

- Requires new heating and cooling equipment that are part of a residential alteration to be sized in accordance with Section C403.1.1 of the VECC
- Right sizing equipment reduces energy use and reliance on energy, reducing carbon emissions directly and indirectly, lessening the impact on climate change. Correctly sized systems also have better longevity.

Vote: Neutral impact on resiliency – Steve Shapiro and Steve Sunderman: thumbs down, others: neutral in chat.

REC-R1104.2-21

- Requires at least one EV-ready parking space or an electrical vehicle supply equipment space in a garage or outdoor parking area for each dwelling unit.
- Switching to EVs will reduce CO₂, CO, SO₂, particulates, methane, and other harmful emissions from fossil fuel combusting vehicles, and they are also more energy efficient than combustion engine vehicles.

Vote: Neutral impact on resiliency – Angela Davis and KC Bleile: thumbs up, others: thumbs down

EC-C1301.1.1.1 (2)-21

- Removes all Virginia Amendments to the International Energy Conservation Code except for those dealing with existing buildings.
- Residents will have more comfort during power outages, be protected from economic impacts of energy price fluctuations and potentially falling behind in housing payments and be protected from air pollution.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, Steve Sunderman: thumbs up, and Angela Davis: “neutral” in chat.

EC-C405.13 (3)-21

- Provides requirements for electric vehicle capable spaces, electric vehicle ready spaces, and electric vehicle supply and equipment spaces based on occupancy classification.
- EVs are essentially mobile batteries available to help absorb load at renewable peak generation and remove a direct combustion source from the climate.

Vote: Neutral impact on resiliency – Steve Shapiro, Paula Eubank and Steve Sunderman: thumbs down, and Angela Davis: “neutral” in chat.

EC-C502.3-21

- Provides requirements for additions to comply with the International Energy Conservation Code.
- Reduces buildings reliance on energy, reduces carbon emissions, and lessens the impact on climate change. Efficiency credits for more efficient systems help reduce peak demand on the grid.

Vote: Neutral impact on resiliency – Steve Shapiro, Paula Eubank and Steve Sunderman: thumbs down, Joel Andre: thumbs up

EC-C405.13 (2)-21

- Requires at least 10% of the parking spaces for Group R-2 occupancies to be provided with electrical vehicle supply equipment.
- Increases resiliency.

Vote: Neutral impact on resiliency – only thumbs down

EC-C405.11.1-21

- Provides requirements for EVSE, EV Ready, and EV Capable spaces based on building type
- Switching to EVs will reduce CO₂, CO, SO₂, particulates, methane, and other harmful emissions from fossil fuel combusting vehicles, and they are also more energy efficient than combustion engine vehicles.

Vote: Neutral impact on resiliency – Steve Shapiro, Steve Sunderman and Joel Andre: thumbs down, Angela Davis: thumbs up

EC-C503.3.2-21

- Requires new heating and cooling equipment that are part of a commercial alteration to be sized in accordance with Section C403.1.1 of the VECC
- Right sizing equipment reduces energy use and reliance on energy, reducing carbon emissions directly and indirectly, lessening the impact on climate change. Correctly sized systems also have better longevity.

Vote: Neutral impact on resiliency – Steve Shapiro and Steve Sunderman: thumbs down, Joel Andre and KC Bleile: thumbs up

B105.1.1-21

- Requires building officials and technical assistants to have general knowledge of the principles and requirements of floodplain and high-velocity wind construction.
- Increases resiliency

Vote: Positive impact on resiliency – only thumbs up

B113.3-21

- Delineates specific inspection requirements for buildings and structures in flood hazard areas and special floor hazard areas.
- Increases resiliency

Angela Davis: Asked in chat if language could be edited. She typed: “Lowest horizontal structural member should be used in coastal high hazard areas or it conflicts with the NFIP.”

Paul Messplay: There cannot be edits directly, since the proposals have already gone through the General Workgroup. However, public comments can be made in cdpVA through tomorrow, and they will be included in the report to the BHCD.

Vote: Positive impact on resiliency – only thumbs up

B202-21

- Correlates definitions in the IBC with the NFIP.
- Increases resiliency

Vote: Positive impact on resiliency – only thumbs up

{BREAK: 10:00am – 10:05am}

B918.1 (2)-21

- References the IFC for the technical provisions and installation requirements for in-building emergency communication systems.
- This proposal will increase the resiliency of buildings by providing technical references to the IFC that will enhance in-building emergency.

Vote: Positive impact on resiliency – only thumbs up

B918.1.1-21

- Removes the outdated term "radiating cable" and replaces it with "cabling".
- This will not bind IBEC systems to antiquated technology. Providing the opportunity for newer, more efficient communication systems technology enhances the IBEC system and the resiliency of buildings.

Vote: Positive impact on resiliency – only thumbs up

B918.1-21

- Provides mandatory requirements for the building owner to install in-building emergency communications infrastructure and equipment.
- Having effective first responder communications is invaluable to the successful outcome of emergency response incidents and protection of lives and property.

Steve Shapiro – AOBA and VAMA are opposed to the code change, but Steve agrees that it is resilient

Vote: Positive impact on resiliency – only thumbs up

B1020.1-21

- Separates I-1 and I-3 occupancies in the Corridor Fire-Resistance Rating Table and provides specific ratings for each occupancy based on the presence of a sprinkler system.
- Increases resiliency

Vote: Neutral impact on resiliency – only thumbs down

B1112.1-21

- Deletes an exception that does not require accessible parking spaces when there are four or fewer spaces.
- Increases resiliency

Vote: Neutral impact on resiliency – only thumbs down

B1602-21

- Incorporates provisions and design parameters for buildings in tornado prone regions.
- Increases resiliency

Vote: Positive impact on resiliency – only thumbs up

B2403.6-21

- Provides requirements for bird friendly construction for buildings built under the Construction code.
- This will enhance the resiliency of both local and migratory birds, threatened by impacts to windows and other glazing of buildings.

Steve Shapiro: Asked if the Attorney General was asked if this topic should even be in the building code.

Paul Messplay: Not yet, but when the question is asked and answered, DHCD will inform the group.

Vote: Neutral impact on resiliency – only thumbs down, and KC Bleile “neutral” in the chat.

RB113.1-21

- Clarifies the minimum inspection requirements for energy conservation material prior to concealment.
- This proposal will strengthen home resilience as it clarifies the minimum inspections related to energy code provisions.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, others: thumbs up

RB202-21

- Correlates definitions in the IRC with the NFIP
- Increases resiliency

Vote: Positive impact on resiliency – only thumbs up

RB302.13-21

- This proposal seeks to restore the 2021 International Residential Code regarding the protection of floor assemblies which was deleted from the VRC when initially introduced in the 2012 IRC.
- This proposal increases the resiliency of residential construction by enhancing the fire protection afforded to exposed floor assemblies.

Vote: Neutral impact on resiliency – Paula Eubank: thumbs down, others: thumbs up

RB308.7-21

- Provides requirements for bird friendly construction for buildings built under the Residential code.
- This will enhance the resiliency of both local and migratory birds, threatened by impacts to windows and other glazing of buildings.

Vote: Neutral impact on resiliency – all thumbs down

RB313.1-21

- Requires an NFPA 13D or P2904 compliant automatic sprinkler system in townhouses.
- Increases life safety infrastructure of new residential townhouses, making them more resilient to the impact of fire. The built-in fire sprinkler protection should also remain for the life span of the structure.

Vote: Positive impact on resiliency – only thumbs up

RB313.1 (2)-21

- Requires an NFPA 13D or P2904 compliant automatic sprinkler system in townhouses and one- and two-family dwellings.
- If construction resiliency means to reduce, respond, adapt or avoid a failure due to a destructive event such as a fire, then yes, this proposal will increase resiliency.

Vote: Neutral impact on resiliency – Paula Eubank: thumbs down, others: thumbs up

RB313.1 (3)-21

- Requires an NFPA 13D or P2904 compliant automatic sprinkler system in townhouses containing more than three townhouse units.
- Sprinklers provide life-safety and property protection and protect the environment from toxic smoke and contaminated runoff from manual firefighting. Also, green efforts can be negated by an uncontrolled fire.

Vote: Positive impact on resiliency – only thumbs up

RB315.3-21

- Requires carbon monoxide alarms to be installed in bedrooms and each room in which combustion occurs.
- Avoids or minimizes hazards associated with indoor air pollution and potentially explosive gas leaks to protect residents. Risks of leaks from damage to fuel lines will be greater when storms damage buildings.

Vote: Neutral impact on resiliency – Paula Eubank: “neutral” in chat, others: thumbs up

EB103.9-21

- Requires elevation certificates to be prepared by a certified land surveyor or registered professional civil engineer licensed in Virginia.
- Increases resiliency.

Vote: Positive impact on resiliency – only thumbs up

Angela Davis: – Asked why architect was not included in the language.

Paula Eubank: Said this was discussed at a previous Resiliency Sub Workgroup meeting, and there were some things left open-ended. She asked if DHCD reached out to DPOR to inquire about architects. She also said there was some discussion about consistency of language, where other codes say “registered design professional”

Paul Messplay: From the April 27th Resiliency Sub Workgroup meeting, “architect” wasn’t mentioned when discussing this code. In that meeting, the group did vote for “registered professional civil engineer” in the USBC Section 103.4 proposal, and then also voted for the same language to be used in EB103.9.

Angela Davis: The Federal Elevation Certificate document is specific about which professionals can sign off on the certificate. She asked if the Virginia language will remain as it is now, which is different from the Federal document. She said that architects currently sign the document in Virginia now, and this will be a big change.

Paul Messplay: Yes, the proposed language is as presented, “certified land surveyor or register professional engineers licensed in Virginia”.

Angela Davis: Will submit a public comment about excluding architects.

Paul Messplay: Asked Angela to submit on cdpVA or to the DHCD staff by close of business tomorrow, 7/29.

Paula Eubank: Asked Angela where she found the Federal language, and asked her to send a copy of it.

Angela Davis: The language is on instructions for the elevation certificate.

EB805.2-21

- Requires existing ductwork serving new equipment in additions and alterations to be tested.
- This increases efficiency and wasted energy through leaky ducts. It also reduces the buildings reliance on energy, reduces carbon emissions, and lessens the impact on climate change.

Vote: Neutral impact on resiliency – Steve Shapiro, Paula Eubank and Steve Sunderman: thumbs down, Joel Andre: thumbs up

EB805.3 (2)-21

- Requires mechanical system acceptance testing, service hot water system acceptance testing, and lighting acceptance testing when alterations to a building are performed.
- Reduces buildings reliance on energy, reduces carbon emissions, and lessens the impact on climate change. Efficiency credits for more efficient systems help reduce peak demand on the grid.

Vote: Neutral impact on resiliency – Steve Shapiro, Paula Eubank and Steve Sunderman: thumbs down

EB805.3-21

- Requires mechanical system acceptance testing, service hot water system acceptance testing, and lighting acceptance testing when additions are made to a building.
- Reduces buildings reliance on energy, reduces carbon emissions, and lessens the impact on climate change. Efficiency credits for more efficient systems help reduce peak demand on the grid.

Vote: Neutral impact on resiliency – Steve Shapiro, Paula Eubank and Steve Sunderman: thumbs down

FP906.1-21

- Removes the exception for Groups A, B, and E occupancies equipped throughout with quick response sprinklers to be provided with portable fire extinguishers.
- Green initiative benefits can be negated by a single fire event. Sprinkler systems may not adequately manage all fires, so there's a need for a layered approach that includes portable extinguishers.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, Steve Sunderman: thumbs up

FP912.2-21

- Grants the fire chief the authority to approve the location of fire department connections.
- This proposed code change would put the authority of approval where it belongs, to the fire chief of the local fire department.

Vote: Neutral impact on resiliency – Steve Shapiro and Paula Eubank: thumbs down, Steve Sunderman: thumbs up

FP5705.5-21

- Revises the sections with requirements for wall-mounted alcohol-based hand rub dispensers to include those that are not wall mounted.
- This will provide that all alcohol-based hand rub dispensers will have safety provisions regarding the use and handling of these dispensers and safeguard the facilities they are used in.

Vote: Neutral impact on resiliency – only thumbs down

M1101.2.1-21

- Incorporates new reference standards for Group A2L, A2, A3, and B1 refrigerant.
- This will ensure that manufacturers can meet new federal regulations (AIM Act) while ensuring safety.

Vote: Neutral impact on resiliency - only thumbs down, and KC Bleile: "neutral" in chat.

M1101.7-21

- Provides provisions for the changing of refrigerant from one safety class to another.
- This will enable users to be able to use lower global warming potential (GWP) refrigerants safely and effectively, giving them the needed information to make this change.

Vote: Neutral impact on resiliency – only thumbs down

Steve Sunderman: Asked if DHCD would make a clarifying statement to the various Workgroups about resiliency, since there seems to be some confusion.

Paul Messplay: Agreed. That would be a possibility for the next cycle. Removing the Resiliency Impact Statement could also happen, based on the administration in authority.

M1103.1-21

- Updates the refrigerant table with new refrigerants added to AHRAE Standard 34.
- This will provide users more flexibility to use lower global warming potential (GWP) refrigerants and also allow greater flexibility with equipment design.

Vote: Neutral impact on resiliency – only thumbs down

M1104.3.1(2)-21

- Provides exceptions to prohibiting group A2, A3, B2, and B3 refrigerants in high probability systems.
- This aligns better with changes made to ASHRAE 15 and will provide equipment manufacturers and users more opportunities to use lower GWP refrigerants and meet the current standards.

Vote: Neutral impact on resiliency – only thumbs down

M1104.3.1-21

- Requires high probability systems used for human comfort to use Group A1 or A2L refrigerant and restricts group A3 and B3 refrigerants to laboratories and industrial occupancies.
- This will enable the use of low GWP refrigerants in high probability human comfort systems. It will also allow the use of low GWP refrigerants in self-contained applications

Vote: Neutral impact on resiliency – only thumbs down

M1106.3-21

- Revises the section from "flammable refrigerants" to specific classes of refrigerant: "Class 2 and 3 refrigerants"
- This will increase resiliency by further enabling low GWP refrigerants and aligning with ASHRAE 15

Vote: Neutral impact on resiliency – only thumbs down

M1106.4-21 Part I

- Correlates the machinery room requirements in the International Mechanical Code with the 2019 edition of ASHRAE 15.
- This will further align the IMC with ASHRAE 15 and provide the appropriate safety measures in machinery rooms. It will further enable low GWP refrigerants and therefore increase resiliency.

Vote: Neutral impact on resiliency – only thumbs down

M1106.4-21 Part II

- Deletes the ventilation system activation provisions for machinery rooms using Group A2L refrigerant
- This code proposal will enable the use of low GWP refrigerants and help manufacturers meet the AIM Act.

Vote: Neutral impact on resiliency – only thumbs down

RM1404.1-21

- Requires refrigeration cooking equipment to comply with applicable UL standards
- This code change proposal will increase resiliency as users will have more options to use equipment with lower GWP which meet the most current equipment safety standards.

Vote: Neutral impact on resiliency – only thumbs down

RM1411-21

- Mandates a UL listing for any equipment using A2L refrigerant and requires refrigeration system installation and field installed accessories to be installed per the manufacturer's installation instructions.
- The addition of the updated standards will provide manufacturers and users greater flexibility to meet the upcoming changes in refrigerants required by the implementation of the AIM Act.

Vote: Neutral impact on resiliency – only thumbs down

BF202-21

- Aligns the definition for flammable gas with the Globally Harmonized Flammable classification system.
- This code proposal will increase resiliency as it will allow users to align with upcoming changes to OSHA which are expected to align with GHS Purple Book 7.

Vote: Neutral impact on resiliency – only thumbs down

BF608.17-21

- Removes the exception for machinery rooms for systems containing Group A2L refrigerants from being classified as Class 1, Division 2 hazardous locations.
- This code proposal will enable the use of low GWP refrigerants and help manufacturers meet the AIM Act.

Vote: Neutral impact on resiliency – only thumbs down

BF911.1-21

- Coordinates with the change in the definition of flammable gas by providing exceptions to explosion control methods for Category 1B flammable gases having a burning velocity not exceeding 3.9 in/s
- This code proposal will increase resiliency by further enabling the use of low GWP refrigerants and allow manufacturers greater flexibility with regards to storage and handling of systems.

Steve Sunderman: – Asked if this was more of a global warming or fire safety issue.

Paul Messplay: Probably fire safety tied to environmental issues. The group can only go by what is in the Resiliency Impact Statement.

Steve Sunderman: It might be resiliency, but he's not sure. He will vote thumbs up, since there is a fire safety concern, even though he disagrees with the Resiliency Impact Statement.

Paula Eubank: Typed in the chat that she also doesn't agree with the Resiliency Impact Statement.

Vote: Neutral impact on resiliency – Steve Shapiro, Joel Andre and Paula Eubank: thumbs down, Steve Sunderman: thumbs up

BF5003.1.1 (1)-21

- Makes changes to the maximum allowable quantity table for hazardous materials in accordance with Globally Harmonized System of Classification and Labelling of Chemicals
- This will provide users with necessary guidelines for storing low GWP refrigerants. Users will be able to store larger quantities of low GWP refrigerants to meet the needs of distributors and other stakeholders.

Vote: Neutral impact on resiliency – only thumbs down

RE2701.1.1-21

- Deletes the GFCI protection requirements in Section 210.8(F) of NFPA 70
- This code change will allow more people to remain in their dwelling during a heat wave.

Vote: Positive impact on resiliency – only thumbs up

RE3902.16-21

- Deletes the exception for AFCI protection not being required where GFCI protection is required.
- This will increase the resiliency of occupancies from the hazard of fire as a result of arcing-faults on the branch circuits that are currently exempted by the exception to this section of AFCI requirements.

Vote: Positive impact on resiliency – only thumbs up

RE3902.17-21

- Deletes the GFCI protection requirements for outdoor outlets.
- This code change will allow more people to remain in their dwelling during a heat wave.

Vote: Positive impact on resiliency – only thumbs up

P401.4-21

- Requires automatic or touchless control devices on plumbing fixtures and accessory controls.
- This proposal positively supports resiliency through the increase in resource conservation and the reduction in resource waste.

Vote: Neutral impact on resiliency – only thumbs down

Paul Messplay: Will indicate in the report to the BHCD that the position of the group is not endorsing the proposal itself, only the Resiliency Impact Statement.

Steve Sunderman: Said he would send an email to DHCD describing what resiliency is and what it isn't, if they want to include that in the final report.

Paul Messplay: Thanked everyone for their time. He reminded the group that public comments could be posted in cdpVA or sent to DHCD for one more day, in order to be included in the BHCD report.