Motion: Adopt into CR103 rulemaking process the CR102 Commercial energy code provisions, <u>Option 1</u> with the following public comments and modifications:

- 1. C101.1: Update year on effective date from "2023" to "2024". (Olnon)
- 2. Commercial:
 - a. C503.4.6 update from 10% to 5% in footnote b per Ty's language.
 - Suggested change to C406.1.2 "1. Where one occupancy group is less than 10 percent
 of the floor area of the project, use the primary occupancy group for all those credits."
 (based on Ty Jennings letter)
 - c. <u>Electrification Readiness:</u> C401.3.6: Revise 1 to read: "1. Provide a spare electrical branch circuit conduit to the location of a future replacement heat pump appliance to support an equivalent heating capacity." (Olnon)
 - d. Jonny letter:
 - i. Amendments 1-5.
 - ii. Table C406.2(1) and (2)
 - 1. 1. HVAC Control should be C406.2.2 reference
 - 2. Include high-efficiency water heating, gas-fired credits and reference language. Option 19 in C406.2(2) in Option 2.
 - iii. Amendment 7: adopt language in Jonny proposal (Nilles equation language), except that equation can be simplified to: CR= A x (B-C)/D
 - e. Olnon letter:
 - i. C503.4 change "...in this section," to "...in this Section C503.4," for clarity.
- 3. C401.2.2: Clarify reference to "C401.3 Item 2" to "C401.3.1 Item 2". (BMO)
- 4. C401.3.1: Remove "...or any combination of the two" from the last sentence, redundant language. (Vander Mey 1)
- 5. C401.3.4: Change references to Sections "C401.3.2.1" and "C401.3.3.1" to "C401.3.3.1" and "C401.3.3.2", respectively. (Vander Mey 2)
- 6. C401.3.6: Remove "utility" from Item 4 in both locations. Update last sentence to "...the space to support electrical service upgrade but also include accommodations for additional cooling for larger transformer(s)." (Vander Mey 3)
- 7. C406.2.5: Revise definition from "AEC_0.1" to "AEC_b" to align with terms used in equations. (Duell)
- 8. C503.4: Revise "C503.4.2 through C503.4.5" to "C503.4.2 through C503.4.6". (Olnon)
- 9. C503.4.3: Revise "C503.4.3" to "C503.4.6". (Olnon)
- 10. C503.4.6: Revise "like-for-like heating appliances" to "...heating equipment with equipment that is the same type and..." to align with C503.5. (Vander Mey 4)
- 11. C503.4.6.1: Revise reference to "C403.3.7.2" to "C403.3.8.2". (Olnon)
- 12. Add language to C503.4.6: Where use of heat pump equipment for space heating is required by this section, it is permissible to utilize the Fossil Fuel Compliance Path in Section C401.3 to attain the credits required for building additions shown in Table C401.3.3. (Olnon and other letters)
- 13. Add language to C503.5:: Where use of heat pump equipment for service water heating is required by this section, it is permissible to utilize the Fossil Fuel Compliance Path in Section C401.3 to attain the credits required for building additions shown in Table C401.3.3. (Olnon and other letters)

14. **C501.1.1 Existing buildings.** Except as specified in this chapter, this code shall not be used to require the removal, *alteration* or abandonment of, nor prevent the continued use and maintenance of, an existing building or building system lawfully in existence at the time of adoption of this code. Unaltered portions of existing buildings used for residential purposes that received a certificate of occupancy at least three years prior to a permit application for residential uses shall not be required to comply with this code.

Motion: CR102 Residential energy code provisions into CR103.

a. Incorporate HSPF 2 numbers in code language per below. These would be inserted in parenthesis after the HSPF number in the credits per below.

Energy credit option	HSPF 2 value	Old HSPF value
3.3 ducted central heat pump	8.1	9.5
3.5 ductless heat pump in main living area + electric resistance in other rooms	9	10
3.6 ducted central heat pump	9.4	11
3.6 ducted central heat pump – NEEP cc VCHP list	8.5	10
3.7 ductless heat pump with no electric resistance (except footnote A)	9	10
3.7 ductless heat pump with no electric resistance ≤ 24,000 Btu (except footnote A)	8.1	9

- b. Section 3.6 there is a typo that should be fixed. "(cc VHP)" should be changed to be "(cc VCHP)" (Greg D)
- c. R405 baseline systems, Table R405.4.2(1) "The standard reference design shall be a heat pump water ((heating)) heater meeting the efficiency standards of Table C404.2. for Tier 1 of NEEA's Advanced Water Heating Specifications.
- d. Table R402.1.2

TABLE R402.1.2 EQUIVALENT *U*-FACTORSa

Climate Zone 5 and Marine 4

Fenestration U -Factor	0.30
Skylight <i>U</i> -Factor	0.50
Ceiling <i>U</i> -Factor	0.026
Above-Grade Wall <i>U</i> -Factor	0.045
	<u>0.056</u>
Floor <i>U</i> -Factor	0.029
Slab on Grade <i>F-</i> Factor	0.54
Below Grade 2' Depth	
Wall <i>U</i> -Factor	0.042
Slab F-Factor	0.59
Below Grade 3.5' Depth	
Wall <i>U</i> -Factor	0.040
Slab F-Factor	0.56
Below Grade 7' Depth	
Wall <i>U</i> -Factor	0.035
Slab F-Factor	0.50

 $^{}_{a}U$ -factors or F-factors shall be obtained from measurement, calculation or an approved source or as specified in Section R402.1.5.