



International Energy Conservation Code Consensus Committee-Commercial

Meeting Agenda (9/6/23 posting)

September 13, 2023
2 PM Eastern to 5 PM Eastern (3 hours)

[Webex Link](#)

Committee Chair: Duane Jonlin
Committee Vice Chair: Emily Hoffman

1. Call to order.
2. Meeting Conduct. Staff
 - a. Identification of Representation/Conflict of Interest
 - b. ICC [Council Policy 7](#) Committees: Section 5.1.10 Representation of Interests
 - c. ICC [Code of Ethics](#): ICC advocates commitment to a standard of professional behavior that exemplifies the highest ideals and principles of ethical conduct which include integrity, honesty, and fairness. As part of this commitment it is expected that participants shall act with courtesy, competence and respect for others.
 - d. ICC [Antitrust Compliance Guideline](#)
3. Roll Call – Hoffman
4. Approval of Agenda
5. Approval of Minutes from September 6, 2023
6. Administrative issues.-
7. Action Items.

CE2D-33-23(Submetering)	Modeling as modified 10-1-2/EPLR as modified 11-3-1
CE2D-30-23(Energy monitoring)	Electrical approve 9-3-2
CE2D-31-23(End-use metering categories)	Electrical disapprove 12-3-0
CE2D-51-23(Modification to carryover surplus load mngmt)	E4C voted to disapproval failed 5-21-4 motion to table until 9/13 passed 25-5. Motion to approve as modified on the floor at time of table
CE2D-66-23(High-end trim control L02)	Electrical as modified 13-0-0
CE2D-67-23(Demand responsive lighting control)	Electrical approve 12-0-1
CE2D-45-23(Demand responsive lighting control)	Electrical as modified 13-0-0
CE2D-44-23(Demand responsive lighting control)	Electrical as modified 7-4-2
CCE2D-3-23(Congregate living facilities definition)	Electrical approve 13-0-0
CE2D-42-23(Dimming control function)	Electrical approve 9-3-2
CE2D-90-23(Electric readiness edits)	Electrical disapprove 13-0-3
CE2D-92-23(Appendix CH modifications)	Electrical disapprove 9-3-3

CE2D-32-23(Submetering)
CE2D-53-23(Mixed fuel building energy credit)

Modeling no action
Modeling no action

8. Subcommittee Reports

9. Other business.

10. Next meeting TBD

11. Adjourn.

FOR FURTHER INFORMATION BE SURE TO VISIT THE ICC WEBSITE:

IECC Commercial Consensus Committee Webpage

<https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/iecc-commercial-consensus-committee/>

ICC Energy webpage

<https://www.iccsafe.org/products-and-services/codes-standards/energy/>

FOR ADDITIONAL INFORMATION, PLEASE CONTACT:

Kristopher Stenger, AIA, Director of Energy Programs

International Code Council

kstenger@iccsafe.org

Join by meeting number

Meeting number (access code): 2599 815 0421

Meeting password: 3eKk3uWWdi3

Tap to join from a mobile device (attendees only)

[1-844-740-1264,,25998150421##](tel:1-844-740-1264,,25998150421##) USA Toll Free

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International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-33-23 Sub-metering
CDP ID #	1759
Code	IECC CE
Code Section(s)	C405.13.2
Location	SC rev
Proponent	Renee Lani rlani@apga.org
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	
Recommendation	<p>this proposal would add the word “electrical” to the title of Section C405.13.3 and the associated table.</p>
Vote	As modified 10-1-2
Recommendation Date	7/24/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

C405.13.3 Electrical Meters.

Meters or other measurement devices required by this section shall be configured to automatically communicate energy consumption data to the data acquisition system required by Section C405.13.4. Source meters shall be allowed to be any digital-type meter. Lighting, HVAC or other *building* systems that can self-monitor their energy consumption shall be permitted instead of meters. Current sensors shall be permitted, provided that they have a tested accuracy of ± 2 percent. Required metering systems and equipment shall have the capability to provide at least hourly data that is fully integrated into the data acquisition system and graphical energy report in accordance with Sections C405.13.4 and C405.13.5. Non-intrusive load monitoring (NILM) packages that extract energy consumption data from detailed electric waveform analysis shall be permitted to substitute for individual meters if the equivalent data is available for collection in Section C405.13.4 and reporting in Section C405.13.5.

C405.13.6 Non-electrical energy metering.

Consumption of non-electrical fuel or energy sources including district heating or cooling shall be automatically metered in accordance with Section C405.13.2 and C405.13.3 or a method developed for usage calculation annually or more frequently from energy bills. Natural gas usage shall be monitored through on site interval metering or from utility interval data, as available.

Reason Statement:

APGA appreciates the opportunity to provide IECC-C Committee this input. APGA is the national trade association for approximately 1,000 communities across the U.S. that own and operate their own retail natural gas distribution entities. They include municipal gas distribution systems, public utility districts, county districts, and other public agencies, all locally accountable to the citizens they serve. Public gas systems focus on providing safe, reliable, resilient, and affordable natural gas service to their customers. APGA members



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-33-23 Sub-metering
CDP ID #	1759
Code	IECC CE
Code Section(s)	C405.13.2
Location	SC rev
Proponent	Renee Lani rlani@apga.org
Proposal Status	SC rev
Subcommittee	CE EPLR
Subcommittee Notes	
Recommendation	This provides important editorial updates to the requirements in this section.
Vote	As modified 11-3-1
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

CE2D-33 AM by PLR 8-25-23

This proposal replaces CE2D-33 from the monograph with the following language. The proposal modifies CEC2D-5. The modifications are shown in **YELLOW** highlight or **RED** text.

2024 International Energy Code[CE Project] R3

Add new text as follows:

C403.18 Non-electrical energy monitoring.

New buildings with a gross *conditioned floor area* of not less than 10,000 square feet (929 m²) shall be equipped to measure, monitor, record and report consumption of non-electrical fuel or energy sources including district heating or cooling shall be **submetered** in accordance with Sections C403.18.1 through C403.18.5. ~~A plan for quantifying annual energy type and end use disclosure in compliance with Sections C403.18.1 through C403.18.6 shall be submitted with the construction documents.~~

Exceptions:

1.	<i>Dwelling units</i> in R-2 occupancies
2.	Individual tenant spaces are not required to comply with this section provided that the space has its own utility services and meters and has less than 5,000 square feet (464.5 m ²) of <i>conditioned floor area</i> .

C403.18.1 Non-electrical energy **submetering**.

For all non-electrical energy supplied to the *building* and its associated site that serves the *building* and its occupants, **submeters** or other measurement devices shall be provided to collect energy consumption data for each end-use category required by Section C403.18.2.

C403.18.2 End-use non-electrical **submetering** categories.

Submeters or other *approved* measurement devices shall be provided to collect energy use data for each end-use category indicated in Table C403.18.2. Where multiple **submeters** are used to measure any end-use category, the data acquisition system shall total all of the energy used by that category. Not more than 5 percent of the measured load for each of the end-use categories indicated in Table C403.18.2 shall be permitted to be from a load that is not within that category.

Exceptions:

1.	HVAC and water heating equipment serving only an individual <i>dwelling unit</i> shall not require end-use submetering .
2.	End-use submetering shall not be required for fire pumps, stairwell pressurization fans or any system that operates only during testing or emergency.

3.	End-use submetering shall not be required for an individual tenant space having a floor area not greater than 2,500 square feet (232 m ²) where a dedicated source meter complying with Section C403.18.3 is provided.
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TABLE C403.18.2 NON-ELECTRICAL ENERGY USE CATEGORIES

Load Category	Description Description of End Use
Total HVAC system	Heating, cooling and ventilation, including but not limited to fans, pumps, boilers, chillers and water heating.

Process Load	Any single load that is not included in an HVAC, lighting or plug load category and that exceeds 5 percent of the peak connected load of the whole building, including but not limited to manufacturing equipment and commercial kitchens.
Building operations and other miscellaneous loads	The remaining loads not included elsewhere in this table, including but not limited to vertical transportation systems, automatic doors, motorized shading systems, ornamental fountains, ornamental fireplaces, swimming pools, inground spas and snow-melt systems.
Non-electric hot water heating for uses other than space conditioning	Energy used to generate hot water. Exception: Water heating with design capacity that is less than 10 percent of building service rating.

C403.18.3 Non-electrical submeters.

Submeters or other measurement devices required by this section shall be configured to automatically communicate energy consumption data to the data acquisition system required by Section C403.18.4. Source submeters shall be allowed to be any digital-type meter that can provide a digital output to the data acquisition system. Required submetering systems and equipment shall ~~have the capability to provide at least hourly data that is~~ be fully integrated into the data acquisition system and graphical energy report that updates at least hourly in accordance with Sections C403.18.4 and C403.18.5.

C403.18.4 Non-electrical energy data acquisition system.

A data acquisition system shall have the capability to store the data from the required submeters and other sensing devices for a minimum of 36 months. The data acquisition system shall have the capability to store real-time energy consumption data and provide hourly, daily, monthly and yearly logged data for each end-use category required by Section C403.18.2. The data acquisition system shall have the capability of providing building total peak demand and the time(s) of day and time(s) per month at which the peak occurs. Peak demand shall be integrated over the same time period as the underlying whole building submeter reading rate.

C403.18.5 Graphical energy report.

A permanent and readily accessible reporting mechanism shall be provided in the building that is accessible by building operation and management personnel. The reporting mechanism shall have the capability to graphically provide the non-electrical energy consumption for each end-use category required by Section C403.18.2 not less than every hour, day, month and year for the previous 36 months. The graphical report shall incorporate natural gas interval data from the submeter or the ability to enter gas utility bills into the report.

~~C403.18.6 Plan for disclosure.~~

~~The plan for annual energy use data gathering and disclosure shall include the following:~~

1.1.	Address
1.2.	Gross floor area
1.3.	Year occupied
1.4.	Occupancy classifications, with respective floor areas

1.	Property information including:
2.	Total annual <i>building site</i> energy use by unit area as collected or documented through Section C408.18.5 sources, separated by energy type and fuel type.
3.	Annual site generated renewable energy by unit area.

CE2D-33

- Would have affected non-electrical loads and submetering.
- Revised based on knowledgeable gas metering changes.
- Discussion of meter versus sub-meter
- Motion to approve as modified / shown on the screen.
 - 1st – Steve Rosenstock
 - 2nd – Bryan Holland
 - Vote: 11 – 3 – 1 – 1
 - Reason: This provides important editorial updates to the requirements in this section.
- Affects #34 and chair requests removal of 34



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-30-23 Energy monitoring
CDP ID #	1653
Code	IECC CE
Code Section(s)	C405.13.2
Location	SC rev
Proponent	Bryan Holland bryan.holland@nema.org
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	The requirements to monitor non-electrical energy should not be located in C405 that covers "power and lighting." Relocating these rules to their own section in C403 will add clarity and enforceability.
Vote	Approve 15-0-2
Recommendation Date	8/21/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-31-23 End-use metering categories
CDP ID #	1596
Code	IECC CE
Code Section(s)	C405.13.2
Location	SC rev
Proponent	Steven Rosenstock srosenstock@eei.org
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	Meters are needed to disaggregate the energy used to charge vehicles from the energy used by the building.
Vote	Disapprove 12-3-0
Recommendation Date	8/7/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-51-23 Modification to carryover surplus load management
CDP ID #	1726
Code	IECC CE
Code Section(s)	C406.1.1(2) Table
Location	SC rev
Proponent	Laura Petrillo-Groh lpetrillo-groh@ahrinet.org
Proposal Status	SC rev
Subcommittee	CE Model, Metrics
Subcommittee Notes	
Recommendation	Reason Statement: With extensive well-documented benefits of energy efficiency, the amount of energy efficiency credits allowed to be traded off to renewable energy and load management credits is limited to the specific amounts determined through the committee's consensus view of the supporting analysis provided by PNNL.
Vote	Disapprove 4-2-8
Recommendation Date	8/28/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

PROPOSED MODIFICATION NOT HEARD BY SUBCOMMITTEE

Modification to remove proposed changes in climate zones that will be exempt from requirements if CE2D-57-23 is approved. The values would remain the same as currently shown in the legislative draft.

Proposed Modification to replace Table C406.1.1(2) values as shown and leave values in CZ 0-2 unchanged.

-	CLIMATE ZONE																			
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8	
BUILDING OCCUPANCY GROUP																				
R-2, R-4, AND I-1	5	5	5	5	5	5	5	24	19	5	22	18	5	5	19	5	5	5	5	
I-2	16	14	11	8	6	5	5	10	6	8	14	10	17	26	29	21	21	22	39	
R-1	7	5	8	5	19	5	32	40	41	24	41	42	17	37	41	5	24	15	22	
B	7	5	5	8	6	6	14	26	31	23	39	34	19	35	45	5	19	17	927	
A-2	18	16	14	15	13	9	11	23	32	5	23	23	5	16	26	5	5	5	5	
M	5	5	5	5	5	5	5	5	20	5	5	5	5	5	5	5	5	5	5	
E	13	13	18	16	17	14	21	35	40	25	43	29	23	32	27	11	17	25	5	
S-1 AND S-2	5	5	5	5	5	5	5	5	13	5	17	20	5	35	23	5	5	11	40	
All Other	5	5	5	5	5	5	5	7	17	5	10	57	5	6	11	5	5	5	5	

Original Table C406.1.1(2) in 2nd Public Comment legislative draft.

-	CLIMATE ZONE																			
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8	
BUILDING OCCUPANCY GROUP																				
R-2, R-4, AND I-1	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
I-2	16	14	11	8	6	5	5	5	5	5	5	5	6	15	18	10	14	10	25	
R-1	7	5	8	5	19	5	13	20	20	5	20	20	5	16	18	5	5	5	5	
B	7	5	5	8	6	6	5	10	14	5	21	15	5	16	26	5	5	5	9	
A-2	18	16	14	15	13	9	5	5	11	5	5	5		5	7	5	5	5	5	
M	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	
E	13	13	18	16	17	14	6	20	25	9	26	13	7	15	10	5	5	9	5	
S-1 AND S-2	5	5	5	5	5	5	5	5	5	5	5	5	5	14	5	5	5	5	17	
All Other	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	

Original Proposed Changes to Table C406.1.1(2) in CE2D-51-2023

-	CLIMATE ZONE																		
	0A	0B	1A	1B	2A	2B	3A	3B	3C	4A	4B	4C	5A	5B	5C	6A	6B	7	8
BUILDING OCCUPANCY GROUP																			
R-2, R-4, AND I-1	<u>12</u>	<u>18</u>	<u>18</u>	<u>18</u>		<u>6</u>	5	<u>24</u>	<u>19</u>	5	<u>22</u>	<u>18</u>	5	5	<u>19</u>	5	5	5	5
I-2	<u>1627</u>	<u>25</u>	<u>21</u>	<u>18</u>	<u>15</u>	<u>13</u>	5	<u>10</u>	<u>6</u>	<u>8</u>	<u>14</u>	<u>10</u>	<u>17</u>	<u>26</u>	<u>29</u>	<u>21</u>	<u>21</u>	<u>22</u>	<u>39</u>
R-1	<u>23</u>	<u>20</u>	<u>25</u>	<u>20</u>	<u>36</u>	<u>23</u>	<u>32</u>	<u>40</u>	<u>41</u>	<u>24</u>	<u>41</u>	<u>42</u>	<u>17</u>	<u>37</u>	<u>41</u>	5	<u>24</u>	<u>15</u>	<u>22</u>
B	<u>22</u>	<u>21</u>	<u>21</u>	<u>24</u>	<u>23</u>	<u>23</u>	<u>14</u>	<u>26</u>	<u>31</u>	<u>23</u>	<u>39</u>	<u>34</u>	<u>19</u>	<u>35</u>	<u>45</u>	5	<u>19</u>	<u>17</u>	<u>927</u>
A-2	<u>36</u>	<u>34</u>	<u>32</u>	<u>33</u>	<u>32</u>	<u>28</u>	<u>11</u>	<u>23</u>	<u>32</u>	5	<u>23</u>	<u>23</u>	<u>5</u>	<u>16</u>	<u>26</u>	5	5	5	5
M	5	5	<u>2</u>	5	<u>18</u>	<u>16</u>	5	5	<u>20</u>	5	5	5	5	5	5	5	5	5	5
E	<u>27</u>	<u>27</u>	<u>32</u>	<u>30</u>	<u>32</u>	<u>28</u>	<u>21</u>	<u>35</u>	<u>40</u>	<u>25</u>	<u>43</u>	<u>29</u>	<u>23</u>	<u>32</u>	<u>27</u>	<u>11</u>	<u>17</u>	<u>25</u>	5
S-1 AND S-2	<u>8</u>	<u>8</u>	5	5	5	5	5	5	<u>13</u>	5	<u>17</u>	<u>20</u>	5	<u>35</u>	<u>23</u>	5	5	<u>11</u>	<u>40</u>
All Other	5	5	5	5	<u>7</u>	5	5	<u>7</u>	<u>17</u>	5	<u>10</u>	<u>57</u>	5	<u>6</u>	<u>11</u>	5	5	5	5



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-66-23 High end trim control L02
CDP ID #	1731
Code	IECC CE
Code Section(s)	C408.3.1.5
Location	SC rev
Proponent	Harold Jepsen harold.jepsen@legrand.us
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	<ul style="list-style-type: none"> ○ Provides clarity for functional testing of high-end trim lighting controls
Vote	As modified 13-0-0
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

CE2D-66-23 AM by PLR on 8/25/2023

Modifications shown in RED.

IECC CE: C408.3.1.4, C408.3.1.5

Proponents:

Harold Jepsen, representing Legrand (harold.jepsen@legrand.us)

2024 International Energy Code[CE Project] R3

Revise as follows:

C408.3.1.4 High-end trim controls.

Where lighting controls are configured for *high-end trim*, verify the following:

- 1.

 trim maximum level has been set.

 High-end
- 2.

 ready access only by authorized personnel.

 The calibration adjustment equipment is located for
- 3.

 ready access for users cannot increase the lighting power above the maximum level established by the *high-end trim* controls.

 Lighting controls with

C408.3.1.5 High end trim lighting control verification for Additional Efficiency Credit L02.

For the qualifying spaces associated with the project receiving additional efficiency credits in Section C406.2.5.2, the following shall be documented while daylight responsive controls are not reducing lighting power:

- 1.

 The maximum setting for power or light output for each control group of *general lighting* luminaires.
- 2.

 The *high-end trim* setting for power or light output for each control group of *general lighting* luminaires.
- 3.

 For projects with seven or fewer claimed qualifying spaces, the reduction in light ~~output level~~ or reduction in power due to *high-end trim* shall be tested in all spaces and shown to reduce the *general lighting* power or light ~~output level~~ to not greater than 85 percent of full power or light output. For projects with more than seven claimed qualifying spaces, the reduction in light ~~output~~

~~level~~ or reduction in power due to *high-end trim* shall be tested in not less than 10 percent of spaces, and no less than seven spaces, and shown to reduce *general lighting* power or light ~~output level~~ to not greater than 85 percent of full power or light output. Where more than 30 percent of the tested spaces fail, the remaining qualifying spaces shall be tested.

- 4.

Summarize the reduction in *general lighting* power or light output resulting from the *high-end trim* setting for each qualifying space and the floor area of each qualifying space.

- 5.

Summarize the fraction of total floor area for spaces where *high-end trim* reduces *general lighting* power or light output to not greater than 85 percent of full power or light output.

Reason:

Some of these shown changes are to restore language from PC Proposal CECD1-4-22, which were left out of the PC DRAFT1 version.

Other changes are editorial to provide greater clarity to the requirements. These changes align language with defined terms, and identifies lighting output reduction as a method to verify functional operation as already identified in three earlier sections of this section. The stringency, intent or application of the code is not altered with these changes.

Cost Impact:

The code change proposal will neither increase nor decrease the cost of construction.

These changes are to correct proposal language which was left out of the PC Draft1 version as well as for editorial and clarity reasons.

CED2D-66

- High-end trim editorial language
 - Modified as shown
 - 1st – Harold Jepsen
 - 2nd – Jon McHugh
 - Vote: 13 – 0 – 0 – 1
 - Reason: Provides clarity for functional testing of high-end trim lighting controls



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-67-23 Demand responsive lighting controls G01
CDP ID #	1732
Code	IECC CE
Code Section(s)	C408.3.1.6
Location	SC rev
Proponent	Harold Jepsen harold.jepsen@legrand.us
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	Provides clarity for functional testing of demand responsive controls within a space
Vote	Approve 12-0-1
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-45-23 Demand responsive lighting control
CDP ID #	1727
Code	IECC CE
Code Section(s)	C405.2.8
Location	SC rev
Proponent	Jay Crandell jcrandell@aresconsulting.biz
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	Editorial changes provide clarity and alignment with defined terms
Vote	As modified 13-0-0
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

CE2D-45 AM by PLR on 8-25-23

Mods are in **RED**.

This modification is to address comments from PLR committee members on PC CE2D-45.

C405.2.8 Demand responsive lighting controls. Interior *general lighting* in group B, E, M, and S occupancies shall have *demand responsive controls* complying with Section C405.2.8.1 in not less than 75 percent of the interior floor area.

Exceptions:

1. Where the combined interior floor area of group B, E, M, and S occupancies is less than 10,000 square feet (929 m²).
2. *Buildings* where a *demand response signal* is not available from a controlling entity other than the *owner*.
3. Parking garages

C405.2.8.1 Demand responsive lighting controls function. *Demand responsive controls for* lighting ~~controls~~ shall be capable of the following:

1. Automatically reducing the output of ~~demand responsive~~ controlled lighting to 80 percent or less of full power or light output upon receipt of a *demand response signal*.
2. Where *high-end trim* has been set, automatically reducing the output of controlled lighting to 80 percent or less of the *high-end trim* set point upon receipt of a *demand response signal*.
3. Dimming controlled lights gradually and continuously over a period of not longer than 15 minutes to achieve ~~get to~~ their demand response setpoint.
4. Returning controlled ~~lightings~~ to ~~their~~ its normal operational settings at the end of the *demand response period event*.

Exception: Storage rooms and Warehouse and ~~retail~~ storage ~~building~~ areas shall be permitted to switch off 25 percent or more of *general lighting* power rather than dimming.

Modification Reason Statement:

1. Restored language to C405.2.8 exception one which was misunderstood in the originally submitted PC.
2. In C405.2.8.1, align DRC function with the definition.

3. Revise exception to C405.2.8.1 to clarify it is not specific to warehouse and retail building types. It is applicable to space types of storage rooms and warehouse storage areas. These align with space types listed in the LPD table.

[The below definitions and section C406.3.2 are for ready reference and are not part of the PC modification. They have no proposed changes or comments and should be removed, along with this note, after the modification is accepted.]

DEMAND RESPONSE SIGNAL. A signal that indicates a price or a request to modify electricity consumption for a limited time period.

DEMAND RESPONSIVE CONTROL. A control capable of receiving and automatically responding to a *demand response signal*.

C406.3.2 G01 Lighting Load Management A project not required to comply with C405.2.9 can achieve energy credits for installing demand responsive lighting controls for interior *general lighting* that comply with C405.2.9.1. The demand responsive lighting controls shall automatically reduce the light output or power of controlled lighting to no more than 80 percent of full output, or 80 percent of the *high-end trim* set point, whichever is less. Energy credits can be earned where demand responsive lighting controls are installed for the following:

1. Not less than 10 percent of the interior floor area in Group R or I occupancies; or
2. Not less than 50 percent of the interior floor area in all other occupancies.

G01 credits shall be prorated using Equation 4-28 with no more than 75 percent of the interior floor area being counted.

-
- Demand response language
 - Motion to approve as shown on screen
 - 1st – Harold Jepsen
 - 2nd –
 - Vote: 13 – 0 – 0 – 1
 - Reason: Editorial changes provide clarity and alignment with defined terms



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-44-23 Demand responsive lighting control exception
CDP ID #	1659
Code	IECC CE
Code Section(s)	C405.2.8
Location	SC rev
Proponent	Tim Peglow tpeglow@mdanderson.org
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	The proponent identified an important safety concern in medical occupancies within Group B Buildings. This is further modified to capture all medical occupancies that will be found in Group B buildings with the scope of the exception.
Vote	As modified 7-4-2
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____

Date	
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CE2D-44 AM by PLR 8-25-23 – Demand Responsive lighting control exception

Mods in **RED**.

C405.2.8 Demand responsive lighting controls. Interior *general lighting* in group B, E, M, and S occupancies shall have *demand responsive controls* complying with Section C405.2.8.1 in not less than 75 percent of the interior floor area

Exceptions:

1. Where the combined interior floor area of group B, E, M, and S occupancies is less than 10,000 square feet (929 m²)
 2. *Buildings where a demand response signal is not available from a controlling entity other than the owner.*
 3. Parking garages
 4. Ambulatory Care Facilities
 5. Outpatient clinics
 6. Physician or dental offices
-

CE2D-44

- Demand response language addressing patient spaces
- Motion to approve as shown on screen
 - 1st – Jack Bailey
 - 2nd – Ali
 - Vote: 7 – 4 – 2 – 1
 - Reason: The proponent identified an important safety concern in medical occupancies within Group B Buildings. This is further modified to capture all medical occupancies that will be found in Group B buildings with the scope of the exception.



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CEC2D-3-23 Congregate living facilities definition
CDP ID #	1622
Code	IECC CE
Code Section(s)	C202
Location	SC rev
Proponent	Glenn Heinmiller
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	
	for clarity on what are congregate living facilities.
Vote	Approve 13-0-0
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-42-23 Dimming control function
CDP ID #	1865
Code	IECC CE
Code Section(s)	C405.2.3.1
Location	SC rev
Proponent	Michael Jouaneh mjouaneh@lutron.com
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	manual dimming controls provides additional energy savings beyond high-end trim.
Vote	Approve 9-3-2
Recommendation Date	8/25/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-90-23 Electric readiness edits
CDP ID #	1805
Code	IECC CE
Code Section(s)	Appendix CH
Location	SC rev
Proponent	Michele Mihelic michelemihelic@aia.org
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	This makes many substantive changes to this appendix and there are questions with the clarity of some of the edits.
Vote	Disapprove 13-0-3
Recommendation Date	8/28/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	



International Energy Conservation Code Code Change Proposal Tracking Sheet

Proposal #	CE2D-92-23 Appendix CH modifications
CDP ID #	1671
Code	IECC CE
Code Section(s)	Appendix CH
Location	SC rev
Proponent	Diana Burk diana@newbuildings.org
Proposal Status	SC rev
Subcommittee	CE Elec, Light
Subcommittee Notes	
Recommendation	This makes many substantive changes to this appendix and there are questions with the clarity of some of the edits.
Vote	Disapprove 9-3-3-1
Recommendation Date	8/28/23
Next Step	To Subcommittee To Advisory Group _____ To Consensus Committee _____
Consensus Committee	
Committee Response	
Vote	Affirmative _____ Negative _____ Table _____ To Subcommittee _____
Date	

