DOCKETED		
Docket Number:	17-BSTD-03	
<b>Project Title:</b>	2019 Title 24, Part 11, CALGreen Rulemaking	
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Document Title:	2-6-18 Presentation on Proposed 2019 CALGreen Code	
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## **Title 24 Part 11** California Green Building Standards

Ingrid Neumann Building Standards Office Efficiency Division

> Rulemaking Workshop Rosenfeld Hearing Room February 6, 2018



- Section A4.203.1.1.1 Performance Approach for Newly Constructed
  - based on target EDR scores
    (no longer "Percent better than" mandatory Part 6)

Mandatory Title 24 Part 6 Voluntary Part 11

Mandatory Energy Efficiency Targets Title 24 Part 6 Voluntary Energy Efficiency Title 24 Part 11



• A4.203.1.3.1 Tier 1.

meet or be less than a target Energy Design Rating (EDR), based on climate zone.

➤Measures considered:

- energy efficiency measures (e.g. triple pane windows)
- Demand Management (e.g. load following)
- on-site battery or thermal storage





Appendix A4 Residential Voluntary Measures A4.203.1.3.1 Tier 1

Modeled using:

- PV oversizing factors of 1.0 for mixed fuel and 1.1 for all-electric
- TOU battery controls

CZ	<b>Mixed Fuel</b>	All-Electric
1	23	36
2	12	16
3	10	14
4	8	12
5	10	16
6	10	12
7	5	7
8	10	10
9	13	13
10	10	11
11	11	12
12	12	13
13	11	13
14	15	16
15	11	8
16	22	39



• A4.203.1.3.2 Tier 2.

meet or be less than a target Energy Design Rating (EDR), based on climate zone.

- ➢Paths considered:
  - electrifying space and water heating
  - advanced electric battery controls
  - modest oversizing of the photovoltaic system

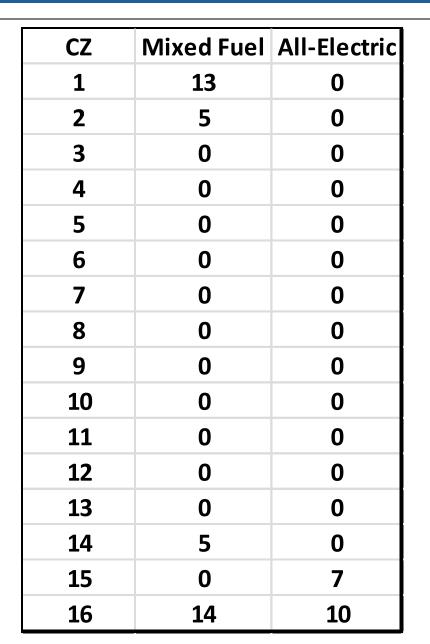




#### Appendix A4 Residential Voluntary Measures A4.203.1.3.2 Tier 2

Modeled using:

- PV oversizing factors up to 1.4 for mixed fuel
- PV sized to offset annual kWh for all-electric
- TOU battery controls





Required Prerequisites:

- A4.203.1.1.2 Quality Insulation Installation (QII) AND Choose ONE of the Prerequisites below:
- A4.203.1.2.1 Roof deck insulation, or ducts in conditioned space
- A4.203.1.2.2 High Performance Walls (HPW)
- A4.203.1.2.3 HERS-Verified Compact Hot Water Distribution System (CHWDS-H) with Drain Water Heat Recovery (DWHR-H)



 Section A4.204 Performance Approach for Additions has been struck



- Section A5.203, Performance Approach
  - Retain the "Percent better than" mandatory language
  - Target Percentages continue to vary depending on whether lighting and/or mechanical systems are included



Choose ONE of the following Prerequisites for Tier 1 and TWO for Tier 2:

- A5.203.1.1.1 Outdoor lighting
- A5.203.1.1.2 Service water heating in restaurants
- A5.203.1.1.3 Warehouse Dock Seal Doors
- A5.203.1.1.4 Daylight Redirecting Devices
- A5.203.1.1.5 Exhaust Air Heat Recovery
- A5.203.1.1.6 Triple Bottom Line Analysis



# **Questions?**

#### **Building Energy Efficiency Program 2019 Update**

http://www.energy.ca.gov/title24/2019standards/rulemaking/

#### Comments should be submitted to DOCKET NO. 17-BSTD-03 by 5:00pm March 5, 2018 https://efiling.energy.ca.gov/EComment/EComment.aspx? docketnumber=17-BSTD-03