July 24, 2017

Dear CBECC-Res user:

CBECC-Res 2016.3.0 was approved by the California Energy Commission on July 12, 2017 and is now available for <u>download at the project website</u> to show compliance with the 2016 Building Energy Efficiency Standards.

CBECC-Res 2016.3.0 replaces all previous versions of CBECC-Res 2016. CBECC-Res 2016.2.1 will expire on October 24, 2017. When demonstrating compliance with the 2016 Standards, CBECC-Res 2016.3.0 must be used for permit applications made on or after October 25, 2017.

**Summary of changes:** CBECC-Res 2016.3.0 includes the following improvements made since the previous releases, along with additional smaller updates and bug fixes:

- 1. Corrects the rounding bug sometimes encountered when new windows are added to an existing zone
- 2. Corrects several water heater bugs for Existing + Alteration + Addition models
- 3. Accommodates the new federal UEF rating for water heaters
- 4. Pipe insulation on hot water pipes required by the Plumbing Code is included in the standard distribution system
- 5. Includes more specific models for NEEA heat pump water heaters
- 6. Adds the ability to enter a decimal R-Value for rigid insulation (such as R-4.2)
- 7. Adds a check box to indicate if roof deck insulation covers the framing or not
- 8. Changes the 1-coat stucco exterior wall finish selection of 'R4 synthetic stucco' by removing the sheathing R-value and renaming it as 'Synthetic Stucco'.
- 9. Raises the standard design furnace AFUE to 80% to match the appliance regulations
- 10. Improved the Energy Design Rating (EDR) inputs and features, such as:
  - a) PV system size limited to a default factor of 1.6 times the proposed design electricity use when a battery is also installed
  - b) Optional checkbox to override the default 1.6 times PV system size limitation
  - c) Optional battery storage when a PV system is installed with a minimum battery size of 6.0 kWh
  - d) Ability to set a target EDR score so the software will automatically determine the PV system size needed to meet the target score

**Technical support:** If you need general help with the software, please check the CBECC-Res FAQs and User Manual, which can be downloaded from the <u>project website</u>. A Quick Start Guide and the User Manual can also be accessed by clicking on the program's Help menu.

If you need additional technical assistance with the software, please email CBECC-Res Support at <u>cbecc.res@gmail.com</u> (if you send an .ribd file, please mention the CBECC-Res version number).

Best Regards,

Larry Froess, P.E., LEED AP Senior Mechanical Engineer California Energy Commission Building Standards Office 1516 Ninth Street Sacramento, CA 95814 Larry.Froess@energy.ca.gov