

CALIFORNIA ENERGY COMMISSION

1516 Ninth Street
Sacramento, California 95814

Main website: www.energy.ca.gov

**ITEM 5**

Notice of Availability California Energy Demand Updated Forecast, 2018-2030

On December 6, 2018, the California Energy Commission conducted a workshop to present and discuss the California Energy Demand Updated 2018 – 2030 Forecast (CEDU 2018). CEDU 2018 provides updated 10-year forecasts for electricity demand in California and for major utility planning areas within the state. CEDU 2018 updates earlier forecasts provided in the California Energy Demand 2018 – 2030 Forecast (CED 2017) by incorporating more recent economic and demographic projections, more recent projections of electric vehicle and behind-the-meter photovoltaic system adoption and adjusting for the latest historical data available for consumption, peak demand, temperatures, and electricity rates.

Following the workshop, Energy Commission staff, in response to stakeholder comments, made further revisions to CEDU 2018 forecasts for the Sacramento Municipal Utility District and consequently for the Northern California Non-California Independent System Operator (ISO) planning areas. Energy Commission staff also identified and corrected a minor error in the calculation of line losses which affected CEDU 2018 forecasts of energy needed to serve load for the Pacific Gas & Electric and Southern California Edison planning areas and minor calculation errors in hourly demand forecasts for Pacific Gas & Electric, Southern California Edison, San Diego Gas & Electric, and Valley Electric Association transmission access charge areas. Energy Commission staff corrected CEDU 2018 Statewide and California ISO territory forecasts accordingly.

The following documents constituting CEDU 2018 will be considered for adoption at the January 9, 2019 Energy Commission Business Meeting.

High Baseline Demand

FINAL CEDU 2018 Baseline Statewide High Demand Case TN-226265

FINAL CEDU 2018 Baseline PGE High Demand Case TN-226256

FINAL CEDU 2018 Baseline SCE High Demand Case TN-226259

FINAL CEDU 2018 Baseline SDGE High Demand Case TN-226263

CORRECTED CEDU 2018 Baseline NCNC High Demand Case TN-226241
CORRECTED CEDU 2018 Baseline SMUD High Demand Case TN-226240
CEDU 2018 Baseline LADWP High Demand Case TN-226101
CEDU 2018 Baseline BUGL High Demand Case TN-226098
CEDU 2018 Baseline IID High Demand Case TN-226102

Mid Baseline Demand

FINAL CEDU 2018 Baseline Statewide Mid Demand Case TN-226267
FINAL CEDU 2018 Baseline PGE Mid Demand Case TN-226258
FINAL CEDU 2018 Baseline SCE Mid Demand Case TN-226262
FINAL CEDU 2018 Baseline SDGE Mid Demand Case TN-226260
CORRECTED CEDU 2018 Baseline NCNC Mid Demand Case TN-226239
CORRECTED CEDU 2018 Baseline SMUD Mid Demand Case TN-226234
CEDU 2018 Baseline LADWP Mid Demand Case TN-226115
CEDU 2018 Baseline BUGL Mid Demand Case TN-226117
CEDU 2018 Baseline IID Mid Demand Case TN-226116

Low Baseline Demand

FINAL CEDU 2018 Baseline Statewide Low Demand Case TN-226266
FINAL CEDU 2018 Baseline PGE Low Demand Case TN-226257
FINAL CEDU 2018 Baseline SCE Low Demand Case TN-226264
FINAL CEDU 2018 Baseline SDGE Low Demand Case TN- 226261
CORRECTED CEDU 2018 Baseline NCNC Low Demand Case TN-226238
CORRECTED CEDU 2018 Baseline SMUD Low Demand Case TN-226233
CEDU 2018 Baseline LADWP Low Demand Case TN-226106
CEDU 2018 Baseline BUGL Low Demand Case TN-226108

CEDU 2018 Baseline IID Low Demand Case TN-226107

Hourly Demand

Corrected CEDU 2018 1 in 2 Peak Loads by Month and CAISO TAC TN-226244

Corrected CAISO Hourly Results CEDU 2018 2018-2022 TN-226243

Corrected CAISO Hourly Results CEDU 2018 2023-2026 TN-226246

Corrected CAISO Hourly Results CEDU 2018 2027-2030 TN-226245

Corrected PGE Hourly Results - CEDU 2018 - 2018-2022 TN-226252

Corrected PGE Hourly Results - CEDU 2018 - 2023-2026 TN-226251

Corrected PGE Hourly Results - CEDU 2018 - 2027-2030 TN-226250

Corrected SCE Hourly Results - CEDU 2018 - 2018-2022 TN-226248

Corrected SCE Hourly Results - CEDU 2018 - 2023-2026 TN-226247

Corrected SCE Hourly Results - CEDU 2018 - 2027-2030 TN-226253

Corrected SDGE Hourly Results - CEDU 2018 - 2018-2024 TN-226254

Corrected SDGE Hourly Results - CEDU 2018 - 2025-2030 TN-226255

Corrected VEA Hourly Results - CEDU 2018 TN-226249

These documents are available on the Energy Commission's website at:

www.energy.ca.gov/2018_energy_policy/documents/#12062018

Media inquiries should be sent to the Media and Public Communications Office by email at MediaOffice@energy.ca.gov or (916) 654-4989

If you have technical questions about these documents, please contact Cary Garcia at 916-654-4698 or by email at Cary.Garcia@energy.ca.gov.

Mail Lists: energypolicy

STATE OF CALIFORNIA

STATE ENERGY RESOURCES
CONSERVATION AND DEVELOPMENT COMMISSION

IN THE MATTER OF:

**THE 2018 INTEGRATED ENERGY
POLICY REPORT UPDATE**

Docket No. 18-IEPR-04

**2018 IEPR
CALIFORNIA ENERGY DEMAND
UPDATED FORECAST, 2018-
2030**

WHEREAS, Senate Bill 1389 (Bowen, Chapter 568, Statutes of 2002) requires the Energy Commission to "conduct assessments and forecasts of all aspects of energy industry supply, production, transportation, delivery and distribution, demand, and prices" and to "use these assessments and forecasts to develop and evaluate energy policies and programs that conserve resources, protect the environment, ensure energy reliability, enhance the state's economy, and protect public health and safety" (Public Resources Code § 25301(a)); and

WHEREAS, the Commission is specifically directed to assess electricity trends, develop electricity forecasts, evaluate adequacy of electricity supplies, and conduct other analytical activities relating to the state's use of and need for electricity (Public Resources Code, § 25303); and

WHEREAS, the Integrated Energy Policy Report (IEPR) contains these assessments and associated policy recommendations and is adopted every two years, with an IEPR Update being adopted each interim year; and

WHEREAS, the Commission held workshops on July 10, 2018, and December 6, 2018, and Demand Analysis Working Group Meetings were held on July 12, 2018, August 2, 2018, and November 14, 2018, to solicit public input on the development of the California Energy Demand Updated Forecast, 2018-2030 (CEDU 2018); and

WHEREAS, on January 8, 2018, staff docketed the Notice of Availability for the CEDU 2018, which identifies the documents that make up the updated forecast, including updated forecasts for electricity consumption, retail electricity sales, and electricity peak demand for each of the major electricity planning areas and for the state as a whole; and

WHEREAS, the CEDU 2018 describes updated 10-year forecasts for electricity in California and for major utility planning areas within the state and updates the forecasts provided in the California Energy Demand 2018-2030 Forecast (CED 2017) by

incorporating more recent economic and demographic projections and adjusting for the latest historical data available for consumption, peak demand, temperatures, and electricity rates; and

WHEREAS, CEDU 2018 includes three updated baseline scenarios designed to capture a reasonable range of demand outcomes during the next 10 years; and

WHEREAS, CEDU 2018 includes updated baseline forecasts of electricity consumption and peak demand for California and for utility planning areas within the state, as well as forecasts of hourly and monthly peak electricity demand for the California Independent System Operator control area and transmission access charge areas; and

WHEREAS, CEDU 2018 incorporates more recent economic and demographic assumptions, and an additional year of historical data, revised projections for electric vehicle and behind-the-meter photovoltaic (PV) system adoption, a new default time-of-use rate impact analysis, and revised estimates of additional achievable PV, and retains existing estimates of additional achievable energy efficiency; and

WHEREAS, CEDU 2018 will serve as a key input into a number of planning efforts, including transmission and distribution system planning, integrated resource planning, and resource adequacy; and

WHEREAS, the Commission has considered all comments received on the CEDU 2018;

THEREFORE BE IT RESOLVED, the California Energy Commission hereby adopts the CEDU 2018 consisting of the demand forecast forms identified in Appendix A to this Resolution along with any changes identified and adopted today, and directs Commission staff to incorporate the results of the CEDU 2018 into the 2018 Integrated Energy Policy Report Update.

CERTIFICATION

The undersigned Secretariat to the Commission does hereby certify that the foregoing is a full, true, and correct copy of a Resolution duly and regularly adopted at a meeting of the California Energy Commission held on January 9, 2018.

AYE:

NAY:

ABSENT:

ABSTAIN:

Cody Goldthrite
Secretariat

Appendix A

Documents Constituting the California Energy Demand Updated Forecast, 2018-2030

High Baseline Demand

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CEDU 2018 Baseline LADWP Mid Demand Case TN-226115

CEDU 2018 Baseline BUGL Mid Demand Case TN-226117

CEDU 2018 Baseline IID Mid Demand Case TN-226116

Low Baseline Demand

FINAL CEDU 2018 Baseline Statewide Low Demand Case TN- 226266

FINAL CEDU 2018 Baseline PGE Low Demand Case TN- 226257

FINAL CEDU 2018 Baseline SCE Low Demand Case TN- 226264

FINAL CEDU 2018 Baseline SDGE Low Demand Case TN- 226261

CORRECTED CEDU 2018 Baseline NCNC Low Demand Case TN- 226238

CORRECTED CEDU 2018 Baseline SMUD Low Demand Case TN- 226233

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