DOCKETED	
Docket Number:	17-IEPR-03
<b>Project Title:</b>	Electricity and Natural Gas Demand Forecast
TN #:	222673
<b>Document Title:</b>	California Energy Demand 2018-2030 Revised Forecast Resolution
<b>Description:</b>	Resolution No: 18-0221-3
Filer:	Cody Goldthrite
Organization:	California Energy Commission
Submitter Role:	Commission Staff
Submission Date:	2/22/2018 12:33:18 PM
Docketed Date:	2/22/2018

#### **STATE OF CALIFORNIA**

#### STATE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

IN THE MATTER OF:

Docket No. 17-IEPR-03

#### THE 2017 INTEGRATED ENERGY POLICY REPORT (2017 IEPR)

2017 IEPR CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST

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 energy policies 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; and

**WHEREAS**, the Commission held multiple workshops in 2017 to solicit public input from stakeholders on the development of the demand forecast; and

WHEREAS, on January 22, 2018, Staff docketed the CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST report, which describes the California Energy Commission's revised 12-year forecasts for natural gas consumption, electricity consumption, retail electricity sales, and electricity peak demand for each of five major electricity planning areas and for the state as a whole to support the analysis and recommendations of the 2017 Integrated Energy Policy Report; and

WHEREAS, the conclusions in the CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST report are based on information contained in supporting spreadsheets and forms that have also been docketed, and several of the supporting spreadsheets and forms have been revised and docketed; and

WHEREAS, the the CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST report and supporting spreadsheets and forms together identify a demand forecast with three baseline cases and six additional achievable energy efficiency scenarios, and four additional achievable photovoltaic adoption scenarios, and the single or managed forecast is a combination of these three forecast components: a baseline case, an additional achievable energy efficiency scenario and an additional achievable photovoltaic scenario. The Energy Commission, California Public Utilities Commission (CPUC), and California Independent System Operator (ISO) leaderships agree that the same additional achievable energy efficiency and photovoltaic cases should, in principle, be applied to all of the analyses, but that the ability to characterize and assign the locational attributes of the demand forecast, procurement authorizations, and transmission additions is still evolving. The leadership from the Energy Commission, in consultation with the CPUC and the California ISO, selected the mid baseline demand case for the combined investor-owned utility service areas that comprise the California ISO balancing areas, including variants for different weather conditions used in system versus local capacity and reliability studies. This selected baseline will be combined into a single forecast set with the mid-mid additional achievable energy efficiency and photovoltaic scenarios for system-wide and flexibility studies, and the mid-low additional achievable energy efficiency and photovoltaic scenarios for local studies in the 2018-2019 procurement and transmission planning cycles; and

WHEREAS, the California Energy Commission accepts and approves the CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST report and the supporting spreadsheets and forms as identified in Appendix A to this Resolution; and

**WHEREAS,** judicial review of this Resolution is governed by Public Resources Code, section 25901;

**THEREFORE BE IT RESOLVED,** the California Energy Commission hereby adopts the CALIFORNIA ENERGY DEMAND 2018 – 2030 REVISED FORECAST report and supporting spreadsheets and forms identified in Appendix A to this Resolution, directs Commission staff to post the CALIFORNIA ENERGY DEMAND 2018-2030 REVISED FORECAST report and supporting spreadsheets and forms, incorporating any errata adopted today along with any non-substantive changes such as typographical corrections, and to make the document available to the public and the Legislature.

# **CERTIFICATION**

AYE: Weisenmiller, Douglas, McAllister, Hochschild, Scott NAY: None ABSENT: None ABSTAIN: None

Original Signed by:

Cody Goldthrite Secretariat

# Appendix A

## Reports

California Energy Demand 2018-2030 Revised Forecast TN Number: 222287

# **CED 2017 Demand Forms**

Low Case Revised Demand Forecast

- CED 2017 Revised Baseline SCE Low Demand Case TN-222309
- Revised Baseline Natural Gas Planning Area and Sector Low TN-222310
- CED 2017 Revised Baseline NCNC Low Demand Case TN-222311
- CED 2017 Revised Baseline LADWP Low Demand Case TN-222312
- CED 2017 Revised Baseline SMUD Low Demand Case TN-222313
- CED 2017 Revised Baseline Statewide Low Demand Case TN-222314
- CED 2017 Revised Baseline SDGE Low Demand Case TN-222315
- CED 2017 Revised Baseline PGE Low Demand Case TN-222316
- CED 2017 Revised Baseline IID Low Demand Case TN-222435
- CED 2017 Revised Baseline BUGL Low Demand Case TN-222436

Mid Case Revised Demand Forecast

- CED 2017 Revised Baseline NCNC Mid Demand Case TN-222317
- CED 2017 Revised Baseline PGE Mid Demand Case TN-222318
- CEC 2017 Revised Baseline Natural Gas Planning Area and Sector Mid Demand Case TN-222319
- CED 2017 Revised Baseline LADWP Mid Demand Case TN-222320
- CEC 2017 Revised Baseline SMUD Mid Demand Case TN-222322
- CEC 2017 Revised Baseline STATEWIDE Mid Demand Case TN-222323
- CED 2017 Baseline SDGE Mid Demand Case TN-222324
- CED 2017 Revised Baseline SCE Mid Demand Case TN-222325
- CED 2017 Revised Baseline IID Mid Demand Case TN-222433
- CED 2017 Revised Baseline BUGL Mid Demand Case TN-222434

#### High Case Revised Demand Forecast

- CED 2017 Revised Baseline LADWP High Demand Case TN-222301
- Revised Baseline PGE High Demand Case TN-222299
- CED 2017 Revised Baseline SMUD High Demand Case TN-222303
- CED 2017 Revised Baseline Statewide High Demand Case TN-222304
- CED 2017 Revised Baseline SCE High Demand Case TN-222305
- CED 2017 Revised Baseline SDGE High Demand Case TN-222306
- Revised Baseline NCNC High Demand Case TN-222307
- CED 2017 Revised Baseline Natural Gas Planning Area and Sector High TN-222321
- CED 2017 Revised Baseline IID High Demand Case TN-222430
- CED 2017 Revised Baseline BUGL High Demand Case TN-222432

Load-Serving Entity and Balancing Authority Forecast Forms

- LSE and BA Tables Low Baseline Demand High AAEE-AAPV (Revised CCA) TN-Number: 222577
- LSE and BA Tables Low Baseline Demand No AAEE-AAPV (Revised CCA) TN-Number: 222578
- LSE and BA Tables Mid Baseline Demand Low AAEE-AAPV (Revised CCA) TN-Number: 222579
- LSE and BA Tables High Baseline Demand Low AAEE-AAPV (Revised CCA) TN-Number: 222580
- LSE and BA Tables High Baseline Demand No AAEE-AAPV (Revised CCA) TN-Number: 222581
- LSE and BA Tables Mid Baseline Demand Mid AAEE-AAPV (Revised CCA) TN-Number: 222582
- LSE and BA Tables Mid Baseline Demand No AAEE-AAPV (Revised CCA) TN-Number: 222583

# Spreadsheets

## Load Modifier Spreadsheets

- SDGE Load Modifiers Mid Baseline-Mid AAEE-AAPV CED 2017 TN Number: 222473
- PGE Load Modifiers Mid Baseline Mid AAEE-AAPV CED 2017 TN Number: 222472
- SCE Load Modifiers Mid Baseline Mid AAEE-AAPV CED 2017 TN Number: 222471
- CAISO Load Modifiers (Corrected) Mid Baseline Mid AAEE-AAPV CED 2017 TN Number: 222501

## Hourly Forecast Spreadsheets

- PGE TAC Hourly Results 2017-2021 CED 2017 TN-222553
- PGE TAC Hourly Results 2022-2026 CED 2017 TN-222554
- PGE TAC Hourly Results 2027-2030 CED 2017 TN-222551
- SCE TAC Hourly Results 2017-2021 CED 2017 TN-222552
- SCE TAC Hourly Results 2022-2026 CED 2017 TN-222558
- SCE TAC Hourly Results 2027-2030 CED 2017 TN-222556
- SDGE Hourly Results 2017-2021 CED 2017 TN-222557
- SDGE Hourly Results 2022-2026 CED 2017 TN-222555
- SDGE Hourly Results 2027-2030 CED 2017 TN-222559

## Forecast Zone Spreadsheets

• CED Baseline Forecast Zone Results 2017 Revised -TN Number: 222302

### Additional Achievable Energy Efficiency and Behind-the-Meter Photovoltaic Spreadsheets

- All AAEE Savings by Utility-Sector-End Use TN Number: 222392
- AAPV Impacts by Planning Area TN Number: 222398