

**February 20, 2020, California Energy Commission Business Meeting**

**Item 5. 2019 INTEGRATED ENERGY POLICY REPORT.**

**Final 2019 Integrated Energy Policy Report- Clean Version**

<https://efiling.energy.ca.gov/getdocument.aspx?tn=231883>

**Proposed Changes to  
Final 2019 Integrated Energy Policy Report**

**For Consideration at the February 20, 2020  
California Energy Commission Business Meeting**

*Page numbers refer to the report posted on January 31, 2020, that does not show changes in underline-strikeout (docket number 19-IEPR-01, TN# 231883). Added text is shown in underline; ~~deleted text shown in strikeout~~.*

**Executive Summary, p. 4**

Transportation Electrification Is Critical Zero Emission Vehicles are Critical

**Executive Summary, p. 5**

These efforts have helped California become the largest ZEV market in the nation with ~~nearly 700,000~~ more than 650,000 ZEVs on the road and nearly half of the U.S. annual sales.

**Chapter 2, p. 45**

CEC research shows that indoor use of natural gas cooking burners elevates risks of carbon dioxide and nitrous oxide emissions, negatively impacting indoor air quality. The study also found that these pollutants can be controlled with an appropriately sized venting range hood or other kitchen exhaust ventilation that meets minimum airflow and configuration specifications. It is unclear what percentage of existing California kitchens with natural gas cooking burners have range hoods or kitchen exhaust ventilation that meet these specifications.

**Chapter 6, p. 184, footnote 471**

[SoCalGas Winter 2019/2020 Technical Assessment](https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-IEPR-09, TN# 230065),

<https://efiling.energy.ca.gov/Lists/DocketLog.aspx?docketnumber=19-IEPR-09, TN# 230065>. SoCalGas assumes a 10 to 15 percent discounting of pipeline supply depending on the scenario. The joint agencies including the CEC rejected SoCalGas' proposal to discount pipeline supplies by 15 percent in April 2017 and began producing their own technical assessments separate from SoCalGas. Staff recognizes that customers choose how much gas to deliver. Staff relies on the long-standing treatment of receipts used in the utilities' California Gas Report and has not accepted SoCalGas' request to discount pipeline supply in staff's analysis of the utility's system ~~to use assumptions that automatically show an increased need for withdrawals from Aliso Canyon~~. In general, SoCalGas' analysis is more conservative due to the discounting of pipeline supply and shows noncore curtailments in the cold weather case with both lines in service whereas CEC's analysis does not. Staff recognizes that if customers do not bring in supply or are unable as in the scenario with both lines out of service, the risk of noncore curtailments increases.

## Chapter 9, p. 238

A publication released in September 2019 by Gridworks references the E3 study and urges the state to initiate an integrated, interagency long-term transition plan for the state's gas system with the goal of minimizing costs and risks for all. Furthermore, the Southern California Edison study, Pathway 2045 estimates that a small number of gas generators will still be necessary in the future for grid reliability. The study also asserts that at least 40 percent of the remaining gas in 2045 will need to be low-carbon fuels such as biomethane or hydrogen. Finally, Lawrence Livermore National Laboratory released a report in January 2020 detailing three pathways California could take to achieve carbon neutrality by 2045 (1) increase the uptake of carbon in its natural and working lands, (2) convert waste biomass into fuels and store carbon dioxide emissions associated with fuel processing, and (3) remove carbon dioxide directly from the atmosphere with purpose-built machines.\*\*

In addition, the CPUC initiated a process to prepare for the decline in natural gas and the state's transition to other energy sources.

\*\* *new footnote*: Lawrence Livermore National Laboratory, [Getting to Neutral: Options for Negative Carbon Emissions in California](https://www-gs.llnl.gov/content/assets/docs/energy/Getting_to_Neutral.pdf), January 2020, [https://www-gs.llnl.gov/content/assets/docs/energy/Getting\\_to\\_Neutral.pdf](https://www-gs.llnl.gov/content/assets/docs/energy/Getting_to_Neutral.pdf).

Appendix D, p. D-1, Table 42

Correcting a formatting issue in the table to add a new row for “Anaheim.”

**Table 42: Summary of POU’s Integrated Resource Plan Resource Mix**

POU Name	Generation by POU and Resource Type (GWhs)	Percentage of Total Energy, by Year and POU	Percentage of Total Energy, by Year and POU	Percentage of Total Energy, by Year and POU	Percentage of Total Energy, by Year and POU			
Anaheim	2018	2019	2025	2030	2018	2019	2025	2030
Anaheim								
Solar	7	7	123	122	0%	0%	5%	5%
Other Renewables	366	370	372	759	16%	16%	16%	33%
Wind	169	169	56	131	7%	7%	2%	6%
Large Hydro	38	38	38	38	2%	2%	2%	2%
Coal	1,086	1,141	1,097	0	47%	50%	48%	0%
Natural Gas	873	866	746	794	38%	38%	33%	35%
Net Market Purchases	-247	-297	-157	427	-11%	-13%	-7%	19%
<b>Anaheim Total</b>	<b>2,292</b>	<b>2,294</b>	<b>2,275</b>	<b>2,272</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>
Burbank								
Solar	98	91	268	264	8%	8%	22%	22%
Other Renewables	48	60	60	60	4%	5%	5%	5%
Wind	54	76	465	404	4%	6%	39%	33%
Energy Storage	0	0	0	106	0%	0%	0%	9%
Large Hydro	19	21	21	22	2%	2%	2%	2%
Nuclear	81	86	86	86	6%	7%	7%	7%
Coal	444	455	180	0	35%	38%	15%	0%
Natural Gas	472	586	507	466	37%	49%	43%	38%

STATE OF CALIFORNIA

STATE ENERGY RESOURCES  
CONSERVATION AND DEVELOPMENT COMMISSION

*IN THE MATTER OF:*

Docket No. 19-IEPR-01

***THE 2019 INTEGRATED ENERGY  
POLICY REPORT (2019 IEPR)***

***ADOPTION OF THE 2019 INTEGRATED  
ENERGY POLICY REPORT***

**WHEREAS**, Public Resources Code § 25301(a) 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"; and

**WHEREAS**, the Integrated Energy Policy Report (IEPR) contains these assessments and associated policy recommendations and is adopted every two years; and

**WHEREAS**, on March 20, 2019, Janea A Scott, Lead Commissioner for the 2019 IEPR, released a Scoping Order which identified the following topics to be included in the 2019 IEPR: all topics required by law to be included in the report; progress of efforts to reduce pollution from the transportation sector; advancement of energy equity so that low-income and disadvantaged communities share the benefits of a transformed energy sector; statewide efforts on the advancement in energy efficiency and building decarbonization; identification of issues and potential solutions in the electricity sector to support California's 2030 goals for greenhouse gas reductions, zero-emission vehicles, and a 60 percent Renewables Portfolio Standard; exploration of the role of natural gas in a decarbonized future; ongoing monitoring assessment of the energy reliability in Southern California; and discussions to address major climate risks to the state's communities and energy systems; and

**WHEREAS**, there were 25 public workshops conducted by staff, the Lead Commissioner, or jointly by the Energy Commission with one or more of the following organizations—the California Public Utilities Commission (CPUC), the California Independent System Operator (California ISO), the California Air Resources Board, and the Los Angeles Department of Water and Power—between October 2, 2018, and December 2, 2019, to solicit input from stakeholders on these topics; and

**WHEREAS**, the Lead Commissioner released a Notice of Availability for the *Draft 2019 IEPR* for public review on November 8, 2019, and comment by November 27, 2019; and

**WHEREAS**, after considering all comments received, the Lead Commissioner released the *Final 2019 IEPR* on January 31, 2020; and

**WHEREAS**, the *Final 2019 IEPR* contains demand forecasts which reflect expected impacts from recent economic and demographic projections, projections of electric vehicle adoption, and projections of behind-the-meter photovoltaic and storage system adoption and which are consistent with the latest historical data available for consumption, peak demand, temperatures, electricity rates, and energy efficiency program activity; and includes three baseline scenarios designed to capture a reasonable range of demand outcomes during the next 10 years with six additional achievable energy efficiency (AAEE) savings scenarios developed. Paired with baseline scenarios, these form managed demand forecasts for planning purposes. The lead staff at the California Energy Commission (CEC), the CPUC, and the California ISO with oversight from the assigned CEC and CPUC commissioners and a senior executive from California ISO, identified variants of the adopted demand forecast to be used in specific planning applications, which are described as the “single forecast set agreement” in the text of Chapter 7 of the *2019 IEPR*; and

**WHEREAS**, California Energy Commission has considered the application of the California Environmental Quality Act (CEQA) to the adoption of the *Final 2019 IEPR*, concluded that its adoption is not a “project” under CEQA, but that in the event that adoption were determined to be a project, that it would nonetheless be exempt from CEQA requirements pursuant to the “common sense” exemption (CEQA Guidelines, § 15061, subd. (b)(3)); and

**WHEREAS**, the California Energy Commission accepts and approves the *Final 2019 IEPR* with the changes identified at its February 20, 2020, Business Meeting.

**THEREFORE BE IT RESOLVED**, the California Energy Commission hereby adopts the *Final 2019 IEPR* including any errata or other modifications proffered and accepted and directs Commission staff to incorporate into the *Final 2019 IEPR* any errata or other modifications adopted today along with any non-substantive changes such as typographical corrections, and make the document available to the public and the Legislature.

**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 CEC held on February 20, 2020.

AYE:

NAY:

ABSENT:

ABSTAIN:

---

Cody Goldthrite  
Secretariat