

**February 16, 2022, California Energy Commission Business Meeting**

**Item 3. 2021 INTEGRATED ENERGY POLICY REPORT.**

**Final 2021 Integrated Energy Policy Report (Final 2021 IEPR) Volume I, II, IV and Appendix**

**2021 IEPR VOLUME I - BUILDING DECARBONIZATION:**

- Final 2021 Integrated Energy Policy Report Volume I Building Decarbonization (Clean Version) [HTTPS://EFILING.ENERGY.CA.GOV/GETDOCUMENT.ASPX?TN=241361](https://efiling.energy.ca.gov/GetDocument.aspx?tn=241361)
- Final 2021 Integrated Energy Policy Report Volume I Building Decarbonization (Track Changes Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241357>

**2021 IEPR VOLUME II - ENSURING RELIABILITY IN A CHANGING CLIMATE:**

- Final 2021 Integrated Energy Policy Report Volume II Ensuring Reliability in a Changing Climate (Clean Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241362>
- Final 2021 Integrated Energy Policy Report Volume II Ensuring Reliability in a Changing Climate (Track Changes Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241358>

**2021 IEPR VOLUME IV - CALIFORNIA ENERGY DEMAND FORECAST**

- Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast (Clean Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241363>
- Final 2021 Integrated Energy Policy Report Volume IV California Energy Demand Forecast (Track Changes Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241359>

**2021 IEPR - APPENDIX**

- Final 2021 Integrated Energy Policy Report Appendix Assessing the Benefits and Contributions of the Clean Transportation Program (Clean Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241364>
- Final 2021 Integrated Energy Policy Report Appendix Assessing the Benefits and Contributions of the Clean Transportation Program (Track Changes Version) <https://efiling.energy.ca.gov/GetDocument.aspx?tn=241360>

# **Proposed Changes to *Final 2021 Integrated Energy Policy Report***

## **For Consideration at the February 16, 2022 California Energy Commission Business Meeting**

*Page numbers refer to the clean version of report posted on February 1, 2022 (docket number 21-IEPR-01, TN# 241361). Added text is shown in underline; ~~deleted text shown in strikeout~~.*

### **Volume I: Building Decarbonization, Chapter 2, pages 45–46:**

- On December 13, 2021, the CPUC issued a proposed decision for proceeding R.20-08-020.<sup>[1]</sup> The proposed decision puts forward a new net billing tariff that includes four components, it would:
  - o Pays net billing customers for the electricity they export to the grid based on the value, determined by the avoided cost to the utility of buying clean energy elsewhere.
  - o Charges net billing customers for the electricity they receive from the grid based on high differential time-of-use tariffs, creating more benefit for customers who install storage and offering them incentives to store solar energy and shift exports later in the day.
  - o Creates a grid participation charge based on the size of the solar system to ensure that net-billing customers are paying the same fixed costs of the electric grid as non-net-billing customers.
  - o Provides a market transition credit so that customers can pay back the cost of a new solar plus storage energy system in less than 10 years, ensuring that the solar industry in California continues to grow and rooftop solar remains economical. The credit ~~will~~ would phase out for new customers over four years.

The net billing tariff would offers incentives for storage adoption to support net peak reliability, promotes equity, and supports the sustainable growth of customer-sited renewable energy. ~~The proposed decision may be heard, at the earliest, at the CPUC's January 27, 2022, voting meeting. If adopted as written, the proposed decision would implement a sunset on the NEM 2.0 tariff four months after issuance of the final decision and the next phase of the NEM proceeding will include workshops to consider community project tariffs, which will be coordinated with other related proceedings. The next phase would also include a workshop by April 30, 2022, to solicit stakeholder feedback on the allocation of the Equity Fund, and a ruling to seek stakeholder input on the five-year evaluation of the net billing tariff, with a focus on affordability and equity metrics.~~

On February 3, 2022, the Administrative Law Judge managing that proceeding informed parties that the proposed decision, "will not appear on the [CPUC's] voting meeting agenda until further notice. On January 11, 2022, the [CPUC] reassigned Rulemaking 20-08-020 to President Alice Reynolds. The assigned Commissioner has requested additional time to analyze the record and consider revisions to the proposed decision based on party comments."<sup>1</sup>

**Volume I: Building Decarbonization, Chapter 6, page 153:**  
**Infrastructure**

New infrastructure ~~will~~could be required for decarbonization, such as additional electricity generation and delivery infrastructure to support electrification, or construction of pipelines for decarbonization efforts involving green hydrogen or carbon capture and utilization or sequestration, respectively.

**Volume I: Building Decarbonization, Chapter 7, page 180:**

- Heat pumps are a critical enabling technology for achieving building decarbonization. As such, the California Energy Commission (CEC), recommends a goal of installing at least 6 million heat pumps in new and existing buildings by 2030. Further, the CEC commits to working with stakeholders — including manufacturers, labor, local governments, environmental advocates, and others — to accelerate the market to meet this goal and to push beyond it toward comprehensive migration to heat pumps for space and water heating. The CEC is planning a public workshop to discuss the heat pump deployment target, related impacts, and steps needed to achieve it.

**Volume I: Building Decarbonization, Glossary, page 194:**

~~**Renewable gas**~~ refers to gas produced from waste and a variety of renewable and sustainable biomass sources.

There are several definitions of **renewable gas** and biomethane in statute and in use by different state agencies. Generally, renewable gas, also known as biomethane, includes, but is not limited to, gas that is produced from anaerobic decomposition or thermochemical conversion of biomass, including RPS-eligible sources.

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<sup>1</sup> CPUC. [Net Energy Metering Revisit Rulemaking R.20-08-020](https://www.cpuc.ca.gov/nemrevisit). <https://www.cpuc.ca.gov/nemrevisit>.

**STATE OF CALIFORNIA  
ENERGY RESOURCES CONSERVATION  
AND DEVELOPMENT COMMISSION**

Docket No. 21-IEPR-01

In the Matter of:

*THE 2021 INTEGRATED ENERGY  
POLICY REPORT (2021 IEPR)*

*Adoption of the 2021 Integrated  
Energy Policy Report*

**WHEREAS**, the Warren-Alquist Act requires the California Energy Commission (CEC) in odd-numbered years 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, subd. (a)); and to update these assessments and forecasts in even-numbered years (Public Resources Code § 25302, subd. (c)); and

**WHEREAS**, on March 16, 2021, the Lead Commissioner issued a Scoping Order for the *2021 Integrated Energy Policy Report* stating that the *2021 Integrated Energy Policy Report* would address the following four major topics as well as an analysis of the benefits of transitioning to a clean transportation system: (1) energy reliability over the next five years; (2) natural gas outlook and assessments; (3) building decarbonization and energy efficiency; and (4) energy demand. To this end, the CEC has produced the 2021 IEPR as four volumes and an appendix consisting of: (1) a report on actions needed to reduce the greenhouse gases (GHGs) related to buildings in which Californians live and work, with an emphasis on energy efficiency, and reducing GHGs from the industrial and agricultural sectors; (2) a report on actions needed to increase the reliability and resiliency of California's energy system; (3) an assessment of the evolving role of gas in California's energy system, both the importance in near-term reliability and the need for the system to evolve as California works to achieve carbon neutrality by 2045; (4) an assessment of California's energy demand outlook, including a forecast to 2035 and long-term energy demand scenarios to 2050; and (5) an evaluation of the benefits of California's Clean Transportation Program.

**WHEREAS**, 21 public workshops were held between January 2021 and December 16, 2021, to solicit input from stakeholders on these topics; and

**WHEREAS**, the Warren-Alquist Act requires the CEC to consult with various entities in preparing the IEPR including the California Public Utilities Commission (CPUC), CPUC Public Advocates Office, California Air Resources Board, California Independent System Operator (California ISO), Department of Water Resources, Department of Transportation, and Department of Motor Vehicles, and any federal, state, and local agencies it deems necessary (Public Resources Code §25302(d)), and the CEC has so consulted with these entities during preparation of the 2021 IEPR; and

**WHEREAS**, on December 7, 2021, the Lead Commissioner published the draft *2021 IEPR, Volumes I, II, IV, and the Appendix* for public review and comment, and, after considering all comments received, published the proposed final version on February 1, 2022, along with a Notice of Intent to Adopt at this regularly scheduled Business Meeting; and

**WHEREAS**, the draft 2021 IEPR, Volume III on the evolving role of gas in California's energy system was published on January 12, 2022, and will be adopted at a later date; and

**WHEREAS**, the CEC has considered the application of the California Environmental Quality Act (CEQA) to the adoption of the *2021 Integrated Energy Policy Report, Volumes I, II, IV, and the Appendix*, and concluded that the adoption of these reports 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)).

**THEREFORE BE IT RESOLVED**, the CEC hereby accepts, approves, and adopts the Final *2021 Integrated Energy Policy Report, Volumes I, II, IV, and the Appendix*, incorporating any changes presented and adopted today along with any non-substantive changes such as typographical corrections, and directs CEC staff to make the document accessible to state, local, and federal entities, the public, and the Legislature.

#### CERTIFICATION

The undersigned Secretariat to the CEC 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 16, 2022.

AYE:

NAY:

ABSENT:

ABSTAIN:

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Liza Lopez  
Secretariat