CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES
QUARTERLY STAFF REPORT
JANUARY – MAY 2020

I. EXECUTIVE SUMMARY: THE PAST QUARTER AT A GLANCE *(pages 3–4):*

Western Grid Integration *(full report on page 5)*
CEERT's V. John White has participated in discussions with Western Grid Group affiliates on expansion of the *Enhanced Day Ahead Market* (EDAM) and its implications for renewable energy integration, especially on resource adequacy issues and accurate GHG accounting for out-of-state resources.

CEERT's Carleigh Osen is co-facilitator of the *Western Clean Energy Advocates Resource Adequacy Working Group*, which aims to accelerate the clean energy transformation while improving the reliability and economic performance of the Western grid.

Los Angeles Department of Water and Power (LADWP) *(full report on page 5)*
The *LA 100% Clean Energy Study* should be completed this fall. The emerging picture is a 50% larger electricity demand, with *energy efficiency*, *demand response* and *distributed resources* as critical elements. *Transmission reinforcements within the LA Basin* that will allow significantly lower fossil generation are already underway. Transmission expansion to support *increased imports* is the next topic for discussion.

Transmission Planning and Development *(full report on page 5)*
Jim Caldwell and V. John White held discussions with LADWP, the California Independent System Operator (CAISO), Southern California Edison (SCE), and the Transmission Agency of Northern California (TANC) on the need for more robust, strategic *transmission planning* that looks beyond the CPUC's narrow future generation portfolio assumptions, and that coordinates between municipal and investor-owned utilities such as LADWP and SCE. CEERT also met with TRED, a company that seeks to build an underwater direct-current transmission line between Diablo Canyon and Los Angeles to bring offshore wind from the Central Coast to the heart of the LA Basin.

Long-Duration Energy Storage *(full report on page 6)*
CEERT continued to engage in discussions with project developers for *pumped hydro* and new *long-duration storage* (LDS) technologies. The California Public Utilities Commission's (CPUC's) Integrated Resource Planning (IRP) decision had contradictory findings about the need for LDS and strategies for procuring it. The LADWP 100% Clean Energy Plan looks at LDS technologies including compressed air, renewable hydrogen, solar thermal, and molten salt storage, and at imports of pumped hydro from the Pacific Northwest and Hoover Dam.

Clean Energy and Economic Recovery *(full report on page 6)*
CEERT convened the *Alliance for a Clean Economy*, a broad group of clean-energy companies, organizations, and advocates, to develop a campaign to put forward clean-energy investments and projects as crucial underpinnings for California's economic recovery from the pandemic. Legislative proposals or initiatives by the Governor may emerge to accelerate investment in clean-energy infrastructure, including a possible *"green recovery" bond issue* that could go before the voters in November.

Advocacy at the California Air Resources Board and California Energy Commission *(full report on page 6)*
CEERT has briefed CARB and CEC staff on our concerns with the CPUC's IRP modeling assumptions and its excessively high greenhouse gas (GHG) target. We believe California needs an *interagency*

power-sector planning process, like the CEC/CARB/CPUC work on implementing SB 100, that can help create consensus on the dramatic GHG emission reductions needed in the next few years.

Clean-Energy Advocacy at the California Public Utilities Commission *(full report on pages 6–28)*
CEERT was among the parties that offered or supported proposed changes in *PG&E's corporate structure* that would further GHG emission reductions.

We asked that a *moratorium* on further changes not be included in the CPUC's approval of *PG&E's regional restructuring plan*. The CPUC eventually agreed with our position, and clarified in a Revised Proposed Decision that adoption of the restructuring plan would not result in a such moratorium.
The CPUC adopted a *new standard-offer contract*, consistent with PURPA regulations, for Qualifying Facilities of 20 MW or less seeking to sell electricity and/or capacity to a CPUC-jurisdiction utility.

CEERT strongly objected to CPUC reliability-procurement moves to extend retirement deadlines for gas-fired once-through-cooling (OTC) plants rather than authorize *preferred resources and resource hybrids*. We argued that such moves should require clean-energy replacement of the OTC capacity by the end of the extension period.

CEERT was joined by multiple parties in arguing for adoption of a *30 million metric tons GHG emission reduction target*, rather than the 46 MMT target in the IRP's Reference System Portfolio. The latter relies on faulty modeling and assumptions, and is not in compliance with the state's climate-change mandates. A CPUC final decision required *IRPs* to plan for meeting *both a 38 MMT and a 46 MMT target*.

Led by proposed adoption of a Maximum Cumulative Capacity (MCC) buckets proposal that essentially locks in today's resource mix, including roughly 28 gigawatts of gas, CPUC decisions in its *Resource Adequacy (RA) proceeding* continue to be a serious impediment to broader objectives for decarbonization of the electric grid.

The CPUC granted with modification a Joint Motion by CEERT, Enel X, Vote Solar, Tesla, Sunrun, and CESA to establish a process for determining the *capacity value of hybrid resources*.

Numerous parties agreed with CEERT that a Proposed Decision (PD) on *central procurement of RA resources* at this time is costly and unnecessary, and that the structure of the PD's central procurement entity would make it very difficult to procure new preferred resources.

CEERT recommended that Energy Division publish a report on megawatts of *demand response* available for CAISO dispatch, the number of participating customers and their payments, and megawatt-hours actually dispatched; and that the CPUC examine why DR is falling short of its technical and economic promise for California. We also filed Comments urging that gas IOUs be required to establish programs for zero-carbon resources such as DR to mitigate safety risks, improve reliability, and meet climate goals.

We objected to PG&E's *Distributed Generation-Enabled Microgrid Services* proposal as it was likely to result in long-term commitments to gas or diesel resources.

Two new pilot programs will develop valuable market experience in *decarbonizing residential buildings*.

The *Distributed Resource Plans proceeding* will decide on a methodology for determining avoided transmission and distribution costs, and how the methodology will be applied to the *Avoided Cost Calculator*.

Clean Transportation Advocacy *(full report on pages 28-31)*

To reduce a major source of air and climate pollution, CEERT continues to support the state's *goals for passenger vehicles*, oppose any weakening of *state and national vehicle standards*, and encourage further growth of California's burgeoning *zero-emission vehicle (ZEV) market*.

CEERT is participating in a small coalition urging that CARB evaluate *a full transition of ride-hailing services to ZEVs* by 2030.

We are also part of the ACT Coalition, which successfully advocated that by 2030 at least 15% of *medium- and heavy-duty trucks* on the road must be *zero-emitting*. The Coalition is urging CARB to commit to transitioning all the state's trucks to be zero-emitting within the next 20-25 years.

Western Grid Integration

CEERT Executive Director V. John White has participated in discussions with Vijay Satyal of Western Resource Advocates and other Western Grid Group (WGG) affiliates on expansion of the Enhanced Day Ahead Market (EDAM) and its implications for renewable energy integration. John reviewed WGG's comments in the EDAM process and is evaluating how proceedings at the California Public Utilities Commission (CPUC) and the California Independent System Operator (CAISO) may affect EDAM, especially on resource adequacy (RA) concerns. John will coordinate with WGG on future comments on the EDAM, notably on accurate real-time greenhouse-gas (GHG) accounting for out-of-state resources.

CEERT has been participating in biweekly Western Clean Energy Advocates (WCEA) meetings on regional markets, as well as the newly formed WCEA Resource Adequacy (RA) Working Group, which is made up of clean energy, public interest, and industry leaders from across the West and aims to accelerate the clean energy transformation while improving the reliability and economic performance of the Western grid. The WCEA RA Working Group will help CEERT keep up to date on RA issues and events in the West and further our advocacy for more effective RA. CEERT Policy Analyst Carleigh Osen is co-facilitator of the WCEA RA Working Group, which had its first meeting on May 26.

Los Angeles Department of Water and Power (LADWP)

The orderly rollout of results from the LA 100% Clean Energy Study has been lengthened and made virtual by the pandemic response. Roughly half of the study's modeling has been completed, analyzed, and communicated to the Advisory Committee, with the major topics of near-term no-regrets investments and transmission expansions yet to be discussed in detail. These will be the subjects of webinars in July.

The picture that is emerging is an approximately 50% larger electricity demand, with energy efficiency, demand response and customer-owned distributed resources as critical elements to hold down peak demand and improve system load factor for cost-effectiveness. In-Basin transmission reinforcements to allow significantly lower fossil generation are already underway. Transmission expansion to support increased imports, plus establishing connections to resources across the Western Electricity Coordinating Council territory, is the next topic for discussion.

The crux of the issue is how to go the "last mile" from roughly 90% zero-carbon to 100% zero-carbon, and how to define "100%" as the revamped electric grid supports decarbonization of transportation and buildings. The study is on track to be completed late this fall.

Transmission Planning and Development

As part of our advocacy to expand transmission needed to meet clean-energy and GHG-emission targets, CEERT's Jim Caldwell and V. John White have had discussions with the California Independent System Operator (CAISO), Los Angeles Department of Water and Power (LADWP), Southern California Edison (SCE), and the Transmission Agency of Northern California. A common thread in these talks has been the need for a more robust and strategic approach to transmission planning that looks beyond the narrow future generation portfolio assumptions the California Public Utilities Commission (CPUC) has developed. A second subject has been the need to coordinate transmission planning across load-serving entities, especially between publicly owned utilities and investor owned utilities such as LADWP and SCE. One idea is to create an informal utility transmission planning group like the one that worked together during the time of the Renewable Energy Transmission Initiative (RETI).

CEERT also met with Bob Mitchell of TRED, an experienced transmission developer that had a lead role on Path 15. They are seeking to build an underwater, direct-current transmission line between Diablo Canyon and Los Angeles to bring offshore wind from the Central Coast to the heart of the LA Basin. This project would be a crucial link for offshore wind, and would help reduce dependence on gas-fired

generation. But under current CPUC transmission planning and Integrated Resource Planning (IRP) modeling assumptions, the project would not be eligible for CAISO to study.

Long-Duration Energy Storage

CEERT has continued to engage in discussions on the opportunities and advantages of long-duration storage with a broad range of stakeholders, including project developers for pumped hydro and new long-duration storage technologies, environmental and environmental-justice NGOs, and other clean-energy advocates. The CPUC's IRP decision had contradictory findings about the need for long-duration storage and strategies for procuring it, and we are hopeful that there will be a sharper focus on the subject in the next round of the IRP.

The LADWP 100% Clean Energy Plan, which is now being developed with consulting and modeling support from the National Renewable Energy Laboratory, gives significant attention to multiple long-duration storage technologies, including compressed air, renewable hydrogen, solar thermal, and molten salt storage. It also weighs imports of new pumped hydro from the Pacific Northwest and Hoover Dam.

Clean Energy and Economic Recovery

CEERT convened the Alliance for a Clean Economy, a broad group of clean-energy companies, organizations and advocates to develop a campaign to put forward clean-energy projects and investments as crucial underpinnings for California's economic recovery. With excellent facilitation by Arthur Haubenstock and Gridworks, the Alliance developed the attached letter to the Governor, policymakers, and the Steyer Commission on Economic Recovery. The group includes many CEERT affiliates, but also other organizations. Next steps are to develop an op-ed calling for the Governor to take action to remove bureaucratic barriers to clean-energy investments, and a follow-up letter with specific recommendations.

Depending on how the next few weeks of the legislative session play out, legislative proposals or initiatives by the Governor may emerge to accelerate investment in clean-energy infrastructure as part of the state's economic recovery from the pandemic, including a possible "green recovery" bond issue that could go before the voters in November.

Discussions with the Governor's Office

We have not had much contact with the Governor's office so far this year, given their preoccupation with the PG&E bankruptcy and wildfire power system shutoffs. We have kept them informed of our views and filings at the CPUC on flaws in the IRP assumptions and the need for reform of resource adequacy.

Advocacy at the California Air Resources Board (CARB) & California Energy Commission (CEC)

As part of our advocacy supporting the implementation of SB 100, we have briefed both CARB and CEC staff on our concerns with the CPUC's IRP modeling assumptions, and our belief that the high GHG target for the power sector selected in the IRP decision won't achieve the necessary emission reductions to meet the 2030 statewide target. We contrasted the CPUC's narrow approach to long-term planning with the more comprehensive and robust process LADWP and NREL are carrying out.

We continue to believe that California will need to restructure its current power-sector planning process to be more of a collaborative, interagency effort, much more akin to the CEC/CARB/CPUC joint work on the implementation of SB 100, and are hopeful of building an independent, transparent modeling and planning process at the CEC that can help create a statewide consensus on how best to achieve the dramatic GHG emission reductions needed in the next few years.

Advocacy at the California Public Utilities Commission (CPUC)

CPUC Investigations of PG&E (i.e., Plan of Reorganization) and SoCalGas/Sempra

CPUC Investigation of Pacific Gas & Electric's (PG&E's) Governance and Safety Culture (I.15-08-019)
This investigation, instituted in 2015, was brought to life again in 2019 due to PG&E's misconduct and mismanagement related to wildfires and gas service, with a process started in Summer 2019 to consider proposals to improve PG&E's safety culture. CEERT was among the parties that offered or supported proposed changes in PG&E's corporate structure that would advance reductions in greenhouse gas (GHG) emissions (i.e., the Climate Center's Open Access Distribution System Operator (OA-DSO) proposal) (see, e.g., CEERT-Climate Center Joint Response to Order Instituting Investigation filed in I.19-09-016), especially where the CPUC itself had acknowledged that climate change had been a significant factor in the rise of wildfires in California. Other proposals have extended to municipalization of PG&E and limitation of PG&E to a "wires-only" (transmission) company.

From Fall 2019 to the present, however, this proceeding has largely been on hold as the CPUC focused on a review of PG&E's plan of reorganization to exit bankruptcy in I.19-09-016. As indicated below, CEERT has participated in I.19-09-016 to ensure that any approval of a PG&E reorganization plan will not serve to limit or defer the Commission's continuing consideration of other changes to PG&E to improve its safety culture and operation in I.15-08-019. Revisions to the pending Proposed Decision in I.15-08-019 agreeing with CEERT on that point and the statutory extension of time for I.15-08-019 authorized in D.20-05-025, issued on May 7, do appear to indicate that consideration of these proposals has not been made moot by approval of PG&E's reorganization plan.

PG&E Bankruptcy – I.19-09-016
I.19-09-016 was instituted to consider PG&E's plan of reorganization to exit bankruptcy, which was ultimately amended a few times from its initial filing to the present (both before the Bankruptcy Court and the CPUC), especially in response to criticism from the Governor in December 2019 that "the Amended Plan and the restructuring transactions do not result in a reorganized company positioned to provide safe, reliable, and affordable service to its customers." (See: NY Times 12-13-19). In this same time period, the Bankruptcy Court has approved, but also reconsidered, PG&E's key proposed settlements with wildfire victims and insurance companies.

The schedule for I.19-09-016 has been driven by the June 30, 2020 statutory deadline adopted in AB 1054 for PG&E to be eligible to participate in the wildfire fund enacted in that statute. PG&E and parties served testimony on the merits of PG&E's reorganization plan as to both financial and non-financial issues in late January (PG&E) and February (other parties). CPUC President Batjer issued an Assigned Commissioner's Ruling & Proposals on February 18, which, relying on PG&E's January 31 testimony, offered proposals on PG&E's corporate structure, including support for its proposed "regional restructuring." This testimony and the proposals were addressed during in-person evidentiary hearings held from February 26 through March 4 (concluding just prior to the Covid-19 shelter-in-place orders). Briefs on the hearing record and comments on the ACR Proposals were filed on March 13 and 26.

CEERT filed Opening and Reply Comments on the ACR Proposals on March 13 (CEERT Opening Comments) and March 26 (CEERT Reply Comments). While we supported PG&E's commitment in its reorganization plan to assume all "renewable energy power purchase agreements" in compliance with AB 1054, we raised concerns about the ACR's effective approval of PG&E's "regional restructuring" plan, which PG&E only vaguely identified and merely called for establishing more local PG&E offices and outreach. Despite this vagueness, PG&E asked that adoption of its regional restructuring plan entail imposing a moratorium on CPUC consideration of any and all other structural changes to PG&E, including those submitted and still pending in I.15-08-019, for a period of five years. Such an outcome would forestall genuine changes to PG&E's corporate structure that would actually put it in a better position than it is today to make "continued progress toward" California's climate goals, especially as needed to mitigate the risk of future wildfires. Therefore, CEERT asked that such a moratorium not be part of approval of PG&E's "regional restructuring" plan, a request that was supported by other parties to the proceeding.

On April 20, the Commission issued its Proposed Decision Approving PG&E Reorg Plan. While the Proposed Decision noted in various places PG&E's misconduct and the CPUC's ongoing authority to regulate PG&E, it nevertheless adopted PG&E's "regional restructuring" plan largely without providing more clarity on its terms and without specifically rejecting PG&E's moratorium proposal. On May 11, CEERT filed Opening Comments on PD, supported by multiple parties in Reply Comments, requesting that the Commission make clear that adoption of PG&E's regional restructuring proposal does not limit or create a moratorium, by time or issue, on CPUC consideration of proposals for further PG&E corporate changes made in I.15-08-019 and other proceedings.

In a Revised Proposed Decision, published on May 19 and re-published on May 22, the CPUC provided revisions agreeing with CEERT: "To clarify, the Commission's adoption of a regional restructuring plan does not directly or indirectly approve or otherwise result in a moratorium on Commission action or otherwise limit the Commission's authority." The PD, both originally and as revised, also made clear that the OA-DSO proposal should be considered in I.15-08-019.

On May 21, the CPUC was scheduled to consider the RPD at its Business Meeting, but had to hold the matter over to May 28 because of an "illegal" ex parte communication that had occurred the week of May 21, when such communications were prohibited. That communication amounted to wildfire victim Will Abrams sending documents from the Bankruptcy proceeding to the service list, but it was deemed an ex parte communication.

On May 28, the CPUC issued D.20-05-053 approving PG&E's reorganization plan, despite extensive public comments at both meetings in opposition to the plan. All Commissioners spoke on this topic and emphasized PG&E's past failures, including failure to take responsibility for its misconduct, but noted that the measures adopted in D.20-05-053 aim to ensure the company will change, or be at risk of forfeiting its Certificate of Public Convenience and Necessity, described by Commissioners as a privilege, not a right. Of the immediate actions referenced by Commissioner Batjer was the requirement for PG&E to file an application for approval of a regional restructuring plan within 30 days of issuance of D.20-05-053.

Commissioner Guzman-Aceves' statements were most notable. She held that the CPUC had not actually had the tools to deal with such a "colossal failure" as PG&E, and that that would change with the enactment of SB 350 (Hill) (Amended May 14, 2020), the "Golden State Energy Act." That bill would give the CPUC the authority, if PG&E did not conform to CPUC directions, to appoint a receiver to assume possession and operation of the company, and the Governor the authority to "incorporate Golden State Energy as a nonprofit public benefit corporation for the purpose of owning, controlling, operating, or managing electrical and gas services for its ratepayers and for the benefit of all Californians."

CPUC's Investigation of PG&E Maintenance, Operations and Practices (I.19-06-015)

On June 27, 2019, the CPUC issued I.19-06-015, an Order Instituting Investigation on the CPUC's Own Motion into the Maintenance, Operations and Practices of PG&E with Respect to its Electric Facilities; and Order to Show Cause Why the CPUC Should not Impose Penalties and/or Other Remedies for the Role PG&E's Electrical Facilities Had in Igniting Fires in Its Service Territory in 2017. On December 17, a proposed settlement agreement (SA) was filed by PG&E, the CPUC's Safety and Enforcement Division (SED), the CPUC Offices of the Safety Advocate, and the Coalition of California Utility Employees, resolving all issues in I.19-06-015 concerning penalties and other remedies that should be imposed on PG&E for the role its electrical facilities played in igniting wildfires in 2017 and 2018.

On May 7, the Commission issued D.20-05-019 approving the SA with modifications and closing the proceeding, pending approval of the SA by the Bankruptcy Court. D.20-05-019 imposes penalties on PG&E totaling $2.137 billion, which consist of: $1.823 billion in disallowances for wildfire-related expenditures

(an increase of $198 million from the proposed SA); $114 million in System Enhancement Initiatives and corrective actions (an increase of $64 million from the proposed SA); and a $200 million fine payable to the General Fund, which shall be permanently suspended. In addition, D.20-05-019 requires any tax savings associated with the shareholder obligations for operating expenses under the SA, as modified by this decision, to be returned to the benefit of ratepayers. D.20-05-019 concludes that its modifications to the SA are "appropriate given the widespread harm resulting from the 2017 and 2018 fires at issue in this investigation; the uncertainty that PG&E would otherwise recover from ratepayers a substantial portion of the costs identified in the settlement agreement; the anticipated tax savings for PG&E associated with its shareholder I.19-06-015; and the importance of fines to punish and deter future misconduct and in light of Commission precedent."

CPUC's Investigation of SoCalGas/Sempra (I.19-06-014)
On June 27, 2019, the CPUC issued I.19-06-014, an Order Instituting Investigation to determine whether SoCalGas's and Sempra's organizational culture and governance prioritize safety. In the first phase of the proceeding, SED will investigate and produce a consultant's report evaluating SoCalGas's and Sempra Energy's organizational culture, governance, policies, practices, and accountability metrics. Since the issuance of I.19-06-014, the only formal rulings the CPUC has issued have been an ALJ's Ruling issued on October 23, seeking consultant information that could assist in the investigation, and a SoCalGas Notice of Ex Parte Communication filed on April 27 with advisors to CPUC Commissioner Randolph, during which SoCalGas and Sempra Energy discussed activities with the consultant selected to perform the safety culture assessment, but also requested that certain in-person aspects of the assessment be held off until the Covid-19 social distancing requirements are lifted.

CPUC Energy Planning and Procurement and Resource Adequacy
Senate Bill (SB) 100
On January 30, the CEC published an SB 100 Joint Agency Report that reviews stakeholders' input from a September 5 Workshop and later regional and technical workshops, and advises of a modeling and inputs assumptions workshop on February 24, all of which work is aimed at preparing a required report to the Legislature by January 1, 2021. As the CEC SB 100 Webpage indicates, there have been no further events held on the SB 100 report.

Renewable Portfolio Standard (RPS) Program (R.18-07-003 (Current) & R.15-0-020 (Predecessor))
Several CPUC Decisions issued from August to December 2019 in R.18-07-003, including D.19-08-007, which imposed fines on Liberty Power Holdings and Gexa Energy for failing to comply with certain program requirements, and denying the entities' request for waiver of penalties. An ALJ's Ruling was issued on February 18 about a process to consider Gexa Energy's subsequent request for reversal of the noncompliance determination and imposed penalties, along with a motion for waiver. The other 2019 decisions included D.19-09-007, addressing new Community Choice Aggregators' (CCAs') 2018 RPS Procurement Plans and Liberty Power Holdings' Request for Waiver; D.19-09-043, adopting modeling requirements for investor-owned utilities (IOUs) to determine Effective Load Carrying Capability (ELCC) values, one element of their least-cost, best-fit methodologies used for RPS bid ranking and selection; and D.19-12-042, approving certain IOUs', small and multijurisdictional utilities', CCAs', and energy service providers' (ESPs') 2019 RPS Procurement Plans, but finding others to be insufficient and requiring amendment.

Beginning in February, a number of Rulings have been issued on specific topics seeking party input and setting the schedule for the 2020 RPS Procurement Plans, as follows:

(1) Assigned Commissioner's Ruling on RPS Confidentiality Rules issued on February 27, requesting party input on a Staff Proposal that "seeks to improve, expand, and formalize the processes for making information about the RPS program more generally available." Opening and reply comments in response were filed on March 30 and April 17.

(2) ALJ's Ruling issued on March 10 requesting comments on the Bioenergy Market Adjusting Tariff Staff Proposal, with responses and replies filed on April 1 and April 15. The Staff Proposal had emerged from an Energy Division initiative that commenced with a draft proposal in 2018 and concluded with a public workshop in 2019.

(3) ACR-ALJ's Ruling on 2020 RPS Procurement Plans issued on May 6 setting forth the content and filing requirements for the 2020 RPS Procurement Plans for all "retail sellers," i.e., IOUs, small-multi jurisdictional utilities, ESPs, and CCAs, with these plans originally due to be filed by June 1. An ALJ's Ruling issued on May 7 clarified that party comments were limited at this time to a Staff Proposal on Revising Citation Program, with opening and reply comments due June 26 and July 13. In an ALJ's Ruling issued on May 13, the due date for the 2020 RPS Procurement Plans was moved to June 29, with Opening and Reply Comments due July 14 and July 21, maintaining the goal of a Proposed Decision on the plans by Q4 2020.

On February 27, in the predecessor RPS Rulemaking (R.) 15-02-020, the CPUC issued D.20-02-044 granting a Petition for Modification of D.15-09-004 to clarify that directed biogas is eligible under the Bioenergy Marketing Tariff (BioMAT), provided that projects using directed biogas comply with all applicable BioMAT program eligibility requirements. PG&E, SDG&E and SCE are directed to file Tier 1 Advice Letters modifying their BioMAT standard contracts to be consistent with this decision.

R.18-07-017 (Public Utility Regulatory Policies Act (PURPA) and RPS ReMAT (Renewable Market Adjusting Tariff) Program Litigation)

On December 6, 2017, U.S. District Judge Donato issued an order granting summary judgment in favor of Winding Creek Solar LLC's requests for relief from PG&E's ReMAT program, and found that CPUC decisions establishing the ReMAT Program conflict with federal law (PURPA). The decision, ultimately upheld by the Ninth Circuit Court of Appeals, effectively shut down the ReMAT program and foreclosed the IOUs from signing new ReMAT contracts. In response, the CPUC issued R.18-07-017 to revise ReMAT consistent with the Court's directions and ensure that it is PURPA-compliant. The CPUC undertook investigation of this issue throughout 2018 and 2019.

On May 7, the CPUC issued D.20-05-006 adopting a new standard offer contract for Qualifying Facilities (QFs) of 20 MW or less seeking to sell electricity and/or capacity to a CPUC-jurisdiction utility pursuant to PURPA. D.20-05-006 states this "New QF SOC" is "consistent with PURPA implementing regulations" and "includes two pricing options for both capacity and energy for a total of four avoided costs rates: a rate determined at the time of contract execution for both capacity and energy, and a rate determined at the time of product delivery for both capacity and energy." Capacity pricing is to be based on Energy Division's annual Resource Adequacy Report. D.20-05-006 adopts an as-available energy price to be paid at time of delivery where a QF has opted to sell as-available energy to the utility without a contract, which prices will be based on hourly locational marginal prices from CAISO's day-ahead market.

The maximum term for the New QF SOC is 12 years for new facilities and 7 years for existing facilities, and is available to QFs of 20 MWs or less "until suspended by the Commission's Executive Director." D.20-05-006 notes this decision does not apply to or interfere with any other CPUC PURPA program or the QF Settlement approved in D10-12-035 (amended in D.15-06-028), so QFs would have the option of executing "any existing PURPA contract" for which they qualify, including the QF Settlement contract.

The IOUs will provide revised contract terms and publish prices through a series of advice letters described in Ordering Paragraphs 6 – 8, 15, and 17. The IOUs have 30 days from the issuance date of D.20-05-006 (i.e., a due date of June 15) to calculate and submit initial prices through a Tier 2 Advice Letter.

As for ReMAT, D.20-05-006 notes that R.18-07-017 focused on "what the appropriate avoided cost would be for each category of energy and capacity being provided by a QF," and that "[r]evisions to ReMAT, to the extent necessary, is a subject to be addressed in other Commission proceedings." R.18-07-017 remains open to consider whether any further action is required to comply with any changes in PURPA regulations that could result from a pending Notice of Proposed Rulemaking issued by FERC on October 4, 2019 (QF Facility Rates & Requirements, Implementation Issues Under PURPA).

Integrated Resource Planning (IRP)(R16-02-007 and R20-05-003) and Procurement-Related Activities

- R.16-02-007/D.19-11-016 (System Reliability Procurement 2021-23) (Legal Challenges and RFOs)
  The significant developments in R.16-02-007 through the end of 2019 centered on the CPUC's consideration of electric system reliability procurement for 2021-2023. CEERT's focus throughout that consideration was to urge procurement authorization reserved for new, non-fossil preferred resources and preferred-resource hybrids, both to achieve clean energy goals and to mitigate potential capacity shortfalls and the likely market power of gas generators as a capacity shortfall approaches.

  Unfortunately, the Proposed Decision Requiring Electric System Reliability Procurement for 2021-2023 issued on September 12 did not provide such directives for preferred resources, but recommended blanket extensions of the Once-Through-Cooling (OTC) power plants' retirement deadlines to provide continued gas generation from those resources, to which CEERT objected. (See CEERT Opening Comments and Reply Comments on the PD.) A Revised Proposed Decision issued on October 21 failed to make any meaningful changes, and stated that the Joint Motion on hybrid resources discussed below should be determined in the RA proceeding.

  In Comments filed October 31, CEERT expressed disappointment with the RPD because it fails to ensure that clean, hybrid, renewable + storage resources can bid in the all-source procurement, and because it proposes to front-stop otherwise retiring OTC resources by asking the State Water Resources Control Board to extend their National Pollutant Discharge Elimination System permit.

  On November 7, the CPUC issued D.19-11-016 based on the RPD, including the extension of OTC compliance deadlines. On January 3, ALJ Fitch issued a Ruling that, with attachments, constitutes the final baseline against which incremental energy resource procurement required by D.19-11-016 will be measured. No further modifications to this baseline list are expected.

  In December, multiple Rehearing Requests and Petitions for Modification of D.19-11-016 were filed, challenging or seeking changes to the decision, especially its gas procurement authorizations. These include rehearing requests by California Environmental Justice Alliance, Sierra Club, Defenders of Wildlife and the Public Advocates Office (Joint Parties Application for Rehearing); by GenOn Holdings (GenOn Application of Rehearing); and Protect Our Communities (POC Application for Rehearing), and a Joint Parties' Petition for Modification. The Joint Parties argue the Decision erroneously allows for procurement of new fossil-fuel generating facilities and capacity. GenOn argues that D.19-11-016 modifies the CPUC's original recommended OTC extension for Ormond without substantial supporting evidence or findings of fact. POC argues the Decision is based on unsubstantiated conjecture about potential system RA shortfalls, and that seeking extensions for the OTC plants is out of scope, fails to comply with CEQA and the Clean Water Act, and increases pollution in disadvantaged communities.

  On April 1, a Petition for Modification was filed by the California Energy Storage Alliance, seeking to direct the IOUs to submit Tier 2 advice letters for expedited 30-day approval for any incremental resource contracts executed to meet the 2021 compliance requirements and to come online by the August 1, 2021 deadline. On May 14, a Petition for Modification was filed by the California Community Choice Association (CalCCA) asking the CPUC to clarify that, in assessing compliance with

D.19-11-016, it will determine the qualifying capacity value of hybrid generation and storage resources using the counting methodology adopted in Track 2 of R.19-11-019 (Resource Adequacy).

No action has been taken on any of the Applications for Rehearing, but the Joint Parties and GenOn PFMs were addressed and initially rejected in the Proposed Decision on the IRP Reference System Portfolio discussed below. The final order (D.20-03-028), however, reversed that outcome in part by granting the Joint Parties' PFM, but continuing to deny the GenOn PFM. On June 3 a Proposed Decision was issued that denies the CESA April 1 PFM, but states the decision "commits to processing the IOU filings for 2021 as quickly as possible, including utilizing all appropriate means of expediting Tier 3 advice letters." Finally, following CalCCA's PFM, the CPUC issued its June RA Proposed Decision on May 22, which does address Track 2 issues and is discussed below in the RA section.

On January 8, the Statewide Advisory Committee on Cooling Water Intake Structures, consisting of the CPUC, CEC, CAISO, Coastal Commission, and State Lands Commission, published a draft proposal recommending to the State Water Resources Control Board (SWRCB) that the OTC deadlines for Alamitos, Huntington Beach, and Ormond Beach be extended for three years and Redondo Beach by one year. The Final Recommended OTC Deadlines was adopted by the Committee on January 23.

On March 18, as addressed at a public workshop on April 18, SWRCB issued a Draft Amendment to its "Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Once-Through Cooling or OTC Policy) to extend the compliance dates for Alamitos, Huntington Beach, and Ormond Beach OTC generating stations for three years until December 31, 2023, and Redondo Beach Generating Station for one year through December 31, 2021, to address system-wide grid reliability concerns." Comments were due on May 18, and a Public Hearing to consider adoption of this amendment will be held on July 21. (See: SWRCB OTC Policy Webpage). As indicated in our prior Quarterly Report, CEERT has objected to this extension unless conditioned on the CPUC identifying and approving resources to replace this retiring capacity before the end of the extension period. V. John White, in discussions with Alice Reynolds in the Governor's Office, has detailed the adverse environmental impacts of operating extensions for OTC coastal power plants.

Quite apart from the grinding process for RA at the CPUC and the CAISO are the early procurement results. To comply with the procurement directives of D.19-11-016, and to meet asserted reliability needs of local areas, the IOUs have conducted competitive solicitations for reliability or system RA resources. These have resulted in contract selections that have been brought to the CPUC for approval by advice letter or application. All the recommended investments in "incremental" system RA capacity per the procurement track in the IRP are either existing gas or 4-hour batteries, either standalone or co-located with existing renewable resources that have available transmission deliverability.

Among the advice letters for system capacity resources filed in the last two months is one by SCE that will result in procurement of 1,165 MW of gas-fired generation (which has at least been suspended for now (SCE AL 4209-E & Suspense Letter)). Roughly 1,600 MW of 4-hour batteries and 2,500 MW from life extension of retiring OTC plants have been proposed. There are indications that some of the yet-to-be-announced projects for completion in 2021-2023 will actually produce energy, but for now, most of the energy required to charge and operate these batteries will come from increased gas consumption in existing gas plants. Some reduction in renewable curtailments will also occur, but on balance, we are no closer to achieving carbon targets for the next decade.

Three of the advice letters and applications are described below. CEERT has or will respond to each.

- ✓ A.20-04-013 (PG&E OCEI): On April 15, PG&E filed A.20-04-013, seeking authorization to recover costs from contracts with two energy storage projects that were successful bidders in its

Spring 2018 RFO on behalf of itself and East Bay Community Energy to procure resources for the Oakland Clean Energy Initiative (OCEI), which will meet reliability concerns in the Oakland subarea. On May 18, CEERT filed a timely Protest to A.20-04-013, stating that we have been a "strong vocal and engaged supporter of both the objectives and the process for the OCEI" at both CAISO and the CPUC, but that unfortunately, our review of the Application demonstrated that the outcome of PG&E's RFO "fails to measure up to the lofty goals set for the OCEI and sets a terrible precedent for future projects with similar characteristics that are less stark than those related to the OCEI." Eight other parties filed protests or responses to A.20-04-013, including Sierra Club, the California Efficiency + Demand Management Council, and the Public Advocates Office, to which PG&E filed its Reply on May 28. A Prehearing Conference will be the next step in this proceeding. Commissioner Shiroma is the Assigned Commissioner.

✓ Advice Letter (AL) 4210-E (SCE): On May 8, SCE filed AL 4210-E, asserted to be pursuant to D.19-11-016, seeking approval of a Resource Adequacy (RA) power purchase agreement with GenOn Energy Management, LLC for Units 1 and 2 of the Ormond Beach Generation Station from 2021 through 2023 to meet SCE's system, Big Creek-Ventura local flexible RA requirements. On May 28, CEERT timely submitted a response to AL 4210-E on the basis that the Advice Letter is "incomplete," given the directions in D.19-11-016 on the terms under which LSEs are allowed to contract with OTC units such as Ormond Beach past their current permit deadlines, and given the need for SCE to address how it plans to deal with its decommissioning obligations for its on-site equipment at Ormond Beach. CEERT proposed that these failings can be cured by the CPUC approving AL 4210-E on the conditions that "procurement, construction and operation of replacement 'clean electricity capacity' be accomplished prior to the expiration of the RA contract" and that SCE submit "a decommissioning and remediation plan for the SCE-owned and -operated substation on the Ormond Beach site." SCE had five business days from the end of the protest period to reply.

✓ AL 5826-E (PG&E): On May 18, PG&E filed AL 5826-E seeking approval of seven system RA agreements resulting from its System Reliability RFO issued on February 28, in asserted compliance with D.19-11-016. The seven PPAs have a total procurement of 423 MW of incremental system RA from various companies using lithium-ion battery technologies, all with a commercial online date of July 18, 2021; six are for contract terms of 15 years and one for a contract term of 10 years. PG&E requested that the time to protest or respond to this AL be shortened to 10 days from its submittal, a request to which Public Advocates Office and California Energy Storage Alliance objected. Energy Division denied the request, and the due date for protests or responses was 20 days.

- R.16-02-007 (IRP) – D.20-03-028 (IRP Reference System Portfolio/GHG Targets)
  At the end of 2019, the CPUC sought comment on the proposed Reference System Portfolio (RSP) recommendation for developing IRPs to be filed by LSEs on May 1. The proposed RSP contains a recommended electric sector GHG emissions target of 46 million metric tons (MMT) for 2030 set by CARB for load-serving entities (LSEs) under CPUC authority.

  CEERT submitted Opening Comments and Reply Comments on December 17 and January 6, arguing that the CPUC must immediately adopt a 30 MMT GHG emission reduction target, as opposed to the 46 MMT one recommended in the Ruling, and that the IRP process should be suspended in order to be informed by the CEC's SB 100 planning process and interagency review. CEERT was joined by multiple parties in arguing for adoption of a 30 MMT GHG emission reduction target.

  Despite the clear support for the 30 MMT target, the CPUC issued a Proposed Decision on February 21 that adopted a 46 MMT GHG target for the electric sector for 2030, and erroneously claimed that

such a target "keeps LSEs on the trajectory to meet the state's goal to supply 100 percent of retail electricity sales with renewable zero-carbon resources by 2045." The PD contended that, based on its own "GHG Planning Price" "analysis," setting any more restrictive target was too costly. The PD also rejected the Petitions for Modification of D.19-11-016 filed by both the Joint Parties (to prevent procurement of new fossil generation) and GenOn (to prevent OTC modifications) as unnecessary.

The PD unleashed a storm of protests, including by CEERT, for its failure to set a GHG emission target that is in compliance with the state's climate-change goals and mandates, and for its reliance on faulty modeling and assumptions. Over the next five weeks, CEERT filed Opening Comments and Reply Comments on March 12 and 17, detailing how the PD was based on inaccurate data analytics, wrongly cemented gas generation into the procurement plan, and would result in no GHG emission reductions from the electricity sector through 2030. We were joined by multiple parties in objecting to the PD's reliance on the RESOLVE model, whose limitations and inaccuracies wrongly led it to adopt a 46 MMT GHG emission target that will not achieve California's decarbonizing goals.

Because of the seriousness of the PD's errors and its adverse consequences for the future, CEERT continued our advocacy through meetings with CPUC Commissioners' advisors on March 19 and 20. We also led and collaborated with AWEA California, EDF, NRDC, UCS, Sierra Club, Nature Conservancy, Vote Solar, California Environmental Justice Alliance, and LSA on a March 18 letter to Governor Newsom expressing strenuous objections to the PD. That letter can be found as an attachment to Notice of Ex Parte Communications & Joint Letter to Governor .

This advocacy resulted in significant revisions to the PD. As revised and ultimately signed out as D.20-03-028 on March 26, the CPUC conceded that "to keep the IRP process moving and allow more realistic evaluation of the potential to lower the GHG target for the electric sector by 2030, the Commission requires all LSEs to file individual IRPs to present portfolios based on the adopted 46 MMT target for the electric sector by 2030, *as well as a 38 MMT target*." (Emphasis added.) The LSEs were directed to show how they would accomplish their proportional share of both targets in their IRP plans. The Commission stated that it could "then consider adopting a portfolio at the end of this cycle of the IRP process that goes further than the 46 MMT target and also includes actual resources necessary to help" with CAISO's annual transmission planning process. In addition, D.20-03-028 reversed the PD by granting the Joint Parties' PFM to modify D.19-11-016 to confirm that procurement was not to include new fossil fuel generating facilities or capacity.

While the CPUC final decision still clings to a cost justification for not embracing a 30 MMT target, CEERT's advocacy and that of other parties (especially in the Joint Letter to the Governor) was successful in underscoring deep flaws in the CPUC's original thinking in the PD. The need for this effort to continue is clear, and may require a further Petition for Modification to ensure that the CAISO's TPP process also considers the 38 MMT target and that both the CPUC and CAISO follow through on analyzing the lower 30 MMT target, which, as attested to by many parties, is the one actually required to achieve the state's decarbonization goals. V. John White's recommendations to the CPUC on the new, successor IRP Rulemaking (R.20-05-003) (see below) are ones from which the CPUC can benefit in improving its IRP process and analysis to meet those goals.

- R.16-02-007 - IRP Filing and Procurement Requirements Pursuant to D.19-11-016 and D.20-03-028
On January 16, the CPUC held a webinar on templates for IRP filing requirements. On April 15, an ALJ's Ruling was issued finalizing load forecasts and GHG benchmarks for individual 2020 IRP Plan filings and assigning procurement obligations pursuant to D.19-11-016. The Ruling finalizes LSE load forecasts for 2030 and associated GHG benchmarks for use in the 2020 IRP filings due September 1, as required by D.20-03-028. It also finalizes the procurement responsibility for reliability capa-

city ordered in D.19-11-016, from which certain LSEs opted out of conducting procurement on behalf of their own customers in favor of having an IOU conduct the procurement.

- R.20-05-003: New IRP Rulemaking.
  At its May 7 Business Meeting, the CPUC issued a new IRP Rulemaking (R.20-05-003 (IRP)). The central purpose of R.20-05-003 is to serve as the successor docket to R.16-02-007 and to "continu[e] the Commission's process for integrated resource planning" pursuant to PU Code Sections 454.51 and 454.52.1 and SB 100. "This proceeding will address ongoing oversight of the IRP planning process and the procurement necessary to achieve the goals set by the Legislature in SB 350 and SB 100, as well as by the Commission in R.16-02-007" and serve "as the umbrella venue for considering comprehensive issues in the…electricity sector…including coordination with activities and policies in specific resource areas, including…energy efficiency, demand response, renewables, storage, transmission, and conventional generation resources" and "the resource adequacy program …" Opening and Reply Comments can be filed on the OIR and its preliminary scope on June 15 and June 29.

  However, before the OIR was signed out, V. John White felt it was important to address the full Commission to highlight serious concerns that CEERT and other parties have about the CPUC's IRP modeling and procurement process (detailed in CEERT's Comments and advocacy on both D.19-11-016 and D.20-03-028, as noted above). At the CPUC's May 7 Business Meeting, during public comment, John made the following statement to the Commissioners:

  > "I'd first like to point out that the proposed rulemaking fails to take account of the fact that we are now living in an extraordinarily different and challenging time from the world we had come to see as normal. The "new abnormal" is a shattered economy, massive unemployment, lost state and local revenue, and tremendous uncertainty. The Commission's decisions to delay procurement and new investment that are needed to meet reliability, climate, and clean energy goals could have the effect of slowing California's economic recovery.
  >
  > "Second, while the proposed rulemaking includes the provision of coordinating with the California Energy Commission, which is important both because of the CEC's role in planning for SB 100, as well as reviewing the IRPs of publicly owned utilities, we believe the Commission, and especially its staff, could learn a great deal from the different methodologies and approaches being used by innovative publicly owned utilities, such as the LA Department of Water and Power, which along with its consultant, the National Renewable Energy Laboratories, is undertaking a more ambitious and comprehensive approach to meeting climate, clean energy, and reliability needs than the assumptions and analytical tools upon which the Commission, its staff, and its private consultant are relying.
  >
  > "Third, we would like to suggest that before embarking on another IRP cycle, the Commission should hold an en banc hearing to enable LSEs, interested parties, and other agencies with responsibilities for meeting statutory climate and clean energy goals, to share directly with the Commissioners their observations, experience, and suggestions for making the next iteration of the IRP more successful and likely to be implemented, so that California gets back on track in meeting GHG reductions and clean energy targets, including near-term procurement of critically important resources, such as long-duration storage and offshore wind."

  In late April, John was contacted by Gridworks, which the CPUC selected in a competitive bid process to conduct an independent evaluation of the CPUC's IRP Process. On May 8, Gridwork's Matthew Tisdale, Katie Wu, and Michael Florio interviewed John, focusing on of how the current IRP process relates to the goals set by the Public Utilities Code and CPUC decisions, and how the program is performing on transparency, stakeholder participation, and ease of administration.

On June 5, an ALJ's Ruling 6-5-2020 was issued seeking comments on backstop procurement and cost allocation. Opening and Reply Comments are due on July 1 and July 17.

- SCE 2018 Local Capacity Requirements (LCR) Requests for Proposals (RFP) (A.19-04-016)

  CEERT was an active party in supporting SCE's Application for Approval of the Results of its 2018 LCR RFPs and the one contract resulting from the RFP: a Strata Saticoy 100 MW/400 MWh in-front-of-the-meter energy storage project, with a delivery period expected to begin December 1. In October and November 2019, we filed an Opening Brief requesting expeditious approval of SCE's Application and Opening Comments in support of the Proposed Decision approving the results of the SCE 2018 LCR RFP and the Strata Saticoy contract, and in opposition to the Public Advocates Office's arguments seeking to delay or add contingencies.

  On December 30, the Commission issued D.19-12-055, which grants SCE's 2018 LCR RFPs for the Moorpark Sub-Area, approves the Strata Saticoy contract, and closes the proceeding. When construction is complete on the Strata Saticoy project, the fourth Pardee/Moorpark 230 kv line, and the five storage projects in the Moorpark Sub-Area approved in the Aliso Canyon proceeding, the seven-year struggle to replace the proposed Puente gas plant with preferred resources will finally come to an end.

Resource Adequacy (RA) (R.17-09-020 and R.19-11-009)

Background

On November 13, the CPUC issued R.19-11-009, the successor proceeding to R.17-09-020 to oversee the RA program, consider structural changes and refinements to the Program, and establish forward RA local and flexible procurement obligations. However, because certain issues being considered in R.17-09-020 had not been resolved, that proceeding continued to address those issues, in some cases concurrently with their potential resolution in R.19-11-009. As a result, and given the high level of CEERT advocacy on these issues, they are addressed below by proceeding and topic area.

The latest PD in this year's RA cycle due for a CPUC vote on June 25 does little to nothing to advance the objective of providing grid reliability with preferred resources. In fact, led by proposed adoption of an MCC buckets proposal that essentially locks in today's resource mix, including roughly 28 GW of gas, RA continues to be a serious impediment to broader objectives for decarbonization of the electric grid.

Various parties are beginning to show interest in undertaking broad reforms of the RA system, from the metrics used to track "reliability" to a shift in focus from meeting a needle summer peak load with adequate reserve margins to supplying clean energy at the time and place needed to ensure true "resource adequacy." Currently, there is little appetite at the Commission for such a reform. This will have to change or carbon targets for 2030 and beyond will not be met.

R.17-09-020

Hybrid Resource Counting/Capacity Value

In September, CEERT joined Enel X, Vote Solar Tesla, Sunrun, and California Energy Storage Alliance (CESA) in filing a Joint Motion in both R.16-02-007 (IRP) and R.17-09-020 (RA) to establish a process for determining the capacity value of hybrid resources. As noted above, by D.19-11-016 in R.16-02-007 (IRP), the CPUC determined that this Motion would be dealt with in the RA proceeding. On November 26, ALJ Chiv and ALJ Allen issued a Proposed Decision granting the Joint Parties' Motion to establish a process and schedule for determining the qualifying capacity value of hybrid resources, with modifications. CEERT filed Joint Opening Comments with Enel X, Vote Solar, Sunrun, Tesla, CESA, California Efficiency + Demand Management Council, and Engie on December 19.

On January 17, the CPUC issued D.20-01-004, which granted the Joint Motion with modification, and adopted the following qualifying capacity (QC) methodology on an interim basis for in-front-of-the-meter hybrid resources: "Where a hybrid resource has charging restrictions related to the Investment Tax Credit, the qualifying capacity value shall be based on the greater of either: (i) the effective load carrying capacity-based qualifying capacity (QC) of the intermittent resource or the QC of the dispatchable resource, whichever applies, or (ii) a modified QC of the co-located storage device capped at the maximum amount of expected energy available to charge the storage device." For purposes of the interim QC methodology, a "hybrid resource" is defined as a generating resource co-located with a storage project and with a single point of interconnection.

On February 11, however, CEERT, AWEA California, CESA, and Enel X filed a Joint Petition for Modification of D.20-01-004, seeking expeditious revision to the definition of "Hybrid Resource" as a generating resource co-located with a storage project and with a single point of interconnection and represented by a single market resource ID, so that the interim "greater-of" qualifying capacity (QC) methodology is not applied to co-located generation and storage resources operating under two or more resource IDs. The Joint PFM details how the CPUC's application of the interim greater-of methodology to co-located resources with two or more resource IDs is not grounded in the public record, is procedurally deficient and unjustified, is at odds with CAISO market participation realities, and, unless modified, would result in D.20-01-004 decreasing the supply of available RA resources, in turn increasing ratepayer costs and undermining the state's decarbonization goals. This change is also required to provide procurement certainty as stakeholders work toward establishing a permanent methodology.

On February 27, SCE responded in opposition to the Joint PFM, stating that the QC methodology and definition of hybrid resources in D.20-01-004's adopted interim methodology was reasonable and any further changes are being addressed in R.19-11-009 (the successor RA proceeding). However, on March 11, CAISO responded in support of the Joint PFM, stating that the definition of "Hybrid Resource" should be modified as the PFM requested. Further support for the Joint PFM's requested modification of the "Hybrid Resource" definition was provided in the Joint Response of SEIA, LSA, and Tesla filed on March 12. On that same date, however, PG&E filed a brief Response opposing the Joint PFM because the definition was "reasonable" for the "interim" methodology and changes could be addressed in the continuing work on that methodology in R.19-11-009.

On May 22, as discussed below related to R.19-11-009, the CPUC issued its June RA Proposed Decision that set RA obligations and addressed program refinements, including the issue of hybrid resources. While never mentioning the Joint PFM, the PD does make the change the Joint PFM requested in the definition of "hybrid resources" for the final methodology by agreeing that the CPUC and CAISO terminology should be aligned, and by adopting the definition put forth by the related Working Group that a hybrid resource is "two or more resources (one of which is a storage project) located at a single point of interconnection with a single resource ID," and further finding that co-located resources are "two or more resources (one of which is a storage project) located at a single point of interconnection with two or more resource IDs," and that, if a hybrid and a co-located resource have identical physical characteristics and charging restrictions, the same QC value should apply to both.

Central Procurement Entity (CPE)

There were many developments in 2019 related to a Settlement Agreement by the California Community Choice Association (CalCCA), et al. to establish a residual central buyer structure to resolve issues on central procurement of RA under the multiyear forward procurement structure adopted in D.19-02-022. On September 30, CEERT submitted Comments arguing that the Settlement Agreement is wholly incomplete as submitted, and the CPUC should reject or modify it, as the settled issues bear little relationship to one another and do not address the truly critical RA issue now before

the CPUC: the immediate need for procurement of new RA resources. In November, the CPUC held a workshop on the proposed central procurement entity settlement.

On March 26, ALJ Chiv issued a Proposed Decision on Central Procurement of the Resource Adequacy Program in R.17-09-020. The PD adopts implementation details for the central procurement of multi-year RA procurement to begin for the 2023 compliance year in PG&E and SCE distribution service areas, including identifying PG&E and SCE as the central procurement entities for their distribution service areas and adopting a hybrid central procurement framework. The PD declines to adopt a central procurement framework for the SDG&E distribution service area at this time.

On April 15, CEERT submitted Opening Comments on the Central Procurement PD, arguing that a central buyer for local capacity requirements (LCR) at this time is costly and unnecessary. We argued that the PD puts in place the wrong central buyer construct. Numerous parties filed Opening Comments agreeing with CEERT that the PD was, on balance, unnecessary because it focuses on unbundled central procurement of existing resources for LCR in the PG&E and SCE Transmission Access Charge (TAC) areas, which is no longer a significant issue. Numerous parties also agreed that the central procurement entity structure contemplated in the Proposed Decision makes it very difficult if not impossible to procure new preferred resources for virtually any reason except legislative mandate.

On April 24, 27, 29 and 30, CEERT met with Advisors to all five Commissioners about the PD. We noted that we are not opposed to central procurement in all cases, but the reasons for an LCR central buyer are no longer an issue due to the operational maturity of the CCAs and the system capacity shortfall that has occurred. We argued that the PD would make projects like the Oakland Clean Energy Initiative (OCEI) extremely difficult because neither East Bay Clean Energy nor PG&E on behalf of its bundled customers could afford to spend ratepayer funds to procure the project it if they had to contribute the LCR value to all the other LSEs in the PG&E TAC.

The PD was addressed in a CPUC "ratesetting deliberative meeting," which was closed to the public, on May 4. It was scheduled to be heard at the CPUC's May 7 Business Meeting, but was held twice – first to the CPUC's May 28 Business Meeting and then to its June 11 Business Meeting. On June 5, the CPUC published a Redlined Revised Proposed Decision and announced another Ratesetting Deliberative Meeting for June 8, with the matter still scheduled to be heard at the June 11 Business Meeting.

RA Imports

In October 2019, the CPUC issued D.19-10-021, which significantly tightens the requirements governing the use of energy imported into California to meet RA needs. However, on December 23, the Commission issued D.19-12-064, granting a stay of D.19-10-021 during the pendency of three applications for rehearing of D.19-10-021 that had been supported by multiple parties.

On March 12, the CPUC in D.20-03-016 granted limited rehearing of D.19-10-021, and ordered that the stay of D.19-10-021 remain in effect until the limited rehearing was completed. The three applications for rehearing contended that D.19-10-021 failed to provide findings or substantial evidence to support its conclusion that the import RA requirements it adopts are affirmations of D.04-10-035, violated Public Utilities Code section 380 by exacerbating potential RA capacity shortfalls in 2021, and violated state and federal laws and constitutional due process and anti-discrimination protections. D.20-03-016 found there was sufficient merit in some of these contentions to grant a limited rehearing to allow party comments on the self-scheduling requirement and on the distinction between resource-specific and resource-nonspecific RA import contracts; to augment the existing evidentiary record on the distinction between resource-specific and resource-nonspecific RA import contracts and provide a sufficient evidentiary basis for this distinction; and to clarify certain specific terms used in D.19-10-021, including

"resource-specific" and "resource-nonspecific," as well as to clarify the timeframe within which RA importers are required to self-schedule in the CAISO market.

On March 20, an ALJ's Ruling first recognized that the RA Import issue was also being considered in Track 1 of R.19-11-009, and then set a process for the limited rehearing that incorporated the record on the issue from Track 1 of R.19-11-009, and sought Comments that could address both the issues identified in the limited rehearing and the incorporation of the Track 1 R.19-11-009 record into R.17-09-020 for purposes of resolving those issues. Those Comments were filed on April 6 and April 13.

On May 18, a Proposed Decision was issued adopting RA Import Requirements. The PD resolves both the limited rehearing issues and overall requirements for RA imports, including consideration of some proposals made in Track 1 of R.19-11-009. The PD adopts requirements for both "resource-specific" and "non-resource-specific" imports to count toward RA needs that will be applied beginning in the 2021 RA compliance year, and states that it "completes" the limited rehearing and supersedes D.19-10-021, which is "no longer in effect."

State of RA Market

On January 14, Commissioner Randolph issued a Ruling appending Energy Division's second RA State of the Market Report that the CPUC directed be prepared in D.19-02-022 (February 21, 2019). This direction was made in recognition of the fact that certain information about the broader RA procurement outlook is not publicly available and only visible to Energy Division Staff, and these reports will "increase transparency into the state of the RA market."

R.19-11-009: RA Obligations and Program Refinements (Tracks 1 and 2)

Simultaneously with the consideration of the above issues in R.17-09-020, multiple directives were made in R.19-11-009, beginning with a Scoping Memo and Ruling issued on January 22 that divided the proceeding into four tracks: Track 1 to revisions of the RA import rules; Track 2 to address system and flexible capacity requirements for the following year, local capacity requirements for the next three years, and counting convention proposals; Track 3 to address the more complex and somewhat less time-sensitive structural changes and refinements to the RA program; and Track 4 to the 2022 program year requirements for system and flexible RA and the 2022-2024 local RA requirements.

From January to the present, the main focus of the R.19-11-009 has been on Track 2 issues that were extended to include the following Working Groups: (1) Hydro Counting, (2) Hybrid Counting, (3) Effective Load Carrying Capability (ELCC) and (4) Demand Response (DR). The initial meetings of these Working Groups took place on February 12 and 13. Other changes through April were also made to Track 2 LCR and FCR issues and to those proposals excluding LCR and FCR.

On February 7, an ALJ's Ruling was issued with the Energy Division's proposal on Maximum Cumulative Capacity (MCC) buckets. On February 21, an ALJ's Ruling was issued with Energy Division's Track 2 Proposals, and on that same date, Track 2 proposals were submitted by multiple stakeholders, including Alliance for Retail Energy Market, CAISO, California Energy Storage Alliance (CESA), Form Energy, Joint Parties (California Efficiency + Demand Management Council, CPower, Enel X and Leapfrog Power), OhmConnect, PG&E, SCE, SDG&E, Shell Energy North America, and Sunrun. Working Group Meetings were held through March, a CPUC Track 2 Workshop was held on March 5, and final Working Group Reports were filed on March 11.

On March 23, CEERT submitted three sets of Comments:

(1) The first were Opening Comments on Track 2 Proposals, March 5, 2020 Workshop, and Working Group Reports. For the DR Counting Working Group, we recommended the following:

- The Energy Division should compile and publish a Report which includes MW of DR available for dispatch by CAISO, number of participating customers by customer class, customer participation payments, and MWh actually dispatched during each year.
- An independent consultant should be retained to compare this information with the DR Technical Potential Studies authored by Lawrence Berkeley National Laboratory (LBNL).
- The information should be placed on the record for use in present and future RA rulemakings.

For the Effective Load Carrying Capability (ELCC) Working Group, it seems to CEERT unlikely that this topic will ever result in a durable universal consensus. For the Hydro Counting Working Group, CEERT supports the Joint Proposal of PG&E, SCE and CAISO.

(2) CEERT joined with CESA and SCE in submitting Joint Opening Comments and making the following recommendations on the Hybrid Counting Working Group Final Report:
- Adopt the SCE modified Additive Methodology as the Interim Methodology for establishing the Net Qualifying Capacity (NQC) of a co-located resource for RA purposes, with the renewable component potentially derated to recognize the need to ensure that the storage component of a co-located resource be fully charged prior to peak load hours, and that circumstances may dictate the charging energy be provided by the renewable resource portion of the co-located resource. This would replace the current Interim "Greater Of" methodology.
- Express the intent that a durable Hybrid Counting Methodology to replace the interim methodology be adopted in Track 3 of this proceeding for hybrid resources and that, if adopted, this durable NQC value will be used for 2021 RA showings.
- Recognize the relevance to Track 3 of this proceeding of the CAISO Hybrid Resources Stakeholder Process to be conducted from April to October 2020.
- Recognize the relevance to Track 3 of this proceeding of the results of the IOU ELCC study to be conducted from April to October 2020 as part of the RPS proceeding (R.18-07-003), and ensure that the study is performed in a way that allows direct usage of results in Track 3.

(3) CEERT joined with the Council, CESA, CPower, Enel X, Leapfrog Power, OhmConnect, Sunrun, and Tesla in filing Joint Opening Comments on the Energy Division's Maximum Cumulative Capacity (MCC) Buckets Proposal. CEERT and these parties argued that the Energy Division's rationale for a DR procurement cap is discriminatory, arbitrary and highly problematic, and that its MCC Proposal preempts Track 3, will cap both DR and DER procurement at close to current levels, and requires further policy development on Bucket 4 eligibility.

On April 2, CEERT submitted Reply Comments on Track 2 Proposals, the March 5 Workshop and Working Group Reports. On Hybrid Resource Counting Rules, we stated that numerous parties supported the immediate replacement of the current "Greater Of" hybrid counting rule with the "derated Additive" methodology proposed by SCE. On DR, we recommended that the CPUC engage in examining how DR is currently utilized in other organized markets around the globe, and where and why it is falling short of its technical and economic promise for California as articulated in the LBNL studies conducted on behalf of the CPUC as the basis for developing a meaningful roadmap for DR, as a valuable RA resource, to grow rather than be diminished. As for the Energy Division's MCC Buckets Proposal, CEERT argued that there is no compelling reason why this proposal is necessary or useful.

On May 22, following the filing of CAISO's final studies on 2021 Local Capacity Technical Analysis and 2021 Flexible Capacity Requirements (which had been subject to comment in draft form in April and May), the CPUC issued a Proposed Decision adopting local capacity obligations for 2021-2023 and flexible capacity obligations for 2021, and refining the RA Program on Track 2 issues, including QC counting conventions, DR protocols, and MCC Buckets. CEERT is reviewing the PD, but already has concerns about certain RA refinements that, if made permanent, could pave the way for more gas-fired generation procurement and continue to make it difficult for preferred resources to provide or appropriately count for

RA. Opening and Reply Comments are due on June 11 and June 16, and the PD will be considered at the CPUC's June 25 Business Meeting. CEERT will request meetings with Commissioners' offices to detail our concerns and put forth needed revisions to the PD.

CPUC Gas System and Grid Initiatives

R.20-01-007 – Gas Reliability and System Planning

On January 16, the CPUC issued Ordering Instituting Rulemaking (OIR) R.20-01-007 to "establish polices, processes, and rules to ensure safe and reliable gas systems in California and perform long-term gas system planning." Based on language in the OIR, CEERT was initially hopeful that this proceeding would focus on planning for alternatives to replace gas resources in order to meet the state's GHG emission reduction targets and mitigate gas pipeline and storage safety-related issues, such as PG&E's gas pipeline rupture in San Bruno in 2010 and the leak at SoCalGas's Aliso Canyon gas storage field in 2015.

On February 26, CEERT filed Comments on the OIR's preliminary scope to request that certain scoping issues in both the Track 1B "Market Structure and Regulations" and Track 2 "Long-Term Natural Gas Policy and Planning" would examine and require the gas IOUs to establish zero-carbon resource programs, such as demand response, to mitigate such risks, improve reliability, and meet decarbonization goals. We also delivered that message in the first Prehearing Conference (PHC) on the OIR on March 24.

Unfortunately, as reflected in the Scoping Ruling issued after the PHC, the CPUC's initial focus in this OIR is on Tracks 1A and 1B, which are recast to focus only on improving gas systems and standards under the apparent assumption of business-as-usual for gas IOUs to have adequate and even excess transmission and storage capacity to continue to meet and exceed ("a specific amount of slack capacity or additional infrastructure") peak day demand, and meet the gas needs of electric generators, especially "during multiple days of low renewable generation."

The fact that this OIR has taken its focus off dealing with reduced demand for gas usage has had adverse impacts on fledging efforts to establish first-of-their-kind gas Demand Response programs, first by SoCalGas, where such a program was specifically identified by both the CPUC and CEC as a means to mitigate gas system risks and disruptions. SoCalGas's efforts to continue its successful Gas DR Pilots were stymied by the CPUC's after-the-fact revision of the pilot goals in D.20-02-043, issued on February 27. While the CPUC denial of the application was "without prejudice," allowed a specific Commercial and Industrial Pilot to continue to be reviewed, and claimed to "encourage" SoCalGas to come back with a new application based on additional "guidance," such "encouragement" is completely undermined by D.20-02-043 failing even to approve the costs SoCalGas incurred in undertaking the pilots at Energy Division's direction. To date, SoCalGas has not filed any such new application.

D.20-02-043 also ignored the fact that, just prior to its issuance, the CPUC in a separate proceeding (R.17-11-009) had directed PG&E to file an application to establish a new Gas DR Program in D.19-09-025, which expressly found that such a program could "allow customers to voluntarily curtail load, giving PG&E more options to operate its system while reducing unwanted service disruptions." On March 30, PG&E did file A.20-03-016 requesting authority to establish a Gas DR Program, but not surprisingly, both in its Application and by separate Motion, sought to defer the request based on two developments after the issuance of D.19-09-025: (1) the CPUC's issuance of R.20-01-007 and its potential consideration of this issue in its Track 2, and (2) the CPUC's rejection of SoCalGas's Gas DR Pilots in D.20-02-043. PG&E, therefore, recommends that A.20-03-016 should await a CPUC decision in Track 2 in the OIR. Disappointingly, in a further death knell to carbon-free resources reducing reliance on or increasing reliability of gas use, a June 2 ALJ's Ruling in A.20-03-016 granted PG&E's deferral motion, claiming that any decision about the need for alternative resources such as DR programs should first be decided in Track 2 of R.20-01-007, the prospect for which seems remote at best.

The above circumstances clearly depict inconsistency and a lack of commitment to carbon-free resources in CPUC decision-making that have had a damaging impact on developing clean resource alternatives to gas supply. The result here, even where Gas DR Programs remain identified by the CEC as a mitigation measure for gas operational and supply risks, is that no IOU is undertaking any work on programs that could meaningfully address such concerns, while also achieving the state's climate goals. CEERT intends to continue to track the OIR and hopes to have an opportunity to urge a different outcome in Track 2.

Microgrids (R.19-09-009)
Fall 2019 saw the issuance of R.19-09-009 to address microgrids pursuant to Senate Bill 1339 and resiliency strategies to begin crafting a policy framework on the commercialization of microgrids. The three-track process for this proceeding announced at a December PHC involves a Track 1 focused on microgrids and resiliency planning in areas that are prone to public safety power shutoffs and wildfires, and Tracks 2 and 3 focused on streamlining implementation of microgrid and resiliency strategies in the context of SB 1339 and California's broader policy goals for reducing GHG emissions and adapting to climate change impacts. CEERT has party status in this proceeding.

On December 20 Assigned Commissioner Shiroma issued a Scoping Memo and Ruling for Track 1, which was followed on January 21 by an ALJ's Ruling that included a Staff Proposal on Track 1 Microgrid and Resiliency Strategies for party comment and by IOU proposals to that same end.

CEERT filed Opening Comments (January 30) and Reply Comments (February 6) on the Staff and IOU Proposals. We agreed with the Staff Proposal's goal of accelerating resiliency solutions before California's next wildfire season, and supported a revision to the Net Energy Metering (NEM) tariff with relaxed storage limitations, transparent and preemptive collaboration between the IOUs and other LSEs in their service territories, and appropriate Net Qualifying Capacity (NQC) values for the microgrids. However, along with many other parties, CEERT objected to PG&E's Distributed Generation-Enabled Microgrid Services (DGEMS) proposal where it was likely to result in long-term commitments to gas resources, at odds with the state's clean energy goals.

On April 29, the CPUC issued a Proposed Decision adopting short-term actions to accelerate microgrid deployment and related resiliency solutions. CEERT filed Opening Comments (May 19) and Reply Comments (May 26). We supported the PD's adopted reforms to streamline customer-initiated interconnections, but urged that it be modified to extend those reforms to other distributed energy resource interconnection projects beyond fire mitigation efforts, especially to break down barriers that prevent California's grid from evolving. We expressed the need for direction to the IOUs to consider demand-side resources, in particular demand response and energy efficiency, as resiliency solutions that complement microgrids. We renewed our concerns about PG&E's DGEMS proposal and strongly encouraged modification of the PD to ensure that even the "temporary" use of diesel or fossil generation this fire season be limited, and that PG&E be held accountable for ensuring that clean solutions will be implemented to replace fossil generation after this fire season, in alignment with California's air quality and climate goals.

CPUC Demand Response (DR). Energy Efficiency (EE), and Building Decarbonization
DR Applications (A.17-01-012, et al.) & Third Party DR Providers Load Impact Protocols (LIPs)
On December 23, the CPUC issued D.19-12-040, which continues its refinements to the DR Auction Mechanism (DRAM) and includes a process to collect data that measure whether the resources procured through the DRAM are cost-effective. Reliability and performance of procured resources will be improved through the adoption of a required delivery of 30 MWh per MW of average Qualifying Capacity (QC), defined qualitative criteria, refinements to the communication processes between utilities and DR providers, and establishment of a schedule for the Energy Division–led refinement process.

While D.19-12-040 adopted a method of measuring RA qualifying capacity for resources bid into the DRAM, D.19-06-026 issued in R.17-09-020 (RA) adopted a new requirement for all non-DRAM DR resources bid into the CAISO market, determining that "all demand response resources, whether third-party or IOU-managed, should receive QC values based on application of the load impact protocols (LIPs) unless or until a further exception is established." The sole exception to that requirement was to be for the DRAM pilots to the extent a different methodology was adopted, which D.19-12-040 in fact did.

However, for RA procurement outside of DRAM, the Energy Division launched an "informal" process in December for determining third-party LIP requirements and reports. This process has continued through the present with stakeholders participating with Energy Division in informal conference calls and service of proposals on those requirements. Issues related to developing these requirements have been exacerbated by the fact that the LIPs were developed for IOUs and not for third-party providers or CCAs, and may not provide the protections of confidential data that would encourage participation. Also, few consultants are available or have experience to develop LIPs for third-party providers, and the Energy Division has found shortcomings even in the draft reports that have been attempted to date.

Given the inability to challenge this process since it is being conducted on an informal basis only, the process itself has clearly placed a chill on third party DR providers even choosing to participate in RA solicitations other than DRAM, where the LIP is a prerequisite for determining QC value. LIPs have also continued to be considered as within the scope of R.19-11-009 as a Track 2 issue, as discussed above. Nevertheless, participating third party DR providers are to submit "final" LIP reports on May 29, which is to be followed by a June 5 Workshop at which the results of those reports will be presented.

As for the future of DRAM, the IOUs have begun their DRAM 2021 RFOs with a bidders' conference on May 28. Bid responses/offers are due June 9. The Energy Division scheduled a DRAM Technical Refinements process with Informal Comments on topics for June 3, a conference call to prioritize topics for June 10, and a Workshop on DRAM Technical Refinements for June 23.

On March 27 SDG&E submitted Advice Letter (AL) 3522-E and on April 1 PG&E submitted AL 5799-E and SCE submitted AL 4182-E. Each is a Tier 3 AL, which requires CPUC approval by Resolution adopted at a CPUC Business Meeting, and each includes the IOU DR 2018-2022 mid-cycle status report detailing the IOU's DR Programs and proposed changes. Protests to the ALs were submitted by Public Advocates Office, seeking a reduction of the proposed budgets; California Large Energy Consumers Association, contesting eligibility changes to a specific DR Program; and jointly by Enel X, CPower, the Council, and OhmConnect, raising multiple concerns about the IOUs' programs, proposed changes, and assessments. The IOUs replied on May 19 and May 20, and it is probable a Draft Resolution may require some time to issue, or a supplemental filing may be required.

Prohibited Resources (A.18-10-008, et al.)

These Applications were filed by PG&E, SCE, and SDG&E at the direction of the CPUC in Resolution E-4906 (June 21, 2018) "to allow appropriate consideration and evidentiary development on the issue of data loggers and meters" for the CPUC's DR prohibited resources policy verification plan. This proceeding has had various delays, including the completion of the IOUs' consultant's (Nexant) report on data loggers and interval meters pilot results. On January 10, an ALJ's Ruling was issued cancelling evidentiary hearings and scheduling the filing of Nexant's "California Demand Response Prohibited Resources Verification Administrator Metering Pilot Report" on January 31 and Opening and Reply Briefs on March 20 and April 3. On April 16, the CPUC issued D.20-04-031, which extended the statutory deadline for this proceeding to October to allow time for a PD resolving this proceeding to be issued.

Energy Efficiency (EE) (R.13-11-005)

On January 9, ALJ Fitch issued a Ruling seeking comments from parties on the "Upstream and Residential Downstream Lighting Impact Evaluation Report: Lighting Sector – Program Year 2017" impact evaluation report conducted by DNV GL Energy Insights USA, Inc. On February 10, Responses to the Ruling were submitted by SCE and SDG&E. Comments by other stakeholders were submitted on February 14, and Reply Comments were submitted on February 28.

On February 7, the CPUC Energy Division hosted a Workshop for an informal discussion and problem-solving among stakeholders on the progress of third-party solicitations and consideration of semiannual Independent Evaluator reports.

On March 12, ALJ Kao issued a Ruling Inviting Responses to Potential and Goals Policy Questions. As the next Potential and Goals (P&G) Study and goal-setting cycle moves forward, stakeholders will be invited to participate and provide feedback in two parallel tracks (P&G Study Track and Goals-Adoption Policymaking Track). The questions posed in this Ruling cover: (1) energy efficiency in California's clean energy future, (2) energy efficiency goals, (3) optimizable energy efficiency, (4) non-optimizable energy efficiency, (5) portfolio assessment of cost-effectiveness and budget approval, and (6) prioritization. Opening Comments were submitted on May 22.

On March 18, Assigned Commissioner Randolph and Assigned ALJ issued a Ruling on Reforming or Eliminating the ESPI Mechanism. The Ruling sets forth questions for the utilities only, which are due on April 15. The remaining stakeholders are invited to respond to questions on whether the ESPI mechanism should be retained or eliminated, and on potential modifications to the ESPI mechanism and other ESPI-related questions. Opening Comments were submitted on April 29 and Reply Comments on May 15.

On March 25, ALJ Kao issued an E-mail Ruling Clarifying the Scope of the OSC against SoCalGas. The factual questions to be addressed in the OSC are: (1) whether SoCalGas booked any expenditures to its Demand Side Management Balancing Account, and associated allocated overheard costs, to advocate against more stringent codes and standards during any period between 2014 and 2018, and (2) whether SoCalGas ever used ratepayer funds to advocate against local governments' adoption of reach codes.

On April 3, ALJ Fitch issued an E-mail Ruling seeking further comment in response to a January 9 ALJ Ruling Seeking Comment on Upstream Lighting Program Evaluation for Program Year 2017. In the E-mail Ruling, the ALJ requests additional comments on the Ruling given that the final 2018 Impact Evaluation Report is now available. SCE and SDG&E were directed to file responses to questions posed in the Ruling.

Building Decarbonization (R.19-01-011)
Last year the focus of this Rulemaking was a Pilot Programs Staff Proposal, issued on July 16, that addressed two building decarbonization pilot programs resulting from SB 1477: the Building Initiative for Low-Emissions Development (BUILD Program) program and the Technology and Equipment for Clean Heating (TECH) Initiative. On February 12, the Commission issued a Proposed Decision to establish a framework for CPUC oversight of these pilots and authorize funding.

Following party comment, on March 26 the CPUC issued D.20-03-027, establishing these two pilot programs and funding and budgets specific to all of the respondent IOUs. These orders include directives on the timing and content of implementing IOU advice letter filings and the responsibilities of Energy Division for the TECH Initiative implementer and the program evaluator for both programs.

The two pilot programs will develop valuable market experience in decarbonizing residential buildings in order to achieve California's zero emissions goals, with pilot program funding authorized and financed pursuant to SB 1477. That funding makes available $50 million annually for four years, for a total of

$200 million, derived from revenue generated from the GHG emission allowances directly allocated to gas corporations and consigned to auction as part of CARB's Cap-and-Trade program. D.20-03-027 appropriates 40% of the $200 million budget for the BUILD program and 60% for the TECH initiative.

Other CPUC Rulemakings and Governance Actions
To the extent resources are available, CEERT is tracking the following CPUC proceedings that have significance for clean energy policies and, where appropriate, can be the subject of CEERT advocacy.

Self-Generation Incentive Program (SGIP) (R.20-05-012)
This SGIP was initiated almost 20 years ago, and its current form has been the subject of R.12-11-005, which also addressed Net Energy Metering (NEM). At its May 28 Business Meeting, the CPUC issued a new SGIP Rulemaking, R20-05-012, focused almost exclusively on developing and refining policies, procedures, and rules for SGIP, with the only additional consideration limited to a set of California Solar Initiative (CSI) sub-program evaluation and program implementation issues. NEM policies or evaluation will not be addressed in this proceeding.

Power Charge Indifference Adjustment (PCIA) (R.17-06-026)
On October 17, the Commission issued D.19-10-001, which refines the method, data and process requirements for the forecast and true-up of market price benchmarks to be used in determining the PCIA rate. In furtherance of the Phase 2 Scoping Memo issued in February 2019, the 2020 focus of work in this OIR has been on addressing and resolving the efforts of three Working Groups: Working Group One – Benchmarking; Working Group Two – Prepayment; and Working Group Three – Portfolio Optimization.

On February 25, a Proposed Decision was issued to consider Working Group One proposals on departing load forecast and the presentation of PCIA rate on bills and tariffs. On March 26, the Commission issued its final D.20-03-019 resolving these issues. In D.20-03-019:

- The CPUC declined to adopt any technical modifications to departing load forecasting at this time.
- IOUs must report in each regulatory filing their meet-and-confer activities with the community choice aggregators (CCAs) if the regulatory filing includes a departing load forecast.
- The IOUs must collaborate to submit a joint proposal for bill and tariff changes to show a PCIA line item in their tariffs and bill summary table on all customer bills. Each IOU shall submit a Tier 3 Advice Letter by August 31 to implement the joint proposal by the last business day of 2021.
- IOUs should file a Petition to Modify to correct the mathematical errors claimed to exist in the PCIA template.
- The Protect Our Communities' August 2, 2019 motion for evidentiary hearings is denied.

The Working Group Two Report (Prepayment) was filed on December 9, with Comments filed in January, but the report has not yet been the subject of a Proposed Decision.

The Working Group 3 (portfolio optimization) schedule, revised in an ALJ's Ruling issued on January 22, has resulted in the filing of a Working Group 3 Report filed on February 21, followed by party comments filed in March, with a Proposed Decision expected in Q3 2020.

On May 22, a Proposed Decision was issued denying a petition by California Choice Energy Authority and Center for Accessible Technology seeking to modify D.18-07-009 to provide a four-year phase-out of the exemption from paying PCIA previously provided for customers of CCAs in SCE's and SDG&E's service territories who receive a Medical Baseline allowance.

Distribution Resource Plans (DRPs) (R.14-08-013)

On November 8, ALJ Mason issued a Ruling Requesting Comments on Possible Improvements to the 2020 Distribution Investment Deferral Framework (DIDF) Process, with Opening and Reply Comments filed on January 17 and January 31. On May 11, an extensive ALJ's Ruling was issued adopting reforms and filing and process requirements for the DIDF in both the Ruling and Attachment A thereto, with the direction that all parties comply with these reforms.

On January 9, Assigned Commissioner Batjer and ALJ Mason issued a Joint Second Amended Scoping Memo and Ruling that clarifies how the proceeding will decide on a methodology for determining avoided transmission and distribution costs, and, if approved, how the methodology will be applied to the Avoided Cost Calculator (ACC).

Following the issuance of a Proposed Decision on February 6 and party comments, the Commission issued D.20-03-005 on March 12 adopting the Staff Proposal on avoided cost and locational granularity of transmission and distribution deferral values. This decision makes the following determinations: 1). The specified T&D deferral values will be estimated through the DIDF and CAISO's TPP, and do not require further modeling to estimate or incorporate their values into other modeling efforts such as the ACC. 2). The White Paper's proposal for estimating the unspecified distribution deferral value will be further developed and modeled for adoption in the ACC Update in the IDER proceeding (R.14-10-003). 3). This decision does not draw a conclusion about the unspecified transmission deferral value. Instead, the existing methodology shall continue to be used unless or until the CPUC approves a new methodology. The CPUC may continue to consider this issue in the ACC major updates in the IDER proceeding.

Integrated Distributed Energy Resources (IDER) (R.14-10-003)
On March 13, following a Workshop (August) and Comment process and Staff Proposal (December), including discussion of alignment between the Avoided Cost Calculator (ACC) and IRP modeling, the CPUC issued a Proposed Decision on 2020 Policy Updates to the ACC, adopting new policies grounded in the Commission's movement to align the ACC with the IRP proceeding (R.16-02-007). Following Comments on the PD, the CPUC issued D.20-04-010 adopting the 2020 Policy Updates to the ACC.

On May 1, Draft Resolution E-5077 adopted updates to the ACC as directed by D.20-04-010. Webinars were held on May 6 – 8 to discuss the updates with stakeholders. Opening and Reply Comments have been permitted on the Draft Resolution (usually only one set of Comments is allowed) for filing on May 28 and June 2. The Draft Resolution will be considered at the CPUC's June 11 Business Meeting.

DER Improvements to Rule 21 (R.17-07-007)
On November 27, ALJ Hymes issued a Ruling continuing the Working Group process to address issues on streamlining Interconnection of Distributed Energy Resources (DERs) and Improvements to Electric Rule 21 governing interconnections to the IOUs' distribution system. Opening and Reply Comments were submitted on January 13 and January 27. A Workshop for Working Group Four (Rule 21 Application Processing and Review) was held on February 12. On May 7, the Commission issued D.20-05-022, which extends the statutory deadline for this OIR to May 2021 to allow sufficient time for Working Group Four to complete its work and the CPUC to issue a proposed decision for review and comments.

EE Business Plans (A.17-01-013, et al.)
This Application was closed by D.19-08-006 (August 9, 2019), which adopted a standard contract for EE local government implementers and associated implementation details. However, the proceeding has been reopened to consider intervenor compensation requests and related rehearing requests, which have yet to be decided. On February 6, the Commission issued D.20-02-029 denying a rehearing request by Public Advocates Offices that contested the cost-effectiveness determinations made about certain energy efficiency portfolios in D.18-05-041. D.20-02-029 finds that the CPUC's actions and analysis were law-

ful, but makes minor modifications to D.18-05-041 to clarify the Decision's rationale for the adoption of the interim cost-effectiveness standard for the program administrators' business plans in the ramp years.

Energy Storage Procurement Plans (A.18-02-016, et al.)
These consolidated applications were closed with the issuance of D.19-06-032, which was issued on June 27, 2019, to implement the AB 2868 Energy Storage Program and Investment Framework and approve related applications, with modifications. The only remaining activity has been the filing of various intervenor compensation claims that have yet to be addressed by a Commission decision.

Public Records Access (R.14-11-001)
On December 5, the Commission issued D.19-12-030 to extend the statutory deadline for this OIR to June 14. D.19-12-030 indicated that, despite three substantive decisions having been issued, there were several issues within its scope that still required resolution, "including the appropriate characteristics of documents that should be preemptively designated as either public or confidential and how often those preemptive designations should be updated or revisited." However, since then there has been no docketed activity in the proceeding and no further ruling or decision on those issues.

Climate Change Adaptation (R.18-04-019)
Following the Commission's issuance of D.19-10-054 in October on climate change adaptation and assessments for California energy utilities, an ALJ's Ruling was issued on January 29 seeking comments on a Working Group Report on Topic 5: "Climate Change Adaptation Data Decision-Making Framework." Opening and Reply Comments were filed on February 18 and March 3. Other than a reassignment of ALJs on this proceeding, no further ruling or decision has been made on this topic.

Disconnections (R.18-07-005) – COVID-19
Since December, all of the IOUs have filed monthly disconnection reports pursuant to D.18-12-013, which adopted interim rules to reduce residential IOU customer disconnections. On May 6, the CPUC issued a Proposed Decision adopting rules and policy changes for the IOUs to reduce such disconnections and to consider Emergency Customer Protections. This PD also addresses Resolution M-4842 (this draft version is the only one available on the CPUC's website), which issued on April 16 to ratify directions by the CPUC's Executive Director on March 17 to energy, water and communications corporations to retroactively apply customer protection measures from March 4 onward during the COVID-19 pandemic.

Resolution M-4842 orders electric, gas, communications, and water and sewer corporations in California to file a Tier 2 Advice Letter describing all reasonable and necessary actions to implement the Emergency Customer Protections contained in the resolution, and authorizes the corporations to establish memorandum accounts to track incremental costs of complying with this resolution. The Emergency Customer Protections, which were an outgrowth of protections adopted in R.18-03-011, apply to customers for up to one year from the date of the resolution.

The May 6 PD states that nothing in the decision is meant to detract or change any of the Emergency Customer Protections set forth in Resolution M-4842. If there are any conflicts with the protections for vulnerable populations listed in this proceeding and those in the Emergency Customer Protections, then the Emergency Customer Protections are controlling, but the utilities should be ready to implement any conflicting requirements adopted in the PD upon the expiration of the Emergency Customer Protections.

On May 28 the CPUC adopted Resolution M-4843 as an "emergency" measure authorizing certain utilities to enter into loan commitments or other indebtedness as necessary to continue to fund their operations during the pandemic.

Affordability (R.18-07-006)

The issues in this proceeding are: identification and definition of affordability criteria for CPUC-jurisdictional utility services; methods and processes for assessing affordability impacts across CPUC proceedings, programs and utility services; and other utility-services affordability issues. On November 8, Assigned Commissioner Rechtschaffen issued an Amended Scoping Memo and Ruling adopting a schedule to consider these issues, include a Revised Staff Proposal, culminating with a PD to be issued in May.

The Revised Staff Proposal was included in ALJ's Ruling issued on January 27, with Opening and Reply Comments, filed on February 21 and March 6. At the same time, Public Advocates Office was pursuing a motion to compel discovery from two communications utilities, which was eventually resolved. Thus far, no Proposed Decision has been issued.

Transportation Electrification (R.18-12-006)
On January 6, ALJ Doherty issued a Ruling that extends the filing deadline for the 8th Electric Vehicle Load Research Report from January 31 to March 31 and establishes March 31 as the filing deadline for any subsequent Electric Vehicle Load Research Reports.

On February 3, ALJ Doherty issued a Ruling Adding Staff Proposal for a Draft Transportation Electrification Framework (TEF) to the Record and Inviting Party Comments. Opening Comments were submitted on March 6. On March 6, parties including Natural Resources Defense Council, Environmental Defense Fund, Union of Concerned Scientists, Sierra Club, Enel X North America, SCE and SDG&E submitted a Joint Motion to Stay the Procedural Schedule and Provide for Alternative Proposals. On March 23, the Energy Division held the first TEF Workshop to discuss near-term priorities for the Draft TEF and moderate questions and responses from parties.

On March 24, ALJ Doherty issued an ALJ's Ruling denying the Joint Motion to stay the proceedings and add proposals due to the urgency of the CPUC achieving its transportation electrification goals. The Ruling provided a revised schedule that called for Reply Comments on specific sections of the Staff Proposal on April 27 and Opening Comments on two other sections (Section 3.4 (Scorecards, Targets, Metrics, and Reporting Requirements) and Section 11.3 (the IOUs' Low Carbon Fuel Standard Programs)) on May 11.

Non-Bypassable Charge (R.19-07-017)
On October 17, the CPUC issued D.19-10-056, which approves the imposition of a non-bypassable charge (NBC) to support California's Wildfire Fund (AB 1054) and adopts a rate agreement between the California Department of Water Resources and the CPUC. On February 27, the CPUC issued D.20-02-070, which denied an application for rehearing of D.19-10-056, rejecting Ruth Henricks' claims that the decision violated due process and upholding the legality and record support for the Wildfire Fund NBC.

On May 6 an ALJ's Ruling was issued seeking Comment on questions of DWR's May 4 request for the CPUC to adopt draft Wildfire Fund NBC Servicing Orders applicable to the electric IOUs that would set terms and conditions allowing DWR and the IOUs to cooperate in funding the Wildfire Fund NBC. The draft servicing orders have been modeled on those the CPUC adopted in 2011 in relation to the DWR Bond Charge. Responsive Comments by PG&E, SCE, SDG&E, and the Energy Producers and Users Coalition were filed on May 29.

Mitigation of Wildfire Risks (R.18-12-005)
This rulemaking focuses on examining electric utility de-energization of power lines in dangerous conditions. At its May 28 Business Meeting, the CPUC signed out a Proposed Decision adopting updated and additional guidelines for de-energization of electric facilities to mitigate wildfire risks as D.20-05-051, which is not yet available in final form.

Clean Transportation Advocacy

Advanced Clean Cars

On March 31, the National Highway Traffic Safety Administration (NHTSA) and the US Environmental Protection Agency (EPA) jointly released a final version of the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule on CO_2 emissions, and subsidiary corporate average fuel economy (CAFE) standards, for model years 2021-2026 passenger cars and light trucks. The regulations also partially withdraw California's waiver for its Zero Emission Vehicle (ZEV) mandate under the Clean Air Act. The final rule seriously weakens the stringency of the CO_2 emissions and CAFE standards in the original 2012 rule, and drops the auto manufacturers' required improvements from 5%/year to 1.5%/year.

On May 27, California and 22 other states filed suit to challenge the Trump Administration's plan to weaken passenger vehicle emissions standards. The suit claims that the EPA and NHTSA have violated federal law and bypassed congressional requirements in enacting the proposed rollbacks, and that the agencies used a flawed analysis, unfounded assumptions, and statistical errors to manipulate data in support of their conclusions. The requirements remain unchanged for new vehicles to meet the strict criteria-pollutant standards proposed in the original 2012 rule.

CEERT has a decades-long history of advocacy for improving vehicle efficiency and strengthening California's ZEV program. In order to reduce a major source of air and climate pollution, we continue to support the state's goals for passenger vehicles, oppose any weakening of state and national vehicle standards, and encourage further growth of California's burgeoning ZEV market. (In 2019, electric vehicles were the state's second most valuable export, worth over $7 billion in revenue, and EV-related exports were valued at more than four times those related to conventional vehicles.)

In keeping with our efforts that contributed to a June 26, 2019 "cooperation agreement" by CARB's Mary Nichols and Canada's then-Minister of Environment and Climate Change, CEERT and Canadian NGOs continue to advocate for Canada's either adopting a California-like Advanced Clean Car standard or pursuing its own regulations that are more stringent than the SAFE Vehicles Rule.

Clean Miles Standard

CARB is conducting an analysis of proposed regulations for the Clean Miles Standard. CEERT and a small coalition that includes UCS, NRDC, Coalition for Clean Air, American Lung Association in California, Sierra Club California, and NextGen) are working with CARB staff on the regulatory package. Staff analysis has GHG emissions from ride-hailing being 50% higher than for an average vehicle, while UCS findings indicate that figure could actually be as high as 69%. The UCS study also determined that a pooled ride generates 33% fewer emissions than a single-occupancy ride-hailing trip. A single-occupancy ride-hail trip in an all-electric vehicle has 53% fewer emissions, and a pooled ride that is all-electric has 68% lower emissions. CARB's analysis found that only 20% of riders take advantage of ride-pooling, and that ride-hailing services are cannibalizing transit ridership, which may be an important driver for recent transit ridership declines.

The most effective solution for reducing emissions from ride-hailing services is for them to use fleets of zero-emission vehicles (ZEVs). Members of the coalition are advocating that CARB evaluate what a full transition of ride-hailing services to ZEVs by 2030 would entail. (This is not being suggested in lieu of other important strategies such as an increase in the pooling of rides, or improved coordination and scheduling with transit.)

Advanced Clean Trucks (ACT) Regulation

On April 28, CARB staff released proposed amendments to the Advanced Clean Trucks Regulation that call for more aggressive targets for different classes of trucks. The Board requested the proposed amendments largely in response to the advocacy of the ACT Coalition, which includes CEERT.

The original staff proposal would have required that only 11% of sales from 2024-2030 be electric trucks, and peak in 2030 at 22% of sales across all categories. This would effectively mean that only about 4% of California's trucks would be zero emission trucks (ZETs) by 2030 (not really any greater than the status quo based on current trends in ZET adoption). The Coalition's proposed amendments would:

1. Increase the overall mandates to ensure that by 2030 no less than 15% of medium- and heavy-duty trucks on the road are zero-emitting;
2. Include Class 2b pickup trucks in the mandates beginning in 2024;
3. Outline CARB's longer-term objectives for achieving 100% zero-emission trucks in various categories, and explain how the rule helps attain federal and state air-quality and GHG objectives; and
4. Commit CARB to adopt corresponding ACT fleet purchase requirements in 2021 (a separate but parallel rule that the Board will consider in December).

CARB staff made three key changes that strengthened the proposed rule:

1. Sales targets were increased across all vehicle categories;
2. Sales targets increase through 2035 rather than plateauing in 2030; and
3. Class 2B pickups must comply with the standard starting in 2024 rather than being exempt until 2027.

Consequently, the latest proposal doubles the number of electric trucks achieved through 2035 relative to staff's original proposal and results in nearly one in three new tractor-trailers being ZETs by 2030.

CARB estimates that the revised ACT Rule will provide statewide benefits of $32.5 billion (including more than $8.3 billion in economic savings for the state's businesses), with health cost savings from criteria emission reductions of roughly $8.9 billion, reduced manufacturer costs of $5.9 billion, and reduced social costs due to climate change of $1.7 billion. (This contrasts with estimates of $5.7 billion, $4.8 billion, and $1.1 billion for staff's original proposal.)

While CARB staff's new proposal represents a significant (and world-leading) step forward, the proposed regulation alone is insufficient to transition the heavy-duty vehicle sector to zero-emissions electric drive (whether that be powered from batteries or hydrogen). More will be necessary if the air and climate pollution burden produced by the state's trucks is to be eliminated. CARB needs to send a clear market signal that it is committed to pursuing timelines for completely transitioning all the state's trucks to ZETs within the next 20-25 years. CARB will consider the revised ACT Rule at its June 25-26 Board hearings.

On December 13 CARB announced it was joining seven other states and the District of Columbia in committing to accelerate deployment of zero-emission trucks and buses. The collaborative will pursue coordinated efforts with industry and stakeholders to address cost, fueling infrastructure, and other barriers through a ZEV Task Force facilitated by the Northeast States for Coordinated Air Use Management, and will develop a Memorandum of Understanding for state governors to consider during the summer.

<u>Clean Transportation Investment Plan</u>

The California Energy Commission released a Staff Draft of the 2020-2021 Clean Transportation Investment Plan Update (CTIPU; formerly the ARFVTP Program) on March 2, and on March 3 the 33-member Advisory Committee met to discuss the plan. This year the CEC extended the budget projections to 3.5 years, effectively making the new CTIPU the 2020-2023 Investment Plan Update, which will better convey the Program's long-term goals and provide more funding certainty to the stakeholder and business community. The new CTIPU also reflected a shift in priorities, with a greater focus on supporting ZEVS and related infrastructure and on direct benefits to disadvantaged communities.

The new CTIPU is proposing total funding of $384.2 million in 2020-2023, with:

- $92.7 million for Light-Duty Charging Infrastructure and eMobility in 2020-2021 and $40.2 million in the following 2½ fiscal years;
- $20 million and $114.8 million for Medium-and Heavy-Duty ZEVs and Infrastructure;
- $20 million and $45 million for Hydrogen Refueling Infrastructure;
- $10 million and $25 million for Zero- and Near-Zero-Carbon Fuel Production and Supply;
- Manufacturing receiving no funding in 2020-21 and $10 million in the following 2½ fiscal years; and
- $3.5 million and $3 million for Workforce Development and Training.

The CEC's strategy is to target large investments to reduce the state's light-duty vehicle charging infrastructure gap in the upcoming fiscal year, and to focus more on medium- and heavy-duty ZEVs and ZEV infrastructure in future fiscal years. Allocations for hydrogen refueling infrastructure and zero- and near-zero-fuel production and supply would remain steady over time. The Commission's allocations for ZEV and ZEV infrastructure manufacturing and workforce development would alternate in each fiscal year with the shared goals of supporting in-state economic development and catalyzing ZEV adoption. (The CEC focuses its funding more on infrastructure while CARB's programs focus more on vehicles.)

The Advisory Committee was broadly supportive of the CTIPU. However, the COVID-19 pandemic has since severely impacted state revenues. California's projected budget shortfall has significant implications for its transportation funding programs, and the 2020/21-2021/23 CTIPU will likely need to be revised.