

CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES
QUARTERLY STAFF REPORT
JANUARY – MAY 2021

I. SCHEDULE OF UPCOMING EVENTS:

Date and Time	Event Name	Proceeding Number
May 2021	Proposed Decisions on Tracks 3.B.1, 3.B.2, and 4	R.19-11-009 (Resource Adequacy (RA))
May 10, 2021	Pacific Gas and Electric (PG&E) Filing due	A.20-04-013 (Oakland Clean Energy Initiative (OCEI))
May 11, 2021	Reply Comments on Proposed Decision on Potential and Goals	R.13-11-005 (Energy Efficiency)
May 18, 2021	Virtual Status Conference	A.20-06-011 (PG&E Regionalization)
May 19, 2021	Opening Comments on Proposed Decision on SGIP Program Requirements	R.20-05-012 (Self-Generation Incentive Program (SGIP))
May 21, 2021	Appeals on Presiding Officer's Decision	R.13-11-005 (Energy Efficiency)
May 21, 2021	Opening Comments on Potential and Goals Ruling	R.13-11-005 (Energy Efficiency)
May 24, 2021	Reply Comments on Proposed Decision on SGIP Program Requirements	R.20-05-012 (SGIP)
May 28, 2021	Reply Comments on Potential and Goals Ruling	R.13-11-005 (Energy Efficiency)
June 1, 2021	Renewable Portfolio Standard (RPS) Plans	R.18-07-003 (RPS)
June 3, 2021	Opening Comments on Heat Pump Water Heater (HPWH) Staff Proposal	R.20-05-012 (SGIP)
June 8, 2021	Reply Comments on HPWH Staff Proposal	R.20-05-012 (SGIP)
June 9, 2021	Opening Comments on Renewable Market Adjusting Tariff (ReMAT) Program Ruling	R.18-07-003 (RPS)
June 23, 2021	Reply Comments on ReMAT Program Ruling	R.18-07-003 (RPS)
August 1, 2021	Deadline for load-serving entities (LSEs) to file all procurement data	R.20-05-003 (Integrated Resources Planning (IRP))

II. EXECUTIVE SUMMARY: THE PAST QUARTER AT A GLANCE (pages 2 – 4):

Transmission Planning and Development (full report on page 5)

The California Public Utilities Commission’s (CPUC’s) sudden shift in new resource procurement policy has exposed several longstanding transmission-related issues, such as the 10-year focus of the California Independent System Operator’s (CAISO’s) Transmission Planning Process (TPP) being too short considering the size of procurement required to achieve state decarbonization goals, and the need to rethink the “deliverability” standard in light of the changes in the resource mix and the reduction in potential imports. *These issues require a shift from the CPUC 10-year IRP procurement to the longer-term SB 100 process at the California Energy Commission (CEC).* The CEC, CPUC and CAISO are meeting for the next two months to work out how these plans will be coordinated.

CEERT’s V. John White and Jim Caldwell have had several discussions with CEC Commissioner Karen Douglas, who is leading a new interagency team that includes CPUC Commissioners Maribel Batjer and Cliff Rechtschaffen and CAISO CEO Elliot Mainzer. The focus will be to develop a *new, more comprehensive transmission planning process* for the renewable generation infrastructure needed to reach our 100% Clean Energy target. We anticipate the initiative will help overcome the barriers to considering long-term transmission system needs, rooted in the CPUC staff’s opposition to building new transmission.

The initiative kicked off with a meeting on May 20 between CEC Commissioners Douglas and Gunda and CPUC Commissioners Batjer and Rechtschaffen, to which CEERT was invited along with Americans for Clean Power, Large Scale Solar Association, California Wind Energy Association, and Independent Energy Producers. Two key issues discussed were the inability of so-called “energy only” renewable projects to be financed or brought online without identifying the availability of transmission, and the backlog in transmission upgrades and expansions identified by ACP.

California Energy Commission Integrated Energy Policy Report (IEPR) (full report on pages 5 - 6)

The CEC’s Draft Scoping Order for its 2021 IEPR proposes four major topics: energy reliability over the next five years; the evolving role of the pipeline gas system; building decarbonization and energy efficiency; and energy demand. CEERT has strongly supported the choice of these topics, and recommended adding a *modeling of load increases from building decarbonization and transportation electrification* and a thorough evaluation of *gas system utilization*.

Long-Duration Energy Storage (full report on page 6)

The CPUC included *1,000 MW of long-duration storage (LDS)* in the proposed midterm reliability procurement and in the updated generation portfolios for the TPP. The response from LDS developers was mixed, because of the relatively short time frame in which these projects would be procured (2025 – 26). Projects with longer lead times, such as pumped hydro, will be difficult to bring online by then, as large-scale LDS projects need multiple off-takers, which makes procurement and financing difficult. Developers of other LDS technologies are more optimistic and believe they can meet the deadlines.

Advocacy at the California Air Resources Board (CARB) (full report on page 6)

CARB is starting on its *2021 Climate Scoping Plan*. Advocates hope to *lower power sector GHG targets to 30 million metric tons*, given the significant load growth expected from electrification of buildings and transportation. CEERT is advocating that the new modeling assumptions be more reflective of actual emissions on the grid, especially considering continued reliance on old, inefficient gas-fired plants and relaxed air permit conditions because of reliability concerns, and inadequate tracking of emissions from back-up diesel generators, which are in far greater use than has been assumed in climate change planning.

Discussions with the Governor’s Office (full report on page 6)

CEERT joined 10 clean energy, environmental, and industry groups in a *February 5 letter to Governor Newsom* calling for renewed California leadership on clean energy, climate action, and reliable electricity service. The group recommended four actions: appoint strong, knowledgeable, independent leaders at the CPUC, CEC, and CAISO who will put frontline communities first; ensure adoption of lower greenhouse-gas (GHG) targets in the CPUC's Integrated Resource Planning (IRP) process and CARB inclusion of new electricity sector GHG targets to account for SB 100 and electrification of other sectors; direct the agencies to work with CAISO, load-serving entities, and transmission owners to expedite interconnection of renewable energy and storage resources; and require the CPUC to procure sufficient clean energy and storage capacity to replace Diablo Canyon.

Los Angeles Department of Water and Power (LADWP) (*full report on page 7*)

The *LA 100 Report* on the three-year modeling effort by the National Renewable Energy Laboratory is complete and the community outreach effort has begun. The bottom line: 100% zero-carbon is not only technically possible, but economically attractive. Mayor Garcetti has directed LADWP to prepare the Strategic Long-Term Resource Plan due this summer on the “Early – No Biofuels Scenario” that *achieves 100% decarbonization by 2035*.

Western Grid Integration (*full report on page 7*)

CEERT continues to participate in Western Grid Group and Western Clean Energy Advocates meetings on *Regional Markets* and *Resource Adequacy* and to monitor activities in CAISO's *Extended Day-Ahead Market* (EDAM) initiative, in addition to the ongoing effects of California's Summer 2020 power outages on *import and export dynamics*.

Advocacy at the California Public Utilities Commission (*full report on pages 7–15*)

CEERT filed comments in the CPUC's *Extreme Weather* proceeding that opposed procuring additional gas-fired power to maintain reliability during extreme hot weather this summer, and instead recommended clean technologies such as *solar + storage hybrids*, *demand response*, and *distributed resources*. A Final Decision made two key changes in response to CEERT and other parties' criticisms: fossil-fuel development at new, existing, or repowering sites will not be considered; and the CPUC will keep the proceeding open in a Phase 2 to consider parties' proposals.

The CPUC recently began to exempt the investor-owned utilities from needing to file AB 970 reports on the *status of their transmission and generation interconnection projects* because they claimed that reports they were filing with the Federal Energy Regulatory Commission (FERC) on the same subjects made the AB 970 reports redundant. However, CEERT discovered that the reports for FERC are harder to navigate or understand, they restrict access to information formerly available, and they are generally inaccessible to parties not active in the FERC proceedings. We filed a response opposing SDG&E's February 27 bid for exemption from having to produce AB 970 reports.

CEERT filed informal comments on an En Banc Hearing and white paper on *electric rates and costs*, asking for a more robust analysis of transmission costs and recommending a comprehensive evaluation on transmission ownership opportunities. We called for more transparency and analysis on gas price volatility and its effects on ratepayer costs, and the relationship to investment in clean energy and electrification.

In the *Integrated Resource Planning (IRP) proceeding*, CEERT argued that continuously planning to a 46 MMT GHG target and truncating transmission planning after 10 years remains out of sync with the needs of the state and its ratepayers. We held that the CPUC should utilize a least-cost/best-fit levelized cost of energy metric for resource selection, as opposed to the net qualifying capacity resource adequacy (RA) metric, and we expressed concern about the lack of consideration of GHG emissions, the exclusive focus on capacity procurement with no consideration of energy need, and the inexplicable failure to address critical transmission and interconnection issues.

In the *Resource Adequacy (RA) proceeding*, CEERT proposed a change to the current net qualifying capacity (NQC) counting methodology for today’s dominant form of hybrid: in-front-of-the-meter, “utility scale” DC solar + storage. With other parties, we also proposed establishing a qualifying capacity (QC) value and dispatch requirements for behind-the-meter (BTM) hybrid and standalone storage resources, and presented two pathways for supply-side RA participation in BTM resources.

CEERT joined many other parties in a [Response](#) to PG&E’s Additional Filing in the *Oakland Clean Energy Initiative*, arguing that the CPUC should chastise PG&E for bringing before it an application that was half-formed and clearly not ready for CPUC and parties’ review and engagement.

In the *Gas Reliability and System Planning proceeding*, CEERT’s Comments noted that the CPUC should require electric generators to provide projections of gas usage on a day-ahead basis, but these projections should be based on the CAISO Day-Ahead Unit Commitment Process that designates which generators will receive Day Of dispatch orders and what hourly quantities are forecast to be dispatched the next day.

In the *Microgrids* proceeding, CEERT filed comments arguing that standby charge waivers should incentivize clean microgrid development. We urged the CPUC to examine standby charge waivers and ensure that its actions help facilitate California’s clean-energy transition.

In the *Aliso Canyon* proceeding, we expressed appreciation for the conciseness of the Workstream #1 results, but believe additional documentation is required. Consultants’ Phase 3 scope for the three other classes of alternatives—gas demand reduction through electrification, decarbonization of the electric grid, and new DC transmission into the LA Basin—should be limited to comparing the results of achieving the state’s goals in these three areas with the resource gap required to allow the closure of Aliso Canyon.

In the *Self-Generation Incentive Program* rulemaking, CEERT recommended that the remaining SGIP funding should be allocated to projects that are most consistent with California’s decarbonization goals.

Clean Transportation Advocacy (full report on pages 15 - 20)

The National Highway and Traffic Safety Administration and the US Environmental Protection Agency announced they would reconsider the prior administration’s SAFE-1 rule, which aimed to preempt California and other states from setting their own GHG standards and zero-emission vehicle (ZEV) mandates.

CEERT is a member of the ACC II Coalition of NGOs advocating for CARB to adopt a strong set of post-2025 vehicle emissions standards and ZEV requirements. We are encouraging CARB to maximize direct benefits for residents of disadvantaged communities, further tighten criteria emissions standards, and prioritize achieving a high level of new ZEV sales by 2030 to ensure the state can meet the goals of all ZEV sales by [2035](#).

Though California’s 2 million trucks make up about 7% of the state’s 30 million registered vehicles, they are the state’s largest source of vehicular air pollution, accounting for 70% of nitrous oxides (NOx) and 80% of carcinogenic diesel soot. CARB Staff are working to achieve a zero-emission truck (ZET) fleet by 2045 everywhere feasible in California.

CEERT and our allies in the ACT Coalition are working with CARB Staff on the [Advanced Clean Fleet Regulation](#) to further reduce emissions from trucking and expedite California’s transition to a ZET fleet. The goal of the ACF Rule is to prime the market for ZETs through requirements that the state’s public and private fleets transition to 100% zero-emission medium- and heavy-duty trucks, and thereby also drive technology development and market investment, with 50% of new fleet truck purchases needing to

be zero-emission by 2024, and 100% of new purchases being zero-emission from 2027 onward. The complete transition to 100% ZETs will be completed over the next two decades.

Transmission Planning and Development

The California Public Utilities Commission's (CPUC's) sudden shift in new resource procurement policy has exposed several long-standing transmission-related issues, including:

- The 10-year focus of the California Independent System Operator (CAISO) Transmission Planning Process (TPP) is too short, considering the size of procurement required to achieve state decarbonization goals
- The lack of oversight on construction of approved projects
- The lack of coordination with plans of other California Balancing Authorities
- The lack of coordination between distribution-level interconnections (WDAT) versus high-voltage bulk interconnections
- The need to rethink the “deliverability” standard, considering the shift in resource mix and the reduction in potential imports

It is evident that these issues need immediate attention and involve a shift in focus from the CPUC 10-year Integrated Resource Planning (IRP) procurement to the longer-term SB 100 process at the California Energy Commission (CEC). In order to keep this year's CAISO TPP on schedule, the CAISO has initiated a new “20-year plan” whose outcome is not tied to an immediate project approval process and takes its input from the CEC's statewide SB 100 process. Details of how these plans will be coordinated are being worked out over the next two months by the CEC, CPUC, and CAISO.

CEERT's V. John White and Jim Caldwell have had several discussions with CEC Commissioner Karen Douglas, who is leading a newly formed interagency team that includes CPUC Commissioners Maribel Batjer and Cliff Rechtschaffen and CAISO CEO Elliot Mainzer. The focus will be to develop a new, more comprehensive transmission planning process for the renewable generation infrastructure that we will need to reach our 100% Clean Energy target. We anticipate the initiative, which will be supported by a significant allocation of new funding to the CEC based on one-time federal stimulus money and the 2021 California General Fund surplus, will help overcome the current barriers to considering long-term transmission system needs, rooted in the CPUC staff's opposition to building new transmission, and will also include outreach and engagement with the publicly owned utilities such as LADWP and SMUD, as well as regional transmission planning with adjacent balancing authorities in other states.

The new initiative kicked off with a meeting on May 20 between CEC Commissioners Douglas and Gunda and CPUC Commissioners Batjer and Rechtschaffen, to which V. John White was invited, along with Danielle Mills of Americans for Clean Power, Shannon Eddy of Large Scale Solar Association, Nancy Rader of California Wind Energy Association, and Jan Smutny-Jones of Independent Energy Producers. Two key issues discussed were the inability of so-called “energy only” renewable projects to be financed or brought online without identifying the availability of transmission, and the backlog in transmission upgrades and expansions identified by ACP.

Based on our conversations with Commissioner Douglas, we are cautiously optimistic that this new forum will help jump-start near- and medium-term transmission planning and implementation, and a more holistic focus on the renewable and transmission infrastructure investment needed to meet both 2030 and 2045 targets. It could also well result in the CEC becoming the lead agency on energy infrastructure planning.

California Energy Commission (CEC) Integrated Energy Policy Report (IEPR)

The CEC adopts an IEPR every two years and an update every other year that include energy policy recommendations formed by the CEC's assessments and forecasts of all aspects of the energy industry. These policy recommendations aim to conserve state resources, protect the environment, provide reliable energy, enhance the state's economy, and protect public health and safety.

On February 5, the CEC released its Draft Scoping Order for the 2021 IEPR, proposing four major topics: 1) energy reliability over the next five years; 2) the evolving role of the pipeline gas system; 3) building decarbonization and energy efficiency; and 4) energy demand.

On February 19, CEERT filed written comments on the Draft Scoping Order, strongly supporting the four topics. We recommended the CEC include a comprehensive modeling scenario for load increases from major electrification projects such as building decarbonization and transportation electrification, and we strongly recommended a thorough evaluation of gas system utilization, with a focus on gas prices including commodity and burner tip, gas system costs, impacts on rates, and electric/gas system reliability.

Long-Duration Storage

The CPUC included 1,000 MW of long-duration storage (LDS) in the proposed midterm reliability procurement and in the recent updated generation portfolios for the transmission planning process, even though the original RESOLVE model didn't include LDS in the Integrated Resource Planning process. The response from LDS developers was mixed, because of the relatively short time frame in which these projects would be procured (2025-26). Projects with longer lead times, such as pumped hydro, will be difficult to bring online by that time, especially given the uncertainty around which load-serving entities will actually be doing the procurement; in general, the problem remains that large-scale LDS projects will need multiple off-takers, which will make procurement and financing of the projects difficult. Developers of other long-duration storage technologies are more optimistic and believe they can meet the deadlines.

The May revisions to the Governor's budget included \$350 million for the CEC that is expected to help support demonstration projects for advanced LDS technologies.

Advocacy at the California Air Resources Board (CARB)

CARB is beginning the process for the 2021 Climate Scoping Plan, which will be the principal activity for the agency over the coming months. Advocates are hopeful of lowering the electricity sector greenhouse gas (GHG) targets to the 30 million metric ton level, considering the significant load growth expected from electrification of buildings and transportation.

CEERT will be seeking to update and revise modeling assumptions to be more reflective of actual emissions on the electric grid, especially taking into account continued heavy reliance on old, inefficient gas-fired power plants and relaxed air permit conditions because of grid reliability concerns, and inadequate tracking of emissions from back-up diesel generators, which are in far greater use than has been assumed in air quality and climate change planning.

Discussions with the Governor's Office

In light of California's rolling blackouts last summer and the Governor's duty to appoint key agency leadership at the beginning of the year, CEERT joined 10 clean energy, environmental, and industry groups in a letter to Governor Newsom calling for urgent action to provide reliable electricity service and restore California's leadership on climate and clean energy.

The group recommended four immediate actions to cure the electricity shortfall, mitigate the impacts of climate change, uplift vulnerable communities, and stimulate the economy: 1) appoint strong, knowledgeable, and independent leaders at the CPUC, CEC, and CAISO who understand that climate policy will be more effective when it puts frontline communities first; 2) ensure adoption of lower GHG targets in the CPUC's IRP process and CARB's inclusion of updated electricity sector GHG targets to account for SB 100 and electrification of other sectors; 3) direct the agencies to work with CAISO, load-serving entities, and transmission owners to expedite interconnection of renewable energy and storage resources; and 4) require the CPUC to procure sufficient clean energy and storage capacity to replace Diablo Canyon.

Los Angeles Department of Water and Power (LADWP)

The complete LA 100 Report on the three-year modeling effort by the National Renewable Energy Laboratory is complete and the community outreach effort has begun. The bottom line of the study is that 100% zero carbon is not only technically possible, but economically attractive. Mayor Garcetti has directed the Department to prepare the Strategic Long Term Resource Plan due this summer on the “Early-No Biofuels Scenario” that achieves 100% decarbonization by 2035. CEERT’s Jim Caldwell has been serving on the Public Advisory Committee to the LA 100 Study.

Western Grid Integration

CEERT continues to participate in biweekly Western Grid Group (WGG) and Western Clean Energy Advocates (WCEA) meetings on Regional Markets and Resource Adequacy (RA). These groups are active on clean energy issues in other Western states, and keep CEERT up to date on current market developments across the region. CEERT continues to monitor activities in CAISO’s Extended Day-Ahead Market (EDAM) initiative, in addition to the on-going effects of California’s Summer 2020 Outages on import and export dynamics.

The WCEA RA Working Group allows CEERT to stay current on RA issues across the West and advocate for RA structures that will reflect the suite of benefits clean energy resources bring to the grid. Carleigh Osen, CEERT’s Policy Coordinator, is co-facilitator of the WCEA RA Working Group, which meets monthly.

Advocacy at the California Public Utilities Commission (CPUC)

Summary of CEERT’s Advocacy at the California Public Utilities Commission (CPUC)

From January to May, 2021, CEERT has been active in the following proceedings: Extreme Weather (R.20-11-003), Transmission Planning/Reporting (I.00-11-001), Electric Rates and Costs, Integrated Resource Planning (IRP) (R.20-05-003), Resource Adequacy (RA) (R.19-11-009), Oakland Clean Energy Initiative (OCEI) (A.20-04-013), Gas Reliability (R.20-01-007), Microgrids (R.19-09-009), Aliso Canyon (I.17-02-002), Self-Generation Incentive Program (SGIP) (R.20-05-012), and Integrated Distributed Energy Resources (IDER) (R.14-10-003).

Extreme Weather (R.20-11-003)

On January 8, Administrative Law Judge (ALJ) Stevens issued a [Proposed Decision](#) (PD) Directing Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas & Electric (SDG&E) to Seek Contracts for Additional Power Capacity for Summer 2021 Reliability. This PD directs and authorizes the three investor-owned utilities (IOUs) to contract for capacity that is available to serve peak and net peak demand this summer and seek approval for cost recovery in rates. CEERT submitted [Opening Comments](#) and [Reply Comments](#) arguing against the PD’s exclusive focus on natural-gas-based resource procurement. The Final Decision [D.21-02-028](#) was issued on February 17.

Subsequently, PG&E, SCE and SDG&E submitted Advice Letters that seek approval of contracts procured pursuant to D.21-02-028. Parties, including CEERT, then filed Protests/Responses to these Advice Letters on February 26, with CEERT urging the CPUC to direct the IOUs to provide more information about the contracts identified in their Advice Letters.

In January, CEERT submitted [Opening Prepared Testimony](#) and [Rebuttal Testimony](#), which recommended that: (1) the CPUC should focus on least-regrets solutions to maintain reliability in Summer 2021, (2) the CPUC should ensure the mitigation measures taken to increase reliability in Summer 2021 are equivalent solutions to the causes of the August 2020 outages, and (3) the CPUC should recognize that there is equal or greater urgency to procure clean resources that can be on-line for the Fall 2021 and Summer 2022. CEERT opposed procurement of gas resources or expansion of gas-fired generation, but if the CPUC does decide to approve them, these contracts should be short-term.

We also recommended that the CPUC adopt the recommendations made by demand-side resource providers to modify programs so that solar + storage hybrids, demand response (DR), and behind-the-meter (BTM) distributed energy resources (DERs) can compete.

In February, CEERT submitted an [Opening Brief](#) and a [Reply Brief](#), arguing that any expansion or new investment in gas-fired generation must be either avoided entirely or, if used in a last resort, be limited to short-term contracts. We urged the CPUC to accept the program recommendations made by demand-side resource providers, and also made a [Motion](#) for Oral Argument.

On March 5, ALJ Stevens issued a [Ruling](#) Noticing Final Oral Argument in response to Motions for Oral Argument made by CEERT and CPower/Enel and scheduled it for March 19. On the same date, he issued a [Proposed Decision](#) Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in the summers of 2021 and 2022. In response to the PD, CEERT submitted [Opening Comments](#) and [Reply Comments](#), arguing that the CPUC's continued reliance on gas raises serious environmental justice, environmental, and health concerns, and that the PD fails to adequately address DERs and leaves them with no pathway forward.

On March 19, V. John White appeared on behalf of CEERT at the oral argument. (See the [Transcript](#).) John stated that while the proceeding had committed to the advancement of DR and DERs as priority resources, the PD presents a crippling response to DR and DERs by failing to consider proposals by industry leaders and even the utilities, which are needed to increase these resources, and in turn increase demand. Worse, the PD shuts down the proceeding from any further consideration of these demand-side proposals. John urged the CPUC to keep this proceeding open and argued that it called for a continuing overreliance on gas.

On March 26, the CPUC issued [D.21-03-056](#), a Decision Directing PG&E, SCE, and SDG&E to Take Actions to Prepare for Potential Extreme Weather in the Summers of 2021 and 2022. Notably, the Final Decision makes two important changes from the PD in response to comments by CEERT and other parties. First, it revises the language to state that contracts for fossil-fuel development at new sites or for redevelopment or full repowering at existing or mothballed electric generation sites will not be considered, which is an improvement over the previous text. Second, the CPUC is keeping the proceeding open in an additional phase to potentially evaluate and consider party proposals, or elements of party proposals.

In March, California Environmental Justice Alliance, Union of Concerned Scientists, and Sierra Club filed an [Application for Rehearing](#) and Protect Our Communities Foundation filed an [Application for Rehearing](#) of [D.21-02-028](#). On April 5, CEERT submitted a [Response](#) supporting these Applications for Rehearing and the concerns raised about [D.21-02-028](#)'s allowed additional procurement of new fossil-fuel capacity, which is inconsistent with numerous important state mandates.

On April 27, Assigned Commissioner Batjer and ALJ Stevens issued a [Joint Ruling](#) Discussing Potential Modification of [D.21-03-056](#) Regarding Day-Of Trigger in the Emergency Load Reduction Program (ELRP). This Ruling identifies a potential inconsistency in [D.21-03-056](#), which implies that ELRP should utilize both day-ahead and day-of triggers. On April 28, OhmConnect, Inc. requested leave to file Comments on the April 27 Ruling, a request that was supported by the California Efficiency + Demand Management Council. However, on May 3, ALJ Stevens denied this request and stated that it was likely that a proposed order would be issued shortly that parties can comment on.

CEERT remains optimistic that the CPUC will initiate a second phase of this proceeding to evaluate the numerous meaningful proposals that the CPUC's March Decision did not have time to address.

CPUC Energy Planning and Procurement and Resource Adequacy

Transmission Reporting (I.00-11-001)

In 2000, the CPUC launched its Investigation I.00-11-001 to implement Assembly Bill (AB) 970 “regarding the identification of electric transmission and distribution constraints, actions to resolve those constraints, and related matters affecting the reliability of electric supply.” In implementing AB 970, the CPUC from the outset required the IOUs to report specified information on the status of transmission and generation interconnection projects, first monthly (D.01-03-077), then quarterly (D.06-09-003).

The CPUC’s commitment to these “AB 970 Reports,” which contained clear, transparent information about the projects, continued until late Fall 2020. At that time, the IOUs, starting with PG&E, began filing Petitions for Modification (PFMs) of Decision (D.) 06-09-003 to be exempted from or relieved of the AB 970 Reporting requirement. In each case, the request was based on claims that settlements in the IOUs’ separate transmission owner (TO) rate cases before the Federal Energy Regulatory Commission (FERC) had resulted in a Stakeholder Transmission Asset Review Process for PG&E, Stakeholder Review Process for SCE, and TO5 Transmission Reporting Process for SDG&E—processes that, according to the IOUs, afford “more comprehensive” information or are “broader in scope” than the AB 970 quarterly reports and render the AB 97 reports “redundant and unnecessary.”

In two decisions to date, first granting PG&E its exemption request ([D.20-11-027](#)) and then granting the same relief for SCE ([D.21-03-010](#)), the Commission concluded that “stakeholders” that are parties to the CPUC proceeding (I.00-11-001) will not be disadvantaged by no longer receiving the AB 970 Reports if the CPUC directs PG&E and SCE to serve the “service list in this proceeding with the public version of the electric transmission projects information” that the utilities are required to provide to “stakeholders” pursuant to their STAR and SRP processes.

CEERT, however, discovered that these processes and the information they provide are *not* the same as the AB 970 Reports: they are more difficult to navigate or understand, they restrict access to information previously made publicly available, and they are generally inaccessible, especially for parties that are not involved in the FERC TO rate proceedings.

The last in line to make this exemption request was SDG&E, which filed its PFM on February 24. On March 26, CEERT filed a response opposing this request, based on multiple facts illustrating that the information claimed to be provided through the FERC settlement processes was not the equivalent to the AB 970 Reports in providing information or accessibility and, where that law is still in effect, did not comply with the statute. (See CEERT’s Response at: [CEERT Response to SDG&E PFM](#) of [D.06-09-003](#).) The CPUC’s Public Advocates Office also filed a Response in opposition to SDG&E’s PFM.

Both SDG&E and SCE filed replies to these responses. While neither wished to give up their “exemption” positions, they appeared to recognize that the IOUs could do more to educate CPUC parties on their FERC transmission reporting processes. To that end, SCE followed up with CEERT to hold a conference call on April 22 to explain its SRP process. In that conference call, with multiple SCE representatives, the utility walked through its process, discussed confidential versus publicly available information, but, ultimately, conceded that accessibility was still an issue that they hoped to have resolved by June.

On April 28, in a meeting with CPUC Energy Division Chief Ed Randolph, CEERT brought up this issue. Mr. Randolph asked us to send him a letter he could use to start to educate parties on the IOUs’ processes and ensure that needed transmission information was accessible.

Electric Rates and Costs

On February 24 the CPUC held an Electric Costs and Rates En Banc Hearing with a panel of experts from academia, industry, environmental justice, and consumer advocacy discussing the CPUC’s white paper on utility costs and rate trends, and how those trends might impact California’s decarbonization goals.

On March 19 CEERT filed informal comments on the En Banc Hearing and related white paper, asking for a more robust analysis of transmission costs and recommending a comprehensive evaluation on transmission ownership opportunities. We called for more transparency and analysis on gas price volatility and its effects on ratepayer costs, and the relationship to investment in clean energy and electrification.

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

On January 7, ALJ Fitch issued a [Proposed Decision](#) Transferring Electric Resource Portfolios to the CAISO for its 2021-2022 Transmission Planning Process. CEERT submitted [Opening Comments](#) and [Reply Comments](#) on the PD, arguing that clean energy procurement presents favorable solutions to current issues in California. We also argued that there should be increased transparency in the operations of the RESOLVE and SERVM models, that the PD fails to implement the long-term planning objective of the IRP process, and that the CPUC should take proactive steps to improve the IRP process. The Final Decision [D.21-02-008](#) was issued on February 17.

On February 22, ALJ Fitch issued a [Ruling](#) Seeking Feedback on Mid-Term Reliability Analysis and Proposed Procurement Requirements. CEERT submitted [Opening Comments](#) and [Reply Comments](#) urging the CPUC to implement near-term RA reform that will more accurately reflect the benefits that clean energy resources bring to the grid, and allow these resources to compete fairly with conventional generation.

CEERT held that transmission analysis, planning, and, perhaps most importantly, actual construction, must account for confounding variables that are not readily discernible in the analysis or available for public viewing. The CPUC should utilize a least-cost/best-fit levelized cost of energy metric for resource selection, as opposed to the net qualifying capacity RA metric. We expressed concern about the lack of consideration of GHG emissions, the exclusive focus on capacity procurement with no consideration of energy need, and the inexplicable failure to address critical transmission and interconnection issues, and we concluded that the CPUC’s modeling in the IRP process must be completely overhauled.

Resource Adequacy (RA) (R.19-11-009)

On January 28, CEERT submitted our [Track 3B.1 Proposal](#), which proposed a change to the current net qualifying capacity (NQC) counting methodology for today’s dominant form of hybrid: in-front-of-the-meter, “utility scale” DC solar + storage. On the same date, CEERT joined Sunrun, CESA, CALSSA, Tesla, Vote Solar and Enel X North America and submitted a [Track 4 Proposal](#) that focused primarily on establishing a qualifying capacity (QC) value and dispatch requirements for behind-the-meter (BTM) hybrid and standalone storage resources. This Track 4 Proposal also presents two pathways for supply-side RA participation in BTM resources.

A Workshop on February 8-10 covered Track 3.B.2 Proposals, and a second Workshop on February 25 covered Tracks 3.B.1 and 4 Proposals. CEERT presented at the second Workshop on the hybrid QC. Workshop materials can be found [HERE](#).

On March 11, ALJ Chiv issued a [Ruling](#) granting CEERT’s Motion for Official Notice of Advice Letter (AL) 5868-E, et al., which contain the “2020 Joint IOU ELCC Study – Report 1,” and AL 6041-E, et al., which contain the “2020 Joint IOU ELCC Study – Report 2.”

On March 15, CEERT submitted [Opening Comments](#) on RA Tracks 3.B.1, 3.B.2, and 4 Proposals, submitted our revised Track 3.B.1 proposal, and provided comments on other revised Tracks 3.B.1, 3.B.2, and 4 proposals. On March 23, we submitted [Reply Comments](#) on Second Revised Track 3.B.2 Propo-

sals and agreed with numerous parties which recommend that the Standardized Fixed-Price Forward Contract proposal that Energy Division adapted as a basis for moving forward on broad RA reform be dropped from further development in Track 3.B.2. CEERT also agreed that the SCE/CalCCA Joint Proposal to incorporate energy sufficiency should be carried over for further development. On March 26, we submitted [Reply Comments](#) on Tracks 3.B.1 and 4 Proposals and urged the CPUC to adopt its hybrid counting rules Track 3.B.1 proposal in this RA cycle. However, there are no viable Track 4 proposals with enough of a record and broad support for adoption at this stage.

On April 2, CAISO submitted a Draft 2022 Local Capacity Technical [Analysis and Update](#) Regarding Draft 2022 Flexible Capacity Needs Assessment, and on April 21, CAISO submitted its Draft 2022 Flexible Capacity Needs [Assessment](#).

On April 19, ALJ Fitch issued a [Ruling](#) on Energy Division's Demand Response Proposal and Seeking Comments. The Proposal pertains to issues relating to Proposed Revision Request (PRR) 1280 and DR in a supply-side context. Opening Comments were submitted on April 29 and Reply Comments on May 4.

Renewable Portfolio Standard (RPS) Program (R.18-07-003)

On January 20, the CPUC issued [D.21-01-005](#), the Decision on 2020 RPS Plans. On March 30, Assigned Commissioner Rechtschaffen and Assigned ALJs Lakhanpal and Sisto issued a [Ruling](#) Identifying Issues and Schedule of Review for 2021 RPS Procurement Plans. The Ruling identifies the 2021 RPS Procurement Plan filing requirements for all retail sellers of electricity and sets a schedule for the Commission's review of the 2021 RPS Procurement Plans.

On April 22, ALJs Lakhanpal and Sisto issued a [Ruling](#) Seeking Updated Information Regarding the Renewable Market Adjusting Tariff (ReMAT) Program. Opening Comments were due on June 9 and Reply Comments are due on June 23.

Oakland Clean Energy Initiative (OCEI) (A.20-04-013)

On January 8, ALJ Fogel issued a [Proposed Decision](#) Approving Oakland Clean Energy Initiative Preferred Portfolio Procurement Costs and Cost Recovery. However, on January 15, PG&E submitted a [Motion](#) asking to suspend the comment period on the PD, and submitted new information which was not known at the time the PD was issued. On January 22, CEERT joined AMP, AReM/DACC, CLECA, NCPA and Shell Energy (the Joint Parties) in a [Response](#) stating that the CPUC should not just suspend the comment period, but withdraw it, set aside submission, stay the proceeding pending the resolution of the ongoing negotiations between PG&E, Vistra and esVolta, and then re-open the record.

On January 26, ALJ Fogel issued a [Ruling](#) that suspended the comment period for the PD, set aside submission, suspended the procedural schedule and directed additional filings. Ultimately, on April 5, PG&E submitted an [Additional Filing](#) stating that both the PG&E-esVolta Local Area Reliability Service Agreement (LARS Agreement) and the PG&E-Vistra LARS Agreement will be terminated.

On April 26, CEERT joined numerous other parties to submit a [Response](#) to PG&E's Additional Filing, arguing that while sanctions may not be merited, PG&E should be chastised by the CPUC for bringing before it an application that was half-formed and clearly not ready for CPUC and parties' review and engagement. The Joint Parties requested that the CPUC direct PG&E to make a formal filing withdrawing its application within the 10 days the ALJ had provided for PG&E to respond to party responses to its recent filing. On May 4, ALJ Fogel ordered PG&E to file a Response to the Joint Parties' filing.

CPUC Gas System and Grid Initiatives

Gas Reliability and System Planning (R.20-01-007)

On February 26, ALJ Tran issued a [Ruling](#) Seeking Comments on questions related to the scope of issues outlined in Phase 1 (Track 1A and Track 1B). On March 19, CEERT submitted [Opening Comments](#), agreeing that the CPUC should require electric generators to provide projections of hourly gas usage information on a day-ahead basis, but emphasizing that these projections should be based on results from the CAISO Day-Ahead Unit Commitment Process that designates which generators will receive Day Of dispatch orders and what hourly quantities are expected to be dispatched the next day.

On March 30, Calpine, Southern California Generation Coalition, Indicated Shippers, and The Utility Reform Network (TURN) submitted a Motion to suspend the procedural schedule. On April 2, several parties, including PG&E, Southern California Gas Company, SDG&E, and SCE submitted motions requesting to serve testimony. However, the ALJ has not yet ruled on these Motions, and the current procedural schedule, including testimony and briefs, is unknown.

Microgrids (R.19-09-009)

On January 21, the CPUC issued [D.21-01-018](#), a Decision Adopting Rates, Tariffs, and Rules Facilitating the Commercialization of Microgrids Pursuant to Senate Bill 1339 and Resiliency Strategies.

On February 9, Assigned Commissioner Shiroma issued an [Amended Scoping Memo and Ruling for Track 3](#). The main issue in Track 3 is whether the CPUC should require PG&E, SCE, and SDG&E to waive standby charges for a customer operating a microgrid, regardless of fuel source, so long as: (1) waiving a standby charge will enable the microgrid customer to provide an incremental benefit to other customers, that is (2) commensurate with the magnitude of the otherwise applicable standby charges.

In March, CEERT submitted [Opening Comments](#) and [Reply Comments](#) on the Track 3 Scoping Memo, arguing that standby charge waivers should incentivize clean microgrid development. Thus, we encouraged the CPUC to carefully examine standby charge waivers in Track 3 and ensure that its actions allow for incentivizing progress toward meeting California's climate goals and facilitating its clean-energy transition. The CPUC must ensure the activities in Track 3 account for necessary resiliency valuation work in Track 4 and are aligned with other relevant proceedings.

On April 16, the CPUC issued [D.21-04-021](#), which addresses the application for rehearing of D.21-01-018 filed by the City of Long Beach. The CPUC modified D.21-01-018 to clarify the CPUC's obligations pursuant to Section 8371 and specify that there are limited exceptions to the over-the-fence rule. Rehearing of D.21-01-018, as modified, is denied.

Aliso Canyon (I.17-02-002)

On February 3, ALJ Zhang issued a [Ruling](#) on Confidentiality Claims by Southern California Gas Company (SoCalGas) Regarding Information in the Energy Division's Modeling Report, Entering into the Record the Energy Division's Modeling Report, and Requesting Prehearing Conference Statements. A Prehearing Conference was held on February 22, which CEERT attended. On March 8, ALJ Zhang issued a [Ruling](#) on Confidentiality Claims by SoCalGas Regarding Information in the Energy Division's Modeling Report, and Requesting Comments on that Report. Parties submitted Opening Comments on March 19 and Reply Comments on April 5.

On March 29, ALJ Zhang issued a [Ruling](#) Regarding March 30 Phase 3 Workshop and Request for Comments. A Workshop was held on March 30, when FTI Consulting and Gas Supply Consulting led an introductory workshop to discuss their baseline analysis, and proposed scenarios for Phase 3.

On April 20 CEERT submitted [Opening Comments](#) on the March 29 Ruling. We expressed our appreciation for the clarity and conciseness of the Workstream # 1 results, but believe that significant additional documentation is required before these results can be entered into the record and serve as the basis for any

modeling of alternatives in Workstream #2. The scope of Workstream #2 requires a complete overhaul and public presentation of a revised scope of work before any alternatives modeling commences.

It is appropriate that Consultants study the Gas Transmission alternatives in Phase 3. However, Consultants' Phase 3 scope for the three other classes of alternatives—gas demand reduction through electrification, decarbonization of the electric grid, and significant new DC transmission into the LA Basin—should be limited to comparing the results of achieving the state's goals in these three areas with the resource gap required to allow the closure of Aliso Canyon.

The Phase 3 Scope should be expanded to revisit Workstream #1 and include the range of investments required to also close the small gas storage facility at Playa del Rey. The CPUC should issue a revised Scoping Memo with these changes and a revised Phase 3 schedule before any Workstream #2 modeling begins. This will require another extension of the schedule, but even a few months' delay to finally “get it right” is well worth the effort and is the only politically viable outcome.

On April 20, CEERT had an [Ex Parte](#) Meeting with Commissioner Martha Guzman-Aceves and members of her Staff in which we reiterated many of the positions we had taken in our Opening Comments. On April 27, CEERT filed [Reply Comments](#) that echoed many views expressed in our Opening Comments.

On April 14, ALJ Zhang issued a [Ruling](#) allowing parties to submit Phase 2 modeling scenario proposals by April 26. A Status Conference on the updated Phase 2 schedule and proposals occurred on April 30.

Self-Generation Incentive Program (SGIP) (R.20-05-012)

On March 2, Assigned Commissioner Rechtschaffen issued a [Ruling](#) In R.20-05-012 Requesting Party Comment on revision to SGIP renewable generation technology requirements and party input on the Equity Resiliency Budget. On March 22, CEERT submitted [Opening Comments](#), arguing that the remaining funding available under SGIP should be allocated toward the cleanest technologies possible. On March 29, we submitted [Reply Comments](#), again holding that the remaining SGIP funding should be allocated to projects that are most consistent with California's decarbonization goals. We also argued that “green hydrogen” specifically should be exclusive to that which is produced from electrolysis using renewable energy or from renewable feedstock such as on-site biogas through a fuel cell.

On April 16, ALJ Fogel issued a [Ruling](#) Providing Proposal, Requesting Comment, and Updating Procedural Schedule. This Ruling provides a Heat Pump Water Heater Staff Proposal for comment.

On April 29, Commissioner Rechtschaffen issued a [Proposed Decision](#) that revises program requirements for SGIP renewable generation technologies and addresses other issues.

Integrated Distributed Energy Resources (IDER) (R.14-10-003)

On January 5, ALJ Hymes issued a [Proposed Decision](#) Adopting Pilots to Test Two Frameworks for Procuring Distributed Energy Resources that Avoid or Defer Utility Capital Investments. On January 27, CEERT submitted [Opening Comments](#), arguing that the pilots outlined in the PD should serve to lower additional barriers to further integrate DERs beyond distribution investment deferral, and that the timeline for the proposed pilots should be accelerated. Parties submitted Reply Comments on February 1. Final Decision [D.21-02-006](#) was issued on February 12.

Other CPUC Proceedings CEERT Continues to Track

As detailed in previous Quarterly Reports, CEERT is either a party to or on the service list for numerous CPUC proceedings that have required or could require CEERT participation, and that CEERT continues to track in anticipation of participating now or in the future. Information on any upcoming events in these proceedings is provided in the Schedule of Upcoming Events at page 1 of this Report.

However, because these proceedings were not the focus of CEERT's efforts from January to May 2021, only limited information about these proceedings is provided here, but is available from CEERT's regulatory counsel, Megan Myers (meganmyers@yahoo.com) or Sara Myers at (ssmyers@att.net.) Please do not hesitate to contact them for information on any of the following proceedings as to status or next steps.

PG&E's Regionalization (A.20-06-011)

On April 2, 2021, parties submitted Comments on PG&E's [Updated Regionalization Proposal](#). In addition, a [Virtual Status Conference](#) is scheduled for May 18 at 10:00 a.m.

Public Utility Regulatory Policies Act (PURPA) (R.18-07-017)

On January 11, Assigned Commissioner Rechtschaffen issued an [Amended Scoping Memo and Ruling](#). Parties submitted Comments on February 10.

Energy Efficiency (R.13-11-005)

On January 20, the CPUC issued [D.21-01-004](#), a Decision Providing Directions for Implementation of School Energy Efficiency Stimulus Program.

On February 17, ALJ Kao issued a [Ruling](#) that denies the September 16 Motion of Sierra Club and NRDC, which requests that the CPUC direct SoCalGas to terminate its Energy Efficient New Homes Program, and to sanction SoCalGas for violations of CPUC rules. The Ruling invites parties to comment on whether and what criteria the CPUC should adopt for delineating between program changes that require Staff approval via Advice Letter submission and program changes that only require an Implementation Plan addendum.

On April 16, ALJs Fitch and Kao issued a [Proposed Decision](#) Regarding Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process.

On April 21, a [Presiding Officer's Decision](#) finds that SoCalGas spent ratepayer funds on activities that misaligned with the CPUC's intent for energy efficiency codes and standards. This Decision does not order a financial penalty, but does order remedies for appreciable harm to the regulatory process, and that SoCalGas refund ratepayer expenditures and associated shareholder incentives. Any party may file an Appeal of this Decision within 30 days of the date of issuance.

On April 23, ALJ Kao issued a [Ruling](#) Inviting Comments on a consultant report for energy savings and total system benefit goals for energy efficiency program administrators from 2022 to 2032.

Improvements to Rule 21 (R.17-07-007)

On April 7, Commissioner Guzman Aceves issued a [Proposed Decision](#) Addressing Remaining Phase 1 Issues. Opening Comments were submitted on April 27 and Reply Comments on May 3. On April 8, ALJ Hymes issued a [Ruling](#) Directing Comments on Proposed Scope and Schedule for Phase II. Parties submitted Opening Comments on April 23 and Reply Comments on April 30.

Power Charge Indifference Adjustment (PCIA) (R.17-06-026)

On April 5, ALJ Wang issued a [Proposed Phase 2 Decision](#) on PCIA Cap and Portfolio Optimization. Opening Comments were submitted on April 26 and Reply Comments on May 3.

Distribution Resource Plans (DRP) (R.14-08-013, et al.)

On January 27, ALJ Mason issued a [Ruling](#) that grants, in part, the Joint Parties' Motion for an Order Requiring Refinements to the Integration Capacity Analysis (ICA). The Ruling groups the Joint Parties'

requests into three categories: ICA Data Validation Refinements, Continuing Improvements to the DRP Data Portals, and Compliance Issues.

Additional proceedings tracked, but where there has been no activity in the last several months:

- A.17-01-012, et al.: DR Applications & Third-Party DR Providers Load Impact Protocols
- R.19-01-011: Building Decarbonization
- R.18-04-019: Climate Change Adaptation

Clean Transportation Advocacy

There are many developments to report since our last update on transportation through September 2020. California must continue to reduce air and climate pollution from transportation to meet the Federal National Ambient Air Quality Standards as required in the State Implementation Plan, and to mitigate the increasingly severe impacts of climate change.

Advanced Clean Cars

A Federal Reset

CARB staff are deciding on the design and implementation of the [post-2025 Advanced Clean Cars](#) Regulation (aka ACC II). With the election of the Biden Administration, the ground has shifted away from federal opposition to California and the Section 177 states' ability to adopt stricter emission regulations for passenger cars and light-duty trucks (aka light-duty vehicles or LDVs) to a much more collaborative approach. The Biden Administration petitioned to have the federal government's defense of the 2019 *Safer Affordable Fuel-Efficient Vehicles Rule Part One: One National Program Rule (SAFE-1)* held in abeyance, a request that was [granted by the DC Circuit Court, which stayed the proceeding on February 8](#).

The National Highway and Traffic Safety Administration (NHTSA) and the US Environmental Protection Agency (US-EPA) released separate notices on [April 22](#) and [April 26](#) respectively in response to President Biden's January 20 [Executive Order 13990](#) on "Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis," announcing that they would reconsider the 2019 SAFE-1 for the purposes of rescinding the action taken by the prior administration. NHTSA stated that it intended to "withdraw its portions of the so-called SAFE I Rule, which sought to preempt states, including California, from issuing their own GHG emissions standards and zero-emissions vehicle mandates. The proposed action would establish a clean slate, enabling the Department to further the Administration's important fuel economy, equity, and climate change priorities — which include reversing unnecessary and potentially unlawful efforts to prevent state action."

The agencies' announcements served to open public consultative processes to review such issues as:

- For NHTSA: whether the SAFE I Rule, which was finalized in 2019, fell beyond the Agency's statutory authority by purporting to impose broad preemption requirements. If finalized, today's action would clear the regulatory decks, and NHTSA's actions in the SAFE I Rule would no longer be a barrier to states implementing tough GHG and zero-emissions vehicle regulations.
- For the US-EPA:
 - Whether it was proper for EPA to reconsider a previously issued CAA waiver.
 - Whether EPA's action to withdraw California's waiver in consideration of EPCA preemption was appropriate.
 - Whether the SAFE-1 interpretation of the CAA that enabled EPA to withdraw California's waiver was appropriate.
 - Whether the SAFE-1 interpretation of CAA section 177 that could disallow other states' ability to adopt California GHG emission standards was appropriate.

In addition, the US-EPA plans to reconsider, and potentially replace, the previous administration's final rule, titled *The Safer Affordable Fuel Efficient (SAFE) Vehicles Final Rule for Model Years 2021-2026 (SAFE-2)*. EPA is expected to issue a Notice of Proposed Rulemaking for SAFE-2 in July.

The issues raised by the Trump Administration's attempt to impose the SAFE Vehicle Rules must be resolved before the federal agencies can proceed to develop fuel efficiency standards (NHTSA has jurisdictional authority over this issue) and GHG and criteria emissions performance standards (under the US-EPA's authority) for post-2025 LDVs. It is not yet clear what approach the US-EPA will take and whether its design would include a zero-emission vehicle requirement for vehicle manufacturers.

We understand CARB has requested that NHTSA and the US-EPA take into account the voluntary [MOU certain automakers agreed to with CARB](#) in response to the Trump Administration's attack on California and the Section 177 states' authority to regulate vehicle emissions, and that in reconsidering the SAFE Vehicle Rules they not punish those automakers.

California's Work

CEERT is a member of the ACCII Coalition of NGOs advocating for CARB to adopt a strong set of post-2025 vehicle emissions standards and ZEV requirements. CARB staff have so far only held two workshops outlining their thinking on further modifications to the criteria pollutant emissions requirements, projections for wider adoption of ZEVs, and projected costs of future electric vehicle (EV) technologies.

CEERT and our allies in the ACCII Coalition have the ZEV/LEV rule begin by 2025 at the latest (which would not affect the voluntary agreement CARB struck with some automakers); ensure the current ZEV credit glut does not undermine the delivery of future ZEVs under ACC II by providing for the early retirement or discounting of credits banked through 2025; prioritize achieving a high level of new ZEV sales by 2030 to ensure the state can meet the goals of all ZEV sales by [2035](#); explore working with US-EPA to set world-leading standards; and ensure that the rule is finalized as soon as possible to make up for the delay caused by the Trump Administration's attack on clean vehicle programs. CARB staff intend to bring the ACCII Regulation to their Board by June 2022.

A Continent United?

In an April 21 letter submitted by [California and 11 other states](#) to President Biden about potential areas for collaboration on clean transportation, the states requested that all new LDV sales be zero-emission by 2035. To date, 14 states and the District of Columbia have [adopted some or all of California's LDV regulations](#), with three more states in the process of adopting theirs. [22 states](#) joined California's suit against the Trump Administration over the [wrangling](#) around the SAFE Vehicle rule, and 24 states signed the [Clean Car Promise](#) as part of the Climate Alliance Governors efforts in 2019.

Canada has embarked on collaborative efforts with the [Biden Administration](#) on issues that include climate change and clean transportation. Since 2017, CEERT has been working with Canadian NGOs to encourage staff at the federal departments of Environment and Climate Change Canada, Transport Canada, and Natural Resources Canada to adopt ambitious clean transportation policy inspired by [California's programs](#). Currently the provinces of Québec and British Columbia have ZEV mandates, while federally Ottawa has set an aspirational goal for LDVs achieving [100% zero emissions by 2040](#). We are working to [encourage Ottawa to adopt an actual ZEV mandate](#). In the absence of a US Federal ZEV mandate, if the 17 potential Section 177 states were to adopt ZEV mandates along with Québec and British Columbia, they would account for roughly 40% of the North American LDV market; if all of Canada were to adopt a mandate with the 22 or 24 states mentioned above, they would account for over 50% of the market.

Clean Miles Standard

On March 20, CARB staff released a [proposal for the Clean Miles Standard Regulation](#) for Transportation Network Companies (TNCs) for CARB Board consideration on May 20. The Staff proposal is broadly consistent with what CEERT and our allies in the Clean Miles Standard Coalition have been advocating. Staff strengthened both the GHG emissions and electric vehicle miles traveled (eVMT; as zero emissions only achievable using a pure battery electric or fuel cell electric vehicle), slowly increasing in stringency beginning at 2% eVMT in 2023 and achieving 90% eVMT and 0gCO₂/passenger-mile-traveled by 2030.

TNCs can achieve compliance targets by employing a range of strategies, including improving their fleet-wide fuel efficiency; reducing VMT by increasing the number of shared or pooled rides; reducing VMT by reducing deadhead miles; and earning CO₂ credits by investing in active transportation infrastructure or by providing integrated fare services to connect riders to mass transit. TNCs with annual fleet mileage of less than 5 million miles are exempt from the vehicle electrification and GHG targets. Staff estimate that the proposed regulation will generate statewide emission reductions of roughly 93 tons of PM_{2.5}, 298 tons of NO_x and 1.8 million tonnes (MMT) of CO₂.

Clean Truck Regulations

Medium- and heavy-duty trucks are only a fraction of the state's on-road vehicles, but a major source of air and climate pollution in California. At 10-11% California is only second to Texas as the nation's largest overall exporting state, and California's imports are about 2.5 times its exports. According to the International Transport Forum's 2019 Transport Outlook, global freight demand will grow 225% by 2050, making it the largest driver of increased emissions from the transportation sector. Moreover, the COVID-pandemic has further accelerated the growth of e-commerce and the demand for on-road freight transport, which underscores the urgency for a rapid transition to zero-emission trucks.

If California is to protect the health of its communities—especially its most underserved and vulnerable communities, which are directly exposed to trucking emissions due to their typically being located near warehouses, distribution/fulfillment centers, and major roadways—the state must pursue the accelerated development of its zero-emission transportation system.

Even though California's roughly 2 million trucks make up just under 7% of the state's 30 million registered vehicles, they are the state's largest source of vehicular air pollution, accounting for 70% of nitrous oxides (NO_x) and 80% of carcinogenic diesel soot. As previously reported, CARB adopted its first-in-the-world [Advanced Clean Truck Regulation](#) on June 25, 2020, phasing in available medium- and heavy-duty zero-emission technology starting in 2024, and requiring Staff to work to achieve a transition to an all-zero-emission California fleet by 2045 everywhere feasible, with earlier goals of 100% ZEV fleets for drayage trucks, last-mile-delivery, and government fleets by 2035; for refuse trucks and local buses by 2040; and for utility fleets by 2040. The regulations must prioritize emissions reductions in disadvantaged communities to the maximum extent feasible.

On August 27, 2020, CARB adopted its [Heavy-Duty Engine and Vehicle Omnibus Regulation](#) (aka the Low-NO_x Omnibus Rule). This Rule improves upon the testing and certification of trucks' emissions performance to ensure they produce the lowest emissions possible under real-world driving conditions, and increases the engine reliability and durability requirements that manufacturers must meet, thus maintaining lower emissions for more of the trucks' useful life. Previous certification requirements yielded low emissions by heavy-duty trucks in highway driving, but did not effectively control NO_x emissions during the low-load conditions under which trucks are often operated when in communities adjacent to ports, rail-yards, warehouses and distribution centers, and under heavy traffic conditions.

The new regulations will require that by 2031 NO_x emissions from all trucks be reduced below the current 2017 standard of 0.2g/bhph by a further 90%. Truck manufacturers will be allowed to cut emissions in intermediate steps: having to reduce emissions by approximately 75% to 0.05 g/bhph by 2024, and by in-

roducing trucks that have 90% lower emissions of 0.02 g/bhph beginning in 2027, with all trucks meeting or exceeding the 0.02 g emissions standard by 2031. Once it has been fully phased in, the Low-NOx Omnibus Rule is expected to reduce total NOx emissions from trucking in California by more than 23 tons per day; equivalent to eliminating the emissions of roughly 16 million passenger cars. According to the DMV, there are roughly 26 million passenger cars registered in the state.

Advanced Clean Fleet Regulation

CARB Staff continue to develop the [Advanced Clean Fleet Regulation](#) (ACF Rule) as a complement to the ACT and Low-NOx Omnibus Rules in furtherance of reducing emissions from trucking and expediting California's transition to a Zero-Emission truck (ZET) fleet. The goal of the ACF Rule is to prime the market for ZETs through requirements that the state's public and private fleets transition to 100% zero-emission medium- and heavy-duty trucks, and thereby also drive technology development and market investment. The ACF Rule will implement a phased approach, with 50% of new fleet truck purchases needing to be zero-emission by 2024, and 100% of new purchases being zero-emission from 2027 onward. (As outlined for the ACT Rule, the complete transition to 100% ZETs will be completed over the next two decades).

CEERT and the ACT Coalition continue to work with CARB staff on developing the ACF Rule. As with the ACT and Low-NOx Rules, one of the key goals for the ACT Coalition is to ensure that the benefits from the program are maximized for disadvantaged and low-income communities. Moreover, the ACT Coalition is cognizant of the fact that the drayage, package delivery, and other short-haul segments of the trucking industry are prone to ongoing worker exploitation. Trucking companies, brokers, and other contracting entities often misclassify drivers as independent contractors to avoid paying wages, benefits, equipment costs, taxes, and regulatory compliance costs. Misclassified drivers operate 70 to 90% of California's drayage trucks, making misclassification the drayage segment's dominant business model.

The ACT Coalition is stressing to CARB that because many misclassified truck drivers barely subsist on poverty wages and cannot access the low-cost capital available to large trucking companies, they lack the financial capacity to acquire new higher-cost ZEV trucks. The ACT Coalition has cautioned CARB that it needs to ensure the ACF Rule does not exacerbate this industry practice, and that if CARB is not mindful about misclassified truck drivers becoming regulated parties as "contractors" under the ACF rule, CARB could end up imposing significant cost burdens on these drivers. CARB will likely need to address this through collaboration with other relevant state agencies having authority in this area.

The ACT Coalition is working with CARB Staff to address the fact that achieving the ZET targets set out in the ACT Rule and the ACF Rule will fall short of what the modeling for the [Draft 2020 Mobile Source Strategy](#) has cited is necessary for the state to meet its climate and air quality goals. The ACT Coalition is also concerned that restrictions imposed by SB 1 (Beall 2017) could inhibit fleet turnover by preventing the early retirement of older high-polluting trucks, since new trucks purchased in 2022 could remain on the road until 2035 – 2040, depending on whether they've crossed a threshold of 800,000 miles with an engine over 13 years old. Even in the absence of the SB 1 restrictions, the ACT Coalition is advocating that the ACT+ACF programs develop innovative approaches to accelerate the turnover of trucks using internal combustion engines (ICETs) and their replacement by ZETs. These may include financial and non-financial incentives for the purchase and use of ZETs, and disincentives for ICETs.

CEERT and the ACT Coalition feel that CARB needs to revise the ACF Rule to include purchase and retirement mandates in order to work around the restrictions of SB 1; strengthen the rule and expand its ambition to mirror state commitments; and limit certain loopholes and exemptions in the proposal. The Coalition is concerned that without these changes the current design of the program could undermine the rule's ability to meet state commitments to have any chance of reaching health-based air quality standards in the San Joaquin Valley and South Coast air basins, or statewide GHG reduction targets.

Of course, a successful ZETs market requires that sufficient charging and fueling infrastructure is available to power all these new vehicles. CEERT and the ACT Coalition remain concerned that the state maintains its vigilance, planning, and support in this area. The CEC recently released its draft [charging infrastructure assessment](#) report, and the Governor's Office of Business and Economic Development is implementing the state's [Zero-Emission Vehicle Market Development Strategy](#), which includes building robust charging and hydrogen fueling networks.

The Los Angeles Cleantech Incubator's [Transportation Electrification Partnership](#) is working to accelerate transportation electrification and zero-emissions goods movement in its region, and California's IOUs have programs approved by the [CPUC to deploy nearly \\$1.45 billion](#) in EV charging infrastructure, including for trucks. The California IOUs and Pacific Northwest utilities have established a [West Coast Clean Transit Corridor Initiative](#) to assess the need for charging infrastructure to support medium- and heavy-duty trucks along the I-5 corridor and interconnecting highways. The ports of Los Angeles and Long Beach, backed by state and regional agencies, are gaining experience through pilot projects in deploying electric charging and hydrogen fueling equipment to support their 100% zero-emission ground equipment target by 2030 and 100% zero-emission drayage target by 2035. This and other funding from the CEC's [Clean Transportation Program](#); CARB's [Hybrid and Zero-Emission Truck and Bus Voucher Incentive Project](#); CARB's [Low Carbon Transportation Program](#); Electrify America (Volkswagen) [Zero Emission Vehicle Investment Plan](#) and [Volkswagen Environmental Mitigation Trust](#); the [Low Carbon Fuel Standard](#); Governor Newsom's [2021-22 budget proposal](#); and new funding from the [Department of Energy](#) and the Biden Administration's proposed [\\$2.3 trillion infrastructure program](#), all bode well that the needed infrastructure could be in place to support a growing ZET fleet in California.

CARB Staff intend to bring their proposed Advanced Clean Fleets Regulation to the CARB Board at its December 2021 hearings.

Multistate ZEV Truck MOU

Following the July 14 release of the [Memorandum of Understanding](#) by the expanded 15 state + D.C. ZEV Task Force for zero-emission trucks, the Northeast States for Coordinated Air Use Management has convened virtual meetings and webinars to cover key issues for a [Medium- and Heavy-duty ZEV Action Plan](#). Topics reviewed to date include how the truck market works, transit and school bus electrification, the role of utilities in accelerating electrification of medium- and heavy-duty vehicles, support for cost-effective infrastructure, and innovative financing to speed up truck and bus electrification. The Task Force is accepting stakeholders' submissions on what should be included in the Action Plan. The goal is to ensure that 30% of all new truck and bus sales are zero-emission by 2030, and 100% by 2050.

In the letter California and 11 other states submitted to President Biden on April 21, the signatories requested that all medium- and heavy-duty vehicle sales be zero-emission by 2045.

Federal Cleaner Trucks Initiative

The US-EPA has taken no public action on this [issue](#) since announcing on July 15, 2020 that it was [postponing any further work on the rulemaking](#).

Clean Transportation Investment Plan

The California Energy Commission approved the [2020-2023 Investment Plan Update for Clean Transportation](#) (IPUCT) at its regular business meeting on October 14, 2020. The IPUCT uses budget projections for the next 3.5 years, better conveying the Program's long-term goals and future funding priorities to the stakeholder and business community. Funding in each fiscal year through 2023 is subject to fees collected from future California vehicle sales, and requires legislative approval.

As previously reported, the IPUCT proposes total funding of \$384 million as follows:

- § \$132.9 million for light-duty EV charging infrastructure;
- § \$129.8 million for medium- and heavy-duty ZEVs and infrastructure;
- § \$70 million for hydrogen refueling infrastructure;
- § \$25 million for zero-and near-zero-carbon fuel production and supply;
- § \$10 million for recovery and reinvestment;
- § \$9 million for ZEV manufacturing; and
- § \$7.5 million for workforce development.

In addition, the IPUCT includes a new category for recovery and investment that will allocate \$10 million to address the near-term needs of projects impacted by the COVID-19 pandemic, including creating opportunities for program funding to be used to leverage federally funded projects requiring cost-sharing.

The CEC will seek to direct 50% of the funding from this plan to projects that benefit low-income and disadvantaged communities. Staff will also explore quantifying benefits in new ways that go beyond measuring funding amounts to ensure the dollars meaningfully advance equity within the state.