

CENTER FOR ENERGY EFFICIENCY AND RENEWABLE TECHNOLOGIES
QUARTERLY STAFF REPORT
APRIL – JUNE 2018

EXECUTIVE SUMMARY: THE PAST QUARTER AT A GLANCE (pages 2–3):

Grid Modernization and Reform (full report on page 4)

CEERT Director of Grid Policy Liz Anthony has been updating her *gas-fleet database* with metrics on *NOx emissions* and *LADWP's gas plants*. She will be using the database to help address the orderly retirement of gas-fired capacity, the Aliso Canyon gas storage facility mitigation plans, and a comparison to resource planning models.

Liz Anthony and CEERT Senior Technical Consultant Jim Caldwell have supported the California Independent System Operator's (CAISO's) Local Capacity Requirements Potential Reduction Study, which will examine *transmission upgrades* that would reduce the need to contract with gas-fired power plants within load pockets for resource adequacy.

Western Grid Integration (full report on page 4)

CEERT continues to work with the Fix the Grid campaign to identify a path to an *integrated regional electric system* that can aid in the transition to a cost-effective and reliable low-carbon grid.

CEERT led comments submitted with Pacific Northwest advocates to support the CAISO Informational Study on Increased Capabilities for *Transfers of Low Carbon Electricity between the Pacific Northwest and California*, which could decrease reliance on the Aliso Canyon gas storage facility in the LA Basin.

Southern California Activities (full report on pages 4 – 5)

CEERT and Fix the Grid met with Mel Levine, Chair of the Los Angeles Department of Water and Power's Board of Commissioners, to talk about *LADWP's participation in CAISO's Energy Imbalance Market* and to review recent discussions on Western grid integration and regional grid governance.

Jim Caldwell provided expert testimony on behalf of the Sierra Club and Earthjustice *in opposition to the city of Glendale's proposed 262 MW repowering of its Grayson gas-fired plant*.

CEERT submitted a letter to the California Public Utilities Commission (CPUC) strongly opposing the proposed decision to deny approval of 19 contracts for preferred resources in *Southern California Edison's (SCE's) Second Preferred Resource Pilot*. Jim Caldwell met with SCE officials to discuss ways to overcome current technical barriers to greater utilization of *demand response*.

Transmission Expansions (full report on page 5)

CEERT Executive Director V. John White and Jim Caldwell met with Dave Olsen, Chair of CAISO's Board of Governors, about the 2018 Transmission Planning Process, which aims to identify *transmission expansions and upgrades that can reduce local capacity requirements* in non-attainment areas and disadvantaged communities.

Large-Scale Energy Storage (full report on page 5)

John White spoke at an Association of California Water Agencies conference about utilization of hydro facilities to provide *long-duration energy storage*. Talks continued with large-scale storage proponents about how projects might be funded through *joint utility ownership* or *long-term contracts with CAISO*.

Discussions with the Governor's Office (full report on page 5)

CEERT talked with Saúl Gómez and Alice Reynolds about *deficiencies in the CPUC's Integrated Resource Planning (IRP) decision* and CPUC failure to recognize the need for *near-term procurement of renewables and large-scale storage*.

Advocacy at the California Air Resources Board (CARB) (*full report on page 5*)

John White and Liz Anthony met with senior CARB staff to discuss the failings in the IRP decision, including errors in the calculation of *existing levels of greenhouse-gas (GHG) emissions* and the proposed delay in acting to reduce emissions on the trajectory needed to meet the state's *2030 GHG target*.

Advocacy at the California Public Utilities Commission (CPUC) (*full report on pages 5 – 14*)

A CPUC Proposed Decision maintains the existing *Renewable Portfolio Standard (RPS)* penalty scheme, integrates changes made by SB 350 into the current RPS waiver scheme, and requires all retail electricity sellers to demonstrate that transportation electrification is accounted for in their procurement plans.

CEERT and several environmental and environmental-justice groups filed a joint response to a Petition for Modification of D.18-02-018 in the *IRP proceeding*, asserting that D.18-02-018 provides no direction on *GHG-free replacement resources* for the planned *retirement of the Diablo Canyon generators in 2024-2025*. An Amended Scoping Memo for the IRP indicates that a Proposed Decision on the Petition for Modification of D.18-02-018 related to Diablo Canyon's closure will be issued in August.

The working group on *Resource Adequacy (RA) reform* discussed a multiyear procurement framework, compliance and enforcement, whether or not to have a central buyer, and reliability studies that may inform a future framework. The CPUC intends to implement a *multiyear local RA requirement* in Track 2.

Initial bids are due June 21 for SCE's groundbreaking *Request for Proposals (RFP)* soliciting *preferred resources and energy storage* to meet local capacity requirements in the Moorpark Sub-Area.

CEERT sent a letter to a letter to the CPUC arguing that a Proposed Decision denying approval of *19 clean-energy resource contracts* in SCE's *Preferred-Resource Pilot (PRP) RFP 2* ignores applicable California policy and is in conflict with prior CPUC directives. Megan Myers and Jim Caldwell later met with advisors of Commissioners Peterman and Rechtschaffen to further discuss CEERT's position in this matter.

The scope of the Demand Response Application proceedings has been expanded to include a determination of next steps for the *DR Auction Mechanism (DRAM)*.

The CPUC issued a *Draft California Customer Choice Green Book* on the need to develop a plan to address current shifts in the evolving electricity market.

Short-Lived Climate Pollutants (*full report on page 14*)

CEERT is collaborating with the Dairy/Livestock Working Group, allied stakeholders, and state agencies on achieving progress toward California's goals for *reducing methane emissions*.

Clean Transportation Advocacy (*full report on pages 14 – 16*)

CEERT continues to work with state and national NGOs to defend the *2022-2025 vehicle emissions standards* against efforts by the Trump administration to roll them back.

We are tracking the CPUC's *Alternative-Fueled Vehicles rulemaking (R13-11-007)* and the IOUs' *transportation electrification plans*, as several CEERT affiliates are active in these proceedings.

In line with CEERT's advocacy, new revisions to the *Low-Carbon Fuel Standard* program would allow renewable power generated off-site to be used for electric vehicle (EV) charging and hydrogen production by electrolysis, and would recognize the benefits of shifting EV charging and electrolyzer loads to times when excess renewable electricity might otherwise be curtailed.

The *ARFVTP Advisory Committee*, of which CEERT is a longstanding member, released a final 2018 – 2019 Investment Plan Update with *funding for EV charging infrastructure* raised from \$20 million to \$134.5 million and for *hydrogen fueling infrastructure* from \$20 million to \$92 million.

Grid Modernization and Reform

CEERT has continued our efforts to find solutions to decrease the gas burn in California. Grid Policy Director Liz Anthony has been updating the gas-fleet database with additional metrics on NOx emission rates, and has added the Los Angeles Department of Water and Power balancing area's gas-fired power plants. Liz reached out to environmental, environmental justice, and clean energy advocates, asking them to provide insights into how the gas fleet is operating and to gain feedback on further directions for expanding the analysis. With this feedback, she developed a workplan to incorporate other datasets and address issues pertaining to an orderly retirement of gas-fired capacity, the Aliso Canyon gas storage facility mitigation plans, and comparison to resource planning models.

Liz and Senior Technical Consultant Jim Caldwell have maintained their engagement in the California Independent System Operator (CAISO) 2018-19 Transmission Planning Process (TPP), with CEERT submitting comments in support of the Local Capacity Requirements Potential Reduction Study. This study will offer guidance on potential economic transmission upgrades that would reduce the need to contract with gas-fired power plants within load pockets for resource adequacy. Although the study is "information only," it will provide valuable feedback to reduce local capacity requirements in future TPP and Resource Adequacy cycles.

Western Grid Integration

CEERT continues to work with the Fix the Grid campaign to identify a path to a regional system operation that can aid in the transition to a cost-effective and reliable low-carbon grid. A current bill dealing with regionalization and requirements for California load-serving entities, AB 813, is still active and has been referred to multiple committees in the state Senate. Clean Power Campaign continues to be supportive of the bill and to work with Assemblymember Holden and Energy Committee staffer Kelly Smith.

CEERT has also continued to collaborate with colleagues in the Pacific Northwest to identify other means to increase regional coordination. We led comments jointly submitted with Pacific Northwest advocates to support the 2018-19 CAISO TPP Informational Study on Increased Capabilities for Transfers of Low Carbon Electricity between the Pacific Northwest and California. The study was framed as a strategy to decrease reliance on the Aliso Canyon gas storage facility in the LA Basin. CEERT recommended further collaboration with the Los Angeles Department of Water and Power (LADWP), as LADWP operates the southern end of the Pacific DC Intertie, and better coordination between the LADWP and Pacific Northwest balancing authorities would in itself create greater efficiencies in the LA Basin.

We also recommended studying the impacts on local capacity requirements, as opposed to system capacity requirements, as the local requirements generally drive gas burn more in the LA Basin. Finally, CEERT and colleagues recommended utilizing updated clean energy portfolios in the Pacific Northwest to more accurately define the potential benefits.

Although the study will provide useful information for future policy initiatives, the CAISO unfortunately chose to take a conservative approach and only study current law for carbon reduction, declining to model more integrated approaches to the Western grid.

Southern California Activities

V. John White and Don Furman and Jena Price of Fix the Grid met with Mel Levine, Chair of the Board of Commissioners for the Los Angeles Department of Water and Power, to talk about LADWP's participation in CAISO's Energy Imbalance Market and recent discussions on regional grid integration and grid governance. Jim Caldwell attended the most recent meeting of the Advisory Committee for LADWP's 100% Clean Energy Study, and provided expert testimony on behalf of the Sierra Club and Earthjustice in opposition to the city of Glendale's proposed 262 MW repowering of its Grayson gas-fired plant.

V. John White and Jim Caldwell have had discussions and meetings with Colin Cushnie and Gus Flores of Southern California Edison on SCE's Request for Offers for the Moorpark sub-area, and on the California Public Utilities Commission's (CPUC's) proposed decision to deny approval of 19 contracts for preferred resources developed pursuant to SCE's Second Preferred Resource Pilot. CEERT has submitted a letter to the CPUC strongly opposing the proposed decision to abandon these important preferred resource projects. Jim also met with Colin Cushnie to discuss ways to overcome current technical barriers to greater utilization of demand response.

Transmission Expansions

V. John White and Jim Caldwell have had several meetings and discussions with Dave Olsen, Chair of the CAISO Board of Governors, about the CAISO's 2018 Transmission Planning Process. CAISO is planning to identify transmission expansions and upgrades that could reduce local capacity requirements in non-attainment areas and disadvantaged communities. At the request of California Public Utilities Commission President Picker and California Energy Commission Chairman Weisenmiller, CAISO is also conducting an analysis of the economic and environmental benefits of expanding the north/south Pacific DC Intertie transmission line from the Pacific Northwest to increase access to hydroelectric resources from the Bonneville Power Administration as a way to help California meet the evening ramp and reduce the gas burn.

Large-Scale Energy Storage

V. John White attended the recent climate and energy conference of the Association of California Water Agencies and discussed the opportunities for better integrating California's water and energy infrastructure through demand response and utilization of hydro facilities to provide long-duration energy storage. John also spoke about the need for and value to California's low-carbon grid of building new pumped-hydro facilities. Discussions have continued with large-scale storage proponents about how new projects might be funded by means of joint utility ownership or through long-term contracts with CAISO.

Discussions with the Governor's Office

V. John White and Liz Anthony met with Saúl Gómez and Alice Reynolds of the Governor's Office to discuss the deficiencies and errors in the California Public Utilities Commission's (CPUC's) Integrated Resource Planning decision and the agency's failure to recognize the need for near-term procurement of renewables and large-scale, long-duration storage in order to achieve the necessary trajectory of GHG emission reductions to meet California's 2030 targets. John also talked with Saúl and Alice about wildfire prevention and mitigation issues, strategies for Western grid integration, and the CPUC's proposed decision to kill the 19 preferred-resources contracts from Southern California Edison's Preferred Resource Pilot for the Johanna and Santiago substations area.

Advocacy at the California Air Resources Board (CARB)

V. John White and Liz Anthony met with CARB Executive Officer Richard Corey and senior CARB staff to discuss the deficiencies in the California Public Utilities Commission's recent decision in the Integrated Resource Plan proceeding, including errors in the calculation of existing levels of GHG emissions and the proposed delay in acting to reduce emissions on the trajectory needed to meet the 2030 GHG target. Liz and John both presented to CARB's joint workshop on the IRP, and Liz has followed up with senior CARB staff about her analysis of the varying operations and emission levels from gas-fired plants in non-attainment areas and disadvantaged communities.

Advocacy at the California Public Utilities Commission (CPUC)

Renewable Portfolio Standard (RPS) Program (R.15-02-020)

On April 16, Commissioner Rechtschaffen issued a [Ruling](#) Ordering Party Comments on Proposed Modification on Language in Sections 4.1 and 4.2 of the BioMAT Power Purchase Agreement (PPA). In those

Sections, each of the parties represents that it will not violate any of the terms and conditions in its governing documents, any contracts to which it is a party, or any laws.

However, PG&E has raised a concern about its ability to make the representation with respect to the “or any laws” language. PG&E questions whether the BioMAT program complies with the Public Utility Regulatory Policies Act of 1978 (PURPA), in light of a recent U.S. District Court decision that finds the Renewable Energy Market Adjusting Tariff (ReMAT) program’s pricing mechanism and contracting limits violate PURPA. Although there are distinguishing characteristics between ReMAT and BioMAT, PG&E is concerned that this decision is broad enough to impact the viability of the BioMAT program. Commissioner Rechtschaffen is considering asking the CPUC to agree to strike the phrase “or any laws” from the BioMAT PPA. Comments were filed on April 26.

On May 1, a [Proposed Decision](#) Implementing Senate Bill (SB) 350 Provisions on Penalties and Waivers in the RPS and Denying Petition for Modification of D.17-06-026 was issued in the RPS proceeding. Comments were filed on May 21 and Reply Comments on May 28. The Proposed Decision completes the implementation of enforcement rules for the RPS program in response to changes made by SB 350. This decision: maintains the existing RPS penalty scheme, integrates changes made by SB 350 into the current RPS waiver scheme, and denies Shell Energy’s August 2, 2017 Petition for Modification of D.17-06-026. In more detail, those findings are as follows:

- *RPS Penalty Scheme*: The Proposed Decision maintains the existing penalty amount at \$50 per REC for the following reasons: (1) nothing in SB 350 or party comments on these issues suggest a change is warranted; (2) the proposals to separate penalties for procurement requirements are unreasonable; (3) lowering the current penalty level will undermine compliance by creating an economic disincentive to comply; and (4) the evaluation and application of mitigating factors and pre-determined conditions in order to lower penalties were considered and dismissed in D.14-12-023. The CPUC also does not see any need to adjust the penalty amount for length or severity of non-compliance, and finds that current caps should continue into the future at current levels in order to maintain their effectiveness.
- *Waivers*: The CPUC should continue to make case-by-case determinations of the merits of requests for waiver of procurement quantity requirements or reduction of portfolio balance requirements.
- *Transportation Electrification*: Beginning with the 2018 RPS cycle, all retail sellers as defined in P.U. Code Section 399.12(j) must annually demonstrate that transportation electrification is accounted for in their RPS procurement plans by explicitly referencing forecasted transportation electrification in those plans, providing a detailed description of the data and method used to support their forecast, and explaining how they considered the CEC’s IEPR transportation electricity demand forecast in creating their own forecast.
- *Petition for Modification of D.17-06-026*: Because Shell is re-litigating issues it already commented on in its Opening Comments on the Proposed Decision on SB 350 RPS Implementation, the Petition for Modification should be denied.

RPS ReMAT (Renewable Market Adjusting Tariff) Program – On Hold per U.S. District Court Decision

On December 6, 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 effectively shut down the ReMAT program and foreclosed the investor-owned utilities (IOUs) from signing new ReMAT contracts. On January 3, the CPUC filed an “urgent motion” to the Court to stay its order while the Commission appealed it; or stay it to allow the CPUC to seek a stay in the Ninth Circuit Court of Appeals.

Following a February 8 hearing, the Court advised parties that it was inclined to deny the stay, but would consider, if jointly requested, a carve-out for those declarants that had made specific representations of alleged harm in the absence of a stay. The Court directed the parties to meet and confer about the possibility of such a carve-out. On February 15, Winding Creek Solar LLC and the CPUC jointly submitted a statement in response, but they met and conferred multiple times after February 8 and were unable to reach an agreement. A Motion was submitted based on the briefs and the February 8 hearing.

On March 16, the U.S. District Court denied the requests by the ReMAT Developers to file an amicus brief, and on April 23, the Court denied the CPUC's request to stay the order and judgment entered in favor of Winding Creek Solar LLC, pending the CPUC's appeal to the US Court of Appeals for the Ninth Circuit. That appeal has not yet been filed.

Integrated Resource Planning (IRP) (R.16-02-007)

On February 28 several of the original Joint Parties to the Diablo Canyon application (Friends of the Earth, Natural Resources Defense Council, California Unions for Reliable Energy, and PG&E) filed a [Petition for Modification](#) (PFM) of D.18-02-018, which is the Decision Setting Requirements for Load Serving Entities Filing IRPs. The Joint Parties take issue with the fact that D.18-02-018 provides no direction on GHG-free replacement resources for the planned retirement of the Diablo Canyon generators in 2024-2025, an outcome at odds with the Diablo Canyon decision. The Joint Parties seek modification of D.18-02-018 to provide direction on the procurement of GHG-free resources to prevent any increase in GHG emissions after the generating units at Diablo Canyon are retired as planned.

On March 26, CEERT joined Green Power Institute, Union of Concerned Scientists, Environmental Defense Fund, Sierra Club and California Environmental Justice Alliance (collectively, "Environmental Responders") in filing a [Joint Response](#) to the PFM. In this Joint Response, the Environmental Responders strongly support additional CPUC consideration of the impact of Diablo Canyon's retirement within the IRP proceeding, and argue that, if Diablo Canyon's retirement is not thoughtfully considered now, it has the potential to significantly increase air pollution and greenhouse gas (GHG) emissions by the middle of the next decade.

On April 9, the Joint Parties filed a [Reply](#) to the Responses to the Joint Parties' PFM. This Reply is very supportive of the Environmental Responders' Response, and notes that the Environmental Responders' efforts to promote a cleaner energy environmental and the elimination of GHG emissions are longstanding and truly impressive. The Joint Parties also supported the Environmental Responders' goal that the retirement of the Diablo Canyon generating units should not trigger any increase in GHG emissions.

On April 3, Administrative Law Judge (ALJ) Fitch issued a [Ruling](#) Seeking Comment on GHG Emissions Accounting Methods and Addressing Updated GHG Benchmarks. The Ruling invited comments from parties on a method proposed by CPUC Staff for comparing GHG emissions from electricity resource portfolios submitted as part of individual IRP filings.

On April 20, CEERT and other parties filed and served Comments on the April 3 ALJ Ruling. CEERT was generally supportive of the Clean Net Short methodology contained in the April 3 ALJ Ruling in the context of Load Serving Entity (LSE) IRP development that rewards LSEs for planning for GHG-free resources that best fit their load shape. We recommended that any steps taken to better align the tools utilized in the IRP with actual emissions would serve to improve the accuracy of the information used to make important planning decisions.

On April 27, the CPUC Energy Division Staff hosted an IRP Modeling Advisory Group webinar. Topics discussed included an update on the proceeding's schedule, energy efficiency optimization, demand response, time-of-use rates, an electric vehicle study plan, and capacity expansion modeling for the IRP.

On May 14, an [Amended Scoping Memo and Ruling](#) stated that the remainder of this proceeding would be divided into three categories of work: items required in preparation for the filing of individual LSE IRPs; consideration of individual IRPs, leading to adoption of the Preferred System Plan; and groundwork and preparation on policy issues for consideration in the 2019-2020 IRP cycle. The CPUC expects to address the issues raised by the petition for modification on Diablo Canyon replacement power in the portion of the proceeding dealing with items required in preparation for the filing of individual LSE IRPs.

The Amended Scoping Memo states that a Proposed Decision Addressing Petition for Modification of D.18-02-018 related to Diablo Canyon's closure will be issued in August, and a Proposed Decision Addressing Individual IRPs and the Preferred System Plan will be issued in 2019.

A.16-08-006 (PG&E Diablo Canyon Closure & Proposed Procurement Plan)

The Diablo Canyon proceeding is closed. Final Decision D.18-01-022 is at: [D.18-01-022](#). Decisions about replacement procurement for Diablo Canyon's output will be made in the IRP proceeding.

Resource Adequacy (RA) (R.17-09-020)

The current RA rulemaking is covering local and flexible RA procurement obligations, and addressing changes to the RA program and refinement of RA program elements. On April 23, the CAISO served the [Draft Flexible Capacity Needs Assessment for 2019](#) and [Draft Local Capacity Technical Analysis](#).

On April 24, the working group on RA reform discussed short- and long-term solutions to RA program reforms that would maintain reliability while reducing potentially costly backstop procurement. The discussion centered on a multiyear procurement framework, compliance and enforcement, whether or not to have a central buyer, and reliability studies that may inform a future framework.

On May 2, ALJ Allen issued an E-mail Ruling that the new due date for Opening Testimony on Track 2 issues is July 10.

On May 15, the CAISO provided its Final Local Capacity Technical Analysis for 2019 and Final Availability Assessment Hours Technical Study for 2019. After a delay due to stakeholder comments identifying fundamental concerns with CAISO's use of California Energy Commission (CEC) hourly load forecast data in determining flexible capacity requirements, CAISO served its Final Flexible Capacity Needs Assessment for the 2019 RA year on May 21. Comments on these final studies were filed on May 25. This is the first year the CEC has integrated distributed energy resources (mostly rooftop PV) in its base forecast, resulting in several significant changes to previous forecasts of both local and flexible capacity needs. It may take a year or so to sort out the impacts of this change in methodology at the CEC.

On May 22, ALJ Allen issued a [Proposed Decision](#) Adopting Local Capacity Obligations for 2019 and Refining the RA Program. The Proposed Decision adopts local capacity requirements (LCR) for 2019 applicable to CPUC-jurisdictional electric LSEs, and sets forth a process for adoption of flexible capacity requirements for 2019. Until new flexible compliance requirements for 2019 are adopted, the 2018 requirements will remain in effect.

For the 2019 LCR, the Proposed Decision adopts the CAISO's recommended values, but with reservations and concerns, which include a lack of transparency and the fact that PG&E and SDG&E are having difficulty reproducing the CAISO's LCR results. These problems must be addressed going forward.

The CPUC will consider changes to the flexible RA requirements in Track 2 and system RA issues further in this proceeding. While acknowledging parties' concerns, the CPUC believes there is value to having a multiyear local RA requirement to ensure that resources needed for reliability are procured in an

orderly fashion, and intends to implement a multiyear local RA requirement in Track 2. Combined storage and DR projects are eligible to participate in the RA program. Comments are due on June 11 and Reply Comments on June 18.

SCE, PG&E, and SDG&E Requests for Proposals (RFPs) or Requests for Offers (RFOs)

SCE Moorpark: In D.17-09-034, the CPUC rejected SCE's 54 MW gas-fired Ellwood contract and 0.5 MW energy storage contract to meet need in the Santa Barbara/Goleta area, directed SCE to determine whether that need could instead be met with reduced reliance on fossil fuel, and told SCE to update the Commission on actions and resources to address needs in the Santa Barbara/Goleta area that may arise in the event of a loss of the two Goleta–Santa Clara 230 kV transmission lines.

On February 28, SCE issued a Request for Proposals (RFP) soliciting preferred resources and energy storage that would meet the LCR needs in the Moorpark sub-area, and that also may further resiliency objectives in the Santa Barbara/Goleta area. SCE held a Bidder's Conference on March 15, and on March 23 amended the RFP to account for final approval by the CAISO Board of Governors of a transmission upgrade that reduced the overall need. Initial bids for this groundbreaking RFP are due on June 21.

The residual LCR need in the Santa Clara sub-area increased substantially with the new CEC load forecast, and SCE has revised the procurement objective as a result. There also appears to be a very real possibility that new gas in the Goleta area will be at least short-listed. Efforts to improve the prospects for demand response by proper accounting for hybridization with storage have not been successful, and it will be very difficult for substantial quantities of demand response to pass the initial screens for short-listing.

SCE Preferred Resources Pilot RFPs: SCE has continued to pursue approval of contracts signed pursuant to its PRP RFP 2, and in October filed briefs in support of 19 contracts for 125 MW of preferred resources (Johanna A-Bank or Santiago A-Bank substations) that will meet DER and GHG goals.

However, on February 23, the CPUC issued a [Proposed Decision](#) denying approval of all 19 purchase and sale agreement contracts in SCE's PRP RFP 2. The decision states that SCE failed to adequately justify why these contracts are needed — whether under the PRP or to meet the objectives and requirements of existing CPUC procurement programs or policies — and since the CPUC is not convinced that the contracts are in the best interests of SCE customers, it does not authorize recovery of their costs in rates.

CEERT was not a party to this proceeding, but took issue with the Proposed Decision (PD), and on April 20 we prepared and served a letter on the Commissioners, their Advisors/Chiefs of Staff, and the Service List in A.16-11-002, emphasizing that the PD ignores applicable California policy and disregards and is in conflict with previous CPUC directives. We noted our grave concern about the message that adoption of the PD would send, the impact it would have on meeting California's clean energy goals, and what it would signal about the CPUC's commitment to meeting these goals.

On May 2, Megan Myers and Jim Caldwell, as noticed by CEERT in compliance with the CPUC's ex parte rules, met with advisors of Commissioner Peterman (the Assigned Commissioner in this proceeding) and Commissioner Rechtschaffen to discuss CEERT's position in this matter. The PD was on two previous agendas, but was held first by Commissioner Peterman and then by Commissioner Picker.

PG&E Storage and Preferred Resources RFP: CPUC Resolution E-4909 orders PG&E "to hold a competitive solicitation for energy storage and preferred resources (including renewables, DR, and EE) to address two local sub-area capacity deficiencies and to manage voltage issues..." As several parties oppose the Resolution, it may be the subject of an application for rehearing, but no such application stays the effect of the Resolution or PG&E's obligation to perform under it.

PG&E issued an RFP in February for up to 200 MW of storage at the Moss Landing substation for the South Bay/Moss Landing sub-area, plus an additional 50 MW of storage at two smaller sub-areas in the San Joaquin Valley. Initial bids are due in June.

PG&E Oakland Clean Energy Project: In September PG&E filed a study request in the CAISO 2017-2018 Transmission Plan process, proposing to substitute preferred resources for its “reliability must-run resources” (RMR) contract with Dynegy for the Oakland C peaking plants, which are the only utility-scale oil-fired generators in the state. The PG&E plan closely mirrors the SCE Moorpark RFP and Resolution E-4909.

On March 20, the CAISO Board of Governors approved the plan and authorized recovery of costs in the CAISO low-voltage Transmission Access Charge under FERC jurisdiction for substation upgrades and installation of a battery storage facility at the Oakland C substation. PG&E will file at the CPUC for a preferred-resource RFP to provide local energy to recharge that battery during a transmission outage, which will allow cancellation of the RMR contract and retirement of the 40-year-old high-emission plants near Oakland’s Jack London Square.

PG&E reached agreement with the new East Bay CCA to conduct a joint procurement of preferred resources, with the East Bay CCA procuring the LCR attributes, as PG&E is generally very long on RA given the large load migration to CCAs. However, demand response is essentially shut out of the procurement because the East Bay CCA has yet to start operations, and did not feel comfortable with its knowledge of customer behavior and its ability to judge the efficacy of DR for this procurement.

SDG&E Preferred Resources RFO: On April 19, 2017, SDG&E filed A.17-04-017, asking for approval of 88 MW of new preferred resource contracts. In January 2018, the ALJ admitted into the record prepared testimony that had been served, and briefs were filed. No Proposed Decision has yet been issued.

Demand Response (DR) (R.13-09-011)

CEERT is convinced that unless we make significant progress on DR, it will continue to be difficult to stop new gas development and to carry out an orderly retirement schedule for existing gas facilities. Therefore, we continue to advocate vigorously before the CPUC to strengthen existing DR programs while pressing for changes in DR procurement, and to urge the CAISO Board of Governors and senior management to reduce barriers to expanded use of this crucial resource.

On May 15, ALJ Hymes issued a [Proposed Decision](#) (PD) modifying D.16-09-056, which adopted guidance for future DR portfolios and established a list of prohibited resources, exempting from that list energy storage and storage coupled with renewable generation that meet the relevant GHG emissions metric adopted for the Self-Generation Incentive Program (SGIP). The PD determines that the DR prohibited resources policy should not rely on any metric developed in the SGIP.

The PD also modifies D.16-09-056 to exempt from the list of prohibited resources all energy storage resources not coupled with fossil-fueled generation. This will be reviewed again in either the proposed rulemaking on new models of DR or the 2023-2027 DR program applications, whichever commences first. At that time, the CPUC will have more experience with storage resources participating in DR and can better consider whether to continue their exemption from the prohibited-resources list or to develop and adopt a new independent emissions requirement for storage resources that take part in DR programs. The PD also closes this proceeding. Comments are due on June 4 and Reply Comments on June 11.

On May 15, ALJ Hymes issued an E-mail Ruling requiring the Supply Side Working Group established in R.13-09-011 to file its proposal addressing local resource adequacy, weather-sensitive DR qualifying capacity requirements, and multi-year procurement contracts in R.17-09-020 (RA) no later than July 10.

DR Applications (A.17-01-012, et al.)

On December 14 the CPUC issued [D.17-12-003](#) in the DR Application proceedings (A.17-01-012, et al.). The decision adopts DR activities and budgets for PG&E, SCE, and SDG&E to conduct DR programs, pilots and associated activities for 2018 – 2022, and also expresses support for the limited integration of DR and energy efficiency activities.

An April 20 telephone conference on the Auto DR program covered such topics as sufficiency of definitions, complete and correct background description, and a complete and correct overview of current rules and guiding principles. A day-long workshop on guidelines for Auto DR will also be held at the CPUC.

On May 8 a Joint Agency Workshop on Energy Reliability in Southern California discussed reliability issue updates and tracking progress on conventional generation, preferred resources, transmission upgrades, and contingency measures from the CEC, the CAISO, LADWP, SCE and SDG&E. There were presentations on reliability issues associated with natural gas pipeline outages and the constrained operations at the Aliso Canyon gas storage facility, and on mitigation measures to address those issues.

On May 22, Assigned Commissioner Guzman Aceves issued an [Amended Scoping Memo and Ruling](#) that extends the deadline of this proceeding to July 17, 2019, and expands its scope to determine the next steps for the DR Auction Mechanism (DRAM). A future decision will address: (1) development of guidance to the utilities on designing pilots targeting DR in transmission-constrained local capacity areas and disadvantaged communities, (2) whether to revise the DR dual participation rules, (3) adoption of a final set of guidelines to implement the automated DR control incentive policy, (4) confirmation of the final Capacity Bidding program trigger method, (5) management of and potential changes to the 2% Reliability Cap, and (6) determination of the next steps for the DRAM pilot as a result of the preliminary evaluation analysis. A Pre-Hearing Conference is scheduled for June 12.

Draft California Customer Choice Green Book

On May 3, the CPUC issued California Customer Choice: An Evaluation of Regulatory Framework Options for an Evolving Electricity Market Draft Green Book ([Draft Customer Choice Paper](#)). This document was prepared by CPUC staff, was revised on May 17, and was intended to set the stage for a conversation among California energy policy decision-makers and stakeholders about the need to develop a plan to address current shifts in the evolving electricity market and the next steps in managing this transition.

A webinar on the Draft Customer Choice Paper was held on May 3. On May 21, the CPUC announced that an En Banc would be held on the Paper on June 22, 9:00 a.m. – 5:00 p.m., at the CPUC, and that the comments period on the Paper would be extended from June 4 to June 11.

Other CPUC Rulemakings and Governance Actions:

CEERT has had a limited budget to actively participate in other CPUC issues. Nevertheless, we are currently a party to or are tracking the following proceedings in order to advance key resources.

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

On March 2, Commissioner Peterman issued an [Amended Scoping Memo and Ruling](#) that modified the schedule of this proceeding. Here is the revised schedule for Track 2 with the new due dates:

- Evidentiary Hearings: May 7 – May 11
- Opening Briefs: June 1
- Reply Briefs: June 15
- Proposed Decision: Late July

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

On March 22 the CPUC issued [D.18-03-023](#), a Decision that addresses the issues identified in Track 3, Sub-Track 2 (Grid Modernization), and provides a framework for Grid Modernization Guidance to inform future General Rate Cases (GRCs), as follows:

- Defines grid modernization with regard to its multiple objectives and the scope of Grid Modernization Plans;
- Establishes a classification framework to serve as a common vocabulary for grid modernization investments, and terminology to guide the organization and presentation of future GRC filings;
- Establishes the structure and timing of the grid modernization planning process, including submission of Grid Modernization Plans and Grid Needs Assessments, and identifies how this fits into the larger DRP process;
- Provides guidance on how the Commission will evaluate the cost-effectiveness of grid modernization investments proposed in future GRCs, including net ratepayer benefits;
- Establishes submission requirements for the grid modernization portion of future GRC requests, including how to justify each request; and
- Identifies next steps for further refining certain aspects of the grid modernization guidance adopted in this decision.

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

On March 14, ALJ Hymes issued a [Ruling](#) on the Societal Cost Test (SCT). The Ruling contains a revised Staff Proposal on the SCT that refines the original Staff Proposal, provides additional information, and makes more detailed recommendations for the proposed cost-effectiveness tests in general and the two adders specifically. The Ruling also sets forth questions on the revised Staff Proposal. Opening Comments were filed on April 20 and Reply Comments on May 7.

On April 30, ALJ Hymes issued a [Proposed Decision](#) modifying D.16-12-036, which established the Competitive Solicitation Framework and a Utility Regulatory Incentive pilot for procurement of distributed energy resources (DERs) that displace or defer the need for capital expenditures on traditional distribution infrastructure. The PD requires that utility spending for D.16-12-036 DERs pilot projects that either avoid or defer a distribution capital project previously authorized or pending be recovered initially through previously authorized distribution capital project spending from the utility's general rate case. Comments on the PD were filed on May 21 and Reply Comments on May 28.

DER Action Plan

There has been no recent activity with the DER Action Plan. The Final DER Action Plan was issued on May 3, and it is still unclear how this plan will be used going forward.

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

On February 14, ALJ Hymes issued a Ruling Revising Schedule and Reassigning Issue Six. The remaining items on the new schedule are:

- September 15: Deadline for filing the Working Group Two proposal.
- October 15: Deadline for Comments on the Working Group Two proposal.

The issue of whether the CPUC should require utilities to develop forms and agreements to allow DERs to fulfill Rule 21 requirements related to smart inverters, identified previously as Issue Six and assigned to the Smart Inverter Working Group, is now assigned to Working Group Two.

In a related matter, on April 27 the CPUC issued [Resolution E-4898](#), which approves, with modifications, a request for modifications to the Electric Rule 21 Tariff to incorporate Smart Inverter Phase 3 advanced functions in compliance with D.16-06-052.

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

On April 26, Assigned Commissioner Peterman and Administrative Law Judge Fitch issued a [Ruling and Amended Scoping Memo](#) (Regarding Remainder of Phase III) in the energy efficiency rolling portfolio proceeding. Items in the scope of the remainder of Phase III include the three-prong fuel substitution test, market transformation, custom projects, and accounting and funding issues.

This rulemaking remains the appropriate venue for overarching policy issues related to administration of energy efficiency policies, portfolios and programs. A Proposed Decision addressing the three-prong test will be issued in the fourth quarter of 2018, a Proposed Decision further addressing market transformation will also be issued in the fourth quarter of 2018, and a Proposed Decision addressing accounting issues will be issued in the first quarter of 2019.

EE Business Plans (A.17-01-013, et al.)

On March 23, ALJ Fitch issued a [Ruling](#) that invites parties to file comments on requirements developed by CPUC Staff on custom classification; behavior, retrocommissioning and Operations Maintenance Plan; limit on normal replacement measures; repair and maintenance programs; pay-for-performance; savings estimates/claims requirements; and submetering accuracy. The Ruling also proposes to sunset the filing process for high-opportunity programs or projects as soon as EE business plans under review in this proceeding are approved. Comments were filed on May 14 and Reply Comments on May 30.

On April 4 the CPUC issued a [Proposed Decision](#) Readdressing Energy Efficiency Business Plans in A.17-01-013, et al. Comments were filed on April 24 and Reply Comments on April 30. The PD approves the energy efficiency business plans of eight Program Administrators (PAs), except as modified in this decision: four investor-owned utilities (PG&E, SDG&E, SCE and SoCalGas), three regional energy networks (BayREN, SoCalREN, and Tri-County REN) and one community choice aggregator (MCE).

The PD includes a required set of metrics and indicators to track progress toward energy efficiency goals at the portfolio and sector level, and includes refined definitions of disadvantaged communities and hard-to-reach customers. Statewide programs are approved, including lead PA assignments, and guidance is included on governance, balancing account treatment and fund contributions. The PD also includes clarifications of previous requirements applied to REN programs and portfolios and approves MCE as a single point of contact in its geographic area, on a non-exclusive basis. The proposal of the Local Government Sustainable Energy Coalition for statewide administration of local government programs is rejected.

The PD includes detailed requirements for the annual budget advice letter submissions and a standard of review for CPUC staff in analyzing these submissions. The proceeding remains open to consider the standard and modifiable terms proposed for use in contracts associated with third-party solicitations. On May 10, a [Red-lined Revised Proposed Decision](#) was issued and is on the agenda for the May 31 CPUC Business Meeting.

Public Records Access (R.14-11-001)

On April 27, the CPUC issued [D.18-04-032](#), which is an Order Denying Rehearing of D.17-0-023 filed by the City of San Bruno. D.17-09-023 adopted a new General Order (GO) 66-D, which was designed to update the CPUC's processes for the submission, review, and potential disclosure of information submitted to, and created by, the CPUC. The City of San Bruno filed an Application for Rehearing that challenged the validity of the processes set forth in GO 66-D, alleging that the lack of a fixed timeframe for completing the resolution process and rehearing process violates several authorities governing open access to public records. The Order Denying Rehearing finds no good cause for rehearing of the challenged decision and denies the Application.

Climate Change Adaptation (R.18-04-019)

On May 7, the CPUC issued an [Order Instituting Rulemaking \(OIR\)](#) to Consider Strategies and Guidance for Climate Change Adaptation. This OIR considers strategies to integrate climate change adaptation matters in relevant CPUC proceedings. The rulemaking is divided into at least two proceedings, with the electricity and natural gas utilities to be the only entities addressed in Phase 1. The scope for future phases will be considered at a later time, and it is anticipated that those phases will consider adaptation for water and telecommunications utilities. The preliminary schedule for the proceeding does not provide any specific dates. It is anticipated that a Scoping Memo will be issued shortly. The initial categorization of this proceeding is quasi-legislative; the assigned Commissioner is Liane Randolph and the assigned ALJ is Mary McKenzie. CEERT staff is currently tracking this proceeding as Information Only.

Short-Lived Climate Pollutants (SCLPs)

Methane Emissions

California has a target of a 40% reduction in methane from 2013 levels by 2030. At 45%, dairies dominate the state's methane emissions, followed by landfills at 20% and other livestock emissions at 10%.

CEERT is participating in the Dairy/Livestock Working Group, which comprises three subgroups (SGs) focusing on fostering markets for non-digester projects, fostering markets for digester projects, and identifying research needs. The SGs are continuing to meet and review technical issues.

On May 3 CalRecycle released the second draft of regulatory language as part of its implementation of the SLCP Reduction Strategy to reduce organic waste disposal to 50% below 2014 levels by 2020 and 75% below 2014 levels by 2025. This was followed by final public workshops in Carlsbad and Sacramento on May 7 and 8. Most of the policy changes in the new draft provide greater flexibility in achieving the waste diversion targets and related methane reduction goals. These provisions remove the sunset date on mixed waste collection; increase flexibility for enforcement; include new procurement, record-keeping, and reporting requirements; and add waivers for rural areas. After receiving comments from stakeholders, CalRecycle intends to adopt a final set of regulations by late 2018 or early 2019.

Clean Transportation Advocacy

Advanced Clean Cars Program

CEERT is working with state and national NGOs to defend the 2022-2025 national passenger vehicle emissions standards, known in California as the Advanced Clean Cars regulations. (The state has also set California-only Zero-Emission Vehicle (ZEV) sales targets through model years (MY) 2022-2025).

Pursuant to the US-EPA's April 13 Federal Register notice that it was overturning its January 2017 determination (under the Obama Administration) that the Clean Cars regulations were feasible both technically and economically, the EPA and the National Highway Traffic Safety Administration (NHTSA) are expected to issue a joint Notice of Proposed Rulemaking (NPRM) on how they plan to revise the 2021-2025 vehicle emissions standards. The NPRM is expected to be issued sometime in June and to allow stakeholders up to 60 days to comment on factors the agencies should consider in revising the standards.

Reports by the LA Times and Reuters indicate the draft NPRM's main recommendation is that the EPA and NHTSA freeze the federal standards at 2020 levels for the balance of the program. This is completely counter to the California Air Resource Board's (CARB's) determination in its March 2017 Board Hearing that the vehicle regulations are entirely feasible and do not require any modifications for MY 2021-2025. It would mean that California and the 12 other states and the District of Columbia that have adopted California's regulations can proceed to require, separate from any weakened future federal standards, that automakers must still build cars that meet the stricter target of reducing their fleet-wide greenhouse-gas (GHG) emissions 34% below 2016 levels by 2025.

In response to the April 13 federal determination, California, 16 other states, and the District of Columbia filed suit in the US Court of Appeals to prevent the EPA from rolling back the standards, thereby attempting to avoid any bifurcation of the emissions regulations and preserve a single national program. Separately, the National Coalition for Advanced Transportation (a coalition of electric utilities, EV charging companies, and Tesla) and an alliance of NGOs also filed a petition in the same court challenging the EPA's weakening of the vehicle GHG emissions standards through MY 2025. While these and any other court cases proceed past rulemakings for vehicle emissions, regulations launched through the release of an NPRM have typically taken 11-12 months to complete.

The Trump administration has at a minimum managed to create an environment of extreme uncertainty around the regulations and what the automakers will need to do to comply if the program splinters, which in the long run is to nobody's advantage.

Electrifying Transportation

CEERT continues to monitor the CPUC's Alternative-Fueled Vehicles rulemaking (R.13-11-007) and the IOUs' transportation electrification plans pursuant to SB 350, all of which have been consolidated under SDG&E's A.17-01-020 application, as several CEERT affiliates are active parties in these proceedings.

On April 19 and 24 the CPUC took opening and reply comments on its March 30 Proposed Decision (PD), which recommended approval of four transportation electrification programs and one rate design with a total budget of nearly \$589 million, proposed by California's three investor-owned utilities as their Standard Review Projects (SRPs), which are expected to last roughly five years,. On May 16 the CPUC held a two-hour all-party meeting at which stakeholders could discuss their perspectives and comments on the PD.

The issues raised about the PD ranged from concerns over the extent of ownership of charging infrastructure being proposed by some utilities, to the number and capacity of fast-chargers needed to support ZEV ride-sharing (especially in major urban areas), to the pressing need to further electrify ports, to the need for additional support for electrification of medium- and heavy-duty transport. After considering this input, the CPUC revised its PD to address those concerns (e.g., reducing the amount of utility ownership of charging infrastructure, and increasing funding for port and freight transport). The revised PD, which will be considered at the CPUC's May 31 business meeting, is now proposing that total funding for the SRPs be increased to \$738 million.

Low-Carbon Fuel Standard (LCFS)

CEERT continues to participate in advocacy efforts to improve and extend the LCFS to 2030. On April 27 the CARB Board held the first of two hearings to consider staff proposals on the revised (Phase 2) approach to the LCFS. These revisions reflect advances in the science and technology for production of low-carbons fuels, and aim to streamline the LCFS program (changes to the pathway carbon intensity application and evaluation process; improvements to reporting and credit-generation processes; the integration of mandatory third-party verification requirements; and updates to lifecycle assessment modeling tools and the fuel pathway certification process).

The revisions will include new fuel (e.g., alternative jet fuel, renewable propane) and vehicle types, and innovative actions such as carbon capture and sequestration that further reduce transportation GHGs. As CEERT has advocated, the revisions will allow renewable power generated off-site to be used for EV charging and hydrogen production by electrolysis, and will recognize the benefits of shifting EV charging and electrolyzer loads to times when excess renewable electricity might otherwise be curtailed, and therefore wasted.

These amendments are a first step in promoting further expansion of ZEV infrastructure through the LCFS as directed by the Governor's executive order B-48-18, which mandates the deployment of 250,000 chargers and 200 hydrogen fueling stations by 2025 in support of deploying 5 million ZEVs by 2030. It would help make these vehicles fully zero-emission on a lifecycle basis.

Under the LCFS the average carbon intensity (CI) of all transportation fuels used in the state during 2017 was 3.5% below the 2010 baseline. Phase 1 of the original LCFS regulation adopted in 2009 set a CI reduction target of 10% below 2010 levels by 2020, and the Phase 2 revisions proposed by CARB staff would extend this target to 20% below 2010 levels by 2030. CEERT supported CARB increasing this target to 22-23% below 2010 levels by 2030.

The CARB Board accepted the bulk of staff's revisions for Phase 2 of the program, and made two additions, asking staff to work with stakeholders to: 1) develop a method for hydrogen stations and direct-current fast chargers for electric vehicles to earn credits on the basis of the capacity of the ZEV infrastructure; and 2) explore ways to increase the magnitude of ZEV rebates funded by sale of LCFS credits, especially at the point of sale.

Staff hope to complete the overall Phase 2 revision and secure Board approval in time for the program to take effect on January 1, 2019. To achieve this, staff will need to report during the summer how it will respond to stakeholder concerns and make the additional changes requested by the Board.

Alternative and Renewable Fuel and Vehicle Technology Program

On May 11 the CEC released the final Commissioner's version of the 2018 – 2019 Investment Plan Update (IPU) for the Alternative and Renewable Fuel and Vehicle Technology Program. The IPU was revised in response to the Governor's January 26 Executive Order, which included immediate additional funding for the CEC's ARFVTP program to support achieving the targets of placing 5 million ZEVs on California's roads by 2030, along with 200 hydrogen fueling stations and 250,000 electric vehicle charging stations by 2025. This raised the total funding available for the 2018-2019 Investment Plan from \$97.2 million to \$277.5 million.

The IPU proposes funding of \$134.5 million for EV charging infrastructure and \$92 million for hydrogen fueling infrastructure (both raised from previous historic levels of \$20 million). At the March 25 meeting, CEERT and other members of the ARFVTP Advisory Committee unanimously approved these new funding levels. The CEC will consider the final IPU during either its June or July business meetings.