2021 Report on Trusts and Entities Established by the California Public Utilities Commission

Assembly Bill 1338 (Public Utilities Code 910.4)
Annual Report To The Legislature

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California Public Utilities Commission

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Stewardship
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Contents

I. Introduction

This 2021 annual legislative report is submitted by the California Public Utilities Commission (CPUC) to the Legislature according to Assembly Bill (AB) 1338 passed in September 2008. It summarizes annual updates to fiscal and governance information for entities and programs established by the CPUC.

Assembly Bill 1338 (Huffman, 2008)

AB 1338 requires the CPUC to report to the Legislature certain information concerning entities or programs created by order of the CPUC. On January 1, 2016, Section 326.5 of the Public Utilities Code was amended and renumbered to Public Utilities Code 910.4, which is included in full below:

Public Utilities Code 910.4.

By February 1 of each year, the Commission shall report to the Joint Legislative Budget Committee and appropriate fiscal and policy committees of the Legislature on all sources and amounts of funding and actual and proposed expenditures, both in the two prior fiscal years and for the proposed fiscal year, including any costs to ratepayers, related to both of the following:

(a) Entities or programs established by the Commission by order, decision, motion, settlement, or other action, including, but not limited to, the California Clean Energy Fund, the California Emerging Technology Fund, and the Pacific Forest and Watershed Lands Stewardship Council. The report shall contain descriptions of relevant issues, including, but not limited to, all the following:
   (1) Any governance structure established for an entity or program.
   (2) Any staff or employees hired by or for the entity or program and their salaries and expenses.
   (3) Any staff or employees transferred or loaned internally or interdepartmentally for the entity or program and their salaries and expenses.
   (4) Any contracts entered into by the entity or program, the funding sources for those contracts, and the legislative authority under which the Commission entered into the contract.
   (5) The public process and oversight governing the entity or program's activities.

(b) Entities or programs established by the Commission, other than those expressly authorized by statute, under the following sections:
   (1) Section 379.6.
   (2) Section 399.8.
   (3) Section 739.1.
   (4) Section 2790.
   (5) Section 2851.

Entities or Programs Established by the California Public Utilities Commission

Table 1 shows the actual and proposed expenditures for the prior two fiscal years and current fiscal year for entities and programs established by order of the CPUC. The chapters for each entity and program that follow include further details and required reporting information.

Table 1. Entities' and Programs' Actual and Proposed Expenditures, 2019-2022

Entity	Expenditures	2019-2020	2020-2021	2021-2022
The Pacific Forest and Watershed Lands Stewardship Council	Proposed	$13,700,000	$13,100,000	10,741,471
	Actual	$5,471,592	$7,546,985	$7,520,490[1]
The California Clean Energy Fund	Proposed	$6,400,000	$6,300,000	$10,200,000
	Actual	$6,322,370	$7,500,000[2]	TBD
The California Emerging Technology Fund	Proposed	$9,025,000	$10,580,000	$14,200,00
	Actual	$8,232,563	$7,892,342	TBD
The California Hub for Energy Efficiency Financing	Proposed	$2,973,000	$4,150,000	$4,150,000
	Actual	$2,664,000	$2,665,000	TBD
21st Century Energy Systems – Research and Development Agreement	Proposed	$1,229,241	N/A[3]	N/A
	Actual	$1,074,680	N/A	N/A
The Diablo Canyon Independent Safety Committee	Proposed	$962,165	$976,598	$991,247
	Actual	$602,958	TBD	TBD
Nuclear Decommissioning Trusts	Proposed	N/A	N/A	N/A
	Actual	$11,212,632	$11,369,780	TBA
Electric Program Investment Charge (EPIC)	Proposed	$185,000,000	$185,000,000	$185,000,000
	Actual	$90,149,859	$177,143,213[4]	$225,704,819

[1] Estimate of actual expenditures.

[2] Estimate of actual expenditures, exact figure will be provided once audits are complete.

[3] This program has ended and submitted its final report to the CPUC on December 6, 2019.

[4] The 2020 EPIC value has been updated from the 2020 report to represent final actual expenditures.

TECH Initiative	Proposed	N/A	N/A	$17,569,826
	Actual	N/A	$306,978[5]	$3,532,697[6]
BUILD Programs	Proposed	N/A	N/A	N/A
	Actual	$0	$0	$7,197,524[7]

Additional details for each Trust and Entity are included in the chapters that follow. The fiscal year for the California Clean Energy Fund, the Pacific Forest and Watershed Lands Stewardship Council, and EPIC is from January 1-December 31. The fiscal year for all other entities listed is from July 1-June 30. For the California Clean Energy Fund, EPIC and BUILD, the figures provided are for calendar years 2019, 2020, and 2021. For the Diablo Canyon Independent Safety Committee, the figures provided are for calendar years 2020, 2021, and 2022.

[5] Estimates are for June 2020 only.

[6] Estimates are through October 31, 2021.

[7] Estimate includes expenditures and encumbrances.

II. Annual Report Updates from Trusts & Entities Created by the CPUC

The Pacific Forest and Watershed Lands Stewardship Council

Background

The Pacific Forest and Watershed Lands Stewardship Council (Stewardship Council) was formed as a result of CPUC Decision (D.) 03-12-035 dated December 18, 2003: "Opinion Modifying the Proposed Settlement Agreement of Pacific Gas & Electric Company (PG&E), PG&E Corporation, and the Commission Staff, and Approving the Modified Settlement Agreement" (Settlement Agreement). The Settlement Agreement, Paragraph 6 of Section VI, Subsection C specified that a total of $100 million would be provided to the Stewardship Council for the Land Conservation Commitment and the Environmental Opportunity for Urban Youth. Paragraph 6 further stipulated that funding would be paid over 10 years, to be recovered in retail rates. At this time, the Stewardship Council does not receive any additional sources of funding.

The Stewardship Council's mission is to protect and enhance watershed lands and uses and invest in efforts to improve the lives of young Californians through connections with the outdoors. The Stewardship Council has two goals: (1) to ensure that over 140,000 acres of California's pristine watershed lands are conserved for the public good through the Land Conservation Program, and (2) to invest in outdoor programs that serve young people residing in the PG&E service area through the Youth Investment Program.

The Stewardship Council Board of Directors (Board) is comprised of appointees from State and federal agencies, including the CPUC, water districts, tribal and rural interests, forestry industry, conservation organizations, and PG&E. The Board's decisions are all made by consensus.

2021 Updates & Accomplishments

- The Stewardship Council Board has approved all 96 Land Conservation and Conveyance Plans (LCCPs) for fee donations and conservation easement or conservation covenant transactions on the Watershed Lands. These plans describe how the proposed transactions satisfy the requirements of the Settlement Agreement and Stipulation. After the Board approves a LCCP, PG&E then seeks regulatory approval of the transaction from the CPUC and the Federal Energy Regulatory Commission (FERC), as applicable. The Board has approved LCCPs for approximately 38,700 acres that have been recommended for donation and for approximately 102,100 acres that are being retained by PG&E. The Settlement Agreement included acknowledgment of a large amount of acreage that would likely be retained by

PG&E, which bore out after the land conservation and conveyance process, including extensive land survey work.[8]

- As of November 15, 2021, 66 conservation easement and fee title donation transactions have closed escrow, out of a total of 96 transactions. 12 transactions were closed in 2017, 10 in 2018, 11 in 2019, 12 closed escrow in 2020. In 2021, as of November 15, 2021, five transactions have closed escrow.
- As of November 15, 2021, following regulatory approvals, 37 conservation easements were recorded on more than 35,428 acres being retained by PG&E at the following planning units: Doyle Springs, Kern River, Narrows, Middle Fork Stanislaus, Lower Bear, Iron Canyon Reservoir, Fordyce, Merced River, Lower Drum, Kilarc, Wishon Reservoir, Lake Spaulding, Blue Lakes, McArthur Swamp, Chili Bar, Mountain Meadows, Lake McCloud, Willow Creek, Kerckhoff Lake, Lyons Reservoir, Cow Creek, Battle Creek, Kings River, Manzanita Lake, Butte Creek, Philbrook Reservoir, Auberry, Butt Valley Reservoir, Fall River Valley, and North Fork Feather River.
- As of November 15, 2021, fee title has been conveyed for approximately 7,439 acres. 29 land donations with conservation easements or conservation covenants have been completed. Escrow closed on fee title conveyance of lands to the University of California, California Department of Forestry and Fire Protection (CAL FIRE), Madera County, Tuolumne County, Placer County, the Auburn Area Recreation and Park District, the Potter Valley Tribe, Maidu Summit Consortium (MSC), San Joaquin County Office of Education, Pit River Tribe, Fall River Resource Conservation District, and Fall River Community Services District with conservation easements recorded concurrently with the land transfer. Lands have also been conveyed to the U.S. Forest Service at the Battle Creek, Deer Creek, Wishon Reservoir, North Fork Mokelumne River, Lyons Reservoir, Lower Bear Area, Blue Lakes, Eel River, Lake Britton, and Fordyce (White Rock) Lake planning units with the conservation covenant recorded concurrently.

2021 Environmental Enhancement Program Accomplishments and Updates

Since launching the Environmental Enhancement Program in 2012, the Stewardship Council has awarded $12.2 million in grants. Overall, the Stewardship Council has budgeted approximately $12.7 million for projects that enhance the Beneficial Public Values of the Watershed Lands and promote productive partnerships involving landowners, conservation easement holders, local communities, youth, and other stakeholders. Examples of enhancement projects include habitat restoration, recreational trails and facilities, cultural resource protection and interpretation, forest research, management plans, planning and feasibility studies, cultural surveys, and biological surveys.

[8] D.03-12-035, Appendix C (Settlement Agreement) states, "Of the Watershed Lands, approximately 95,000 acres are lands that are either included in the project boundaries, contain essential project elements related to the operations of the hydro facilities, or are part of legal parcels that contain major FERC project facilities. The remaining 44,000 acres are lands completely outside the FERC project boundaries and do not contain FERC project features."

In March 2021, the Board approved an enhancement grant to Sierra Buttes Trail Stewardship for the Bucks Lake Trail System in the amount of $253,000. The project will build a new 6.2 mile multi-use trail system in Plumas County at the Bucks Lake planning unit to enhance public recreation with beginner and family friendly trails, and increase safe access to regional trails. The trail system will be sustainably designed to minimize long term maintenance and impacts to natural resources.

In July 2021, an additional grant of $592,750 was awarded to the Fall River Resource Conservation District to continue demonstration of the synergy between grazing and wildlife habitat at McArthur Swamp and restoration of the land to support the beneficial public values. The proposed project was guided by the recently adopted management plan funded by a prior Stewardship Council grant and focuses on increased water delivery to the property for wildlife, waterfowl, and agricultural uses.

The Sky Mountain Outdoor Education Center Accessibility Project was awarded to remediate the safety and accessibility deficiencies identified in the Sky Mountain facilities assessment to ensure that the facility meets fire-life-safety requirements and provides accessible access to all main buildings that complies with Americans with Disabilities Act requirements. San Joaquin County Office of Education has completed permitting and has begun construction on necessary facility upgrades to accommodate students including safety and accessibility improvements. The Stewardship Council provided $5 million to purchase the facilities and complete the necessary upgrades.

Project delivery is also continuing with four enhancement projects in Shasta, Lassen, Madera, and Plumas counties at Fall River Lake, Indian Ole Dam at Mountain Meadows Reservoir, Manzanita Lake, and Tàsmam Kojòm (Humbug Valley). Construction is currently underway on the Fall River Lake Trail project, which Fall River Valley Community Services District and Lomakatsi Restoration Project are installing with complementary native plantings and educational features. California Environmental Quality Act (CEQA) compliance and land survey work for the trail and facilities at Indian Ole Dam have been completed and the advice letter for the Mountain Meadows Conservancy trail easement was submitted to the CPUC on December 10, 2021. Madera County has completed fuel reduction work and is constructing trail and campground amenities for the Bass Lake North Fork Regional Trail in the Manzanita Lake Planning Unit. At Tàsmam Kojòm, the MSC continues to plan campground improvements and visitor interpretation elements of the new Tribal Cultural Park, though the scope of the project may need to be adjusted given recent damage from the Dixie Fire.

The Stewardship Council launched a new competitive solicitation for enhancement grants in January 2020 with an estimate of up to an additional $3 million in available funding. However, exact funding and the timing of availability is still unknown and depends on meeting key milestones including progress with the remaining transactions. After the concept proposal round with original requests totaling $7 million, applicants were prioritized, and the Stewardship Council eventually received eight full proposals, which were again ranked based on the scoring criteria used by the Enhancement Review Committee and staff. Due to considerations regarding funding availability, project readiness, and priorities, the Board has not yet made a recommendation for funding any of the eight projects.

Youth Investment Program Accomplishments

Justice Outside (formerly Youth Outside) continues to focus on developing sustainable funding beyond the life of the Stewardship Council. Justice Outside was awarded $10,725,000 in 2013 and, as of December 31, 2020, had a remaining balance of $1,967,660 to create a permanent program to connect youth with the outdoors. Justice Outside anticipates all Major Grant Agreement funds provided by the Stewardship Council to be expended by 2022.

Beginning in 2020, Youth Outside underwent a strategic refresh process culminating in the identification of the organization's new name, Justice Outside, and the following organizational priorities to steer their work into the future:

1. Field Building: Strengthen the capacity of individuals and institutions to achieve a racially just and culturally representative outdoor and environmental field.
2. Thought Leadership: Lead and influence the outdoor and environmental field to achieve racial justice through research, policy, and narrative change.
3. Network Building and Mobilization: Mobilize existing organizations led by Black, Indigenous, and people of color as well as allies in the public, private, philanthropic, non-profit, and academic sectors around a racial justice agenda and leverage resources, relationships, programs, and strategies to maximize influence and impact.
4. Financial Health and Resilience: Strengthen the financial health and resilience of Justice Outside to achieve its strategic goals and long-term sustainability.

In 2021, Justice Outside awarded grants to 26 organizations (23 multi-year grants and three one-year grants) totaling $855,000. These grants serve youth in several regions of PG&E's service area, providing transformational outdoor education and open-space experiences to thousands of youth. A sample of awards is listed below:

- A Justice Outside award to Acta Non Verba supports its Urban Youth Farm Project that connects youth of color from East Oakland to a nature-based farm program. Youth learn about healthy eating and sustainable farming and help youth build savings for their educational future.

- A Justice Outside award to Amah Mutsun Land Trust empowers Native American youth ages 12-17 to participate in summer camp programming focused on Traditional Ecological Knowledge and conservation along the California coast.

- A Justice Outside award to Brown Girl Surf uplifts programs that integrate awareness of marine and coastal ecology through hands-on explorations and projects while surfing. This program provides girls with an opportunity to confront and overcome fear, and develop skills in self-reliance, confidence, and leadership.

- A Justice Outside award to Communities United for Restorative Youth Justice supports youth who have been impacted by multiple criminalizing youth-serving systems, including foster care, juvenile and adult criminal injustice system and punitive school districts. Funds assist in the development of a robust garden ecosystem where community needs intersect with programmatic needs while developing an edible garden, healing herbs garden, and hosting and caring for land and soil via a worm composting system and a beehive.

- A Justice Outside award to Movimiento supports their work developing young people's leadership and life skills via outdoor adventure, counseling and therapy, cultural exchange, service-learning, farming, and indigenous youth events. Movimiento's focus is to synthesize outdoor-based learning experiences with mental health.

Justice Outside has continued to grow the Liberated Paths grantmaking program (formerly the Empowered Communities Environmental Fund). The program is supported by the William and Flora Hewlett Foundation, outdoor retailers including Evo and The North Face, Oceankind, The David and Lucile Packard Foundation, Meyer Memorial Trust, and others. Liberated Paths continues to prioritize supporting organizations and programs led by and serving Black, Indigenous, and communities of color, through financial support, capacity-building resources, and networking opportunities. In the inaugural year of Liberated Paths in 2020, Justice Outside awarded nearly $340,000 to 17 grantees. In 2021, the program has expanded its service area to include California and provided awards totaling $1 million to 52 grantees.

Annual Reporting Updates

The annual audit reporting information required by statute is provided below.

Expenditures

In addition to the information required by statute reported below, Table 2 shows the Stewardship Council's actual and proposed expenditures for the two prior fiscal years and the proposed fiscal year based on the most recent audit report and tax return.

Table 2. The Stewardship Council's Actual and Proposed Expenditures, 2020-2022

Fiscal Year	**2020**	**2021**	**2022**
Proposed expenditures (budget)	$13,700,000	$13,100,000	$10,741,471
Actual expenditures	$7,651,788	*$7,546,985	$7,520,490

*proposed spend through 2021

The Stewardship Council has established an independent Audit Committee, which oversees a full financial audit of the organization's financial statements and internal controls processes. The annual audit and the organization's IRS form 990: Return of Private Foundation are available to the public on the Stewardship Council's website. These reports can be found here.

Governance Structure

This section provides links to relevant documents related to the Stewardship Council's governance structure.

a. Articles of Incorporation
b. Bylaws
c. Settlement Agreement
d. Stipulation Agreement
e. Policies and Procedures: The board-adopted Policies and Procedures are available upon request.

Schedule of Employees and Compensation

Table 3 provides a summary of staff salaries and benefits. A more detailed breakdown of salaries and benefits for the top five highest paid employees, and employee compensation is provided in Appendix A.1.

Table 3. General Breakdown of Stewardship Council's Active Staff Costs, December 31, 2019-October 31, 2021

Year	Gross Pay	Benefits	401K	Total
2019	$642,827	$158,458	$14,806	$816,092
2020	$469,688	$89,373	$16,150	$575,211
2021	$515,048	$50,793	$20,145	$585,986

Once the requirements of the Settlement Agreement and associated Stipulation have been met, the Stewardship Council will dissolve consistent with the founding documents. The Stewardship Council is currently anticipating organizational dissolution no later than 2023 and is addressing staffing and other needs during the process of dissolution with the development of a dissolution plan.

Staff Transferred or Loaned

No State staff is currently or has ever been loaned internally or interdepartmentally to the Stewardship Council.

Contracts, Funding Sources, and Legislative Authority

Under the Settlement Agreement, Section 17(c), PG&E is obligated to fund the Stewardship Council annually over a 10-year period and is authorized by the Commission to recover these payments in rates. PG&E made its tenth and final installment payment to the Stewardship Council in January 2013. However, the Commission is not a party to any of the contracts entered into by the Stewardship Council, except that it is a third-party beneficiary to the Major Grant Agreement that the Stewardship Council entered into with the Foundation for Youth Investment (now known as Justice Outside) in August 2013. When the Stewardship Council dissolves, the CPUC will have the right to succeed to the Stewardship Council's rights, but not its obligations, under the Major Grant Agreement.

A schedule of professional fees is provided in Appendix A.2.

Public Process and Oversight

The Stewardship Council's Stipulation Agreement, corporate bylaws, and board-adopted policies and procedures guide its public process and oversight.

a. Stipulation Agreement. The Stipulation Agreement provides:

1. "The meetings of the Governing Board [of the Stewardship Council], including meeting minutes, will be public… The Stewardship Council will publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located and will maintain a public web site… Before making decisions regarding the disposition of any individual parcel, the Stewardship Council will provide notice to the Board of Supervisors of the affected county, each affected city, town, and water supply entity, each affected Tribe and/or co- licensee, and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner." (Section 11(c))

2. "The Governing Board will make each decision by consensus" (Section 11(a) "Each member of the Governing Board will report to, and back from, the entity he or she represents before the Governing Board takes any programmatic action . . . in order to ensure that consensus represents the views of that entity." (Section 11(b))

3. "The Stewardship Council will provide semi-annual progress reports to the Commission… Each such report will state (1) actual expenditures and progress achieved towards the stated purpose of the Land Conservation Commitment; (2) unresolved disputes within the Governing Board; and (3) anticipated expenditures and actions during the next reporting period." (Section 14)

b. Corporate bylaws. The Stewardship Council's corporate bylaws are as follows:

Section 11. Public Notice of Meetings.

1. All meetings of the Board, including meeting minutes, shall be public; provided, however, that the Board shall have the authority to undertake a closed meeting in appropriate circumstances. The Board shall publish notice of its meetings in newspapers of general circulation in the affected counties within a reasonable time prior to any meeting and shall maintain a public web site that provides notices of its meetings and copies of all meeting minutes. Upon request, all information available on the web site shall be made available in hard copy to members of the public at cost.
2. Before the Board makes any decision regarding any individual parcel of land, the Board shall provide notice to the Board of Supervisors of the affected county, each affected city, town and water supply entity, each affected tribe and/or co-licensee and each landowner located within one mile of the exterior boundary of the parcel, by mail or other effective manner within a reasonable time prior to the meeting at which the Board will make the decision regarding that land.

c. Board-adopted policies and procedures. The board-adopted Policies and Procedures include the following:

1. Public Noticing - The Stewardship Council is required to "publish notice of its meetings in newspapers of general circulation in the counties where affected parcels are located..." It is also required by its Bylaws to "publish notice of its meetings in newspapers of general circulation in the affected counties within a reasonable time prior to any meeting…" Staff will be responsible for meeting the letter and spirit of these requirements through an inclusive and comprehensive public outreach effort.
2. Stewardship Council 2020 - 2021 Public Outreach Activities, Targeted Media Outreach and Noticing:

- The Stewardship Council sends e-mails to interested stakeholders in its database regarding Land Conservation program updates and information, and announcements for public Stewardship Council board meetings. As of November 1, 2021, the Stewardship Council database included 13,450 individuals and 5,183 organizations (federal, State, local agencies, non-profits, schools, tribal entities, foundations, and for-profit businesses).

- The Stewardship Council mails notifications to neighboring property owners, the Board of Supervisors of the affected county, each affected city, town and water supply entity, and each affected tribe regarding draft LCCPs for subject parcels of PG&E Watershed Lands. The notification explains how stakeholders can submit public comments on the draft LCCP. The Stewardship Council also disseminates e-mail notices to stakeholders in its database requesting public comment on the draft LCCPs.

- The Stewardship Council sends news releases announcing public board meetings to a media database, which includes over 1,200 media outlet representatives.

- The Stewardship Council pays for legal notices to be printed in local papers, noticing all public board meetings. Notices are printed in newspapers serving populations that are located (a) near the place of each board meeting, and (b) in the geographical areas corresponding to the Watershed Lands that are the subject of a recommendation for the selection of a fee donee or conservation easement holder or a proposed action approving a LCCP.

- Logs are maintained for telephone inquiries regarding noticing. If a written correspondence is received, an electronic copy is made and saved. e-mail communication is also saved electronically.

- The Stewardship Council's 2020 annual report[9] is posted to the Council's website, and its availability announced via an e-mail to all stakeholders in its database.

[9] Historical annual reports are also available at here.

THE CALIFORNIA CLEAN ENERGY FUND

Background

The California Clean Energy Fund (CalCEF) is an independent 501(c)(4) non-profit corporation, doing business as CalCEF Ventures. The CalCEF was established as a result of the 2003 bankruptcy settlement between PG&E and the CPUC by D.03-12-035, related to Investigation (I.) 02-04-026.[10] PG&E granted the CalCEF $30 million over a five-year distribution period that was derived from shareholders per the terms of the Settlement Agreement.

Over the years, CalCEF has expanded into a family of entrepreneurial non-profit organizations focused on the rapid commercialization, deployment, and scale up of low-carbon energy technologies. The CalCEF tripartite framework (comprised of three not-for-profit corporations: CalCEF Ventures, CalCEF Innovations, and CalCEF Catalyst) identifies market barriers, develops and launches innovative financing solutions to overcome those barriers, and invests in the deployment of those solutions. The CalCEF is forging a new model of market, policy, and financial innovation to bridge gaps in the development cycle of clean energy technologies.

In 2019, the CalCEF family of organizations rebranded as New Energy Nexus to emphasize the additional global elements and new funding sources it is incorporating into its programming to continue its mission to drive innovation and equity into the global clean energy economy.

The following selection highlights the CalCEF's / New Energy Nexus' accomplishments since 2005:

- Collaborated with industry leaders to bring new financing solutions to the energy efficiency marketplace.
- Founded the nation's first university center on energy efficiency, located at University of California Davis.
- Created the first venture capital impact fund focused on clean energy.
- Helped form the industry's first multi-investor platform for clean energy related tax equity investment.
- Launched the industry's first fund to focus on early-stage clean energy financing.
- Collaborated with Lawrence Berkeley National Laboratory, as well as two other Department of Energy National Labs, San Jose State University, and industry leaders to launch CalCharge, aimed at developing and deploying new energy-storage technologies.

[10] Order Instituting Investigation into the ratemaking implications for PG&E pursuant to the Commission's Alternative Plan of Reorganization under Chapter 11 of the Bankruptcy Code for PG&E, in the U.S. Bankruptcy Court, Northern District of California, San Francisco Division, In re PG&E, Case No. 01-30923 DM: D.03-12-035.

- Entered into a contract with the California Energy Commission (CEC) to administer and run the California Sustainable Energy Entrepreneur Development (CalSEED) initiative, which awarded 97 grants to early-stage clean energy enterprises within its first four years of programming and was re-funded to enable the acceleration of another 100+ early stage clean energy enterprises.
- Launched, advised, and implemented multiple corporate innovation programs that connect clean energy and climate tech start-ups with corporate customers, e.g., Free Electrons, a global advanced accelerator program for clean energy solutions connecting clean energy startups and utilities; the EV & Battery Challenge, now in its third iteration with leading global battery companies; and the Climate FinTech: Cards & Payments Challenge.
- Launched the New Energy Nexus, a global network of clean energy incubators and accelerators.
- Launched the CalTestBed program in collaboration with the University of California Office of the President. The CEC funds this initiative and will provide $8.8 million in testing vouchers to clean energy innovators to use at one of nearly 30 testing facilities throughout California through 2023.
- Launched The Clean Fight, a passively managed subsidiary of CalCEF Innovations funded by a grant by the New York State Energy Research and Development Agency (NYSERDA), is an accelerator that seeks high-impact clean building solutions that are ready to scale. Further information is provided on The Clean Energy Fight's website.
- Launched Third Derivative, a large-scale global accelerator to find, fund, hone, and scale the most-promising technologies to achieve larger, faster reductions in global carbon emissions. The CalCEF Ventures collaborated with Rocky Mountain Institute to found Third Derivative. Further information is provided on the Third Derivative's website (CalCEF Ventures).

Since 2017, all funds provided from the 2003 settlement have been spent down and remaining investment returns are not expected to provide a reliable funding stream for the organization's future work or provide any significant windfalls. The organization is now sustained through other sources of funding as described in more detail under the heading Contracts, Funding Sources, and Legislative Authority below.

2021 Updates & Accomplishments

The 2021 fiscal year's program accomplishments include:

- The CalSEED solicitated and selected of approximately 25 Concept Awards ($150,000 each) to early-stage clean energy start-ups to the program's fifth cohort in 2021 and held a Business Plan Competition to recommend four to six Prototype Awards ($450,000) to the CEC to Concept awardees from the second year The CalSEED cohort. As of the reporting date for this report, the awardees were not yet publicly announced.

- CalTestBed awarded over $3 million in testing vouchers to support 15 clean energy companies in the second cohort of the program. The funds will vastly accelerate commercialization of the awardee's clean energy innovations. Testing will take place in test beds across six University of California campuses as well as the Lawrence Berkeley National Lab.
- CalCEF Innovations wholly owned impact investment fund New Energy Nexus (Indonesia 1); closed seven investments for an impact investment fund for clean energy startups in Indonesia; and with the support of partners and subcontractors, CalCEF Innovations supported more than 150 clean energy startups with acceleration programs across South Asia, including new programming in India.
- The Clean Fight completed its first full cohort including successful start-up and investor matching for all companies and launched its second cohort selection of nine companies.
- The Third Derivative accelerator delivered acceleration services to its initial cohort of 47 companies and admitted 15 more on a rolling basis.
- Through the Ugandan entity, a related party, CalCEF Innovations supported 30 new last mile clean energy distribution enterprises (including with microcredit, supply chain logistical support and entrepreneurship training) in Uganda. The Uganda program received the prestigious 2021 Ashden Award for Energy Access Innovation, which is supported by the UK Government Department for Business, Energy and Industrial Strategy. It was presented during the COP26 in Glasgow.
- CalCEF Innovations staff and subcontracted experts advised EXCEL Accelerator, an energy internet startup program in China that connects growth stage companies with corporates as new customers and strategic partners as well as venture capital firms. The 2021 program included 19 start-ups.
- Launched the third iteration of the EV & Battery Challenge in collaboration with Hyundai Kia Motor Company (CalCEF Catalyst).
- Held the Climate FinTech: Cards and Payments Challenge, supporting solutions across digital payments, digital wallets, credit assessment, rewards, and processing infrastructure with a focal point is decarbonization and better stewardship of the planet. The challenge was sponsored by corporate partners Barclays, Mastercard, Doconomy and Patch (CalCEF Innovations).

Annual Reporting Updates

The annual audit reporting information required by statute is provided below. This information represents reporting for CalCEF Ventures, CalCEF Innovations, and CalCEF Catalyst combined.

Expenditures

Table 4 shows the actual and proposed expenditures for the two prior fiscal years and the proposed fiscal year for CalCEF.

Table 4. CalCEF's Actual and Proposed Expenditures, 2020-2022

Year	2020	2021	2022
Proposed expenditures (budget)	$6,400,000	$6,300,000	$10,200,000
Actual expenditures	$6,322,370	$7,500,000[11]	TBD

CalCEF's fiscal year is from January 1-December 31.

Governance Structure

CalCEF Ventures is governed by a board of between 3-15 directors under its Incorporation Charter and Bylaws filed in 2004 and the 2013 amended and restated Bylaws. CalCEF Ventures appoints the Board of Directors of CalCEF Innovations, a 501(c)(3) non-profit corporation and CalCEF Catalyst, a 501(c)(6) non-profit corporation. CalCEF Innovations currently has a board of 10 directors while CalCEF Catalyst has a board of four directors.

Governance Overview

CalCEF Ventures has been a limited partner in Clean Energy Advantage Partners since 2011 and is a general partner in Microgrid Catalytic Capital Partners.

a. Articles of Incorporation: Articles of Incorporation, 2004.
b. Bylaws: Restated Bylaws, 2013.
c. Settlement Agreement: D.03-12-035 Appendix B - Settlement Agreement.
d. Stipulation Agreement: No stipulation agreement found.
e. Policies and Procedures: Conflict of Interest Policy, 2009.
f. Current board members: Vic Shao (since 2018), Jonathan Foster (since 2004), Julie Blunden (since 2013), Ian Rogoff (since 2013), and Janet Dalziell (since 2020).

Schedule of Employees and Compensation

As of November 2021, CalCEF Ventures has 19 employees (17.4 full-time equivalent staff), which includes staff charged out to CalCEF Innovations and CalCEF Catalyst. Table 5 includes staff salaries and benefits for all staff across the CalCEF family, now branded as New Energy Nexus. Settlement funds were fully spent down as of the end of 2017; hence no settlement funds have been spent on staff salaries or benefits since then.

[11] Estimate of actual expenditures.

Table 5. New Energy Nexus Staff Salaries			
Year	**Gross Pay**	**Benefits**	**Total**
2019	$1,643,945	$209,661	$1,853,605
2020	$1,694,379	$163,898	$1,858,227
2021 Year to Date*	$1,287,345	$100,113	$1,378,458

*As of October 2021

Staff Transferred or Loaned

Staff are shared across the CalCEF family of organizations but recorded (accrued) for each organization separately. No State staff is currently, or has ever, been loaned to this organization. No staff from other organizations is on loan to the CalCEF.

Contracts, Funding Sources, and Legislative Authority

PG&E shareholders provided CalCEF Ventures' initial funding of $30 million. The funding extended over a five-year period as follows: $2 million in 2004, $4 million in 2005, $6 million in 2006, $8 million in 2007, and $10 million in 2008. During this period, other entities also made minor donations of $110,000 (mostly in-kind). PG&E's role in CalCEF Ventures was limited to providing the $30 million in funding and in appointing three of the initial board members (none remain). Authority for this funding was granted in CPUC D.03-12-035, upon settlement of PG&E's bankruptcy.

CalCEF Ventures invested in new technologies by entering into partnering contracts with certain for-profit venture capital partners, all of which have been wound down, including the final direct investment Thetus, a former portfolio company still owned by the venture capital fund when it was dissolved and ownership interests were transferred to fund investors, including CalCEF Ventures. (A detailed list of investments is provided in previous years' AB 1338 Annual Reports).

In 2006, CalCEF Ventures made a grant of $500,000 to University of California Davis for the development of the Energy Efficiency Center, and in 2007 made a second grant of $500,000 per the terms of the grant agreement. In 2008, CalCEF Innovation was established as a sister organization with $500,000 to address important gaps in public policy regarding motivation promotion of clean energy technology and business solutions, and to pursue policy making needs and public benefit goals. In 2011 and 2012, CalCEF Ventures co-established two new investment vehicles with operating partners: in 2011, Clean Energy Advantage Partners and in 2012, Renewable Energy Trust.

CalCEF Ventures maintains ownership interest in Clean Energy Advantage Partners. The ownership interest in Renewable Energy Trust was first diluted in the years after the original investment, as expected, through follow-on funding rounds since the seeding stage and exited in late 2016. In 2012, CalCEF Ventures continued its support of the University of California Davis Energy Efficiency Center and provided an additional $200,000 grant over the subsequent three years. The investment distribution of the original funding among the partners and grantees can be found in previous AB 1338 Annual Reports.[12]

In September 2016, CalCEF Ventures entered into a contract with the CEC to administer and operate the CalSEED Initiative. The program is funded through the Electric Program Investment Charge (EPIC). This contract will be extended and refunded into 2027, which was already approved at the CEC Business Meeting on June 9, 2021. Final contract execution is in progress.

In January 2018, CalCEF Ventures was awarded a grant by the CEC to manage the CalTestBed program. The related agreement was finalized in June 2019 and the program has formally launched. The program is funded through EPIC.

After the initial funding for CalCEF Ventures was spent, the organization transitioned to a sustainably financed operating model through a combination of grants, including two grants totaling $750,000 from the Economic Development Agency to support regional innovation strategies in California and a private sector grant to support catalytic investments, and other mission-aligned earned income streams. As part of its catalytic investment activities, CalCEF Ventures is a general partner in Microgrid Catalytic Capital Partners.

CalCEF Innovations is predominantly funded by philanthropic grants. CalCEF Catalyst receives certain membership and fee-for-service income from the member[13] companies in its CalCharge program.

Public Process and Oversight

CalCEF Ventures is a non-profit 501(c)(4) corporation not funded through direct taxation or utility ratepayers. CalCEF Ventures, CalCEF Innovations, and CalCEF Catalyst each have a Board of Directors that provide oversight of program activities.

[12] These investments are not listed in this report since the last investment from the original funding was made in 2013.

[13] Membership is non-voting.

The California Emerging Technology Fund

Background

The California Emerging Technology Fund (CETF) was established as a non-profit corporation pursuant to orders from the CPUC approving the mergers of SBC/AT&T and Verizon/MCI in 2005 in CPUC D.05-11-028 and D.05-11-029, respectively. As a condition of approval of the mergers, AT&T and Verizon were required to contribute to the CETF a total of $60 million seed capital over five years "for the purpose of achieving ubiquitous access to broadband and advanced services in California, particularly in underserved communities, through the use of emerging technologies by 2010." The funds were transferred by both companies by 2010. The $60 million seed capital funds were fully spent as of June 2017, plus a portion of earned interest and other awarded grants. As of June 30, 2017, the CETF retained a little more than $2.3 million in earned interest from the original seed capital to support ongoing operations.

Pursuant to CPUC D.15-12-005, issued on December 9, 2015, additional funds were provided to the CETF through a Memorandum of Understanding (MOU) demonstrating public benefit from the mergers of Frontier Communications and Verizon Wireline. As a result of D.15-12-005, Frontier entered into an agreement with the CETF to implement several activities to close the Digital Divide, including a pass-through of $3,050,000 in funds to re-grant to non-profit community-based organizations (CBOs) throughout its territory in California. The CETF did not negotiate any funds from Frontier to support its operations.

Pursuant to CPUC D.16-05-007, issued on May 12, 2016, additional funds were provided to the CETF through an MOU demonstrating public benefit from the mergers Charter Communications, Inc., Time Warner Cable, Inc., and Bright House Networks. As a result of D.16-05-007, on July 1, 2016, Charter agreed in the MOU with the CETF to provide $6,500,000 each year for five years for a total of $32.5 million to support the CETF's core mission and program activities in Charter territories. Both companies agreed that the work of CETF would remain vendor neutral.

In addition, in February 2019, the City Council of San José voted to engage the CETF to assist in the management of grants with local CBOs and public agencies from its Digital Inclusion Fund. Per the action of the City Council and signed agreement, the CETF received $20,000 from the City in fiscal year 2018-2019, and will receive $190,000 annually for ten years, to support the San José Digital Inclusion Partnership (SJDIP) Program Manager and manage Digital Inclusion grant payments that will flow through the CETF. As of December 2019, all the CETF funds going forward are from these sources.

Pursuant to CPUC D.20-04-008, issued on April 16, 2020, additional funds were provided to the CETF through an MOU demonstrating public benefit from the mergers T-Mobile USA, Inc. and Sprint Communications, L.P. As a result of D.20-04-008, T-Mobile agreed in the MOU with the CETF to provide $7 million each year for five years for a total of $35 million: $22 million to support the CETF's digital inclusion programs in T-Mobile territory and $13 million to support the CETF's core mission to accelerate broadband deployment and adoption. Both companies agreed that the CETF's work would remain vendor neutral.

In the establishment of the CETF, D.05-11-028 and D.05-11-029 directed it to pursue the goals that expanded the adoption and usage of broadband technology in addition to promoting ubiquitous access: "We understand that without computers and computer literacy neither availability nor access will ensure use. It is low use that is at the heart of the digital divide. The CETF should consider the possibility of public-private partnerships to develop community broadband access points that provide both."

When the CETF became operational in 2007, the Board of Directors developed a Strategic Action Plan with aggressive overall goals to achieve and/or cause the following to happen: 98 percent deployment and 80 percent adoption. Those overall goals were achieved in the first decade (per the Decade Report delivered to the CPUC and Legislature in November 2017). In 2017, the CETF approved a new 5-Year Strategic Plan to achieve new overall goals: 98 percent deployment by region and 90 percent adoption statewide. The CETF is making steady progress towards achieving these overall goals.

2021 Updates & Accomplishments

- Engaged University of Southern California (USC) Annenberg School to administer the CETF Statewide Survey on Broadband Adoption, which shared results in April 2021: 91 percent of households in California have broadband and only 74 percent of low-income households have broadband.
- Secured Pew Charitable Trust Grant of $250,000 for USC to study affordability models.
- Managed grants to CBOs and promotion of affordable offers to achieve 395,310 adoptions since 2018. The goal is 500,000 by June 2022.
- Handled more calls for affordable internet service in fiscal year 2020-2021 than the previous two years. Reached more than 110 school districts to distribute information to 1 million students and families.
- Established, over two years, 63 co-branded websites with the CETF and anchor institutions (local governments, libraries and school districts that feature the Everyoneon locator tool and a phone number to reach the CETF grantees for assistance.
- The CPUC approved the Investor-Owned Utilities (IOU) Settlement Agreement with the CETF to provide information on affordable broadband to their customers directing readers to resources that the CETF identifies.
- Led implementation of School2Home in 27 schools in eight districts for 17,000+ students and 800+ teachers.
- Hosted the 2021 Leadership Academy virtual meeting. Participants said they and their students were ready to learn remotely without some of the barriers related to devices and home internet connections because of School2Home. All 27 Partner Schools credited School2Home for their relatively seamless transition to distance learning. This experience provided insights into the additional adjustments necessary to support students and families as the pandemic continued.

- Collaborated and signed agreements with 26 school districts and 10 Tribal Nations to distribute 25,000 Chromebooks to low-income students. The CETF gave districts and Tribal Nations the option for digital literacy training. To date, 3,421 parents have completed a two-hour workshop offered by grantees the CETF funded.
- Wrote the Digital Equity Bill of Rights and secured more than 3,500 supporters as of June 2021.
- Developed the California Advanced Services Fund Consensus Principles and formed Digital Equity Coalition.
- Funded and facilitated the identification of Broadband Strategic Corridors by regional consortia.
- Supported and assisted four regional consortia to develop preferred scenarios (two with the Corporation of Education Network Initiatives in California to achieve 98 percent deployment.
- Funded Nevada County to do a countywide Environmental Impact Report to serve as a model for other local governments to use when seeking to expedite the CEQA process.
- Supported the Southern California Association of Governments (SCAG) and San Diego Association of Governments, representing 216 local governments and authorities, to develop the model within their regions for metropolitan planning organizations to use the Request for Proposals (RFP) process for broadband vendors to Step Up or Step Aside.
- Submitted an application to the Federal Communications Commission Covid-19 Telehealth Fund with the Los Angeles Jewish Homes for the Aging as the lead for 12 centers, to demonstrate the value of telehealth applications in Skilled Nursing Facilities.
- Drafted the Affordable Internet Act, secured author for AB 1176 (Garcia and Santiago, 2021), drafted Public Housing Act, and secured author for AB 1425 (Gipson, 2021).
- Managed the San Jose Digital Inclusion Project: 23 grantees to complete outreach to 140,549 households, develop a pipeline of 6,312, and secure 1,399 adoptions.
- Issued Round 2 of the Digital Inclusion Grant for the 2022-2023 opportunity available to community organizations and public agencies serving San José residents.
- The SJDIP in 2021 received financial pledges for $664,647 for the SJDIP.
- The CETF Progress Report contains details relative to previous years.

Annual Reporting Updates

The annual audit reporting information required by statute is provided below.

Expenditures

Table 6 lists the CETF's proposed and actual expenditures for the two prior fiscal years and the proposed fiscal year.

Table 6. CETF's Actual and Proposed Expenditures, 2019-2022

Fiscal Year	2019-2020	2020-2021	2021-2022
Proposed expenditures (budget)	$9,025,000	$10,580,000	$14,200,000
Actual expenditures	$8,232,563	$7,892,342	N/A

Governance Structure

The CPUC Ordering Paragraphs specified the initial composition and process for constituting the 12-person CETF Board of Directors: four were to be appointed by the CPUC; four were to be appointed by the companies (three by SBC, of which only one could be an employee, and one by Verizon); and the remaining four were to be appointed by the initial eight board members. Initial appointments were made in April 2006 and the Board of Directors was fully constituted by the end of June 2006.

Below are links relevant to documents related to the CETF's governance structure.

a. Articles of Incorporation.

b. Bylaws

c. Settlement Agreements: The CPUC Decisions authorizing the mergers and the establishment of the CETF are D.05-11-028 and D.05-12-011. The Decisions funding the work of the CETF since 2016-2017 are D.15-03-005 and D.15-07-009. These Decisions can be found on the CPUC's website by entering the application number (without dashes) in the Proceeding document search function and choosing the tab for "Decisions." The application number for each decision is below:

- D.05-11-028, authorizing Verizon's acquisition of MCI, has the application number A. 05-04-020.
- D.05-12-011, authorizing SBC's acquisition of AT&T, has the application number A.05-02-027.
- D.15-12-005, authorizing Frontier's acquisition of Verizon California wireline services, has the application number A.15-03-005.
- D.16-05-007, authorizing Charter's acquisition of Time Warner Cable Inc.; Time Warner Cable Information Services (California), LLC; Advance/Newhouse Partnership; Bright House Networks, LLC; and Bright House Networks Information Services (California), LLC has the application number A.15-07-009.
- D.20-04-008, authorizing T-Mobile's acquisition of Sprint Communications, L.P. has the application number A.18-07-011.

d. Stipulation Agreement: No Stipulation Agreement is given for this entity.

e. Policies and Procedures: Available upon request.

f. Current board members.

Schedule of Employees and Compensation

Table 7 shows the CETF's employee compensation schedule for the two prior fiscal years and the proposed fiscal year. Gross pay incudes base salary and performance incentive pay (but not travel reimbursements as included in the independent audit). Benefits include health insurance and employer retirement contributions (but not employer payroll taxes).

Table 7. CETF's Employee Compensation Schedule

Year	Gross Pay	Benefits	Total[14]
July 2018-June 2019	$1,220,340	$227,161	$1,447,501
July 2019-June 2020[15]	$1,450,600	$330,886	$1,781,486
July 2020-June 2021	$1,478,860	$347,137	$1,825,997

Staff Transferred or Loaned

There are no State employees at the CETF, nor have there ever been any State staff or employees transferred or loaned internally or interdepartmentally to the CETF.

Contracts, Funding Sources, and Legislative Authority

Table 8 shows professional contracts for fiscal year 2020-2021. A list of completed and current grants is provided in Appendix B.1.

Table 8. List of CETF Contracts

Category	Total Amount
Accounting	$ 95,500
IT Tech Support (Includes Website Support/ Online Grant Services)	$ 29,000
Legal Counsel	$57,530
Plan Administrators	$ 5,010
Printing	$ 1,040
Broadband and Adoption Programs	$ 2,506,648
School2Home	$ 1,768,812

[14] The total reflects audited financials.

[15] Fiscal year 2019-2020 reflects an increase of employees.

As previously mentioned, under the 2005 mergers of AT&T/SBC and Verizon/MCI approved by the CPUC, both companies are obligated to fund the CETF annually over a five-year period for a total of $60 million. This funding is from the shareholders of each company and not ratepayers. Both companies have completed their payments. During fiscal year 2009-2010, the National Telecommunications Information Agency awarded the CETF two federal grants totaling $14.2 million, which were completed in fiscal year 2012-2013. As of June 2017, the entire $60 million in seed capital had been spent.

The CETF also entered into an MOU with Frontier Communications, Inc. and Charter Communications, Inc. to implement public benefits as the result of corporate consolidations in 2017. The CETF received the final payments in 2020-2021 for a total of $3,050,000 and remaining 25,000 devices from Frontier Communications and $32.5 million from Charter through 2021 to continue organizational operations and support School2Home and other digital inclusion programs in their service areas.

In May 2020 (through 2025), the CETF began receiving annual payments for the $35 million from T-Mobile USA, Inc.: $22 million to support the Digital Inclusion Programs ($12.5 million to School2Home, $4.5 million to Digital Literacy Training, and $5 million to Local Government Grants) and $13 million to support the CETF's core mission to accelerate broadband deployment and adoption.

Public Process and Oversight

The CETF is incorporated as a California 501(c)(3) non-profit corporation as a public benefit corporation. It has a Board of Directors that provides oversight. The CETF was established with shareholder funds from AT&T and Verizon. There were no ratepayer funds in the seed capital or subsequent funding the CETF received.

The California Broadband Council (CBC) was established to marshal the State's resources to increase broadband network deployment, and to eliminate the digital divide by expanding broadband accessibility, literacy, adoption, and usage. While the CETF's President and Chief Executive Officer is a statutory member of the CBC, the CETF makes presentations on policy issues and grant programs to this group.

The CETF published an annual report during the first decade and, going forward, will publish a bi-annual progress report describing the grants to date, the metrics and outcomes of the investments, and detailed financial information. In addition to mailing printed copies, the CETF distributes an electronic copy to everyone who signs up to receive one on the CETF website. All the annual reports are on the organization's website. The Decade Report 2007-2017 was attached as Appendix E in the 2017 AB 1338 Annual Report and presented in a public meeting to the CPUC on November 30, 2017. Going forward, the CETF will produce reports every two years and continue sending reports to the CPUC.

The CETF hosts a wide range of public forums during the year, including meetings with its Board of Expert Advisors, Regional Consortia, and grantees all designed to provide and solicit information about the grants and future directions. 2019 public forums and workshops are identified in the Highlights and Accomplishments. In addition, the CETF is a legal party to proceeding considering the T-Mobile, Sprint, Dish acquisition application, A.18-07-011.

The CETF is required by California law to comply with the Non-Profit Integrity Act of 2004. The CETF Board of Directors appoints an independent Audit Committee, which oversees a full audit of the financial statements. The audits are on the CETF website. The IRS Forms 990 for the past three years are available upon request.

The California Hub for Energy Efficiency Financing

Background

The California Hub for Energy Efficiency Financing (CHEEF) was established through CPUC D.13-09-044 issued on September 20, 2013. D.13-09-044 authorizes energy efficiency financing pilots that leverage ratepayer funds to attract a greater amount of private capital to the energy efficiency retrofit market by reducing risk to lenders.

On June 18, 2014, the CPUC entered into an MOA with the California Alternative Energy and Advanced Transportation Financing Authority (CAEATFA), a State agency associated with the California State Treasurer's Office. The MOA to administer the CHEEF financing activities has been extended to June 30, 2022. As set out in D.13-09-044 and the MOA, the CPUC reviews the CAEATFA's funding and work. D.13-09-044 noted that the CPUC's oversight is "critical to protecting the integrity of ratepayer funds allocated to support [energy efficiency] financing programs." Both D.13-09-044 and the MOA direct the CPUC and the CAEATFA to coordinate and execute education and outreach for energy efficiency financing pilot programs.

D.13-09-044 includes a draft implementation plan for the CHEEF with the following tasks:[16]

1. Issue competitive solicitations for a master servicer, and other technical assistance as needed such as for information technology, data management, etc. The master servicer manages the flow of ratepayer funds and data between the IOUs,[17] CHEEF, and financial institutions.
2. Create an Information Technology (IT)-driven platform to support the core processes and functions that make utility on-bill repayment (OBR) possible and facilitate data collection.
3. Develop procedures for various CHEEF responsibilities such as: approval of forms and protocols for data-transfer between the IOUs and financial institutions and the development of lender service agreements.
4. Develop standards for evaluating financial institutions' qualifications and approving financial institutions for pilot participation.
5. Implement CPUC-approved protocols for collection of energy and financial data, data sharing, and third-party access to aggregated, anonymous data.

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16 D.13-09-044, Appendix F.

17 The IOUs are San Diego Gas and Electric (SDG&E), Southern California Gas (SoCalGas), Southern California Edison (SCE), and Pacific Gas and Electric (PG&E).

6. Develop a framework for type and frequency of reporting to the CHEEF by the IOUs and financial institutions and ensure quarterly information reports on pilots' progress are provided by the CHEEF to the CPUC as requested by the Energy Division.
7. Coordinate with existing customer and contractor facing tools such as Energy Upgrade California.
8. Provide a mechanism to make minor, mid-course modifications to the pilot programs as needed to better meet the individual objectives of a particular program.

D.13-09-044 authorizes a total of up to $75,244,931 (including $9,344,931 for the CHEEF Pilot Reserve) of ratepayer funding administered by the IOUs for the pilots. Acknowledging that the CHEEF may need to be supported by a master servicer, a trustee bank, a contractor manager, a data manager, and a technical advisor, D.13-09-044 allocates $5 million of the budget to cover the CHEEF's administrative costs and $2 million for the CHEEF training and outreach for contractors and financial institutions. Table 9[18] provides a summary of the actual and proposed expenditures, and further details may be found in Appendix C.1.[19]

Table 9. CHEEF's Actual and Proposed Expenditures, 2019-2022

Fiscal Year	2019-2020	2020-2021	2021-2022
Proposed expenditures (budget)	$2,973,000	$4,150,000	$4,150,000
Actual expenditures	$2,664,000	$2,665,000	N/A

D.13-09-044 also selects the CAEATFA to administer the CHEEF functions. D.13-09-044 recognizes that the CAEATFA is a State agency and it would be necessary for it to obtain legislative budget authority to perform this role. On July 1, 2014, the CAEATFA was granted legislative budget authority to act as the administrator of the CHEEF through December 2015, and most recently that authority was extended to June 30, 2022.

Inadequate initial staffing levels to address the complexity and scope of work, coupled with high turnover and frequent vacancies due to the limited-term nature of the existing positions, left insufficient resources to effectively meet the desired anticipated timelines for the pilots. Subsequently, the CAEATFA requested approval from the CPUC for an additional $8.36 million of the existing $9.3 million contingency fund for administrative support to address the delayed timetable and complexity of the work, and to right-size the number and level of staff resources, through fiscal year 2019-2020. The CPUC approved the CAEATFA's

18 The data was provided by the CAEATFA's management per the CPUC's Energy Division staff's request in October and November 2021.

19 See Appendix C.1 for the Finance Pilot Budget with the CAEATFA Expenditures (September 2014 through June 30, 2021).

funding request and released $8.36 million of the CHEEF reserve funds.[20]

The approval process of changing residential pilot to a full-scale program required a resolution. On April 17, 2020, the CPUC approved Resolution E-5072, transitioning the CHEEF's Residential "Pilot" to a full-scale program. The resolution also authorized the CAEATFA to spend up to $9.5 million of previously allocated Credit Enhancements funds for maintenance and improvement of information technology and administrative needs of the CHEEF for fiscal years 2020-2021 and 2021-2022.

On August 9, 2021 the CPUC approved D. 21-08-006, extending the CHEEF for energy efficiency financing programs and conditionally approved use of platforms for non-ratepayer funded programs allowing for the incorporation of non-ratepayer funds to expand the reach of the programs, and extended IOU support for the programs. This Decision authorized up to an additional $75.2 million in ratepayers' energy efficiency funding to the CAEATFA for implementation of the existing CHEEF programs through June 30, 2027.

Roles

Key infrastructure elements needed to implement the CHEEF include a master servicer, trustee bank, secure flow of funds functionality, contractor manager, and technical advisors. Below are descriptions of each of these roles and information regarding their status as it relates to the CAEATFA's procurement processes.

- *Master Servicer:* The master servicer plays a key role in daily administration of the pilots, accepting loan enrollment applications and processing bill repayment transactions. The CAEATFA selected Concord Servicing Corporation (Concord) as the master servicer, through a competitive solicitation, and entered into a contract on April 23, 2015. The CAEATFA contracted with Concord through two subsequent solicitations on January 1, 2018, and October 22, 2020. This contract is effective till July 31, 2022, with options to extend.
- *Trustee Bank:* The trustee holds the ratepayer funds provided by the IOUs to serve as credit enhancements under the various pilot programs. US Bank served as the trustee for the program from March 11, 2015 to December 31, 2020. Beginning in January 2021, Zions Bank as assumed the role of the trustee bank. This contract will be in effect till December 31, 2023.
- *Contractor Manager*: The contractor manager recruits, trains, enrolls, and supports contractors participating in the GoGreen Home and GoGreen Business programs and conducts quality control oversight of projects not participating in an IOU rebate/incentive program. On October 24, 2017, Frontier Energy began providing services under a contract for what was then known as the Residential Energy Efficiency Loan Assistance Program (REEL)[21] program. Upon the launch of what is now

[20] D.17-03-026 affirmed CPUC Rulemaking 13-11-005: Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing, Education, and Outreach Activities issued November 22, 2016.

[21] In September 2021, the REEL program changed its name to GoGreen Home Energy Financing Program.

GoGreen Business,[22] the CAEATFA issued a solicitation for a contractor manager to serve both programs; Frontier was selected for a new contract that began June 4, 2019. This contract will expire on May 28, 2022.

- *Technical Advisor*: Technical advisors provide expertise to the CAEATFA in its development and implementation of the CHEEF pilot programs. The CAEATFA contracted with Energy Futures Group, which provides technical assistance to continue research and development and provides implementation assistance for the commercial programs. The initial contract term was from March 29, 2017 through February 14, 2019. The most recent contract with the same technical advisor started on March 13, 2019, and most recently renewed till March 13, 2022.

2021 Updates & Accomplishments

GoGreen Home Energy Financing Program

The CAEATFA launched the REEL as the first of the Energy Efficiency Financing Pilots in July 2016. In March 2017, the CPUC issued D.17-03-026 granting the CAEATFA the authority to make several requested modifications to the pilots to be more responsive to the evolving energy efficiency marketplace. The CAEATFA made several modifications to the REEL pilot, including:

- Simplifying measure eligibility for the program and moving toward a statewide list of eligible energy efficiency measures.
- Removing the need for a separate statewide Customer Information Service Release form.
- Consolidating lenders' separate loan loss reserve accounts by IOU into a single loan loss reserve account for lenders.

The REEL's initial two-year pilot term was completed on July 15, 2018. However, to continue the momentum of the pilot, there was not a hard stop of program operation after two years and the pilot continued issuing loans while the evaluation process took place.

In December 2019, Opinion Dynamics, Inc. completed the evaluation of the REEL pilot program. Following the evaluation, the CPUC issued Resolution E-5072 approving the REEL to continue operating as a full-scale program. Additionally, the CPUC authorized the CAEATFA to make enhancements to the REEL and the financing pilots for maintenance and improvement of information technology and administrative needs during the interim period before the next CPUC decision. However, this authorization does not include any expanded scope for the REEL program nor for any other financing pilots.

By the end of October 2020, the program had enrolled 966 loans, with an average loan size of $16,561, and claim-eligible principal totaling $16 million since the program's inception (compared with 569 loans and $9.6 million by the end of October 2019).[23]

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[22] In September 2021, the Small Business Energy Efficiency Financing Program changed its name to GoGo Business Energy Financing Program

[23] Available at: California Hub for Energy Efficiency Financing Programs.

The website GoGreenFinancing.com launched in June 2018 and continues to serve consumers and stakeholders in need of energy efficiency project financing. The website launched in Spanish in December 2020.

In September 2020, the CAEAFTA changed the REEL program's name to "GoGreen Home Energy Financing Program" (GoGreen Home). By October 20, 2021, GoGreen Home had enrolled 1,612 loans, with an average loan size of $16,820 and claim-eligible principal totaling over $27 million. GoGreen Home also launched an online, point-of-sale financing option available to customers purchasing appliances through the IOUs' marketplaces. SoCalGas' marketplace was the first to offer this financing and as of October 20, 2021, 19 microloans for a total value of $25,565 have been enrolled. SCE is expected to offer this financing to its marketplace in early 2022.

On-Bill Repayment Programs

The CAEATFA staff has been working with the IOUs and the master servicer to establish the OBR infrastructure. In July 2021, the CAEATFA modified the GoGreen Business Energy Financing Program Regulations (formerly known as the Small Business Energy Efficiency Financing Program) to include on-bill repayment. The CAEATFA and Concord are in the final stages of implementing the on-bill infrastructure with on-bill repayment (OBR) planned to be offered in early 2022, incorporating OBR functionality for pilots.

The Small Business Finance Pilot

The Small Business Finance (SBF) pilot program regulations were approved by the Office of Administrative Law and went into effect on December 17, 2018. The first lease was enrolled in July 2019. The SBF pilot program seeks to:

1. Provide a State-backed financing program designed to address the energy efficiency challenges faced by small business owners and tenants.
2. Provide an accessible—and attractive—financing option for small businesses.
3. Provide a source of financing that allows deep energy retrofits in existing small business buildings.

Financing through the program is available to small businesses, non-profits, and market-rate multi-family properties (five or more units) that meet the following business size requirements:

- 100 or fewer employees,
- Annual revenue of less than $15 million, or
- Compliance with the Small Business Administration's small business size classifications (annual revenue limits range from $750,000 to $38.5 million, depending on the industry).

SBF is available to both small business property owners and tenants and the pilot program facilitates a variety of financing instruments for potential customers to consider, including loans, equipment leases, service agreements and savings-based payment agreements. Each participating finance company offers products from this menu of authorized instruments. Small business owners can take out loans up to $5 million. Participating financial institutions are eligible to receive a credit enhancement for qualifying measures for up to $1 million of the financed amount.

In July 2021, regulations were modified to change the name of the program to the GoGreen Business Energy Financing Program. Additionally, the CAEATFA modified regulations to add a streamlined microloan pathway and an OBR mechanism. COVID restrictions on small businesses and delays in the launch of IOU third-party implemented programs for small business affected program uptake. As of the end of October 2021, the SBF pilot offered financing from three participating finance companies, had enrolled over 70 contractors and project developers, and facilitated $1.7 million in financing for ten projects. A fourth finance company is enrolled but awaiting the launch of an IOU third-party implemented small business program through which to offer financing. More information on the CHEEF pilot programs is available on the CAEATFA's website at: CHEEF Pilot Programs and GoGreen Financing.

Annual Reporting Updates

The annual audit reporting information required by statute is below.

Expenditures

Table 9 above and Appendix C.1 show the CHEEF expenditures.

Governance Structure

A specific governance structure was not created for the CHEEF. However, D.13-09-044 clarifies that the CAEATFA is required to follow public procurement and rulemaking procedures when contracting for the CHEEF-managed services and finalizing rules for programs identified in this Decision. Specifically, the CAEATFA is bound by Chapter 2 (commencing with Section 10290) of Part 2 of Division 2 of the Public Contracts Code, and Chapter 3.5 (commencing with Section 11340) of Part 1 of Division 3 of Title 2 of the Government Code.

The CAEATFA must submit a budget revision request to the Department of Finance and Joint Legislative Budget Committee to approve staff positions to administer the pilots as well as for the ability to utilize ratepayer funds to cover administrative costs to secure their approval for staff positions to administer the pilots and to be authorized to expend ratepayer funds to cover administrative costs. The CAEATFA received budgetary authority to implement the pilots through fiscal year 2021-2022 to implement the pilots through their estimated timetable and evaluation period. The MOA between the CAEATFA and the CPUC was extended to June 30, 2022. On November 4, 2021, the CAEATFA and the CPUC a new MOA was completed to reflect the implementation of D.21.08.006.

Staff and Employees and their Salaries and Expenses

Table 10 shows the CHEEF's employee compensation schedule for the two prior fiscal years and the proposed fiscal year.

Table 10. CHEEF Salaries and Expenses Authorized for Fiscal Year 2019-20 and 2020-21

	State Personnel Classification	**Annual State Salary[24] and Benefit (2019-2020)**	**Annual State Salary and Benefit (2020-2021)[25]**
	Staff Services Manager II (Supervisor)	$145,908	$158,759
Program Manager	Staff Services Manager I (Supervisor) - Direct and Implementation (D&I)	$127,896	$144,240
	Staff Services Manager I (Specialist) - Compliance	$127,896	$144,240
	Staff Services Manager I (Specialist) - D&I	$127,896	$144,240
	Staff Services Manager I (Specialist) - D&I	$127,896	$144,240
	Staff Services Manager I (Specialist) - Marketing	$127,896	$144,240
Support Staff	Associate Governmental Program Analyst - D&I	$110,124	$124,284
	Associate Governmental Program Analyst - D&I	$110,124	$124,284
	Associate Governmental Program Analyst - Marketing	$110,124	$124,284
	Associate Governmental Program Analyst - Marketing & Data	$110,124	$124,284
	Associate Governmental Program Analyst - Compliance	$110,124	$124,284
	Associate Governmental Program Analyst - Compliance & Data	$110,124	$124,284
	Office Technician	$72,528	$81,170
	Office Technician	$72,528	$81,170
	Office Technician	$72,528	$81,170

24 State salary represents annual midrange assumption; includes average benefit.

25 Per request of the CPUC's staff, the CAEATFA management provided the data in November 2021.

Table 11. CHEEF Contracts and Funding[26]

Contract	Current Contract Term	Amount	Amount Paid[27]	Funding Source
MOA between the CPUC and CAEATFA	Through June 30, 2022	$0	N/A	None
Receivables contract between the four IOUs and CAEATFA	September 1, 2014 – June 30, 2022	$15,360,000 (reimbursement only)	N/A	Ratepayer Funds
CAEATFA contract with master servicer (Concord Servicing Corporation)	April 23, 2015 – December 31, 2017	$1,500,000	$1,278,294	Ratepayer Funds
	January 1, 2018 – October 21, 2020	$1,500,000	$1,394,463	
	October 22, 2020 – July 31, 2022[28]	$5,500,000[29]	$290,762[30]	
CAEATFA contract with Trustee Bank (US Bank)	January 24, 2015 – December 31, 2017	$180,000	$160,000	Ratepayer Funds
	January 08, 2018 – December 31, 2020	$285,000	$240,000	
CAEATFA contract with Trustee Bank (Zions)[31]	January 1, 2021 – December 31, 2023	$360,000	$70,000[32]	Ratepayer Funds

[26] Per request of the CPUC's staff, the CAEATFA management provided the data in November 2021.

[27] For services through June 30, 2019.

[28] Two one-year extensions are available.

[29] This figure includes two available $1 million extensions.

[30] This figure represents the amount paid billed through September 2021.

[31] This contract is pending DGS approval.

[32] This represents payments as of the end of August 2021.

CAEATFA contract with contractor manager (Frontier Energy Corporation)	October 24, 2017 – August 31, 2019	$1,500,000	$775,680	Ratepayer Funds
	June 4, 2019 – May 28, 2021[33]	$1,500,000	$1,078,005[34]	
CAEATFA contract (CMAS Service Order) for Technical Assistance (Energy Futures Group)	May 25, 2016 – December 15, 2016	$49,963	$49,904	Ratepayer Funds
	March 29, 2017 – February 14, 2019	$249,995	$224,193	
CAEATFA contract with Technical Advisor (Energy Futures Group)	March 13, 2021 – March 13, 2022[35]	$299,999	$191,320[36]	Ratepayer Funds

Staff Transferred or Loaned

Other CAEATFA staff may assist with the intermittent workload. This assistance is not significant and is not currently quantifiable.

Contracts, Funding Sources, and Legislative Authority

Table 11 shows the CHEEF contracts and funding.

Public Process and Oversight

The CAEATFA developed its pilots under State laws regarding public processes and procurement. Regulations are established under the oversight of the Office of Administrative Law, which include establishing the appropriate channels for public input and access. In addition, all contracts are publicly noticed and competitively bid under the oversight of the DGS.

- Regulations for each pilot program are established under California's Administrative Procedures Act.
- GoGreen Home (formerly REEL) program regulations can be found in Title 4, Division 13, Article 5, Section 10091.1 through Section 10091.15 of the California Code of Regulations.

33 A one-year extension is available.

34 This represents payments as of the end of August 2021.

35 Contracted extended for an additional year till March 13, 2022.

36 This represents payments as of the end of September 2021.

- GoGreen Business regulations can be found at Title 4, Division 13, Article 6, Section 10092.1 through Section 10092.14 of the California Code of Regulations.
- GoGreen Multifamily regulations can be found at Title 4, Division 13, Article 7, Section 10093.1 through Section 10093.11 of the California Code of Regulations.

The CAEATFA's budget and position authority is overseen by the Department of Finance and the Legislature on an annual basis. The CAEATFA provides the following reports:

- Quarterly Reports to the CPUC (as required under the Decision and Contract).
- Annual Reports to the State Legislature (submitted no later than March 31 pursuant to Public Resources Code Section 26017).

21st Century Energy Systems – Research and Development Agreement

Background

On December 20, 2012, the CPUC authorized the 21st Century Energy Systems (CES-21) in D.12-12-031. The D.12-12-031 authorized the development of a five-year Cooperative Research and Development Agreement between PG&E, SCE, and SDG&E (collectively known as the Joint Utilities), and the Lawrence Livermore National Laboratory (LLNL). The program was subsequently modified by 2013 Budget Trailer Bill, Senate Bill (SB) 96 (2013).

In 2014, the CPUC approved D.14-03-029, which modified D.12-12-031 to comply with SB 96. Changes included reducing funding from $152.19 million to $35 million over the five-year research period, narrowing the scope of the program to focus only on cybersecurity and grid integration, minimizing the governance structure, and enhancing CPUC and Legislative oversight of the program.

On April 25, 2014, the Joint Utilities filed a joint Advice Letter containing their proposed cybersecurity and grid integration research and development projects, revised under the new program requirements. The CPUC conducted a thorough and collaborative review of the proposals and convened a consensus-building session among the parties to discuss the issues raised. Ultimately, Resolution E-4677 was approved on October 2, 2014. Resolution E-4677 approved, with modifications and additional oversight requirements, the Joint Utilities' proposed cybersecurity and grid integration projects.

On January 17, 2018, the Joint Utilities each filed an Advice Letter requesting the public release license rights to four cybersecurity software applications developed under the CES-21 program. The CPUC approved this request in Resolution E-4943 without modification. On September 26, 2019, the Joint Utilities each filed an Advice Letter requesting the public release license rights to three additional cybersecurity software applications; the CPUC approved this request in Resolution E-5057.

Program Overview

The Joint Utilities began implementation of the Cybersecurity Project and the Grid Integration Project in 2015, securing multiple subcontractors to conduct the work in addition to LLNL.

The Cybersecurity Project, which focused on next-generation industrial control systems in general and Machine-to-Machine Automated Threat Response (MMATR), had $33 million in funding and sought to develop automated response capabilities to protect critical California infrastructure against cyber-attacks. The project was successful in bringing about meaningful developments towards the first automated system for cyber-attack detection and response. This project achieved the development of a simulation and modeling engine for evaluating the impacts of cyber-attacks on the power grid; an operationally realistic physical test bed for understanding how the IOUs' industrial control systems interface, communication technology, and cybersecurity interfaces could be used at real substations; and an automated response research package. In line with the requirements of SB 96 and D.14-03-029, the project was completed in October 2019.

The Grid Integration Project focused on flexibility metrics and standards and studied planning metrics and standards that explicitly considered operational flexibility. The project had $2 million in funding and sought to improve flexibility metrics and thereby improve long term resource planning for California's grid. This research project targeted potential breakthroughs to assess the electric grid's operational flexibility requirements, operating limits of the existing or planned grid to integrate additional amounts of intermittent renewable generation, and additional resources and costs to integrate additional renewable generation. The Grid Integration Project was successful in all its requirements and officially completed in November 2017.[37]

CES-21 has created ground-breaking research in understanding the impacts of cyber-attacks on the power grid at scale and automated response to previously known cyber-attacks, as well as the variety of tools that can help characterize, describe, and prioritize threats to Industrial Control Systems. This research has been recognized by the Department of Energy, the National Security Agency, the Department of Homeland Security, numerous national laboratories (beyond LLNL), and the cybersecurity industry at large. The program has informed and contributed to standards and it has pushed the boundaries of research in the power grid cybersecurity domain. The program has identified the path forward for developing an integrated MMATR capability, as well as additional gaps in the grid cybersecurity domain that should be addressed in future research efforts. Finally, the program has identified a role that the State of California is uniquely positioned to play in securing our grid against cyber threats.

2021 Updates & Accomplishments

The Joint Utilities completed the Cybersecurity Project in October 2019 and submitted the final CES-21 program report to the CPUC on December 6, 2019. The CPUC submitted the final report to the Legislature on January 6, 2020.[38] The utilities provided final program financial information to the CPUC in August 2020. The program and all associated reporting are now complete—there are no additional updates for 2021.

For more information, please contact Fredric Beck (fredric.beck@cpuc.ca.gov or 415-703-5432).

Annual Reporting Updates

The annual audit reporting information required by statute is below.

Expenditures

Table 12 lists CES-21's proposed and actual expenditures for the two prior fiscal years.

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[37] Lawrence Livermore National Laboratory published the final report on the Flexibility Metrics project titled, *Role of Operating Flexibility in Planning Studies*, on April 26, 2018.

[38] California Energy Systems for the 21st Century (CES-21) Program Final Report.

Table 12. CES-21's Actual and Proposed Expenditures, 2019-2022[39]			
Fiscal Year	**2019-2020**	**2020-2021**	**2021-2022**
Proposed expenditures (budget)	$1,229,241	N/A	N/A
Actual expenditures	$1,074,680	N/A	N/A

Governance Structure

SB 96 (2013) and D.14-03-029 determined that the CES-21 program would be administered by one representative, a Project Manager, from each PG&E, SCE, and SDG&E. These project managers coordinated with LLNL, administered the CES-21 program and the Cooperative Research and Development Agreement (CRADA) with LLNL, and ensured that CES-21 stayed within the authorized budget.

Schedule of Employees and Compensation

It is not feasible to provide a full schedule of employees and compensation because of the CES-21 program's structure. Many, if not all, staff working on CES-21 are funded through multiple sources as they perform work for multiple programs, each with their own funding stream, within their respective organizations.

Staff Transferred or Loaned

No CPUC staff have been transferred or loaned internally or interdepartmentally for this program.

Contracts, Funding Sources, and Legislative Authority

Contracts entered into by the CES-21 Program are authorized by D.14-03-029 and funded by CES-21 Program funds. This program is funded through the ratepayers of PG&E, SCE, and SDG&E on a proportional basis, as authorized in D.12-12-031.

Public Process and Oversight

The CPUC's staff oversaw the CES-21 Program. The program administrators were required to submit monthly and annual reports outlining key developments. These were reviewed by staff in the CPUC's Energy Division and Safety and Enforcement Division. Annual and Final reports are posted on the CPUC's Energy Research, Development, and Deployment webpage.

[39] Utilities report expenditures by calendar year. This table provides an estimate of funding by fiscal year by averaging across the two calendar years.

The Diablo Canyon Independent Safety Committee

Background

The Diablo Canyon Independent Safety Committee (DCISC) was established as a part of a Settlement Agreement entered into in June 1988 between the Division of Ratepayer Advocates (renamed Public Advocate's Office) of the CPUC, the Attorney General for the State of California, and PG&E concerning the operation of the two units of PG&E's Diablo Canyon Nuclear Power Plant (Diablo Canyon). The agreement provided:

> An Independent Safety Committee shall be established consisting of three members, one each appointed by the Governor of the State of California, the Attorney General, and the Chairperson of the California Energy Commission, respectively, serving staggered three-year terms. The Committee shall review Diablo Canyon operations for the purpose of assessing the safety of operations and suggesting any recommendations for safe operations. Neither the Committee nor its members shall have any responsibility or authority for plant operations, and they shall have no authority to direct PG&E personnel. The Committee shall conform in all respects to applicable federal laws, regulations and Nuclear Regulatory Commission (NRC) policies.

The committee acts as an advisory body and has no independent budget.

On January 25, 2007, the CPUC approved a modified charter for the DCISC in D.07-01-028. Section 1.B of the new charter concerns appointments of Committee members. It states that candidates for the Committee membership shall be selected from those applicants responding to an open request for application and requires the CPUC to provide for public comment on the applicants' qualifications and potential conflicts of interest. Under the modified charter, the President of the CPUC is required to review the applicants' qualifications, experience, and background, including any conflicts of interest, together with any public comments, and propose candidates with knowledge, background, and experience in the field of nuclear power plants and nuclear safety issues to that year's appointing authority. The CPUC's Energy Division is required to prepare and circulate for public comment, and place on the CPUC public agenda a resolution ratifying the CPUC's President's selection of candidates.

On September 9, 2021, the CPUC issued D.21-09-003 approving the Settlement Agreement in PG&E's 2018 Nuclear Decommissioning Cost Triennial Proceeding, which among other things, allows the DCISC to continue in its safety oversight role after Diablo Canyon closes in 2024/2025 until all its spent nuclear fuel has been moved from wet storage to dry storage. Additionally, the DCISC approved a second amended charter, and in accordance with D.21-09-003, PG&E submitted Advice Letter 6361-E on October 11, 2021, which is under review and awaiting approval from the CPUC's Energy Division.

2021 Updates & Accomplishments

On May 20, 2021, the CPUC's approved Resolution E-5145, ratifying the President's selection of two candidates, and their names were submitted to David Hochschild, Chair of the CEC, for the term July 1, 2021 – June 30, 2024.[40] On June 25, 2021, Chair Hochschild reappointed the incumbent candidate, Dr. Peter Lam, to serve this term. In 2020, the Governor reappointed Dr. Per Peterson for the term July 1, 2020 – June 30, 2023. In 2019, the California Attorney General reappointed Dr. Robert Budnitz for the term July 1, 2019 – June 30, 2022. The DCISC held three public meetings in 2021. The DCISC also recently approved its 31st Annual Report for July 1, 2020 – June 30, 2021.

Annual Reporting Updates

The annual audit reporting information required by statute is provided below.

Expenditures

Table 13 lists DCISC's proposed and actual expenditures for the two prior fiscal years.

Table 13. DCISC's Actual and Proposed Expenditures, 2019-2022

Fiscal Year	2019-2020	2020-2021	2021-2022
Proposed expenditures (budget)	$962,165	$976,598	$991,247
Actual expenditures	$602,958	TBD	TBD

Governance Structure

The Committee consists of three members, each appointed by the Governor of the State of California, the Attorney General, and the Chair of the CEC, respectively, serving staggered three-year terms. Further information is available: here.

The Restated Charter for the DCISC, approved in CPUC D.07-01-028.

The second amended charter, which the DCISC approved and PG&E submitted in Advice Letter 6361-E on October 11, 2021, is under review and awaiting approval from the CPUC's Energy Division.

40 At the time of this report's publishing a candidate had not yet been selected.

Schedule of Employees and Compensation

As approved in the PG&E Advice Letter 6144-E, compensation for members of the DCISC includes the following:

- Annual Retainer of $10,400;
- A fee of $260/hour to attend DCISC meetings;
- A fee of $260/hour for DCISC work performed outside of committee meetings in excess of 40 hours per year; and
- Reimbursement of expenses incurred in the performance of DCISC work.

Staff Transferred or Loaned

There are no CPUC or other State staff hired to work for the DCISC. No State staff is currently or ever has been loaned internally or interdepartmentally to the DCISC.

Contracts, Funding Sources, and Legislative Authority

While the DCISC does not have an independent budget, it receives funding through PG&E's cost-of-service rates at funding levels established in D.97-05-088, based on funding for calendar year 1996 with a 1.5 percent annual increase thereafter. Per D.97-05-088, DCISC's continued funding is approved through PG&E's General Rate Case proceedings, most recently in D.20-12-005. Proposed and actual expenditures are listed in Table 13.

Public Process and Oversight

Agendas, meeting videos, and minutes are available for each DCISC public meeting. Notices for the DCISC's public meetings are posted here. The DCISC held public meetings in February, June, and October 2021 (online-only due to COVID-19).

The DCISC provides extensive information to the public concerning Diablo Canyon. Transcripts and minutes of each public meeting and reports of each fact-finding meeting, and an extensive annual report on the safety of Diablo Canyon's operations are available by contacting the committee or at the R. E. Kennedy Library. The DCISC welcomes comment and communication from members of the public and provides an opportunity for such dialogue during every public meeting. In addition, the DCISC's administrative office maintains a toll-free 800 telephone line and an e-mail address to respond to questions or requests for information from the public. Written comments or questions may also be directed to the DCISC's members by contacting the office of the DCISC Legal Counsel.

The DCISC's contact information is available here.

Nuclear Decommissioning Trusts

Background

Pursuant to Order Instituting Investigation (OII) 86, the CPUC conducted an investigation into managing the decommissioning trust funds for California's nuclear power plants. As a result, CPUC D.87-05-062 adopted externally managed trusts as the vehicles for accruing decommissioning funds. Two types of funds were established:

1. Qualified trust funds are contributions that qualify for an income tax deduction under Section 468A of the Internal Revenue Service (IRS) Code.
2. Non-qualified trust funds are contributions that do not qualify for an income tax deduction.

Each utility has a committee made up of five members who are responsible for directing and managing their nuclear decommissioning trusts. Two of the committee members are utility affiliated. The three that are not affiliated with the utility are CPUC-approved members who serve five-year terms. The committees appoint trustees and investment managers. On November 25, 1987, Resolutions E-3060, E-3048, and E-3057 approved, respectively, SDG&E's, PG&E's, and SCE's Master Trust Agreements.[41]

Investment Managers

The utilities employ a stable of investment managers and advisors for their decommissioning trusts:

SDG&E:

- Bank of New York – Mellon [Trustee]
- State Street Global Advisors [Qualified Trust/U.S. Equity]
- Acadian [Qualified Trust/U.S. Equity]
- Earnest Partners [Qualified Trust/International Equity]
- Lazard [Qualified Trust/International Equity]
- PIMCO [Qualified Trust/Intermediate Credit]
- Loomis Sayles [Qualified Trust/Intermediate Credit]
- TCW MetWest [Qualified Trust/Intermediate Credit]
- Northern Trust [Qualified Trust/Municipal Bonds; Nonqualified Trust/Municipal Bonds]
- Western Asset [Qualified Trust/Municipal Bonds]

[41] Decisions, Resolutions, and Rulings issued before July 2000, can be requested from Central Files by filling this online form.

- BlackRock [Qualified Trust/Municipal Bonds]
- Payden Rygel [Qualified Trust/Short Duration]

PG&E:

- BlackRock Financial Management [Qualified Trust Fixed Income]
- NISA Investment Advisors [Qualified Trust Fixed Income]
- PanAgora Asset Management [Qualified Trust Non-US equities]
- RhumbLine Advisers [Qualified Trust U.S. equity]
- Earnest Partners [Qualified Trust Fixed Income]
- Bank of New York – Mellon [Trustee]

SCE:

- Schroders Investment Management [Qualified Trust Fixed Income]
- BlackRock Financial Management [Qualified Trust Fixed Income]
- AB (formerly Alliance Bernstein) [Qualified Trust Fixed Income]
- PanAgora Asset Management [Qualified Trust International Equity Assets]
- Rhumbline Advisors [Qualified Trust U.S. Equity Assets]
- State Street Global Advisors [Qualified Trust U.S. Equity Assets]
- Pacific Investment Management Company (PIMCO) [Qualified/Non-Qualified Trust Fixed Income]
- NISA Investment Advisors [Qualified Trust Fixed Income]
- Bank of New York – Mellon [Trustee]

Trustee

Mellon Bank, N.A. acts as the trustee for the PG&E, SDG&E, and SCE Decommissioning Trusts by providing custody, record keeping, accounting, taxation, and reporting services on behalf of the trusts.

Fund Balances

Table 14 shows the balances for the PG&E, SCE, and SDG&E trust funds.

Table 14. All Trust Fund Balances are through December 31, 2020		
Utility	**Nuclear Plant**	**Fund Balance**
PG&E	Humboldt Bay Power Plant (HBPP) 3	$170,000,000
PG&E	Diablo Canyon Power Plant (DCPP) 1	$1,758,000,000
PG&E	DCPP 2	$2,299,000,000
SCE	San Onofre Nuclear Generation Station (SONGS) 1	$318,000,000
SCE	SONGS 2	$1,162,000,000
SCE	SONGS 3	$1,395,000,000
SDG&E	SONGS 1	$150,000,000
SDG&E	SONGS 2	$364,000,000
SDG&E	SONGS 3	$426,000,000
SCE	Palo Verde 1	$468,000,000
SCE	Palo Verde 2	$479,000,000
SCE	Palo Verde 3	$494,000,000

Regulations

The Nuclear Regulatory Commission (NRC) has some basic regulations that must be followed regarding decommissioning. These are:

1. Licensees are required to have sufficient funds to decommission the plant [10 CFR 50.75]. Utilities that operate nuclear plants file a report every two years with the NRC showing estimated decommissioning costs according to the NRC methodology, and how much money has been set aside for that purpose. The NRC definition of decommissioning is related only to the "nuclear" portion of the plant. In California, decommissioning also includes restoring the site to its original condition, which includes additional activities and requires the accumulation of more funds.
2. After a permanent plant shutdown, certain activities may not be performed that would prevent the completion of decommissioning [10 CFR 50.82(6)].

In the 2009 Nuclear Decommissioning Cost Triennial Proceeding (NDCTP), the Commission undertook a comprehensive review of the management and administration of these externally managed nuclear decommissioning trust funds for each of the three major IOUs.

In January 2013, the CPUC issued D.13-01-039 which allows for greater flexibility in trust fund management by allowing for increases in the amount of equity investments and lower-rated higher-yield domestic and foreign bonds to increase the overall yield of the decommissioning trust funds. In the course of the NDCTP, the CPUC reviews the trust fund levels and any potential adjustments to amounts paid by ratepayers into the trust funds. On December 18, 2014, CPUC D.14-12-082 approved the 2012 NDCTP for all California nuclear power plants. The 2015 NDCTP for DCPP 1 and 2 and HBPP 3 was approved in D.17-05-020 on May 25, 2017. The 2015 NDCTP for SONGS 1, 2, and 3 and Palo Verde was separated into three phases: Phase 1 was decided in D.18-10-010[42] on October 11, 2018; Phases 2 and 3 were decided in D.18-11-034 on December 7, 2018.

2021 Updates & Accomplishments

The 2018 NDCTP (A.18-03-009) for SONGS and Palo Verde were filed in March 2018 and separated into three phases: Phase 1 was decided in D.19-09-003 on September 12, 2019; Phases 2 and 3 reviewed the reasonableness of recorded costs and the reasonableness of the decommissioning cost estimates for SONGS units 1, 2, and 3. A proposed decision for Phases 2 and 3 of the 2018 NDCTP was mailed on October 29, 2021 and is on the CPUC agenda for a vote in December 2021.

The 2018 NDCTP for DCPP and HBPP was filed as A.18-12-008 in December 2018 (and later consolidated with A.18-07-013). On September 10, 2021, the CPUC issued D.21-09-003 adopting the parties' proposed Settlement Agreement, thereby approving:

1. An adjusted DCPP Decommissioning Cost Estimate of $3.9 billion and a resulting annual revenue requirement of $112.5 million to be recovered from ratepayers through the Nuclear Decommissioning Adjustment Mechanism (NDAM) over eight years;
2. An extension of the Diablo Canyon Independent Safety Committee's safety oversight role until all DCPP spent nuclear fuel has been moved from wet storage to dry storage;
3. The reasonableness of $400 million in HBPP decommissioning costs and continued collection of HBPP's $3.9 million annual revenue requirement in rates through the NDAM; and
4. Additional performance specifications and guidelines that PG&E must use in its pending solicitation of vendors for spent fuel storage systems.

As ordered in D.21-09-003, the 2021 NDCTP for DCPP and HBPP will be filed by no later than December 31, 2021. The 2021 NDCTP for SONGS and Palo Verde is expected to be filed by mid-2022.

[42] D. 18-10-010 in response to a joint application filed by SCE and SDG&E; Applications 16-03-004.

Annual Reporting Updates

The annual audit reporting information required by statute is provided below. The sections on "Schedule of Employees and Compensation" and "Contracts, Funding Sources, and Legislative Authority" are not applicable to the Nuclear Decommissioning Trusts.

Expenditures

Tables 15, 16, and 17 below show the actual administrative costs for the utilities' nuclear decommissioning trusts for the last two available calendar years. Costs for 2021 will not become available until mid-2022.

Table 15. PG&E's Actual Administrative Costs, 2019-2021

Fiscal Year	2019	2020	2021
Actual expenditures	$2,233,000	$3,115,000	N/A

Table 16. SCE's Actual Administrative Costs, 2019-2021

Fiscal Year	2019	2020	2021
Actual expenditures	$6,390,485	$5,448,618	N/A

Table 17. SDG&E's Actual Administrative Costs, 2019-2021

Fiscal Year	2019	2020	2021
Actual expenditures	$2,589,147	$2,806,162	N/A

Governance Structure

As described above, each utility has a committee made up of five members who are responsible for directing and managing their nuclear decommissioning trusts. Two of the committee members are utility affiliated. The three that are not affiliated with the utility are CPUC-approved members who serve five-year terms. The committees appoint trustees and investment managers.

Staff Transferred or Loaned

No State staff is currently or ever has been loaned internally or interdepartmentally to manage nuclear decommissioning trusts.

Public Process and Oversight

As required by their Master Trust Agreements, PG&E, SCE, and SDG&E filed Decommissioning Master Trust reports with the CPUC, which included:

- Findings as to whether current trustees and investment managers should be retained or replaced;
- If necessary, the justification for using more than one investment manager;
- Voting records of committee members and the minutes of committee meetings; and
- Itemized accounting of master trust administration expenses and their basis.

Additionally, this year, the PG&E and SDG&E Master Trust Agreements required each to perform a triennial review, which included:

- Descriptions of attempts to solicit proposals from other firms which can perform the trust and investment management duties;
- Evaluations of at least three firms which could potentially replace the current Trustee and/or Investment Manager(s); and
- Justification of the continued use of investment manager(s) on a retainer basis, as opposed to the Trustee's employment of an in-house investment advisor.

Electric Program Investment Charge

Background

The Electric Program Investment Charge (EPIC) is a clean energy innovation funding program the CPUC established for the benefit of electricity ratepayers. Organized around three program areas— Applied Research and Development (R&D), Technology Demonstration and Deployment (TD&D), and Market Facilitation—EPIC seeks to drive efficient, coordinated investment in new and emerging energy solutions.

Applied R&D and TD&D projects are meant to bring clean energy technologies from earlier stages of development towards commercialization. These project areas are highly diverse, ranging from the development of novel microgrids to improve grid reliability and resiliency to the development, patenting, and demonstration of algorithms to help identify and de-energize downed electricity wires to reduce wildfire threats. There is also a wide variety of market facilitation projects, which aim to remove non-technical barriers to the adoption of these new technologies. These projects have included programs to understand energy use patterns in multifamily homes before and after energy upgrades as well as projects to establish regional innovation clusters to spur technology development and job creation.

Originally authorized for 2012-2020, D.20-08-042 renewed the program for 2021-2030 and directed five-year investment cycles for EPIC 4 (2021-2025) and EPIC 5 (2026-2030) to continue the previous three-year investment cycles of EPIC 1 (2012-2014), EPIC 2 (2015-2017), and EPIC 3 (2018-2020). The CPUC allocates 80 percent of the EPIC program budget to the CEC to conduct Applied R&D, TD&D, and market facilitation. The IOU administrators (PG&E, SCE, and SDG&E) administer the remaining 20 percent of the EPIC program budget for TD&D projects.

2021 Updates & Accomplishments

2012-2014 (EPIC 1), 2015-2017 (EPIC 2), 2018-2020 (EPIC 3), and 2021-2025 (EPIC 4) Investment Plans

In 2021, all four administrators continued implementing the wide range of research, development, demonstration, deployment, and market facilitation activities from their EPIC 1 (2012-2014), EPIC 2 (2015-2017), and EPIC 3 (2018-2020) portfolios. Pursuant to D.20-08-042, the CEC filed its interim 2021 EPIC investment plan as part of the CEC's motion in February 2021, requesting continued funding for 12 months while EPIC proceeding R.19-10-005 considers changes to the EPIC program in advance of the next full investment cycle applications for EPIC 4 (2021-2025). In D.21-07-006 , the CPUC approved the CEC's interim investment plan for 2021. On November 18, 2021, D.21-11-028 approved a total program budget of $925 million for the EPIC 4 (2021-2025) investment cycle, with the allocation shown in Table 18.

Table 18. Authorized Funding for EPIC 4 (2021-2025)

CEC	PG&E	SCE	SDG&E	Total
$740,000,000	$92,685,000	$7,6035,000	$16,280,000	$925,000,000

The CEC's 2021 EPIC Interim Investment Plan contains nine research topic areas focused on the themes of decarbonization, resilience and reliability, and entrepreneurship. The research topic areas are:

1. Advanced prefabricated zero-carbon homes;
2. Energy efficiency and demand response in industrial and commercial cold storage;
3. Energy efficiency and load shifting in indoor farms;
4. Optimizing long-duration energy storage to improve grid resiliency and reliability in under-resourced communities;
5. The role of green hydrogen in a decarbonized California—a roadmap and strategic plan;
6. Valuation of investments in electricity sector resilience;
7. Vehicle-to-building for resilient back-up power;
8. Offshore wind energy technologies; and
9. Entrepreneurial ecosystem. Equity is, in addition, an overarching theme across the plan, implemented through a four-pronged strategy to:
    a. Increase awareness of EPIC and the opportunities it provides under resourced communities;
    b. Encourage technology/project developers to seek out projects in under-resourced communities;
    c. Scope many solicitations around specific issues facing ratepayers in under-resourced communities; and
    d. Embed equity in clean energy entrepreneurship.

The IOUs also administer a range of projects in TD&D. These TD&D projects fall into the following four investment areas:

1. Renewables and distributed energy resource integration;
2. Grid modernization and optimization;
3. Customer service and enablement; and
4. Cross-cutting/foundational strategies and technologies. Per D.21-11-028, IOU EPIC 4 (2021-2025) investment plan applications are to be submitted on October 1, 2022.

As of December 31, 2021, 300 EPIC projects have been completed since program inception at a cost of $1.268 billion as provided in Tables 19 and 20.

Table 19. Projects by Administrator and Status				
Administrator	**Active Projects**	**On-hold Projects**	**Canceled Projects**	**Completed Projects**
CEC	196	0	9	231
PG&E	14	35	28	36
SCE	19	1	6	22
SDG&E	4	0	3	11
Total	233	36	46	300

Table 20. Spending by Administrator and Program Area				
Administrator	**Applied R&D**	**Technology Demonstration and Deployment**	**Market Facilitation**	**Total**
CEC	$465,000,000	$431,000,000	$144,000,000	$1,040,000,000
PG&E	$0	$117,000,000	$0	$117,000,000
SCE	$0	$88,000,000	$0	$88,000,000
SDG&E	$0	$23,000,000	$0	$23,000,000
Total	$465,000,000	$659,000,000	$144,000,000	$1,268,000,000

Spending for PG&E, SCE, and SDG&E is through October 2021, and spending for the CEC is estimated through December 2021.

Program Coordination

The administrators coordinate closely with one another and other stakeholders, under the close oversight of the CPUC. Administrators have continued to participate in regular review meetings, conduct joint webinars and workshops, and regularly collaborate on EPIC-related matters through bi-weekly phone calls.

In 2021, the administrators held 23 EPIC-related public workshops, many with input and coordination from the CPUC's Energy Division staff. These workshops covered a variety of topics, ranging from scoping for the CEC's EPIC 4 investment plan to public input on specific projects. All workshops in 2021 were held remotely, consistent with Executive Orders N-25-20 and N-29-20 and recommendations from the California Department of Public Health to encourage physical distancing to slow the spread of COVID-19. In November 2021, the administrators held a virtual annual EPIC workshop describing its EPIC 3 project portfolio and focused on promoting awareness and visibility of the EPIC program, facilitating stakeholder engagement, improving coordination among EPIC administrators, and providing transparency regarding emerging technology progress and results. Additionally, in December 2021, the CEC held a virtual annual EPIC Symposium highlighting progress in the EPIC Program and connected with key stakeholders, including the CPUC. Symposium topics included reliability, distributed generation, start-up companies and innovation, renewable energy, energy storage, lithium production, load flexibility, building technologies, and industrial decarbonization. The Energy Division's staff continues to work with the CEC and IOUs to identify areas for knowledge transfer between EPIC research projects and current energy policy proceedings. This coordination work is being formalized and improved in part through the Policy + Innovation Coordination Group, described in more detail below.

EPIC Evaluation and Program Improvements

In 2016, the CPUC initiated a public competitive RFP for an independent evaluation of the EPIC Program and awarded a contract to Evergreen Economics to evaluate the EPIC Program, its results, and its processes in order to provide recommended improvements for future implementation.

As a response to the recommendations of the Final Evaluation Report, published September 8, 2017, D.18-01-008 established the Policy + Innovation Coordination Group (PICG).

The PICG consists of representatives at the program management/leadership level from each of the program administrators and the CPUC. The goals of the PICG are to:

1. Identify Policy + Innovation Partnership Areas - areas around which the PICG will engage in targeted coordination to accelerate research, development, and deployment (RD&D), and to gather input and lessons learned from projects related to timely and critical policy challenges.
2. Create transparency of EPIC program results and find ways to track or identify substantive developments and discoveries in EPIC projects that may inform energy policy.
3. Ensure alignment between policy and programs and increase the CPUC's understanding of energy innovations in key policy areas to inform decision making.
4. Center equity in process and programs by ensuring input from disadvantaged communities, low-income communities, and tribal communities is prioritized during the PICG process.

D.18-10-052 set forth the framework and Scope of Work for the PICG, and the Accelerate Group was selected through a competitive process to serve as the PICG coordinator. The PICG held a public forum in February 2021 to discuss key lessons learned from the EPIC Policy + Innovation Coordination Group's Fall 2020 public workshops on Equity, Transportation Electrification, Wildfire Mitigation, and Public Safety Power Shutoffs (PSPS), and to develop options for incorporating those lessons into the EPIC program. The PICG held its second public forum in October 2021 to discuss the State of California's near, medium, and long-term energy policy directions, and to discuss the technology RD&D implications of those policy directions, with a focus on building decarbonization, integrated resource planning, and transportation electrification. At this forum, the PICG administrator also provided a preview of a comprehensive EPIC project database that is under development. When the database is complete, it will provide publicly searchable information and data for all EPIC projects from the inception of the program in one place, for the first time. The launch of the database will be announced in the first quarter of 2022 and will be available through the PICG website and the CPUC RD&D website. Finally, the PICG coordinator completed an evaluation and assessment of the efficacy of the PICG, based on PICG member input as required by the PICG Scope of Work.

Open Proceedings

On October 10, 2019, the CPUC opened R.19-10-005 to consider renewal of the EPIC Program. D.20-08-042 approved reauthorization of EPIC for 2021-2030 and approved the CEC to continue EPIC administration through 2030. D.21-07-006 approved the CEC's interim investment plan for 2021. D.21-11-028 approved the IOUs to continue EPIC administration through 2030, subject to several requirements and safeguards to ensure correction of remaining administrative deficiencies found in the 2017 EPIC Final Evaluation Report. The next phase of the proceeding, scheduled to conclude in 2022, will:

1. establish policy priorities for the EPIC program,
2. address findings and recommendations from forthcoming evaluation of the PICG,
3. address any findings of the 2017 EPIC Evaluation Final Report that have not yet been addressed, and
4. set forth a framework for future EPIC program evaluations.

For more information contact Cheryl Cox (cheryl.cox@cpuc.ca.gov or 916-327-6799), or Fredric Beck (fredric.beck@cpuc.ca.gov or 415-703-5432).

Annual Reporting Updates

The annual audit reporting information required by statute is below.

Expenditures

EPIC has been funded through triennial (three-year) investment cycles from 2012-2020, with years demarcated by calendar year. For 2021-2030, EPIC will be funded through five-year investment cycles, again with years demarcated by calendar year. Due to the variability in spending across the years in the investment period, fiscal year expenditures may not be indicative of actual expenditures. Listed below are the allowed funding amounts over the last three investment cycles and the current investment cycle.

Table 21. EPIC Funding				
Investment Cycle (calendar year)	**2012-2014**	**2015-2017**	**2018-2020**	**2021-2025**
Allowed Funding	$467,000,000	$510,000,000	$555,000,000	$925,000,000

Governance Structure

EPIC investments are funded under the authorization of the CPUC as established by D.11-12-035. Per D.12-05-037, the CPUC was required to conduct a public proceeding every three years for the period 2012-2020 to consider EPIC investment plans for coordinated public interest investment in clean energy technologies and approaches. Furthermore, D.12-05-037 directed the CEC, SDG&E, PG&E, and SCE, as administrators of the program, to present their investment plans for the triennial program periods for consideration by the Commission. D.20-08-042 reauthorized the EPIC program through 2030 and renewed the CEC as an EPIC administrator. The decision requires the CPUC to conduct a public proceeding every five years for the period 2021-2030 to consider the five-year EPIC investment plans for coordinated public interest investment in clean energy technologies and approaches. D.21-11-028 renewed SDG&E, PG&E, and SCE as EPIC administrators through 2030.

Schedule of Employees and Compensation

Table 22 shows EPIC Administrator dollars spent on labor for the prior two and current calendar years.

Table 22. Schedule of Employees and Compensation		
Year	**Gross Compensation**	**Total**
2019	$13,821,997	$13,821,997
2020	$13,743,776	$13,743,776
2021 Year to Date	$15,959,061	$15,959,061

The reporting year for EPIC is from January 1-December 31. Compensation for PG&E, SCE, and SDG&E is through October 2021, and compensation for the CEC is estimated through December 2021. Gross compensation includes benefits.

Staff Transferred or Loaned

No CPUC staff have been transferred or loaned internally or interdepartmentally for this program.

Contracts, Funding Sources, and Legislative Authority

Contracts entered into by the EPIC program administrators are authorized by D.12-05-037 and are funded by EPIC program funds. Per D.18-10-052, PG&E holds the contract with the Accelerate Group, the Project Coordinator for the EPIC Policy + Innovation Coordination Group. The contract is managed by CPUC's Energy Division and will continue through 2022. EPIC is funded by the ratepayers of PG&E, SCE, and SDG&E on a proportional basis.

Public Process and Oversight

The EPIC program is overseen by the CPUC's Energy Division staff. Additionally, each EPIC administrator submits an annual report to the CPUC in February. On April 9, 2021, a CPUC Executive Letter granted the CEC's February 28, 2021, request to submit its 2020 Annual Report by April 30, 2021. The CEC also submits its annual EPIC report directly to the Legislature by March 31 of each year. Annual reports provide updates on the status of the investment plans, projects, funding levels, results, intellectual property development, and technological breakthroughs. In the 2020 Annual Report, submitted in 2021, each EPIC administrator provided updates on project status, administrator coordination, public engagement, and budget. The EPIC program administrators also hold public workshops to gain stakeholder input throughout the EPIC funding process. Additional information on public process and oversight is provided in the section on "Program Coordination" above. One of the tasks for the Policy + Innovation Coordination Group consultant is to develop a web-based database for all EPIC projects, furthering program transparency. The database is expected to be publicly available in early 2022.

The Building Initiative for Low-Emissions Development and Technology and Equipment for Clean Heating Programs

Background

SB 1477 (Stern, 2018) requires the CPUC to develop two pilot programs to promote building decarbonization using $200 million collected in $50 million installments over four years. The Building Initiative for Low-Emissions Development (BUILD) Program provides incentives for the deployment of near-zero-emission building technologies in residential housing to reduce building-sector greenhouse gas (GHG) emissions. The Technology and Equipment for Clean Heating (TECH) Initiative provides incentives to advance the State's market for low-emission space and water heating equipment for new and existing residential buildings. Both pilot programs are funded by GHG allowance proceeds from the four gas corporations that participate in California's Cap-and-Trade program (i.e., PG&E, SDG&E, SoCalGas, and Southwest Gas). SB 1477 further directs the CPUC to provide annual updates regarding both BUILD and TECH to the Legislature as part of the AB 1338 Annual Report.

On March 26, 2020, the CPUC adopted a Phase I decision in the proceeding on Building Decarbonization (D.20-03-027). D.20-03-027 establishes a framework for both BUILD and TECH and makes the funding available for the programs as directed in SB 1477. D.20-03-027 appropriates 40 percent of the $200 million budget for the BUILD Program and 60 percent for the TECH Initiative.

To comply with the California Air Resources Board's rules governing the use of Cap-and-Trade allowance proceeds, spending for these programs shall be proportionally directed to the gas corporation service territories where the funds are derived. However, any spending for the BUILD Program and the TECH Initiative with statewide or cross-territory benefits, including but not limited to administrative and evaluation spending, shall be attributed to the gas corporation service territories in proportion to their original funding contribution.[43]

BUILD Program

The BUILD Program is focused on new construction, and at least $60 million of BUILD's $80 million dollar budget must be dedicated to low-income housing. The CEC will administer BUILD with oversight from the CPUC. The CEC will ensure program outreach and that technical assistance is available to all prospective applicants prior to the start of implementation.

[43] See Title 17 of the California Code of Regulations Section 95893(d)(3): "Allowance value, including any allocated allowance auction proceeds, obtained by a natural gas supplier must be used for the primary benefit of retail natural gas ratepayers of each natural gas supplier, consistent with the goals of Assembly Bill 32, and may not be used for the benefit of entities or persons other than such ratepayers."

TECH Initiative

The TECH Initiative is focused primarily on the upstream market (i.e., manufacturers) and midstream market (i.e., distributors and contractors) as catalysts for market development for clean heating equipment. TECH will also focus on consumer education, contractor training, vendor training, as well as strategies to reduce the barriers to participation by low-income, disadvantaged, and hard-to-reach customers. According to D.20-03-027, the TECH Initiative is to be effectuated by a third-party implementer under a contract held by SCE with oversight by the CPUC.

Evaluation

D.20-03-027 outlined a series of evaluation criteria based on metrics such as GHG emissions reductions and market penetration of clean heating technologies. The Decision also directs SCE, with CPUC oversight, to run a solicitation for a single evaluator for both BUILD and TECH. D.20-03-027 sets the budget for the evaluator at 2.5 percent of the overall programs' budget, or $5 million. Program implementers are directed to embed evaluation needs into program design.

2021 Updates & Accomplishments

BUILD Program

The CEC worked, in conjunction with the CPUC, on an implementation plan for the BUILD Program, which was adopted by the CPUC on April 15, 2021. The implementation plan served as a framing document and collected early stakeholder feedback to be used for developing detailed program guidelines. Following the adoption of the implementation plan, the CEC held a workshop on September 15, 2021, to discuss and solicit feedback from stakeholders on the proposed program design. Further, the CEC awarded the technical assistance contract for the program to the Association of Energy Affordability in August 2021. The CEC is currently working on finalizing the program guidelines.[44] The CEC and the CPUC will adopt the program guidelines through a public process before commencement of the program. The program is expected to launch in early 2022.

TECH Initiative

Energy Solutions, as well as a team of nine sub-contractors, won the solicitation to serve as the TECH implementation team. TECH has been branded as "TECH Clean California" and formally launched in August 2021.

Since TECH's launch, the TECH implementation team has been building a network of alliance organizations and partners, and has been offering incentives for contractors to install heat pump appliances. They have also started a contractor training program and have recently upgraded their public facing website called Switch is On. On November 9, 2021, the CPUC adopted a Phase II decision in the Building Decarbonization Rulemaking (D.21-11-002) establishing additional requirements for the TECH program implementer. Consistent with this decision, the TECH implementation team is working with the CPUC and

[44] Further information is available at: Building Initiative for Low-Emissions Development Program.

the CEC on a comprehensive public database so that market actors may be able to analyze data to best tailor future program approaches. The decision also requires the TECH implementer to coordinate various building decarbonization programs adopted by the Commission including through regular stakeholder meetings. In November, the TECH implementation team finished selecting the winners of its "Quick Start Grant" solicitation, with over $2 million being contracted to innovative projects and research that will help inform the future direction of building decarbonization programs. Further information is available at:

- TECH Clean California website
- Switch is On website

Evaluation

The evaluation solicitation for both BUILD and TECH was won by Opinion Dynamics Corporation, who are now working with the program implementation teams to develop innovative ways to collect and analyze data.

Annual Reporting Updates

Pursuant to D.20-03-027, program funding is to be held and distributed by SCE. First year funding was deposited by all relevant gas corporations with SCE on June 1, 2020, in one lump sum of $50 million. Funding for the second, third, and fourth years is to be collected in quarterly installments of $12.5 million occurring March 1, June 1, September 1, and December 1 of each year. Every quarterly installment has been deposited timely thus far. Expenditures to date are denoted in the summary table of this report.

Appendices

Appendix A. Pacific Forest and Watershed Lands Stewardship Council

Appendix A.1 Employee Compensation

Table 23. 2021 Year to Date (YTD) Schedule of Employee Compensation through October 31, 2021

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	$116,678	$0	$4,667	$121,345
Deputy Director of Land Conservation	$76,203	$15,783	$3,048	$95,034
Director of Programs & Administration	$109,475	$11,252	$4,379	$125,106
Finance & Compliance Administrator	$74,200	$15,184	$2,512	$91,896
Other Staff (3)	$138,492	$8,574	$5,539	$152,605
Grand Total (7 positions)	$515,048	$50,793	$20,145	$585,986

Table 24. 2020 Year to Date (YTD) Schedule of Employee Compensation through October 31, 2020

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	$107,947	$9,629	$3,998	$121,574
Deputy Director of Land Conservation	$78,200	$22,150	$3,129	$103,479
Director of Programs & Administration	$98,079	$18,307	$3,923	$120,309

Finance & Compliance Administrator	$67,310	$19,759	$1,224	$88,292
Other Staff (3)	$118,152	$19,528	$3,876	$141,556
Grand Total (7 positions)	$469,688	$89,373	$16,150	$575,211

Table 25. 2019 Schedule of Employee Compensation through December 31, 2019

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	$126,099	$15,758	$5,038	$146,895
Director of Land Conservation	$111,925	$21,596	$4,094	$137,615
Director of Finance	$118,372	$41,163	$0	$159,535
Senior Project Manager	$87,299	$30,302	$3,474	$121,075
Other Staff (4)	$199,131	$49,638	$2,201	$250,970
Grand Total (8 positions)	$642,827	$158,458	$14,806	$816,092

Table 26. 2018 Schedule of Employee Compensation through December 31, 2018

Title	Gross Pay	Medical & Fringe	401k	Total
Executive Director	$122,100	$15,326	$4,884	$142,310
Director of Land Conservation	$119,343	$29,797	$4,504	$153,644
Deputy Director of Land Conservation	$92,275	$19,209	$3,691	$115,175
Director of Finance	$114,663	$38,598	$0	$153,268
Senior Project Manager	$92,031	$21,258	$3,681	$116,970
Other Staff (5)	$281,515	$80,483	$7,650	$369,648
Grand Total (10 positions)	$821,928	$204,672	$24,410	$1,051,010

Appendix A.2 Professional Fees

Table 27. Schedule of Professional Fees YTD as of October 31, 2021 by General Ledger Category

General Ledger Category	Total Paid
Legal Fees	$16,482
Accounting Fees	$22,072
Graphics & Media Fees	$14,093
Investment Management Fees	$17,500
Professional Services Fees	$53,390
Boundary Surveys	$142,813
Baseline Documentation	$1,428
Land Planning Fees	$7,637
Land Transfer Costs	$27,576
Total Consultant Expense	$302,991

Appendix B. California Emerging Technology Fund

Appendix B.1 List of Grantees

Table 28: California Emerging Technology Fund Grantees as of June 30, 2021	
Name of Grant	**Grant Agreement Amount**
Adoption Legacy Fund	
California State University, Fresno SJV Consortium	$20,000
Chicana Latina Foundation	$10,000
El Concilio of San Mateo County	$90,000
OCCUR	$5,000
Pivotal	$10,000
Silicon Valley Education Foundation	$50,000
Tech Exchange	$435,000
Valley Vision	$25,000
WiConduit	$25,000
In Support of Santa Clara County Office of Education Outreach to Students:	
Catholic Charities of Santa Clara County	$10,000
Goodwill of Silicon Valley	$10,000
Sacred Heart Community Service	$10,000
Oakland Public Education Fund (Oakland Undivided)	$250,000
City of San Jose for the San Jose Digital Inclusion	$10,000

Vietnamese Voluntary Foundation, Inc. (VIVO)	$3,000
Adoption Legacy Fund Total	*$963,000*
Access Broadband Connect (ABC) Grants	
American GI Forum Education Foundation of Santa Maria	$48,000
Asian Youth Center	$48,000
California Foundation for Independent Living Centers	$120,000
California State University, Fresno Foundation	$102,000
Delhi Center	$81,000
EveryoneOn	$50,000
human I-T	$288,000
Independent Living Center of Kern County	$5,000
Mothers Helping Others	$18,000
mRelief	$50,000
National Council of Negro Women Inland Empire	$96,000
Priscilla's Helping Hands	$72,000
SBX, Sigma Beta Xi	$300,000
Southeast Community Development Corporation	$170,000
United Ways of California	$360,000
World Institute on Disability	$535,000
California Family Resource Association	$25,000
Vietnamese Voluntary Foundation, Inc. (VIVO)	$9,600
Access Broadband Connect (ABC) Grants Total	*$2,377,600*

Neighborhood Transformation	
CFEE Smart Housing Forum	$5,000
City of Long Beach Digital Inclusion Initiative	$10,000
Families in Schools	$25,000
Southeast Community Development Center	$25,000
UCLA Center for Transformation of Schools	$10,000
YMCA of Greater Long Beach	$112,000
Youth Policy Institute	$5,000
Neighborhood Transformation Total	*$222,000*
Institutionalization of Digital Inclusion	
BizFed Institute	$10,000
California Association of Councils of Governments	$25,000
California Forward	$75,000
California Foundation for Independent Living Centers	$50,000
California Reinvestment Coalition	$50,000
California Family Resource Association	$25,000
California State PTA	$60,000
California State University, Fresno SJV Consortium	$30,000
East Los Angeles College Foundation	$10,000
Families in Schools	$25,000
Foundation for Los Angeles Community Colleges	$70,000
Inland Empire Economic Partnership	$10,000
Inland Empire Regional Consortium (SmartRiverside)	$50,000
Los Angeles City College Foundation	$10,000

Los Angeles Community Foundation (Mayor's College	$50,000
National Digital Inclusion Alliance	$25,000
Newstart Housing Corporation	$25,000
Partners In Care Foundation	$25,000
SCAG Caltrans Sustainable Communities Project	$30,000
Schools, Health & Libraries Broadband	$50,000
Southeast Community Development Center	$10,000
Southern Border Regional Consortia (IVEDC)	$50,000
The Maddy Institute	$10,000
United Way of Greater Los Angeles	$200,000
United Ways of California	$50,000
USC Sponsored Programs	$50,000
Valley Vision (Capital Area Regional Consortium)	$52,500
Valley Vision (RC Broadband Strategic Corridors)	$30,000
WiConduit	$25,000
YMCA of Greater Long Beach	$10,000
Institutionalization of Digital Inclusion Total	*$1,242500*
Total Consolidated Grants	$4,583,100
Frontier Partnership Grants	
AGIF Education Foundation (Santa Maria)	$210,480
California Community Action Partnership Association	$240
California Foundation for Independent Living Centers	$136,200
California State University Foundation, Fresno	$150,000
Great Harvest Community Center	$39,000
Happy Village	$4,080

human-I-T	$1,800,000
McFarland School District	$54,000
Mothers Helping Others	$36,000
National Asian American Coalition	$9,000
National Council of Negro Women Inland Empire	$3,000
Partners in Education	$18,000
Priscilla's Helping Hands	$30,000
SBX (formerly Sigma Beta Xi)	$60,000
Southeast Community Development Corporation	$300,000
United Ways of California	$150,000
Frontier Partnership Grants Total	*$3,000,000*
T-Mobile Partnership Grants	
Nevada County	$50,000
BizFed Institute for LA/OCRBC	$100,000
Equalitech	$20,590
California State University Foundation, Fresno	$51,000
T-Mobile Partnership Grants Total	*$221,590*

Appendix C. The California Hub for Energy Efficiency Financing

Appendix C.1 Finance Pilots' Budget

Table 29: Finance Pilots Budget with CAEATFA Expenditures, September 2014-June 2021

Item	Allocated	Expended	Balance
CAEATFA Hub Administration[45]			
Initial allocation per D.13.09.044 for implementation including outreach and training to finance companies and contractors and reserve fund allocation to the CAEATFA in November 2016[46]	$23,060,000[47]	$13,829,449	$9,230,551
Subtotal Hub Administration Costs[48]	$23,060,000	$13,829,449	$9,230,551
Marketing, Education, and Outreach (MEO)			
Statewide MEO plan[49]	$8,000,000	$7,954,727	$45,273
Subtotal Marketing, Education, and Outreach[50]	$8,000,000	$7,954,727	$45,273
Credit Enhancement			
Initial Allocation per D.13.09.044	$42,900,000		

45 Includes start-up costs, Hub administration, direct implementation, outreach, and training.

46 Funds were authorized per Joint Ruling of Assigned Commissioner and Administrative Law Judge on Financing Pilots and Associated Marketing Education and Outreach in November 2016.

47 Include credit enhancement funds allocated to the CAEATFA for FYs 20-22, if needed per Resolution E.5072.

48 Quarterly expenditures are based on good faith estimates due to a lag in invoice submittals.

49 The contract for the statewide marketing implementer is administered by SoCalGas. The numbers reflect data reported to the CAEATFA.

50 The initial allocation for ME&O also included $2 million to the CAEATFA for outreach to finance companies and contractors.

Earmarked by IOUs for Administration and Direct Implementation per PIPs[51]	($9,863,976)		
Subtotal Credit Enhancement Funds Allocated after IOU Administrative Costs net of $7,7,00,000 of credit enhancement funds for reallocation to administrative expenses if needed	$25,336,024	$198,569[52]	$25,137,455
Funds currently encumbered[53]	$3,135,217		$22,002,238
IOU Administration[54]			
Administration, General Overhead, and Direct Implementation per PIPs.	$9,863,976		
IT Costs	$8,000,000	TBD	TBD
Subtotal IOU Administration[55]	$17,863,976		
Hub Pilot Reserve			
Subtotal Remaining Reserve[56]	$984,931		$984,931
Grand Total	$75,244,931	$39,846,721	$35,398,210

51 The IOUs and CHEEF filed Program Implementation Plans (PIPs) in 2014 and 2015.

52 Credit enhancement expenses consist of $198,569 paid out in claims to the 300REEL lenders.

53 Includes contributions to Finance Company loss reserve accounts net of claims paid and net of funds recaptured through annual rebalances.

54 Includes start-up costs, On Bill Repayment build-out, and direct implementation.

55 IOU Administration costs reflects initial funding. D.17.03.026 approved additional expenditures of up to $500,000 per year per IOU (and $800,000 for SoCalGas) from 2017 through 2020 with funding from energy efficiency funding already approved or for incremental funding, subject to the Advice Letter process.

56 This amount reflects the remaining balance after the release of reserve funds to the CAEATFA.