AGENDA

ASSEMBLY BUDGET COMMITTEE No. 3 RESOURCES AND TRANSPORTATION

ASSEMBLYMEMBER RICHARD BLOOM, CHAIR

WEDNESDAY, MARCH 21, 2018

9:30 A.M. - STATE CAPITOL ROOM 447

PART A

VOTE-ONI	LY CALENDAR		
İTEM	DESCRIPTION	PAGE	
3360	CALIFORNIA ENERGY COMMISSION		
ISSUE 1	IMPLEMENTATION OF THE SCHOOL BUS RETROFIT AND REPLACEMENT PROGRAM (SB 110)	2	
ISSUE 2	TITLE 20 APPLIANCE EFFICIENCY STANDARDS-COMPLIANCE ASSISTANCE AND ENFORCEMENT PROGRAM CONTRACT FUNDING	3	
ISSUE 3	On-Call Delegate Chief Building Official Contract Funding	4	
8660	CALIFORNIA PUBLIC UTILITIES COMMISSION	5	
ISSUE 4	CALIFORNIA PUBLIC UTILITIES COMMISSION GOVERNANCE, ACCOUNTABILITY, TRAINING, AND TRANSPORTATION OVERSIGHT ACT OF 2017 (SB 19)	5	
ISSUE 5	ELECTRIC VEHICLE CHARGING INFRASTRUCTURE AT PUBLIC PARKS, PUBLIC BEACHES, AND SCHOOLS (AB 1082 AND AB 1083)	5	
ISSUE 6	GAS AND ELECTRIC SERVICE DISCONNECTIONS (SB 598)	5	
ISSUE 7	RESIDENTIAL SOLAR ENERGY SYSTEM CONSUMER PROTECTIONS (AB 1070)	5	
ISSUE 8	CALIFORNIA ADVANCED SERVICE FUND-INTERNET FOR ALL NOW ACT (AB 1665)	5	
ISSUE 9	COMMUNICATIONS LICENSING AND COMPLIANCE PROGRAM	7	
ISSUE 10	SUPPORTING STATEWIDE PRESENCE (SACRAMENTO)	7	
ISSUE 11	WATER AFFORDABILITY FOR LOW-INCOME COMMUNITIES	8	
ISSUE 12	WATER AND UTILITY PROGRAM AUDIT COMPLIANCE	9	
ISSUE 13	REDUCE CARBON EMISSIONS	10	
ISSUE 14	OFFICE OF THE RATEPAYER ADVOCATE (ORA)—ANALYSIS OF COMMUNITY CHOICE AGGREGATION AND OTHER DEPARTING LOAD PROGRAMS	11	
ISSUE 15	ORA—ELECTRIC RESOURCE MODELING	12	
ISSUE 16	ORA—ELECTRIC SAFETY ANALYSIS	13	
10001	OTO LELOTRIO DAI ETT ANALTOID	1 10	

ITEMS TO BE HEARD ITEM DESCRIPTION VARIOUS ZERO EMISSION VEHICLES AND CHARGING INFRASTRUCTURE 14 2018-19 CAP AND TRADE EXPENDITURE PLAN 19 **VARIOUS** 8660 **CALIFORNIA PUBLIC UTILITIES COMMISSION** 23 23 ISSUE 1 BUILDING ADMINISTRATIVE INFRASTRUCTURE CORE ISSUE 2 CALIFORNIA LIFELINE LOCAL ASSISTANCE AND STATE OPERATIONS 25 SAFETY AND ENFORCEMENT DIVISION- FORTIFY GAS SAFETY RELIABILITY, 28 ISSUE 3 RAIL CROSSINGS AND ENGINEERING, AND RAIL OPERATIONS BRANCHES ISSUE 4 ELECTRIC TRANSMISSION RATES ADVOCACY 29 ISSUE 5 OFFICE OF RATEPAYER ADVOCATES (ORA) GEOGRAPHICAL INFORMATION 30 SYSTEMS ANALYSIS

VOTE-ONLY

3360 CALIFORNIA ENERGY COMMISSION

VOTE-ONLY ISSUE 1: IMPLEMENTATION OF THE SCHOOL BUS RETROFIT AND REPLACEMENT PROGRAM (SB 110)

The Governor's budget requests \$0.9 annually for three years from the Alternative and Renewable Fuel and Vehicle Technology Fund for 6.0 temporary positions to implement the new school bus retrofit and replacement activities under the Clean Energy Job Creation Program SB 110 (Committee on Budget and Fiscal Review, Chapter 55, Statutes of 2017).

BACKGROUND

The California Clean Energy Jobs Act, approved by the voters in November 2012 as Proposition 39, provided for the transfer of \$550 million annually from the General Fund to the Clean Energy Job Creation Fund for five fiscal years beginning in 2013-14. In addition, to other reappropriations of this funding, SB 110 reappropriates \$75 million and requires the Energy Commission to provide grants or loans to school districts and county offices of education for school bus retrofit or replacement. This is a new activity for the Energy Commission and will require additional resources to implement.

VOTE-ONLY ISSUE 2: TITLE 20 APPLIANCE EFFICIENCY STANDARDS-COMPLIANCE ASSISTANCE AND ENFORCEMENT PROGRAM CONTRACT FUNDING

The Governor's budget requests \$100,000 increase in expenditure authority for baseline contract funding from the Appliance Efficiency Enforcement Subaccount to support the Title 20 appliance efficiency enforcement testing contract.

BACKGROUND

SB 454 (Pavley, Chapter 591, Statutes of 2011) authorized the Energy Commission to establish an enforcement program for violations of the Energy Commission's appliance efficiency standards, with penalties up to \$2,500 per violation. Testing appliances is a vital component to discovering appliance efficiency standards violations. The requested resources will increase the testing capacity at the contracted test laboratory to support the growing program infrastructure and allow the laboratory to test a greater variety of appliances. The funds will also be used for additional test laboratory contract services, such as: quarterly internal laboratory audits, consulting services, and general assistance on technical testing related issues. Enforcing these energy efficiency standards is necessary to meet the state's greenhouse gas reduction goals.

VOTE-ONLY ISSUE 3: ON-CALL DELEGATE CHIEF BUILDING OFFICIAL CONTRACT FUNDING

The Governor's budget requests \$1.0 million in increased expenditure authority from the Energy Facility License and Compliance Fund (EFLCF) to provide contract funding for an On-Call Delegate Chief Building Official (DCBO).

BACKGROUND

The Energy Commission currently uses DCBO firms' support for modifications to jurisdictional power plants resulting from project owner filed amendments, emergency responses, such as power plant fires, and other small modifications. This proposal changes the flow of funding for these services from between power plant project owners and the DCBO firms, to between the Energy Commission and the DCBO firms. Under this proposal, the Energy Commission will contract directly with the DCBO firms and eliminate the historic use of Memorandum of Understandings. This change will allow for greater financial accountability of DCBO work, performed on behalf of the Energy Commission. The On-Call DCBO contract will also create more public transparency in the DCBO selection process. After paying the DCBO firms for these services, the Energy Commission would seek reimbursement from the project owners; thus funding is only needed to increase the Energy Commission contract authority. The requested increase in contract authority will be offset by the increase in revenue as project owners provide reimbursement for services.

8660 CALIFORNIA PUBLIC UTILITIES COMMISSION (CPUC)

VOTE-ONLY ISSUES 4-8: Resources to Implement Recently Enacted Legislation

The Governor's budget includes five proposals to implement recently enacted legislation. The budget also proposes clean up trailer bill language to SB 19. Below is a summary and description of each proposal.

Legislation	Budget Request
CPUC Governance, Accountability, Training, and Transportation Oversight Act of 2017 (SB 19)	To reflect the transfer of the regulation of household goods carriers from the CPUC to the Department of Consumer Affairs' (DCA) Bureau of Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation effective July 1, 2018, the CPUC requests: (1) the elimination of an ongoing appropriation of \$2.2 million from the Transportation Rate Fund (TRF) and 11.0 positions and (2) the transfer of \$750,000 from the TRF to the DCA's Household Movers Fund for household movers' regulatory activities.
Electric Vehicle Charging Infrastructure at Public Parks, Public Beaches, and Schools (AB 1082 and AB 1083)	\$546,000 (one-time) from the Public Utilities Commission Utilities Reimbursement Account (PUCURA) for 3.0 positions for one year to review up to 12 proposals from each of the six electric utilities to provide EV charging infrastructure at public schools and beaches, and state parks.
Gas and Electric Service Disconnections (SB 598)	\$336,000 from PUCURA for 2.0 permanent positions to develop policies, rules, or regulations to reduce gas and electric service disconnections and to submit an annual report on disconnections at the four largest utilities and all community choice aggregators.
Residential Solar Energy System Consumer Protections (AB 1070)	\$592,000 from PUCURA for two years for 1.0 position and consulting services of \$450,000 per year to establish standardized assumptions and inputs to forecast residential solar bill savings and to create a disclosure document the solar industry must present to residential customers before the purchase or lease of a solar energy system.

California Advanced Services Fund (CASF)-Internet for All Now Act (AB 1665) \$76.6 million from the CASF. AB 1665 (Eduardo Garcia, Chapter 851, Statutes of 2017) continues the program and authorizes CPUC to collect \$330 million beginning January 1, 2018 and continuing through 2022. The budget request includes: (1) permanent funding for 2.0 positions to address staffing shortfalls; (2) the conversion of 5.0 limited term positions to permanent; (3) the addition of 5.5 permanent positions and 2.0 new limited term positions; (4) \$2.5 million annually for consulting services for California Environmental Quality Act (CEQA) review of projects; (5) ongoing local assistance funding for the program of \$72.6 million until 2029; and (6) budget bill language authorizing a three-year encumbrance period and a two-year liquidation period.

Proposed SB 19 Clean-up Trailer Bill Language. To facilitate the transfer of the CPUC's Transportation Rate Fund to the Department of Consumer Affair's (DCA) Household Movers Fund, the Administration is proposing to strike a reference that would have DCA spend money out of a fund they will never use again, and the Administration has proposed budget bill language to have State Controller's Office transfer a set amount of cash from PUC's fund to DCA's fund, and provided DCA an appropriation out of their own fund. The second proposed change allows PUC to finish liquidating their 2017-18 encumbrances, transfer any monies that may be left to DCA's fund, and only then – when the fund is empty - abolishes the fund.

Staff Recommendation: Approve as Budgeted these five proposals and the proposed trailer bill and budget bill language related to SB 19.

VOTE-ONLY ISSUE 9: COMMUNICATIONS LICENSING AND COMPLIANCE PROGRAM

The Governor's budget requests \$295,000 from PUCURA for 2.0 permanent positions for the Licensing and Compliance Program.

BACKGROUND

Expanded work obligations have resulted in work backlog issues in the program that handles licensing and compliance processing for communication carriers. The number of licenses for wireline and wireless carriers has increased by about 5 percent annually since 2012-13. The additional resources will better enable the Licensing and Compliance Program to manage the increasing number of telecommunication licenses and related compliance functions necessary to prevent fraud, waste, and abuse.

Staff Recommendation: Approve as Budgeted

VOTE-ONLY ISSUE 10: SUPPORTING STATEWIDE PRESENCE (SACRAMENTO)

The Governor's budget requests \$1.1 million annually (growing by about 2 to 4 percent annually to reflect increases in rents) from various fund sources to lease office space in Sacramento County for new staff and the relocation of existing staff to Sacramento.

BACKGROUND

In recent years, the Legislature and the Administration have given the CPUC direction to increase its presence outside of San Francisco in order to improve coordination with other state agencies and departments, and to facilitate CPUC employees providing transparency and accountability. This proposal reflects lease space being expanded to house more CPUC employees in Natomas and Sacramento.

VOTE-ONLY ISSUE 11: WATER AFFORDABILITY FOR LOW-INCOME COMMUNITIES

The Governor's budget requests \$294,000 from PUCURA for two years for 2.0 positions to analyze water affordability in rate-setting proceedings.

The CPUC authorizes utility programs for the nine large Class A water utilities that provide assistance to low-income customers (200 percent of the federal poverty level) to assist with the payment of water utility bills by providing credits against applicable utility charges. Current enrollment is about 250,000 customers and total discounts provided annually are greater than \$26 million. The CPUC recently opened Rulemaking R.17-06-024 to review low-income rate assistance programs in Class A water utilities. The review will: (1) assess the feasibility of achieving program consistency across the utilities; (2) investigate assistance to low-income customers of Class 8, C, and D water utilities; and (3) consider mechanisms to advance water affordability. The proposed positions will work on the proceeding that will result in a temporary increase in workload to review, integrate, and manipulate large data sets and model water affordability analysis.

VOTE-ONLY ISSUE 12: WATER AND UTILITY PROGRAM AUDIT COMPLIANCE

The Governor's budget requests \$929,000 ongoing from the PUCURA to fund 7.0 positions that expire on June 30, 2018.

BACKGROUND

The CPUC's Utility Audit, Finance and Compliance Branch consist of 27 staff located in San Francisco and Sacramento. The Public Utilities Code empowers the CPUC to, at any time: inspect the accounts, books, papers, and documents of any energy, water, or telecommunications utility, as well as any subsidiary or affiliate of a particular utility. A 2013 audit found that CPUC largely left the energy utilities balancing and memorandum accounts unaudited as well as other oversight deficiencies. The 2015-16 Budget Act provided CPUC 7.0 limited-term positions to correct these deficiencies. If ongoing funding is not provided for these positions, the prior deficiencies in this program would return and CPUC would lack the ability to audit utilities' programs and expenditures to ensure that consumers are paying reasonable rates.

VOTE-ONLY ISSUE 13: REDUCE CARBON EMISSIONS

The Governor's budget requests \$1.4 million annually from the PUCURA for: (1) 2.0 permanent positions to analyze and administratively manage the implementation of transportation electrification initiatives and (2) funding for a consultant (\$1 million annually) for four years that will analyze integration of electric vehicles onto the grid.

BACKGROUND

SB 350 (De Leon, Chapter 547, Statutes of 2015) expanded the CPUC's work to include transportation electrification beyond vehicles and required the CPUC to order the six electric utilities under its jurisdiction to file applications proposing programs to support transportation electrification. Further, SB 350 requires the CPUC to help the state achieve a 40 percent reduction in greenhouse gas emissions. Prior legislation also requires the CPUC, in consultation with others, to biennially study and submit a report on the impacts of distributed energy generation on the state's distribution and transmission grid. The increased workload in these areas has left CPUC under-resourced to complete these tasks. The staff and funds for consultants will enable CPUC to evaluate grid impacts from increased electric vehicle penetration, and to evaluate what investments are needed to modernize the grid and policy to support the optimal level of distributed energy resources on the grid.

VOTE-ONLY ISSUE 14: OFFICE OF THE RATEPAYER ADVOCATE— ANALYSIS OF COMMUNITY CHOICE AGGREGATION AND OTHER DEPARTING LOAD PROGRAMS

The Governor's budget requests 1.0 position and \$167,000 from the Public Utilities Commission Office of Ratepayer Advocates Account to perform expanding workload associated with the recent increase in departing load programs, specifically the Community Choice Aggregation (CCA) program.

Investor-owned utilities (IOUs) are currently experiencing unprecedented quantities of load departure primarily through CCA. CCA is a departing load program that allows cities and counties to procure and/or generate electricity on behalf of residents and businesses residing in their areas. The requested position would conduct complex policy and economic analyses, and coordinate with other Office of the Ratepayer Advocate staff where departing load-related issues arise. The position would also develop expertise in cost allocation as it applies to departing load, and would recommend cost allocation mechanisms that do not unfairly burden ratepayers.

VOTE-ONLY ISSUE 15: OFFICE OF THE RATEPAYER ADVOCATE—ELECTRIC RESOURCE MODELING

The Governor's budget requests 2.0 positions and \$307,000 from the PUCORA to participate in computer model simulation efforts to support ORA's work on the Integrated Resource Planning (IRP) and Resource Adequacy (RA) proceedings.

SB 350 (De Leon, Chapter 547, Statutes of 2015) established aggressive greenhouse gas reduction requirements, cost effective integration of renewable resources, and transportation electrification. In order to implement these requirements, CPUC must develop computer simulations and a model, primarily for capacity expansion and production costs. CPUC's increased workload in this area, in turn, results in an increase in ORA's workload; especially regarding the IRP proceeding, which will be conducted every two to three years, and each cycle is expected to take two to three years. The addition of these two positions will help ORA participate effectively in the IRP and the annual RA proceedings as the modeling needs become more complex.

VOTE-ONLY ISSUE 16: OFFICE OF RATEPAYER ADVOCATES —ELECTRIC SAFETY ANALYSIS

The Governor's budget requests 2.0 positions and \$334,000 from the PUCORA to address additional utility safety-related workload arising from the expansion of new and existing CPUC proceedings.

BACKGROUND

Since the 2010 natural gas pipeline explosion in San Bruno, the CPUC established new regulatory processes to identify safety risks associated with the investor owned energy utilities' (IOUs) operations, and the effectiveness of the IOUs' efforts to mitigate safety risks. The PUC's processes allow more vetting of the IOUs' risk assessment, which the utilities have historically performed internally. With this more transparent process, ORA has the opportunity to scrutinize the IOUs' safety risk mitigation proposals in terms of overall effectiveness as well as cost effectiveness. These two proposed positions will conduct analyses of complex policy and technical issues involving electric and gas utility systems and practices, and integrity management programs to help ORA determine if ratepayer funded utility operations and programs (proposed and existing) are effective in ensuring safe and reliable electric and gas service at a reasonable cost.

ITEMS TO BE HEARD

3360 CALIFORNIA ENERGY COMMISSION 8660 CALIFORNIA PUBLIC UTILITIES COMMISSION 3900 AIR RESOURCES BOARD

ISSUE 1: ZERO EMISSION VEHICLES AND CHARGING INFRASTRUCTURE

The Governor issued Executive Order B-48-18, establishing new goals and a \$2.5 billion investment plan over eight years to reduce carbon emissions from transportation. The plan includes:

- 5 million zero-emission vehicles (ZEV) on the road by 2030 (\$1.6 billion over eight years), and
- 250,000 ZEV chargers, including 10,000 fast charging stations, and 200 hydrogen fueling stations by 2025 (\$900 million over eight years).

Zero Emission Vehicle Infrastructure Initiative

The Governor's budget proposes a total of \$235 million at the California Energy Commission through the Alternative Renewable Fuel and Vehicle Technology Program (ARFVTP) for electrical vehicle charging and hydrogen fueling infrastructure projects. Specifically, it makes the following funding shifts:

- Directs \$77 million from various AB 118 programs to ZEV charging infrastructure.
- Directs a fund balance of \$70 million (\$15 million from the Air Resources Board's Air Quality Improvement Fund and \$55 million from ARFVTP) to ARFVTP.
- Transfers \$88 million from the New Solar Homes Partnership Program to ARFVTP.
- Removes the current limits on annual expenditures for hydrogen fueling stations of \$20 million, or 20 percent of the amount appropriated by the Legislature.

In addition, budget bill language and trailer bill language are proposed to make certain changes.

The figure on the next page summarizes the AB 118 Program funding changes.

Governor's ZEV Infrastructure Initiative Funding Proposal (in millions)

AB 118 Program	2017-18	Proposal	2018-19	Ongoing
	Funding		Funding	Funding
Low Carbon Fuel Production	\$25	Shift to	\$0	\$0
		GGRF		
Electric Charging Infrastructure	\$20	Expand	\$235	\$95
Hydrogen Charging Infrastructure	\$20	Expand	(included	(included
			above)	above)
Advanced Freight and Fleet	\$17.5	AB 118	\$17.5	\$0
Technologies		funding		
Manufacturing	\$5	Eliminate	\$0	\$0
Emerging Opportunities	\$4.2	GGRF	\$0	\$0
Workforce Training and Development	\$3.5	GGRF	\$0	\$0

GGRF= Greenhouse Gas Reduction Fund

Zero Emission Vehicles

The Governor's Cap and Trade proposal (discussed in more detail in the Cap and Trade section) provides \$200 million annually from GGRF through 2025 for rebates to California residents for the purchase or lease of ZEVs and plug-in hybrids, including \$25 million for low-income consumers.

PANELISTS	
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Panel 1: Presentation of ZEV Executive Order and Budget Proposal

Department of Finance and Other Departments

Panel 2: Strategies for Success

- Dr. Austin Brown, Executive Director, Policy Institute for Energy, the Environment, and the Economy, UC Davis
- Ryan Millendez, Fiscal and Policy Analyst, Legislative Analyst's Office

Panel 3: Real World Success and Challenges

- Anthony Harrison, Director of Public Policy, ChargePoint
- Fred Silver, Vice President, CALSTART re: Antelope Valley Transit
- Bill Boyce, Manager, Electric Transportation Research and Development, Sacramento Municipal Utility District

Public Comment

BACKGROUND

The transportation sector accounts for nearly 40 percent (2015 data) of California's greenhouse gas (GHG) emissions and the greatest amount of emissions come from passenger vehicles. Decreasing emissions from the transportation sector is essential to the state meeting its GHG emission reduction targets; yet, despite efforts in this area emissions continue to increase.

Increased ZEVs Will Help Reduce Greenhouse Gas Emissions. Increasing the number of ZEVs on the road will help to reduce GHG emissions from transportation fuels. There are two primary types of ZEVs: (1) battery-electric vehicles that are recharged using an electric outlet or charging station and (2) hydrogen fuel cell electric vehicles powered by hydrogen gas distributed at hydrogen fueling stations. There are currently about 350,000 light-duty ZEVs in the state, including more than 1,600 hydrogen vehicles. Some people are reluctant to purchase a ZEV because they have concerns about how far a vehicle can go on a single charge and the ability to recharge quickly. Therefore, having a sufficient ZEV charging infrastructure is critical to ensuring that the state meets its GHG reduction target goals.

Various Efforts Are Underway to Increase ZEV Charging Infrastructure. The state funds or oversees numerous ZEV charging infrastructure efforts that various departments are involved in as shown below:

Funding for Major State Zero-Emission Vehicle (ZEV) Infrastructure Programs

Agency	Funding Amount	Description
California Air Resources Board	\$800 million over ten years	A 2016 settlement requires VW to invest \$800 million in ZEV projects—mostly for ZEV fueling infrastructure—in California over ten years. The first round of spending will invest \$120 million to construct 350 neighborhood charging stations and 50 fast charging stations
California Public Utilities Commission (CPUC)	\$200 million since 2016	Since 2016, CPUC has approved over \$200 million for ZEV infrastructure pilot projects. CPUC is currently evaluating IOU proposals to spend an additional \$1 billion on ZEV infrastructure.
CPUC	\$100 million one time	A 2012 settlement requires the energy company NRG to install at least 200 public fast-charging stations and infrastructure for up to 10,000 privately owned charging stations at residences and workplaces, estimated to cost about \$100 million.
Energy Commission	\$40 million annually	Spends roughly \$40 million annually for public ZEV infrastructure and has funded the construction of about 7,000 charging and fueling stations to date.
Department of Transportation	\$20 million one time	The 2017-18 budget provided \$20 million to install 32 electric vehicle chargers along highway corridors.
Department of General Services	\$7 million in 2017-18	The 2017-18 budget provided \$7 million to install 230 chargers at state buildings. The proposed 2018-19 budget includes \$16 million for 1,200 chargers. The administration has a long-term plan to spend \$87 million over four years to install over 6,200 charging stations.
	California Air Resources Board California Public Utilities Commission (CPUC) CPUC Energy Commission Department of Transportation Department of	Agency Amount California Air Resources Board \$800 million over ten years California Public Utilities Commission (CPUC) CPUC \$100 million one time Energy Commission \$40 million annually Department of Transportation \$20 million one time Department of \$7 million in

Source: Legislative Analyst's Office

ZEV Fueling Infrastructure Gap Analysis. According to the Energy Commission, California has 14,220 public charging stations at 4,107 sites as shown below, and 31 hydrogen fueling stations. The various efforts currently underway that are shown above are expected to grow the network to 104,000 chargers by 2025. The figure below shows the estimated number of chargers by type that CEC anticipates the state needs—the low estimate is 229,298 chargers and the high estimate is 278,249 chargers:

Type of Charger	Currently	Low Estimate	High Estimate
	Available	of Need	of Need
Direct current fast chargers	1,560	9,062	24,967
Level 2 in public locations	12,100	47,571	75,631
Level 2 near workplaces	*	51,665	56,651
Level 2 at or near multiunit dwellings	*	60,000	60,000
Level 1 at or near multiunit dwellings	560	61,000	61,000
Total	14,220	229,298	278,249
Projected Number of Chargers by			
2025 with Current Resources	104,000	104,000	104,000
Gap	NA	125,298	174,249

^{*}Level 2 chargers by location are not broken out.

Given the Administration's goal of 250,000 chargers, including 10,000 DCFCs, CEC estimates a gap of 143,000 chargers (which includes a gap of 7,400 DCFCs). The types of EV public chargers currently available include:

- Level 1 that take many hours to recharge a vehicle;
- Level 2 that provide about 20-25 miles of range from an hour of charging;
- Direct current fast chargers or Level 3 that charge to 80 percent of capacity in 30 minutes.

The costs to install a charger can vary from \$1,500 to \$300,000 depending on the type of charger and access to power.

Proposal Uses Cap and Trade to Backfill Some Previously AB 118 Funded Activities. Numerous programs previously funded from AB 118 (Núñez, Chapter 750, Statutes of 2007) and subsequent legislation would not be funded from ARFVTF under the Governor's proposal. Specifically, funding for the low-carbon fuel production program is proposed by be backfilled by GGRF funds in 2018-19. Funding for Advanced Freight and Fleet Technologies or Alternative Fuel and Fleet Technologies would be reduced to \$18 million and funded from ARFVTF on a one-time basis in 2018-19. Manufacturing funding would be eliminated and workforce training and other activities

would be integrated into the proposed GGRF allocation for "Research" (discussed further in the Cap and Trade section).

LAO COMMENT

The LAO recommends the Legislature direct the Administration to provide (1) a more detailed justification for the amount of funding requested for ZEV infrastructure; (2) additional information about how the funding would affect key policy outcomes, such as GHG emission levels; (3) its assessment of potential risks and costs associated with a substantial expansion of ZEVs, and (4) a plan for evaluating outcomes after program implementation. Additionally, the LAO recommends the Legislature direct the Administration to develop a detailed strategy for coordinating spending for ZEV infrastructure across various state programs. The LAO further recommends the Legislature consider whether the administration's proposal to use various special funds and ratepayer funds to support ZEV infrastructure is consistent with legislative priorities.

STAFF COMMENT

Coordination of installation and funding ZEV charging infrastructure is critical to ensure that the right types of charging stations are installed where needed, and to address issues that are likely to arise such as impacts on the electricity grid and the reduction in gas and diesel tax revenue for state and local roads. In addition, how and where this infrastructure is installed could have major impacts on sprawl and congestion, and if used wisely, could help address policy concerns in these areas.

At this time, while there are workgroups that involve many of the entities providing funding or approving the development of charging infrastructure, there does not appear to be a single entity that is being held accountable for coordinating these efforts, or being held responsible for considering the broader policy impacts. The Assembly may want to take steps to ensure that any funding provided is used thoughtfully and that all efforts are well coordinated. It may also want to consider directing an outside research group to conduct a gap analysis and assess the adequacy and efficacy of the state's approach to developing a statewide charging system.

Staff also notes that the trailer bill that would implement these changes has not been made public yet.

VARIOUS DEPARTMENTS

ISSUE 1: 2018-19 CAP AND TRADE EXPENDITURE PLAN

The Governor's budget proposes a \$1.25 billion Cap and Trade Expenditure Plan consistent with the priorities specified in AB 398 (Eduardo Garcia, Chapter 135, Statutes of 2018) and the statutory requirements that at least 35 percent of expenditures benefit disadvantaged and low-income communities.

BACKGROUND	
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The Governor's budget estimates Cap and Trade auction proceeds of \$2.4 billion as shown below:

2018-19 Cap and Trade Funding

Budget Year

	2018-19
	(in millions)
Auction Proceeds (\$600 million each)	\$2,400
Off the top	
Manufacturing Tax Credit	\$88
SRA backfill (reflects BY expenditure of remaining balance)	\$30
Net Total	\$2,282
Existing Continuous Appropriation	\$1,369
Air Board Staffing Costs	\$35
Budget Year Projection	\$878

Amount Available for 18-19 Cap and Trade Expenditure Pla

Bottom Line (Rounded)	\$1,250
Interest Income	\$50
Budget Year Projection	\$878
CY Balance	\$330

Off the top of this amount, \$88 million is proposed for the manufacturing tax credit and \$30 million for the State Responsibility Area (SRA) fire prevention fee backfill. This leaves \$1.4 billion for continuous appropriation, \$35 million for ARB staffing costs, and combined with the current year balance \$1.25 billion for the Cap and Trade Expenditure Plan.

The figure below shows the proposed \$1.25 billion expenditure plan by category of activity:

2018-19 Cap and Trade Expenditure Plan (Dollars in Millions)

Investment Category	Department	Program	Amount
Air Toxic and Criteria Air	Air Resources Board	AB 617 - Community Air Protection	\$250
Pollutants	Air Resources Board	Technical Assistance to Community Groups	\$5
		Clean Vehicle Rebate Project	\$175
	Air Resources Board	Clean Trucks, Buses, & Off-Road Freight Equipment	\$160
Low Carbon Transportation		Enhanced Fleet Modernization Program, School Buses & Transportation Equity Projects	\$100
	Energy Commission	Low Carbon Fuel Production	\$25
	Air Resources Board	Agricultural Diesel Engine Replacement & Upgrades	\$102
Climate Smart Agriculture	Energy Commission	Energy Efficiency	\$34
	Department of Food and Agriculture Healthy Soils		\$5
	Energy Commission	Renewable Energy	\$4
Haalibaa Faranta	CAL FIRE	Healthy & Resilient Forests	\$160
Healthy Forests	CalOES	Local Fire Response	\$25
Short-Lived Climate Pollutants	Department of Food and Agriculture	Methane Reduction	\$99
	CalRecycle	Waste Diversion	\$20
	Strategic Growth Council	Transformative Climate Communities	\$25
Integrated Climate Action: Mitigation & Resilience	IBank	California Integrated Climate Investment Program	\$20
	California Conservation Corps	Energy Corps	\$6
Climate and Clean Energy Research	Strategic Growth Council	California Climate Change Technology and Solutions Initiative	\$35
То	tal		\$1,250

Source: Department of Finance

In addition, to providing funding for programs that have been GGRF-funded in the past, the budget includes three new initiatives:

Carbon Sequestration and Resilience provides \$160 million for CalFire for Healthy and Resilient Forests and \$25 million for the Office of Emergency Services to fund additional fire engines for the mutual aid system.

California Integrated Climate Investment Program provides \$20 million for the California Infrastructure and Economy Development Bank (IBank) to provide seed funding to accelerate private sector investments in California infrastructure projects that reduce GHG emission and improve climate resilience.

California Climate Change Technology and Solutions provides \$35 million for the Strategic Growth Council for research and development of innovative technologies and other solutions to maximize GHG emission reductions and prepare the state for a changing climate. It will also support research on climate policy impacts on California's economy.

LAO COMMENTS

Revenue Estimates. At the time of the Governor's budget release, the LAO found the Governor's Cap and Trade revenue estimates reasonable. However, after the February 21, 2018 action, the LAO observed that if the May results are similar to the February action, annual revenues would be a couple hundred million greater than the budget assumes.

Expenditure Plan. The LAO makes the following observations about the proposed expenditure plan:

- Provides less funding for freight and heavy duty vehicles.
- Expands and modifies Climate Change and Energy Program Research.
- Backfills special funds used for other activities. Specifically: (1) \$25 million to the Energy Commission for low-carbon fuel production which is currently funded with the Alternative and Renewable Fuel Vehicle Technology Fund (ARFVTF); and (2) \$26 million to ARB for the Carl Moyer Program which is currently funded through the Air Pollution Control Fund (APCF). The redirected funds from the ARFVTF are used for ZEV infrastructure, and the funds from APCF fund the shortfall in funding at the Department of Fish and Wildlife.
- Includes \$232 million in new multiyear funding. Specifically: (1) \$200 million annually over eight years for CVRP; (2) \$26 million for the Carl Moyer Program backfill though at least 2023; and (3) \$6 million annually to the California Conservation Corps for continue energy efficiency activities.

Overall Comments. The LAO notes that the combination of the previously adopted continuous appropriations and the proposed new long-term funding commitments would leave less than 30 percent of the expenditures as discretionary, or about \$600 million

annually. The LAO also proposes some spending strategies that the Legislature may want to consider, such as funding activities that target uncapped emissions such as forest health, targeting areas of "market failure" such as research and development activities on GHG reducing technologies, and climate adaptation.

The LAO recommends the Legislature ensure that the spending plan is consistent with its priorities, which could include greenhouse gas reductions, as well as local air pollution reductions and/or climate adaptation. The LAO also recommends that the Administration report at budget hearings on outcomes associated with each program that would be funded (including past outcomes for previously funded programs), and that the Legislature consider options to ensure funding is sufficient if more or less revenue is available, such as prioritizing spending to ensure fund solvency in the event that future revenues are lower than current budget estimates.

STAFF COMMENTS

Many of the Administration's proposed expenditures are consistent with priorities funded by the Legislature last year, and the plan continues to make investments in the areas of air toxic and criteria air pollutants, low carbon transportation, and agricultural energy efficiency and renewal energy. Furthermore, some of the new proposals, such as increased funding for forest health, may help the state to better address the ongoing high risk of fires that the state currently faces. The plan assumes that providing \$200 million annually for CVRP will be in the expenditure plan baseline. While it seems reasonable to continue funding CVRP, to reach the goal of 5 million ZEVs by 2030 it may make sense to provide a greater level of funding in the near term.

The expenditure plan fails to fund some areas that have been funded in the past. Specifically, the plan does not propose funding freight hubs and ports. In addition, funding for urban forestry and urban greening, and adaptation money for wetlands, natural lands, and coastal adaptation are proposed to be funded from SB 5—The California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, (which will be on the ballot before voters in June 2018) instead of GGRF, as was done in the past. Some of these investments have been effective in reducing GHG emissions and should continue to be funded from GGRF.

8660 California Public Utilities Commission

The Governor's budget includes \$1.6 billion, all funds, for the California Public Utilities Commission (CPUC) in 2018-19, a reduction of \$216.0 million or 11.8 percent from the current year. The CPUC has 1,042 personnel and receives no General Fund support.

The ORA, within the CPUC, is an independent consumer advocate representing the interest of investor owned utility customers. ORA is mandated to represent the interests of ratepayers in virtually all CPUC proceedings. ORA has a staff of 159 positions.

ISSUE 1: BUILDING ADMINISTRATIVE INFRASTRUCTURE CORE

The Governor's budget requests \$2.6 from various funds for 23 permanent full-time positions, training, and travel to strengthen the administrative core of the department.

BACKGROUND

Business Services is an office within Administrative Services that provides essential services that support CPUC staff in seven locations (two in San Francisco, four in Sacramento, and one in Los Angeles). Business Services has multiple responsibilities, such as acquiring contracts and maintenance agreements, leasing, mailroom services, procurement of goods and services, records, forms management, printing and reprographics, space management, state-owned vehicle management, and stock room services. Because of regional expansion and increases in CPUC staff, the demand for services has significantly increased.

Approval of this proposal would add the following staff:

Unit/ Office	Number of Positions
Facilities	2
Fleet Management	1
Forms Management	1
Records Retention	1
Reprographics	1
Safety Office	3
Sustainability	1
Contracts and Procurement	3
Safety Advocate	1
Human Resources	9
Total	23

In addition, the budget proposes \$27,000 annually for training and \$37,000 annually for travel.

STAFF COMMENTS

CPUC adds a significant number of staff each year to address additional responsibilities added through the legislative process. In part, because of the continuous expansion of its role there is a need to expand the "business services" function that supports the CPUC as a whole. Historically, CPUC's administrative core has not expanded as responsibilities have increased resulting in "chronic understaffing" according to CPUC.

The Subcommittee may wish to ask if there is a better way to approach staffing at CPUC so that it is not in a situation of "chronic understaffing" as mentioned in the budget proposal. The LAO has raised no concerns with this proposal.

ISSUE 2: CALIFORNIA LIFELINE LOCAL ASSISTANCE AND STATE OPERATIONS AND CALIFORNIA LIFELINE MONITORING AND COMPLIANCE

The Governor's budget requests \$428.8 million (\$396.9 million for local assistance and \$31.9 million for state operations) for the California LifeLine Program. This includes 4.0 new permanent positions.

BACKGROUND

The Moore Universal Telephone Service Act, in 1984, set the goal of providing high quality telephone service at affordable rates to low-income households. The Act requires the CPUC to annually designate a class of lifeline service necessary to meet minimum residential communications needs, develop eligibility criteria (currently about 150 percent of the federal poverty level), and set rates for the lifeline services, which are required to be not more than 50 percent of the rate for basic telephone service. Over the years, the definition of a "basic service," has been expanded to include new technologies such as voice, video, and data services.

Revenues to fund the program are collected from a surcharge on telephone bills for non-LifeLine customers. The CPUC adjusts the level of the surcharge based on its projections of the amount of revenue needed to cover the costs of the program. The surcharge is 4.75 percent, effective November 1, 2016.

The Governor's budget proposal is a reduction in local assistance costs of \$202.6 million (33.8 percent) and an increase in state operations costs of \$1.3 million (4.4 percent) from the 2017 Budget Act appropriation of \$599.5 million for local assistance and \$30.6 million for state operations.

Potential Number of Lifeline Subscribers. According to US Census data for 2012-2016, it is estimated that there are approximately 12.8 million households in California. If roughly 20 percent of these households are under 150 percent of the Federal Poverty Level, it is possible that up to 2.7 million households are eligible for this program. However, according to CPUC, eligibility is largely determined by eligibility for other programs, which has led them to believe that about 4.0 million households are eligible for the program.

Program Participation Projected to Fall Slightly. In January 2014, the CPUC authorized wireless service providers to offer discounted service plans to low-income households that include wireless voice, text, and data services. The table on the next page shows historical caseload and caseload projections for 2017-18 and 2018-19:

LifeLine Subscriber History and Projections (in millions)

	2012-13	2013-14	2014-15	2015-16	2016-17	2017-18*	2018-19*
Applications	3.31	2.50	4.76	6.0	5.24	5.63	5.24
Wireline							
Subscribers	1.17	.94	.72	.58	.46	.37	.30
Wireless							
Subscribers	0	.09	1.44	1.53	1.37	1.44	1.44
Total							
Subscribers	1.17	1.03	2.17	2.11	1.84	1.81	1.75
Ratio of							
Subscribers							
to							
Applications	35.44%	41.53%	45.50%	35.17%	35.06%	32.13%	33.38%

Wireless subscriptions began in March 2014.

Overall, the total number of subscribers has declined since the peak of 2.17 million subscribers in 2014-15, at the same time that California's total population has increased. The number of wireline subscribers continues to decrease as the number of wireless subscribers has grown. The number of wireless subscribers peaked in 2015-16 at 1.53 million subscribers, but has declined since and is estimated to be at 1.44 million subscribers in 2018-19. In addition, the number of applications received and processed has resulted in a smaller percentage of subscribers over time.

Caseload Estimates Are Significantly Lower than Anticipated for Current Year. Last year, CPUC estimated that there would be 3.2 million participants in the program (2.7 million wireless) by the end of 2017-18. However, actual enrollment has been much lower and it is now estimating a total of 1.8 million subscribers (1.4 million wireless) at the end of 2017-18; this is a reduction of nearly 44 percent.

Low Renewal Rates for Wireless Subscribers. The estimated renewal rate for wireless subscribers is about 23 percent of subscribers. This is very low compared to the wireline renewal rate which is about 72 percent of subscriber renew. Currently, the CPUC is conducting a pilot in which participating service providers send text messages to subscribers that provide renewal instructions, reminders, and a link to where they can complete their renewal online. Additionally, the CPUC is piloting, through its Third Party Administrator's call center, allowing participants impacted by the Northern and Southern California fires to complete their renewals over the phone. The CPUC will then evaluate the results and explore the feasibility of extending renewals over the phone to all participants who are due for renewal.

^{*=} Estimated number

Sitting on a Large Fund Balance. In 2016-17, the fund balance at the end of the year was \$281.6 million. This is projected to grow to \$326.4 million at the end of 2017-18 and slightly decrease at the end of 2018-19 to \$314.3 million. Local Assistance expenditures have been and are estimated to remain flat at roughly \$400 million annually for fiscal years 2016-17 through 2018-19.

STAFF COMMENTS

Given how far off last year's LifeLine caseload estimate was, the Subcommittee may wish to adopt Supplemental Reporting Language directing the LAO to 1) review the CPUC's estimate package, specifically the caseload estimate and the underlying assumptions behind the estimate, and 2) direct the LAO to make recommendations about how CPUC could improve the accuracy of its estimate. The Subcommittee may also wish to direct the LAO to make recommendations about ways to improve enrollment and reenrollment in the program based on its experience with other caseload programs for low-income persons, such as Medi-Cal and Calworks.

The Lifeline Program estimate will be updated in the May Revision. There is no need to take action at this time.

ISSUE 3: SAFETY AND ENFORCEMENT DIVISION-FORTIFY GAS SAFETY RELIABILITY, RAIL CROSSINGS AND ENGINEERING, AND RAIL OPERATIONS BRANCHES

The Governor's budget requests \$2.2 million from the State Transportation Fund and the Public Utilities Commission Utilities Reimbursement Account for the following:

- 12.0 new permanent positions.
- Classification upgrade of 5.0 existing permanent positions.
- Equipment, training, and travel to facilitate inspections and audits, and to ensure staff safety.

BACKGROUND

The CPUC's Safety and Enforcement Division (SED) staff oversees the safety of gas and electric utilities and rail infrastructure in California by traveling to facilities for inspections, audits, and investigations, as well as responding to emergencies.

The SED is currently located at the CPUC offices in San Francisco (69.5 positions or 34 percent of total staff), Sacramento (47 positions or 23 percent of total staff), Los Angeles (83 positions or 40 percent of total staff), and 7 positions or 3 percent of the total staff are Central Valley and/or homebased. SED oversees the safety of utility and rail infrastructure from the Oregon border to the Mexican border and from the coast to the inland areas of California.

CPUC asserts that decentralizing and adding staff will:

- Reduce response time,
- Provide for a better understanding of local infrastructure needs, and
- Decrease travel times to increase staff efficiency.

STAFF COMMENTS

CPUC anticipates workload will increase in the future. However, much of the increase in workload seems to be in a year or two beyond 2018-19. The Subcommittee may wish to ask what the consequences would be of not providing additional staff this year, and where the additional staff will be located. The LAO has raised no concerns.

ISSUE 4: ELECTRIC TRANSMISSION RATES ADVOCACY

The Governor's budget requests a permanent increase in funding of \$1.5 million from the PUCURA for 5.0 positions and \$600,000 annually for consulting services to represent California ratepayers at the Federal Energy Regulatory Commission (FERC) rate cases and in the California Independent System Operator Corporation's (CAISO) transmission planning processes that have a direct influence on electric transmission rates, and to advise in CPUC proceedings that impact transmission rates.

BACKGROUND

FERC decides the transmission rates that California ratepayers must pay in utility rate cases. In contrast, CPUC decides the generation and distribution costs of utility rates. Electric transmission costs approved in FERC rate cases are passed on to California ratepayers. Active rate cases represent over \$3.79 billion in utility-requested revenue requirements, approximately 90 percent of which are paid by retail ratepayers. Given the magnitude and complexity of FERC rate cases, present resources are inadequate to ensure ratepayers are paying reasonable costs associated with utility transmission projects.

STAFF COMMENT

Approval of this request will help CPUC to ensure ratepayers obtain the best value for their transmission rate dollars. The Subcommittee may wish to monitor the outcomes provided by the addition of these resources. To do so, it may wish to adopt placeholder trailer bill language that requires the CPUC to report annually on the following:

- The number of cases in which the CPUC participates.
- The amount of ratepayer monies saved through case litigation by providing the transmission owner's original requested Transmission Revenue Requirement (TRR) and the FERC-approved TRR.
- The nature of CPUC's involvement in each case, for example a description of issues litigated such as return on equity, tax issues, depreciation, cost-of-service ratemaking, and assumptions for justifying project needs.

ISSUE 5: OFFICE OF RATEPAYER ADVOCATES (ORA) GEOGRAPHIC INFORMATION SYSTEMS ANALYSIS

The Governor's budget requests 1.0 position and \$142,000 from the Public Utilities Commission Office of Ratepayer Advocates Account (PUCORA), to perform geospatial analysis work. The position will be placed in the Communications and Water Policy Branch and will be a shared resource across all of ORA.

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Geospatial analysis is the visualization of numerous data elements through the use of Geographic Information Systems (GIS) that integrates geographic, demographic, infrastructure, and other pertinent data to draw relationships between multiple variables. Geospatial analysis includes the mapping and location of data elements and how they relate to one another. Water, telecommunications, and energy utilities are all equipped to store information in GIS format to be able to use and view interactively through a map within their networks, in the field and from employees desktops.

Expertise in Geographic Information Systems (GIS), will better position ORA in helping ensure IOUs' investments and programs across industry areas are cost effective, meet desired outcomes, advance the health and economic welfare of disadvantaged communities and low-income customers, maintain the reliability of utility services, enhance public safety, and result in just, reasonable and affordable rates to ratepayers. For example, ORA can use GIS expertize to evaluate energy utilities proposals making investments in EV charging stations to make sure that stations are optimally placed based on usage patterns, policy preferences, and spending efficiency. Similarly, ORA can use GIS data to analyze water utilities implementation programs that provide rate relief to low-income ratepayers.

STAFF COMMENTS

Staff has no concerns with this proposal and the LAO has not raised any concerns.