

Proceeding: A.22-03-
Exhibit No.: BayREN-03
Date: March 4, 2022
Witness(es): Berg, Jennifer

BAYREN
TESTIMONY APPENDICES

APPENDIX A – STATEMENTS OF QUALIFICATION

APPENDIX B – APPLICATION ATTACHMENT TABLES

APPENDIX C – SUPPLEMENTAL BUDGET INFORMATION NARRATIVE

APPENDIX D – EQUITY METRICS REPORT

APPENDIX E – MARKET SUPPORT METRICS REPORT

APPENDIX A
STATEMENTS OF QUALIFICATION

STATEMENT OF QUALIFICATIONS OF CANDIS MARY-DAUPHIN
RESIDENTIAL SECTOR – MULTIFAMILY

Name and Business Address

My name is Candis Mary-Dauphin. My business address is 1537 Webster Street, Oakland, California 94612.

Description of responsibilities

I am a Program Manager with StopWaste, which is the Alameda County BayREN member agency. In this role, I direct the BayREN Bay Area Multifamily Building Enhancement Program (BAMBE), managing the budget, consultants, program strategy and design for a program that facilitates energy efficiency upgrades in more than 5,000 multifamily units per year.

I led a feasibility analysis on integrating health and resiliency components into ratepayer funded energy efficiency programs, including BAMBE. I manage the design and implementation of an energy efficiency financing referral service. I am also responsible for developing StopWaste's equity plan and am accountable for coordinating staff initiatives relating to equity and inclusive communications and outreach.

Summary of educational and professional background

I have been with StopWaste since 2015. Prior to that, I worked for Strategic Energy Innovations as a project coordinator; the Center for Energy and Environmental Policy as a senior research assistant; and at the Federal Reserve Bank of Cleveland as a Commissioned Examiner.

I have a Bachelor of Business Administration (*Cum Laude*) from Kent State University, and a Masters in Energy and Environmental Policy from the University of Delaware.

STATEMENT OF QUALIFICATIONS OF CHRIS CONE
CROSS CUTTING SECTOR – WATER UPGRADES \$AVE

Name and Business Address

My name is Chris Cone. My business address is 411 King Street, Santa Rosa, California 95404.

Description of responsibilities

I am a Senior Planner with the Sonoma County Regional Climate Protection Authority (RCPA). In this role, I serve as Program Manager for the BayREN Water Upgrades \$ave program (formerly known as Water Bill Savings program). In this capacity, I am responsible for program design, management of program implementation, outreach to water utilities throughout BayREN's territory, providing direction to the BayREN member agencies on marketing plans, and contract management. I also work closely with the ABAG financing team to ensure an efficient flow of capital and accurate reporting.

Summary of educational and professional background

I have been with RCPA since 2019. Prior to that, I was on staff with The Climate Center (formerly known as Climate Protection Campaign) and was part of the team that collaborated with the Town of Windsor to launch the tariff on-bill program with a grant from the U.S. Department of Energy Better Buildings Program. Known as the Windsor Efficiency PAYS® pilot, the program received an honorable mention from the American Council for an Energy-Efficient Economy's Program of Promise.

I previously worked for Efficiency First California (EFCA), a home performance contractor trade association, representing EFCA at the Energy Upgrade California® Statewide Working Group; on coalitions with industry partners engaging in California Public Utilities Commission rulemakings; and in meetings with CPUC and California Energy Commission representatives. I also facilitated twenty-seven Southern California forums to improve efficiency program communications and problem solving between contractors and Investor-Owned Utilities.

I have authored numerous articles on energy efficiency, economic and environmental sustainability, and related topics, including:

State of Solar Energy in Sonoma County, 2017;
Co-author, Data Driven Path to Economic and Environmental Sustainability, 2016;
Co-author Renewable-Based Energy Secure Community Sonoma County, 2012 (CEC-500-2006-057);
Greening the MLS: Status Report for Energy Upgrade CA Sonoma County, 2012; and
Sonoma County Solar Implementation Plan, 2010.

I also served as technical editor for the Sonoma County Community Climate Action Plan.

I have a Bachelor of Arts degree from California State University, Sonoma. I am a Fellow with the Leadership Institute for Ecology and the Economy.

STATEMENT OF QUALIFICATIONS OF EMILY ALVAREZ

RESIDENTIAL CHAPTER – GREEN LABELING

Name and Business Address

My name is Emily Alvarez. My business address is 1537 Webster Street, Oakland, California 94612.

Description of responsibilities

I am a Program Manager with StopWaste, the Alameda County BayREN member agency. In this role, I direct the BayREN Green Labeling program, which includes the Home Energy Score and Realtor trainings. Specifically, I oversee program strategy, design and implementation, and I work with the BayREN member agencies to develop outreach and marketing strategies for realtor, assessor and homeowner outreach. I have assisted staff from the City of Berkeley and the City of Piedmont with the drafting and subsequent adoption of local ordinances that require a Home Energy Score at the time of a major transaction. I also support Alameda County jurisdictions with their Climate Action Plan development and implementation and provide outreach to building department staff for the BayREN Codes and Standards program. I am the agency planning lead to conduct studies on material consumption and waste production in the county to help guide StopWaste's goals and projects, including waste diversion from landfills, reducing greenhouse gas emissions, and economic development of businesses that support these aims.

Summary of educational and professional background

I have been with StopWaste since 2018. Prior to that, I worked as an urban planner with Dyett & Bhatia Urban and Regional Planners, helping to develop long-range plans and policies for public agencies, including general and specific plans, as well as zoning ordinances. I also served as an Assistant Planner with the City of Piedmont.

I have a Bachelor of Arts degree from Brown University, and a Master of City Planning, Environmental Planning and Policy from the University of California, Berkeley. I am also LEED Accredited Professional, with a Building Design and Construction specialty.

STATEMENT OF QUALIFICATIONS OF JEFFERY LIANG

RESIDENTIAL SECTOR – SINGLE FAMILY

Name and Business Address

My name is Jeffery Liang, and my business address is 375 Beale Street, 7th Floor, San Francisco, California, 94105.

Description of responsibilities

I am an Associate Program Manager at the Association of Bay Area Governments (ABAG). In this role, I lead BayREN Home+, an energy efficiency retrofit program for single family homeowners and renters. I oversee program design and implantation, contractor outreach, marketing, and work with BayREN member agencies on county specific marketing plans. I collaborate regularly with the Community Choice Aggregators in our shared territory, Technology and Equipment for Clean Heating (TECH) program implementers, and other key stakeholders in the residential decarbonization and energy efficiency sectors.

Summary of educational and professional background

I joined ABAG in January 2020. Prior to that, I worked for StopWaste, performing BayREN outreach activities to Alameda County jurisdictions. I have held a variety of other positions in the energy field, including as a contractor specialist with Renew Financial; Energy Upgrade Specialist with Ecology Action; Green Building Coordinator with the County of San Mateo; and as a Commercial Toxics Reduction Associate with the San Francisco Department of Environment.

I have a Bachelor of Arts in Environmental Studies from Washington University in St. Louis. I am a LEED Accredited Professional.

STATEMENT OF QUALIFICATIONS OF JENNIFER BERG
PORTFOLIO OVERVIEW AND STRATEGY

Name and Business Address

My name is Jennifer Berg, and my business address is 375 Beale Street, 7th Floor, San Francisco, California, 94105.

Description of responsibilities

I am the Director of Energy Programs at the Association of Bay Area Governments (ABAG). In this capacity, I am responsible for managing all the agency's energy programs, including the San Francisco Bay Area Regional Energy Network (BayREN).

I have been the BayREN Program Manager since the regional energy network was launched in January 2013. I am responsible for oversight of BayREN's portfolio of energy efficiency programs, reporting and compliance, strategic planning, management of evaluation, verification and measurement activities, preparation of regulatory filings, and supervision of development and implementation of collaborations with Pacific Gas and Electric Company and all seven Community Choice Aggregators (CCA) in our region. I have been a member of the California Energy Efficiency Coordinating Committee (CAEECC) since it was formed and have been the Co-chair since 2019.

I joined ABAG in January 2013 as the Program Manager for BayREN. While I continue to serve in this role, my duties have expanded to include management of all ABAG energy programs, as well as management of all staff in the energy section.

Summary of educational and professional background

Prior to joining ABAG, I was an attorney specializing in toxic tort litigation. I have a Bachelor of Arts degree from the University of California, Santa Barbara, graduating with honors, a Juris Doctorate from the Catholic University of America in Washington, DC, and an Executive Certificate in Sustainable Management from the Presidio Graduate School. In addition to serving as the Co-Chair of CAEECC, I serve on the Board of the Local Government Sustainable Energy Coalition, whose mission is to advance local government leadership on clean energy and climate resilience through regulatory action, policies, and programs.

STATEMENT OF QUALIFICATIONS OF JENNIFER MITCHELL-JACKSON

METRICS AND PORTFOLIO SEGMENTATION

Name and Business Address

My name is Jennifer Mitchell-Jackson, and my business address is 6114 La Salle Avenue, #183, Oakland, California, 94116.

Description of responsibilities

I am a Partner with Grounded Research and Consulting, a firm that specializes in Evaluation, Design and Implementation, Process Evaluations, Metric Development and Stakeholder Engagement and Evaluation of marketing, education and outreach. My work with BayREN has included market research and analysis, process evaluations, development of BayREN value metrics and associated program logic models. I participated in the California Energy Efficiency Coordinating Committee Equity Metrics Working Group on behalf of BayREN.

Summary of educational and professional background

I co-founded Grounded Research and Consulting in 2015.

Prior to that, I was a partner at Opinion Dynamics, where I worked with dozens of clients across the country, acting as a researcher and technical advisor on hundreds of program and market studies. I also developed project methodologies, questionnaires, and discussion guides, interpreted survey results and presented results and recommendations to clients.

I previously was a research affiliate at Lawrence Berkeley National Laboratory, where I tested the energy use of appliances in support of state and national energy efficiency standards.

Prior to that, I was a Researcher/Consultant for the California Public Utilities Commission, where I assisted in the oversight of utility-run energy efficiency programs. I also served as a liaison between the utilities and participated in the utility stakeholder-regulatory committee that guides measurement and verification of these programs.

I have authored numerous professional articles on topics related to evaluation, measurement and verification. A few representative publications are:

- Mary Sutter, Jenn Mitchell-Jackson, Chris Cone, Chris Bradt. Integrating evaluation to expand an innovative water and energy program in the United States. 2020 Energy Evaluation Europe Conference, UK.
- Jennifer Mitchell-Jackson and Mary Sutter. The DSM Industry – Deep Dive. Presentation to AESP Board. January 2019.
- Jennifer Mitchell-Jackson. Building A Customer-Centric Community Solar Program Through Market Research and Market Segmentation. Olivine under a SunShot Grant. Berkeley: CA. October, 2016.

- Jennifer Mitchell-Jackson and Chris Ann Dickerson. Codes and Standards: A View from the Shores of Hawaii. ACEEE Conference, Monterey, CA. August 2016.
- Jennifer Mitchell-Jackson. Impact Evaluation of Energy Efficiency Financing. American Council for an Energy-Efficient Economy Finance Forum. Washington, DC. August, 2014.

I have a Bachelor of Science from Yale University, and a Master of Science in Energy and Resources from the University of California, Berkeley.

STATEMENT OF QUALIFICATIONS OF KAREN KRISTIANSSON
CODES AND STANDARDS AND PUBLIC SECTOR SECTORS

Name and Business Address

My name is Karen Kristiansson, and my business address is 375 Beale Street, 7th Floor, San Francisco, California, 94105.

Description of responsibilities

I am a Senior Program Coordinator at the Association of Bay Area Governments (ABAG). I am the BayREN Codes and Standards program manager. My duties include facilitating committees and working groups consisting of city and county staff from throughout the Bay Area; leading efforts to improve compliance with Building Energy Efficiency Standards, Title 24, including oversight of training programs, organization of quarterly regional forums, and development of resources; providing information, support, and encouragement for local government staff regarding energy efficiency policies and reach codes; tracking California Energy Commission policies, participating in workshops, and developing and submitting comments on proposed regulations and legislation. I also collaborate with the other regional agencies, including the Bay Area Air Quality Management District, on climate related policy, particularly associated with decarbonization.

Summary of educational and professional background

I joined ABAG in 2018. Prior to that, I worked at the Bay Area Air Quality Management District as a Principal Environmental Planner; for the Town of Portola Valley as a Deputy Town Planner; and in the private sector with Spangle Associates, where I worked as a planner, starting at the Associate level, working my way up to Principal Planner. I received a Bachelor of Arts from Williams College, and a Master of Regional Planning with a specialization in Environmental and Land Use Planning from the University of North Carolina, Chapel Hill.

STATEMENT OF QUALIFICATIONS OF LOWELL CHU
COMMERCIAL SECTOR

Name and Business Address

My name is Lowell Chu. My business address is 1455 Market Street, Suite 1200, San Francisco, California.

Description of Responsibilities

I am a Principal, Energy and Clean Transportation Program Manager at the San Francisco Department of the Environment. In this role, I manage daily operations and a \$6 million budget for the Department's energy efficiency and electric vehicle (EV) programs. I plan, develop, and oversee management of energy reduction measures and policies to serve San Francisco's diverse market sectors, including residential and commercial customers, especially the hard-to-reach and underserved. I manage staff to ensure that administration, marketing, implementation and reporting activities of San Francisco Energy Watch, a local government partnership with Pacific Gas and Electric Company (PG&E), and Bay Area Regional Energy Network (BayREN) programs meet contractual obligations, serve to effectively remove market barriers, and achieve energy savings goals. I also manage implementation of the San Francisco EV Roadmap that seeks to advance strategic electrification across the transportation sector, represent the City and County of San Francisco on the BayREN Coordinating Circle, and lead development and launch of the BayREN Commercial Pay-for-Performance program and the Bay Area Refrigerant Replacement Program.

Summary of educational and professional background

I have been with the San Francisco Department of the Environment since 2008, serving different roles within the energy and built environment departments. Prior to this, I worked as a mechanical engineer with Advanced Design Consultants.

I received a Bachelor of Science in mechanical engineering from California State University, Sacramento. I am a LEED, Accredited Professional, a Certified Energy Manager, have a Lighting Certification from the National Council on Qualifications for the Lighting Professionals, and a California Real Estate License.

STATEMENT OF QUALIFICATIONS OF MARY SUTTER
METRICS AND PORTFOLIO SEGMENTATION

Name and Business Address

My name is Mary Sutter, and my business address is 6114 La Salle Avenue, #183, Oakland, California, 94116.

Description of responsibilities

I am a Partner with Grounded Research and Consulting, a firm that specializes in Evaluation, Design and Implementation, Process Evaluations, Metric Development and Stakeholder Engagement and Evaluation of marketing, education and outreach. My work with BayREN has included market research and analysis, process evaluations, development of BayREN value metrics and associated program logic models. I participated in the California Energy Efficiency Coordinating Committee Market Support Metrics Working Group on behalf of BayREN.

Summary of educational and professional background

I co-founded Grounded Research and Consulting in 2015.

Prior to that, I was Vice President of Energy Evaluation at Opinion Dynamics. In this role, I served as director of engineering as well as a lead technical advisor and staff trainer. I also provided guidance on evaluation design and implementation for process, impact, and market studies.

I was previously President at Equipoise Consulting, where I implemented all aspects of evaluation on a large variety of energy efficiency programs in the residential, commercial, agricultural, and industrial sectors.

I was a Senior Energy Engineer with Quantum Consulting, where I assessed multiple residential and commercial programs.

I have authored numerous professional articles on topics related to evaluation, measurement and verification. A few representative publications are:

- Jenn Mitchell-Jackson, Mary Sutter, Jenny Berg. Doing It Differently: Moving Beyond Measures to People and Communities. 2020 ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, CA.
- Amy Cortese, Mark Lyles, Mary Sutter. Zeroing in on Energy Performance in New and Existing Schools. 2018 ACEEE Summer Study on Energy Efficiency in Buildings, Asilomar, CA.
- Mary Sutter, Brandy Brown. Making Evaluation Reports Easy to Determine “What Works, Why, and for Whom”. Association of Energy Service Professionals National Conference, Orlando, FL. 2017.

- Megan Campbell, Seth Wayland, Mary Sutter, Salim Khalil. Alternative Statistical Models: Saving Energy, Time and Money. Association of Energy Service Professionals National Conference, Orlando, FL. 2015.
- Garrick Wahlstrand, Mary Sutter. Bringing them Home: Rebate Agents Score Contracts for Utilities. Association of Energy Service Professionals National Conference. San Diego, CA. 2012.

I have Bachelor of Science from the University of Missouri and a Master of Science in Civil Engineering from the University of Colorado. I also have a Certificate in Evaluation Practice and Quantitative Evaluation Methods, Evaluator's Institute.

STATEMENT OF QUALIFICATIONS OF NANCY BARBA
ENERGY SAVINGS FORECAST AND TECHNICAL CONSULTANT

Name and Business Address

My name is Nancy Barba. My business address is 12949 Alcosta Blvd, Suite 101, San Ramon, CA 94583.

Description of Responsibilities

I am Senior Manager with Frontier Energy, responsible for designing and developing energy management portfolios and programs for regional energy networks and community choice aggregators. The work includes strategic planning, creating sector frameworks, goals development and energy savings forecasting. Additionally, my team provides strategic funding consulting to local governments and aids in securing funding from ratepayer and non-ratepayer sources. As part of my responsibilities, I manage programs, oversee stakeholder engagement, develop program pipelines, ensure accurate regulatory reporting and advice on community outreach. I have supported dozens of successful filings of annual budget advice letters, program implementation plans and other required regulatory documents for program administrators.

As part of regulatory and technical consultant services provided to BayREN, I ensure that technical guidance is current and appropriate for the proposed sectors and segments. I oversee development of cost effectiveness calculations and the populating of regulatory reporting tables. I supervise and provide advice and insights on regulatory activities, portfolio strategic framework, development activities, as well as associated budgets, metrics, and energy savings.

I consult on program design, including measure selection and strategic customer engagement for workforce education and training, codes and standards, and public sector, single family, and multifamily programs.

Summary of educational and professional background

I have been with Frontier Energy since 2010. Previously, I was the Director, Sustainable Works, Residential Green Programs for the City of Santa Monica.

I earned a Bachelor of Science from California State University, Long Beach. I am a LEED, Accredited Professional, a Certified Green Building Professional and a Certified GreenPoint Advisor.

STATEMENT OF QUALIFICATIONS OF RYAN JACOBY

PORTFOLIO AND SECTOR BUDGET

Name and Business Address

My name is Ryan Jacoby, and my business address is 375 Beale Street, 7th Floor, San Francisco, California, 94105.

Description of responsibilities

I am a Principal Program Manager at the Association of Bay Area Governments (ABAG). In this role, I oversee all financial aspects related to BayREN, including developing and managing portfolio and sector budgets, and supervising ABAG staff and consultant contracts and budgets in coordination with the ABAG Chief Financial Officer. I am responsible for preparing staff memos regarding the BayREN budget and contracts for presentation to the ABAG Executive Board for approval. I manage ABAG POWER, a natural gas purchasing pool serving 38 government agencies within Pacific Gas and Electric Company's service territory. I oversee the development and management of an \$9 million annual budget. I also am responsible for developing and implementing program strategy, including related to international gas purchasing.

Summary of educational and professional background

I joined ABAG in 2013. Prior to that, I worked as a bookkeeper at Appel & Associates overseeing all invoicing, bank reconciliation and payment. I have a Bachelor of Science, Management Information Systems, San Francisco State University and an Accounting and Business/Management, Santa Barbara City College.

STATEMENT OF QUALIFICATIONS OF WELLS BROWN
CROSS-CUTTING SECTOR - WORKFORCE, EDUCATION AND TRAINING

Name and Business Address

My name is Wells Brown. My business address is 1136 – 36th Street, Suite 1200, Oakland, California, 94608.

Description of Responsibilities

I am Vice President and Chief Program Officer with Rising Sun Center for Opportunity (Rising Sun). I oversee Rising Sun's workforce development and climate resiliency programs, develop new programs and initiatives in accordance with Rising Sun's strategic plan, am a member of the Rising Sun executive leadership team, and am responsible for fulfilling Rising Sun's mission of building career pathways associated with economic equity and climate resilience.

Prior to my current role, I served as Director of Programs, leading Rising Sun's workforce development and climate resiliency programs: Opportunity Build and Climate Careers. Opportunity Build focuses on creating high road career pathways for low-income adults who face barriers to employment, with an emphasis on training and placing women and individuals in reentry following incarceration into union construction jobs within the building trades. Climate Careers focuses on creating career pathways into the clean economy for low-income youth in the Bay Area and Central Valley.

Summary of educational and professional background

I have been with Rising Sun since 2011. Previously, I worked for Conservation International as an Environmental Consultant. I earned a Bachelor of Science with a double major in Urban and Regional Planning and Environmental Sciences Principles and Practices from Miami University.

APPENDIX B

APPLICATION ATTACHMENT TABLES

Pa Name:	Bay Area Regional Energy Network (BayREN)
Budget Year:	2024-2031

Spending Budget Comparison

Tab 3 - PA Spending Budget Request (PA Program and EMBV) (same as row 4)	
Tab 4 - PA Spending Budget Request (PA Program and EMBV)	
Tab 7 - PA Spending Budget Request (PA Program and EMBV + CEC AB 841)	
Tab 8 - PA Spending Budget Request (PA Program and EMBV)	
Tab 9 - PA Spending Budget Request (PA Program and EMBV + CEC AB 841)	

Difference

2024	2025	2026	2027	2028	2029	2030	2031
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491

Revenue Requirement or Cost Recovery Comparison

Tab 4 - PA Revenue Requirement Request	
Tab 7 - PA Revenue Requirement Request (Cost Recovery)	

Difference

2024	2025	2026	2027	2028	2029	2030	2031
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491
\$ 38,101,637	\$ 40,336,986	\$ 41,278,573	\$ 42,059,441	\$ 42,900,629	\$ 43,758,642	\$ 44,633,815	\$ 45,526,491

Program Budget by Cost Category

Tab 4 - Program Budgets

Tab 8 - Caps & Targets

Difference

Tab 9 - Incentives Column, EE Total

Difference

2024				2025				2026				2027				2028				2029				2030				2031			
Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive	Admin	Mktg	DI/NI	DI Incentive
\$ 2,583,347	\$ 3,944,915	\$ 14,445,310	\$ 15,600,000	\$ 2,685,626	\$ 4,134,829	\$ 15,006,563	\$ 16,896,488	\$ 2,769,340	\$ 4,252,385	\$ 15,465,050	\$ 17,340,655	\$ 2,853,440	\$ 4,371,022	\$ 16,011,946	\$ 17,140,655	\$ 2,944,915	\$ 4,489,310	\$ 15,600,000	\$ 16,896,488	\$ 2,769,340	\$ 4,252,385	\$ 15,465,050	\$ 17,340,655	\$ 2,853,440	\$ 4,371,022	\$ 16,011,946	\$ 17,140,655	\$ 2,944,915	\$ 4,489,310	\$ 15,600,000	\$ 16,896,488
\$ 2,583,347	\$ 3,944,915	\$ 14,445,310	\$ 15,600,000	\$ 2,685,626	\$ 4,134,829	\$ 15,006,563	\$ 16,896,488	\$ 2,769,340	\$ 4,252,385	\$ 15,465,050	\$ 17,340,655	\$ 2,853,440	\$ 4,371,022	\$ 16,011,946	\$ 17,140,655	\$ 2,944,915	\$ 4,489,310	\$ 15,600,000	\$ 16,896,488	\$ 2,769,340	\$ 4,252,385	\$ 15,465,050	\$ 17,340,655	\$ 2,853,440	\$ 4,371,022	\$ 16,011,946	\$ 17,140,655	\$ 2,944,915	\$ 4,489,310	\$ 15,600,000	\$ 16,896,488
\$ 15,600,000				\$ 16,896,488				\$ 17,340,655				\$ 17,140,655				\$ 17,340,655				\$ 17,340,655				\$ 17,340,655				\$ 17,340,655			

Portfolio Budget Total vs Budget by Function Summary Total

Tab 7 - PA Portfolio Budget by Function

Tab 9 - PA Portfolio Budget by Function

Difference

2024									
Residential	Commercial	Industrial	Agricultural	Public	Emerging Tech	Codes & Standards	WE&T	Finance	Cross Cutting
\$ 19,254,406.00	\$ 8,332,751.00	\$ -	\$ -	\$ 2,107,341.00	\$ -	\$ 1,984,954.00	\$ 2,916,768.00	\$ 1,983,352.00	\$ 6,883,074.00
\$ 19,254,406.00	\$ 8,332,751.00	\$ -	\$ -	\$ 2,107,341.00	\$ -	\$ 1,984,954.00	\$ 2,916,768.00	\$ 1,983,352.00	\$ 6,883,074.00

2025									
Residential	Commercial	Industrial	Agricultural	Public	Emerging Tech	Codes & Standards	WE&T	Finance	Cross Cutting
\$ 19,891,731.00	\$ 9,645,750.00	\$ -	\$ -	\$ 2,475,793.00	\$ -	\$ 2,008,191.00	\$ 3,096,406.00	\$ 2,105,610.00	\$ 7,212,232.00
\$ 19,891,731.00	\$ 9,645,750.00	\$ -	\$ -	\$ 2,475,793.00	\$ -	\$ 2,008,191.00	\$ 3,096,406.00	\$ 2,105,610.00	\$ 7,212,232.00

2026									
Residential	Commercial	Industrial	Agricultural	Public	Emerging Tech	Codes & Standards	WE&T	Finance	Cross Cutting
\$ 19,523,892.00	\$ 9,704,682.00	\$ -	\$ -	\$ 2,886,653.00	\$0	\$2,065,581	\$3,295,193	\$3,351,430	\$ 7,512,203.00
\$ 19,523,892.00	\$ 9,704,682.00	\$ -	\$ -	\$ 2,886,653.00	\$0	\$2,065,581	\$3,295,193	\$3,351,430	\$ 7,512,203.00

2027									
Residential	Commercial	Industrial	Agricultural	Public	Emerging Tech	Codes & Standards	WE&T	Finance	Cross Cutting
\$ 19,666,408.00	\$ 9,770,550.00	\$ -	\$ -	\$ 3,145,763.00	\$0	\$2,096,431	\$3,502,190	\$2,195,721	\$ 7,794,342.00
\$ 19,666,408.00	\$ 9,770,550.00	\$ -	\$ -	\$ 3,145,763.00	\$0	\$2,096,431	\$3,502,190	\$2,195,721	\$ 7,794,342.00

Pa Name: Bay Area Regional Energy Network (BayREN)
Budget Year: 2024-2031
(This Table applies only to the IOU PAs)

Table 1 -Bill Payer Impacts (based on program savings forecasted for the year)				
	Electric Average Rate (Res and Non-Res) \$/kwh	Gas Average Rate (Res and Non-Res) \$/therm	Total Average Annual Bill Savings by Year (\$)	Total Average Lifecycle Bill Savings (\$)
Present Rates - System Average *				
2021				
2022				
2023				
2024				
2025				
2026				
2027				
2028				
2029				
2030				
2031				

* = Based on [relevant date] current effective rates
Total Average Annual Bill Savings by Year (\$) Electric Average Rate (Res and Non-Res) \$/kwh * Total First Year Electric Net Savings KWH + Gas Average Rate(Res and Non-Res) \$/therm * Total First Year Gas Net Savings Therm
Total Average Lifecycle Bill Savings (\$) Electric Average Rate (Res and Non-Res) \$/kwh * Total Lifecycle Electric Net Savings KWH + Gas Average Rate(Res and Non-Res) \$/therm * Total Lifecycle Gas Net Savings Therm

Pa Name:	Bay Area Regional Energy Network (BayREN)
Budget Year:	2024-2031

(This Table applies only to the IOU PAs)

Table 2a - Electric Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

[illegible]

* = Based on [relevant date] current effective rates

Table 2b - Gas Bill Payer Impacts - Current and Proposed Revenues and Rates, Total and Energy Efficiency, by Customer Class

[illegible]

Pa Name: Bay Area Regional Energy Network (BayREN)
Budget Year: 2024-2031
Table 3.1 - PA 2024-2031 Funding Source Summary

	Spending Budget Request	Electric Procurement	% Electric	Gas	% Gas
2024	38,101,637	25,909,113	68.0%	12,192,524	32.0%
2025	40,336,986	26,219,041	65.0%	14,117,945	35.0%
2026	41,278,573	27,243,858	66.0%	14,034,715	34.0%
2027	42,059,441	28,179,825	67.0%	13,879,616	33.0%
2028	42,900,629	28,743,422	67.0%	14,157,208	33.0%
2029	43,758,642	29,318,290	67.0%	14,440,352	33.0%
2030	44,633,815	29,904,656	67.0%	14,729,159	33.0%
2031	45,526,491	30,502,749	67.0%	15,023,742	33.0%
Total	338,596,214	226,020,955		112,575,260	

	PA Revenue Requirement Request (Cost Recovery)	Electric Procurement	% Electric	Gas	% Gas
2024	38,101,637	25,909,113	68.0%	12,192,524	32.0%
2025	40,336,986	26,219,041	65.0%	14,117,945	35.0%
2026	41,278,573	27,243,858	66.0%	14,034,715	34.0%
2027	42,059,441	28,179,825	67.0%	13,879,616	33.0%
2028	42,900,629	28,743,422	67.0%	14,157,208	33.0%
2029	43,758,642	29,318,290	67.0%	14,440,352	33.0%
2030	44,633,815	29,904,656	67.0%	14,729,159	33.0%
2031	45,526,491	30,502,749	67.0%	15,023,742	33.0%
Total	338,596,214	226,020,955		112,575,260	

	PA (IOU+CCAs+RENs) Recovery Budget	Electric Procurement	% Electric	Gas	% Gas
2024	38,101,637	25,909,113	68.0%	12,192,524	32.0%
2025	40,336,986	26,219,041	65.0%	14,117,945	35.0%
2026	41,278,573	27,243,858	66.0%	14,034,715	34.0%
2027	42,059,441	28,179,825	67.0%	13,879,616	33.0%
2028	42,900,629	28,743,422	67.0%	14,157,208	33.0%
2029	43,758,642	29,318,290	67.0%	14,440,352	33.0%
2030	44,633,815	29,904,656	67.0%	14,729,159	33.0%
2031	45,526,491	30,502,749	67.0%	15,023,742	33.0%
Total	338,596,214	226,020,955		112,575,260	

8 Year Funding Sources - RENs/CCAs

Year	PG&E		SDG&E		SCE	SCG
	Electric \$	Gas \$	Electric \$	Gas \$	Electric \$	Gas \$
2024	25,909,113	12,192,524				
2025	26,219,041	14,117,945				
2026	27,243,858	14,034,715				
2027	28,179,825	13,879,616				
2028	28,743,422	14,157,208				
2029	29,318,290	14,440,352				
2030	29,904,656	14,729,159				
2031	30,502,749	15,023,742				
Total	226,020,955	112,575,260	-			-

	Scenario 1 - Table A				Scenario 2 - Table A			
	2024	2025	2026	2027	2028	2029	2030	2031
PA Spending Budget Request by Funding Source								
Electric Procurement 10 Funds	\$ 38,383,437	\$ 40,330,585	\$ 40,278,575	\$ 42,009,041	\$ 42,903,629	\$ 43,788,542	\$ 44,633,117	\$ 45,526,491
Gas PPP Recovery Funds	\$ 26,374,837	\$ 48,326,386	\$ 48,278,575	\$ 42,009,041	\$ 42,903,629	\$ 43,788,542	\$ 44,633,117	\$ 45,526,491

Table A.2 - Budget by Funding Source

	2024 Budget	2024 % Allocation	2025 Budget	2025 % Allocation	2026 Budget	2026 % Allocation	2027 Budget	2027 % Allocation	2028 Budget	2028 % Allocation	2029 Budget	2029 % Allocation	2030 Budget	2030 % Allocation	2031 Budget	2031 % Allocation
Electric Procurement 10 Funds	\$ 38,383,437	100%	\$ 40,330,585	100%	\$ 40,278,575	100%	\$ 42,009,041	100%	\$ 42,903,629	100%	\$ 43,788,542	100%	\$ 44,633,117	100%	\$ 45,526,491	100%
Gas PPP Recovery Funds	\$ 26,374,837	100%	\$ 48,326,386	100%	\$ 48,278,575	100%	\$ 42,009,041	100%	\$ 42,903,629	100%	\$ 43,788,542	100%	\$ 44,633,117	100%	\$ 45,526,491	100%
Total Funds	\$ 64,758,274		\$ 88,656,971		\$ 88,557,150		\$ 84,018,082		\$ 85,807,258		\$ 87,577,084		\$ 89,266,234		\$ 91,052,982	

Table A.3 - Revenue Requirement for Cost Recovery by Funding Source

	2024 Revenue Requirement	2024 % Allocation after Carryover adjustment	2025 Revenue Requirement	2025 % Allocation after Carryover adjustment	2026 Revenue Requirement	2026 % Allocation after Carryover adjustment	2027 Revenue Requirement	2027 % Allocation after Carryover adjustment	2028 Revenue Requirement	2028 % Allocation after Carryover adjustment	2029 Revenue Requirement	2029 % Allocation after Carryover adjustment	2030 Revenue Requirement	2030 % Allocation after Carryover adjustment	2031 Revenue Requirement	2031 % Allocation after Carryover adjustment
Authorized Funding by Rate (including Unapport/Uncommitted Funds)	\$ 38,383,437	100%	\$ 40,330,585	100%	\$ 40,278,575	100%	\$ 42,009,041	100%	\$ 42,903,629	100%	\$ 43,788,542	100%	\$ 44,633,117	100%	\$ 45,526,491	100%
Electric Procurement 10 Funds	\$ 38,383,437	100%	\$ 40,330,585	100%	\$ 40,278,575	100%	\$ 42,009,041	100%	\$ 42,903,629	100%	\$ 43,788,542	100%	\$ 44,633,117	100%	\$ 45,526,491	100%
Gas PPP Recovery Funds	\$ 0	0%	\$ 0	0%	\$ 0	0%	\$ 0	0%	\$ 0	0%	\$ 0	0%	\$ 0	0%	\$ 0	0%
Total Funds	\$ 38,383,437	100%	\$ 40,330,585	100%	\$ 40,278,575	100%	\$ 42,009,041	100%	\$ 42,903,629	100%	\$ 43,788,542	100%	\$ 44,633,117	100%	\$ 45,526,491	100%

Table A.4 - Unapport/Uncommitted Carryover Funds (in positive \$ amounts)

Program Unapport/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
2024	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2025	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2026	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2027	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2028	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2029	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2030	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2031	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

EM&V Unapport/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
2024	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2025	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2026	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2027	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2028	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2029	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2030	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2031	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Total Unapport/Uncommitted Funds	2024			2025			2026			2027			2028			2029			2030			2031		
	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total	Electric	Gas	Total
2024	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2025	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2026	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2027	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2028	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2029	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2030	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
2031	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0
Total	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

Notes on Table A.4
Any actual uncommitted/unapport funds for 2023 will be traced-up in the IOU's respective electric and gas PPP annual rates advice letter for 2023.

Table A.5 - Total Requested Recovery 2024-2027 Portfolio Budgets - Demand Response & Energy Efficiency^{1,2}

	2024				2025				2026				2027				2028				2029				2030				2031			
	Demand Response				Demand Response				Demand Response				Demand Response				Demand Response				Demand Response				Demand Response				Demand Response			
	Energy Efficiency				Energy Efficiency				Energy Efficiency				Energy Efficiency				Energy Efficiency				Energy Efficiency				Energy Efficiency				Energy Efficiency			
	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds	Electric Demand Response Funds	Electric Energy Efficiency Funds	Natural Gas Public Purpose Funds	Total Energy Efficiency Funds
Program Funds - PA ³	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
Program Funds - BTR ⁴	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
Program Funds - CCA ⁵	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	
Budget Total	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0	

Notes:
1. Natural gas budget includes reductions from gas unapport funds, carryover and is consistent with funding approved in D. 09-05-047, D. 12-12-025, D. 14-10-046 and D. 15-10-028, D. 18-05-041 and D. 21-01-004.
2. BTR and CCA information provided by all IOUs and CCA and is consistent with their respective MRAs.
3. This represents total IOU-CCA-BTR-BTR.
4. Program Funds represent the total program budget, including DBMR.
5. Only the IOU completes this line and should be consistent table 7.

Project Information										Project Details										Project Status										Project Location										Project Dates										Project Budget										Project Team										Project Risks										Project Deliverables										Project Milestones										Project Notes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
Project Name	Project ID	Project Description	Project Manager	Project Sponsor	Project Status	Project Location	Project Dates	Project Budget	Project Team	Project Risks	Project Deliverables	Project Milestones	Project Notes	Project Name	Project ID	Project Description	Project Manager	Project Sponsor	Project Status	Project Location	Project Dates	Project Budget	Project Team	Project Risks	Project Deliverables	Project Milestones	Project Notes	Project Name	Project ID	Project Description	Project Manager	Project Sponsor	Project Status	Project Location	Project Dates	Project Budget	Project Team	Project Risks	Project Deliverables	Project Milestones	Project Notes	Project Name	Project ID	Project Description	Project Manager	Project Sponsor	Project Status	Project Location	Project Dates	Project Budget	Project Team	Project Risks	Project Deliverables	Project Milestones	Project Notes																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											

[illegible]

PA Name: Bay Area Regional Energy Network (BayREN)
Budget Year: 2024-2031
Table 4.3- 2024 and Beyond Program Changes

(report budgets to the \$--do not round, add rows as needed)

Table 4.3.1 - Programs to be closed with the disposition of 2024-2031 EE Application

PA Justification	Third Party Implementer or Core	Statewide or Local	Programs to be closed with the disposition of 2024-2031 EE Application	% change	2021 (Q3) Claimed TRC	2022 Filed TRC	2023 Filed TRC	2024 Filed TSB	2025 Filed TSB	2021 Budget	2022 Budget	2023 Budget	Year Program Started	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2024 and Beyond Application planning and new 3P contracting	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2024 and Beyond Application planning and timing for new 3P contracts' ramp up

BayREN does not propose any programmatic changes meeting this criteria.

Table 4.3.2 - Programs to be closed upon completion of commitments

PA Justification	Third Party Implementer or Core	Statewide or Local	Programs to be Closed with the Disposition of 2024-2031 Application	% change	2020 Claimed TRC	2021 (Q3) Claimed TRC	2022 Filed TRC	2023 Filed TRC	2024 Filed TSB	2025 Filed TSB	2021 Budget	2022 Budget	2023 Budget	Year Program Started	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2024 and Beyond Application planning and new 3P contracts ramp up.

BayREN does not propose any programmatic changes meeting this criteria.

Table 4.3.3 - Programs with reduced budgets (>40% budget decrease), to continue in 2024 and beyond

PA Justification	Third party implementer or Core	Statewide	Programs with reduced budgets (>40% budget decrease)	% change	2020 Claimed TRC	2021 (Q3) Claimed TRC	2022 Filed TRC	2023 Filed TRC	2022 Filed TSB	2023 Filed TSB	2021 Budget	2022 Budget	2023 Budget	Year program started	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2024 and Beyond Application planning and new 3P contracts ramp up.	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2024 and beyond planning and timing for new 3P contracts ramp up, or mark "NEW 3P" program if program is result of 3P solicitation process per D1803004.

BayREN does not propose any programmatic changes meeting this criteria.

Table 4.3.4 - Programs with enhanced budgets (>40% budget increase)

PA Justification	Third party implementer or Core	Statewide	Programs with enhanced budgets (>40% budget increase)	% change	2023 Filed budget	2023 Filed TSB	2023 Filed TRC	2024 Filed TSB	2024 Filed TSB	2024 Budget	Year program started	For existing third party implemented programs, MM/YY Program was due to sunset prior to PY 2024 Application planning and new 3P contracting	For existing third party implemented programs, MM/YY Program is extended to as a result of PY 2024 Application planning and timing for new 3P contracts ramp up, or mark "NEW 3P" program if program is result of 3P solicitation process per D1803004.

BayREN does not propose any programmatic changes meeting this criteria.

Table 4.3.5 - Programs that are new in 2024 and Beyond

PA Justification	Third party implementer or Core	Statewide	Programs that are new in 2024 or beyond	Start year Filed TSB	Start year Filed TRC	Start Year Budget	MM/YY program to start	MM/YY Program is due to sunset, and flag as "NEW 3P" program if program is result of 3P solicitation process per D1803004.
This is a new program intended to address EE portfolio and customer needs. See Exhibit BayREN-02 for detail.	Core	No	BayREN09 - Climate Careers	0.00	0.00	\$2,916,768.00	01/24	-
This is a new program intended to address EE portfolio and customer needs. See Exhibit BayREN-02 for detail.	Core	No	BayREN10 - Integrated Energy Services	0.00	0.00	\$4,109,119.00	01/24	-
This is a new program intended to address EE portfolio and customer needs. See Exhibit BayREN-02 for detail.	Core	No	BayREN11 - Targeted Decarbonization Resources	0.00	0.00	\$1,046,965.00	01/24	-
This is a new program intended to address EE portfolio and customer needs. See Exhibit BayREN-02 for detail.	Core	No	BayREN12 - BayREN Business Refrigerant Replacement	0.00	0.00	\$1,060,376.00	01/24	-

Table 4.3.6 - Programs with Third-Party Contracts that Sunset during 2024-2027

PA Justification	Third party implementer or Core	Statewide	Programs with Third-Party Contracts that Sunset in 2024-2027	Third-Party Contracts that sunset during PY 2024-2027	Contract Expiration Date	Identify contract terms and/or limits on extensions	Is third-party contract anticipated to be renewed, re-competed, or unknown?	Proposed target date to reopen solicitation for competition or new market opportunity

BayREN does not propose any programmatic changes meeting this criteria.

Pa Name: Bay Area Regional Energy Network (BayREN)
 Budget Year: 2024-2031

Table 5 - Committed Energy Efficiency Program Funding - Funds Not Yet Spent as of 9/31/2021

Committed funds but not yet spent	Electric Procurement	Natural Gas Public	
Category **	Funds	Purpose Funds	Total
2017 to date EM&V Funds			\$0
2017 to date Program Funds - Utility			\$0
2017 to date Program Funds - REN			\$0
2017 to date Program Funds - CCA			\$0
2018 to date EM&V Funds			\$0
2018 to date Program Funds - Utility			\$0
2018 to date Program Funds - REN	\$314,419	\$59,889	\$374,308
2018 to date Program Funds - CCA			\$0
2019 to date EM&V Funds			\$0
2019 to date Program Funds - Utility			\$0
2019 to date Program Funds - REN			\$0
2019 to date Program Funds - CCA			\$0
2020 to date EM&V Funds			\$0
2020 to date Program Funds - Utility			\$0
2020 to date Program Funds - REN	\$524,685	\$224,865	\$749,550
2020 to date Program Funds - CCA			\$0
2021 to date EM&V Funds			\$0
2021 to date Program Funds - Utility			\$0
2021 to date Program Funds - REN			\$0
2021 to date Program Funds - CCA			\$0

** For Non-IOU PAs: complete on the EM&V and REN/CCA; provide information to your IOU partner for the IOUs share of the commitment.

For IOU PA: Input IOU EM&V and IOU commitments. Incorporate REN/CCA information into the table. IOU Tab 5 will provide full picture of all committed funds for the IOU/CCA/REN combined portfolios.

Pa Name: Bay Area Regional Energy Network (BayREN)
 Budget Year: 2024-2031
 Table 7.1 - PA 2024-2031 Budget Savings By Segment

	Segment	Requested Budget	TSB	TRC ²	PAC ²	kWh	kW	Therms	First Year Net Elec CO2e	First Year Net Gas CO2e	Lifecycle Net KWH	Lifecycle Net Therms	Lifecycle Net Electric CO2e	Lifecycle Net Gas CO2e	Lifecycle Net CO2e from low-GWP Measures
2024	Resource Acquisition	4,223,632	4,723,456	0.82	1.12	5,572,463	719	124,421.94	815	728	72,720,636	1,947,776.25	11,273	11,394	-
	Market Support	5,849,395	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	24,519,591	1,964,605	0.11	0.10	6,316,410	226	114,534.92	(167)	2,121	41,035,975	1,272,771.76	(1,510)	17,124	-
	Codes & Standards	1,984,954	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,524,065	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio¹	38,101,637	6,688,061	0.19	0.19	11,888,872	944	238,956.86	648	2,849	113,756,611	3,220,548.01	9,763	28,519	-
2025	Resource Acquisition	4,878,705	5,350,679	0.82	1.10	6,113,250	789	136,496.65	738	799	79,777,913	2,136,800.95	12,612	12,500	-
	Market Support	6,421,557	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	25,415,053	2,015,901	0.11	0.11	6,414,084	229	110,912.91	(200)	2,127	42,076,267	1,197,476.91	(1,651)	16,976	-
	Codes & Standards	2,008,191	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,613,480	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio²	40,336,986	7,366,580	0.20	0.20	12,527,334	1,018	247,409.55	538	2,925	121,854,180	3,334,277.86	10,961	29,476	-
2026	Resource Acquisition	4,908,911	5,324,273	0.82	1.08	5,791,913	747	129,321.82	847	757	75,584,458	2,024,481.93	12,359	11,843	-
	Market Support	6,911,074	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	25,741,864	2,041,532	0.11	0.11	6,460,890	229	106,093.25	(199)	2,112	42,555,777	1,100,392.56	(1,759)	16,555	-
	Codes & Standards	2,065,581	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,651,143	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio³	41,278,573	7,365,804	0.19	0.20	12,252,802	976	235,415.07	648	2,869	118,140,236	3,124,874.49	10,600	28,398	-
2027	Resource Acquisition	4,941,325	5,241,225	0.82	1.06	5,400,038	697	120,572.04	791	705	70,470,489	1,887,507.51	11,797	11,042	-
	Market Support	7,253,613	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	26,085,694	2,193,635	0.12	0.11	6,554,997	236	108,308.90	(206)	2,150	43,593,224	1,140,703.13	(1,904)	17,061	-
	Codes & Standards	2,096,431	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,682,378	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio⁴	42,059,441	7,434,860	0.19	0.19	11,955,035	933	228,880.93	585	2,856	114,063,713	3,028,210.64	9,893	28,103	-
2028	Resource Acquisition	5,040,152	5,282,282	0.82	1.05	5,180,588	668	115,672.16	842	677	67,606,667	1,810,801.83	11,608	10,593	-
	Market Support	7,398,685	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	26,607,408	2,368,899	0.13	0.12	6,745,371	246	111,871.20	(227)	2,217	45,118,610	1,188,914.11	(2,071)	17,721	-
	Codes & Standards	2,138,360	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,716,025	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio⁴	42,900,629	7,651,181	0.20	0.20	11,925,959	914	227,543.36	615	2,894	112,725,277	2,999,715.94	9,537	28,315	-
2029	Resource Acquisition	5,140,955	5,286,234	0.82	1.03	4,937,625	637	110,247.29	863	645	64,436,006	1,725,877.69	11,286	10,096	-
	Market Support	7,546,659	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	27,139,556	2,551,391	0.13	0.13	6,942,528	256	115,574.22	(227)	2,287	46,707,210	1,239,357.59	(2,240)	18,411	-
	Codes & Standards	2,181,127	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,750,346	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio¹	43,758,642	7,837,625	0.20	0.20	11,880,153	893	225,821.52	636	2,932	111,143,216	2,965,235.29	9,046	28,507	-
2030	Resource Acquisition	5,243,774	5,346,343	0.82	1.02	4,773,038	616	106,572.38	648	623	62,288,139	1,668,348.44	11,093	9,760	-
	Market Support	7,697,592	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	27,682,347	2,747,077	0.14	0.14	7,146,746	266	119,424.62	(273)	2,359	48,361,981	1,292,143.46	(2,436)	19,131	-
	Codes & Standards	2,224,749	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,785,353	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio²	44,633,815	8,093,420	0.20	0.20	11,919,783	882	225,997.00	375	2,983	110,650,120	2,960,491.89	8,656	28,891	-
2031	Resource Acquisition	5,348,649	5,427,850	0.82	1.01	4,631,963	598	103,422.46	698	605	60,447,111	1,619,037.64	11,148	9,471	-
	Market Support	7,851,544	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	28,235,994	2,953,264	0.15	0.14	7,358,398	280	123,429.76	(303)	2,434	50,086,220	1,347,388.79	(2,630)	19,883	-
	Codes & Standards	2,269,244	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	1,821,059	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio²	45,526,491	8,381,114	0.20	0.21	11,990,360	877	226,852.22	395	3,039	110,533,331	2,966,426.43	8,518	29,354	-
8-Yr Total		338,596,214	60,818,644	0.19	0.20	96,340,299	7,438	1,856,876.52	4,440	23,347	912,866,683	24,599,780.54	76,973	229,563	-
2024-2027 Total	Resource Acquisition	18,952,573	20,639,632	0.82	1.09	22,877,663	2,951	510,812.45	3,191	2,988	298,553,496	7,996,566.64	48,041	46,780	-
	Market Support	26,435,639	-	-	-	-	-	-	-	-	-	-	-	-	-
	Equity	101,762,202	8,215,672	0.11	0.11	25,746,381	920	439,849.98	(773)	8,510	169,261,244	4,711,344.35	(6,825)	67,716	-
	Codes & Standards	8,155,157	-	-	-	-	-	-	-	-	-	-	-	-	-
	EM&V	6,471,066	-	-	-	-	-	-	-	-	-	-	-	-	-
	TOTAL Portfolio⁴	161,776,637	28,855,305	0.19	0.19	48,624,044	3,871	950,662.42	2,419	11,499	467,814,739	12,707,910.99	41,217	114,496	-
		QC ok	QC ok	BAD	BAD	QC ok	QC ok	QC ok	QC ok	QC ok	QC ok	QC ok	BAD	QC ok	QC ok

¹Portfolio level TSB, TRC, and PAC exclude C&S

²TRC and PAC are not additive, disregard QC error in row 65

Pa Name:	Bay Area Regional Energy Network (BayREN)
Budget Year:	2024-2024

Table 7.2 - PA 2024-2031 Budget Savings By Sector

		Requested Budget							First Year Net Elec CO2e	First Year Net Gas CO2e	Lifecycle Net KWH	Lifecycle Net Therms	Lifecycle Net Electric CO2e	Lifecycle Net Gas CO2e	Lifecycle Net Gas GWP Measures
	Sector		TSB ²	TRC ²	PAC ²	kWh	kW	Therms							
2024	Residential	19,254,406	1,964,605	0.14	0.13	6,316,410	226	114,534.92	(167)	2,121	41,035,975	1,272,771.76	(1,510)	17,124	-
	Commercial	8,332,751	4,723,456	0.48	0.57	5,572,463	719	124,421.94	815	728	72,720,636	1,947,776.25	11,273	11,394	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	2,107,341	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	2,916,768	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	1,981,352	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	1,984,954	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,524,065	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		38,101,637	6,688,061	0.19	0.19	11,888,872	944	238,956.86	648	2,849	113,756,611	3,220,548.01	9,763	28,519	-
2025	Residential	19,391,731	2,015,901	0.15	0.14	6,414,084	229	110,912.91	(200)	2,127	42,076,267	1,197,476.91	(1,651)	16,976	-
	Commercial	9,643,750	5,350,679	0.47	0.55	6,113,250	789	136,496.65	738	799	79,777,913	2,136,800.95	12,612	12,500	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	2,475,793	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,098,406	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,105,635	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,008,191	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,613,480	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		40,336,986	7,366,580	0.20	0.20	12,527,334	1,018	247,409.55	538	2,925	121,854,180	3,334,277.86	10,961	29,476	-
2026	Residential	19,523,892	2,041,532	0.15	0.14	6,460,890	229	106,093.25	(199)	2,112	42,555,777	1,100,392.56	(1,759)	16,555	-
	Commercial	9,704,682	5,324,273	0.47	0.55	5,791,913	747	129,321.82	847	757	75,584,458	2,024,481.93	12,359	11,843	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	2,886,653	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,295,192	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,151,430	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,065,581	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,651,143	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		41,278,573	7,365,805	0.19	0.20	12,252,802	976	235,415.07	648	2,869	118,140,236	3,124,874.49	10,600	28,398	-
2027	Residential	19,666,408	2,193,635	0.16	0.15	6,554,997	236	108,308.90	(206)	2,150	43,593,224	1,140,703.13	(1,904)	17,061	-
	Commercial	9,770,550	5,241,225	0.47	0.54	5,400,038	697	120,572.04	791	705	70,470,489	1,887,507.51	11,797	11,042	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	3,145,763	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,502,190	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,195,721	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,096,431	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,682,378	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		42,059,441	7,434,860	0.19	0.19	11,955,035	933	228,880.93	585	2,856	114,063,713	3,028,210.64	9,893	28,103	-
2028	Residential	20,059,736	2,368,899	0.17	0.16	6,745,371	246	111,871.20	(227)	2,217	45,118,610	1,188,914.11	(2,071)	17,721	-
	Commercial	9,965,961	5,282,282	0.46	0.53	5,180,588	668	115,672.16	842	677	67,606,667	1,810,801.83	11,608	10,593	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	3,208,678	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,572,234	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,239,635	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,138,360	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,716,025	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		42,900,629	7,651,181	0.20	0.20	11,925,959	914	227,543.36	615	2,894	112,725,277	2,999,715.94	9,537	28,315	-
2029	Residential	20,460,931	2,551,391	0.18	0.17	6,942,528	256	115,574.22	(227)	2,287	46,707,210	1,239,357.59	(2,240)	18,411	-
	Commercial	10,165,280	5,286,234	0.46	0.52	4,937,625	637	110,247.29	863	645	64,436,006	1,725,877.69	11,286	10,096	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	3,272,852	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,643,678	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,284,428	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,181,127	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,750,346	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		43,758,642	7,837,625	0.20	0.20	11,880,153	893	225,821.52	636	2,932	111,143,216	2,965,235.29	9,046	28,507	-
2030	Residential	20,870,150	2,747,077	0.18	0.18	7,146,746	266	119,424.62	(273)	2,359	48,361,981	1,292,143.46	(2,436)	19,131	-
	Commercial	10,368,586	5,346,343	0.46	0.52	4,773,038	616	106,572.38	648	623	62,288,139	1,668,348.44	11,093	9,760	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	3,338,309	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,716,552	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,330,117	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,224,749	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,785,353	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		44,633,815	8,093,420	0.20	0.20	11,919,783	882	225,997.00	375	2,983	110,650,120	2,960,491.89	8,656	28,891	-
2031	Residential	21,287,552	2,953,264	0.19	0.19	7,358,398	280	123,429.76	(303)	2,434	50,086,220	1,347,388.79	(2,630)	19,883	-
	Commercial	10,575,958	5,427,850	0.46	0.51	4,631,963	598	103,422.46	698	605	60,447,111	1,619,037.64	11,148	9,471	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	3,405,075	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	3,790,883	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	2,376,719	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	2,269,244	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	1,821,059	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		45,526,491	8,381,114	0.20	0.21	11,990,360	877	226,852.22	395	3,039	110,533,331	2,966,426.43	8,518	29,354	-
8-Yr Total		338,596,214	60,818,646	0.19	0.20	96,340,299	7,438	1,856,876.52	4,440	23,347	912,866,683	24,599,780.54	76,973	229,563	-
2024-2027 Total	Residential	77,836,437	8,215,673	0.15	0.14	25,746,381	920	439,849.98	(773)	8,510	169,261,244	4,711,344.35	(6,825)	67,716	-
	Commercial	37,451,733	20,639,633	0.47	0.55	22,877,663	2,951	510,812.45	3,191	2,988	298,553,496	7,996,566.64	48,041	46,780	-
	Industrial	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Agricultural	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Emerging Tech	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Public	10,615,550	0	0	0	-	-	-	-	-	-	-	-	-	-
	WE&T	12,812,556	0	0	0	-	-	-	-	-	-	-	-	-	-
	Finance	8,434,138	0	0	0	-	-	-	-	-	-	-	-	-	-
	OBf Loan Pool	-	0	0	0	-	-	-	-	-	-	-	-	-	-
	Codes & Stds	8,155,157	-	-	-	-	-	-	-	-	-	-	-	-	-
EMbV	6,471,066	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL Portfolio ⁵		161,776,637	28,855,306	0.19	0.19	48,624,044	3,871	950,662.42							

¹Portfolio level TSB, TBC, and PAC exclude C&S

²TBC and PAC are not additive, disregard OC error in row 119

[illegible]

		2024 Energy Efficiency Cap And Target Expenditure Projections						2025 Energy Efficiency Cap And Target Expenditure Projections						2026 Energy Efficiency Cap And Target Expenditure Projections						2027 Energy Efficiency Cap And Target Expenditure Projections					
		Expenditures			Cap & Target Performance			Expenditures			Cap & Target Performance			Expenditures			Cap & Target Performance			Expenditures			Cap & Target Performance		
		Non-Third Party Qualifying Costs (including PA costs and old-definition 3P/IGP contracts that don't meet the new definition)	Third Party Qualifying Costs ² (Local SW, CEC & AB 841)	Total Portfolio	Percent of Budget ⁴	Cap %	Target %	Non-Third Party Qualifying Costs (including PA costs and old-definition 3P/IGP contracts that don't meet the new definition)	Third Party Qualifying Costs ² (including SW)	Total Portfolio	Percent of Budget ⁴	Cap %	Target %	Non-Third Party Qualifying Costs (including PA costs and old-definition 3P/IGP contracts that don't meet the new definition)	Third Party Qualifying Costs ² (including SW)	Total Portfolio	Percent of Budget ⁴	Cap %	Target %	Non-Third Party Qualifying Costs (including PA costs and old-definition 3P/IGP contracts that don't meet the new definition)	Third Party Qualifying Costs ² (including SW)	Total Portfolio	Percent of Budget ⁴	Cap %	Target %
Line	Budget Category																								
1	Administrative Costs																								
2	PA ¹	\$ 2,340,810	\$ 2,340,810		6.1%	10.0%		\$ 2,418,948	\$ 2,418,948		6.3%	10.0%		\$ 2,495,440	\$ 2,495,440		6.9%	10.0%		\$ 2,574,918	\$ 2,574,918		6.8%	10.0%	
3	Non-PA Third Party & Partnership ²	\$ -	\$ -		0.0%			\$ -	\$ -		0.0%			\$ -	\$ -		0.0%			\$ -	\$ -		0.0%	10.0%	
4	PA & Non-PA Target Exempt Programs ³	\$ 242,537	\$ -	\$ 242,537				\$ 266,678	\$ -	\$ 266,678				\$ 273,900	\$ -	\$ 273,900				\$ 278,522	\$ -	\$ 278,522			
5	Marketing and Outreach Costs ⁴																								
6	Marketing & Outreach	\$ 3,944,915	\$ 3,944,915		10.4%	6.0%		\$ 4,134,829	\$ 4,134,829		10.9%	6.0%		\$ 4,252,385	\$ 4,252,385		11.2%	6.0%		\$ 4,371,022	\$ 4,371,022		11.5%	6.0%	
7	Statewide Marketing & Outreach ⁵	\$ -	\$ -					\$ -	\$ -					\$ -	\$ -					\$ -	\$ -				
8	Direct Implementation Costs																								
9	Direct Implementation (Incentives and Rebates)	\$ 15,600,000	\$ 15,600,000					\$ 16,896,488	\$ 16,896,488					\$ 17,140,655	\$ 17,140,655					\$ 17,140,655	\$ 17,140,655				
10	Direct Implementation (Non Incentives and Non Rebates)	\$ 12,706,893	\$ 12,706,893		33.3%	20.0%		\$ 13,265,050	\$ 13,265,050		34.8%	20.0%		\$ 13,673,369	\$ 13,673,369		35.9%	20.0%		\$ 14,194,037	\$ 14,194,037		37.3%	20.0%	
11	Direct Implementation Target Exempt Programs (Non Incentives and Non Rebates) ⁷	\$ 1,742,417	\$ 1,742,417					\$ 1,741,513	\$ 1,741,513					\$ 1,791,681	\$ 1,791,681					\$ 1,817,869	\$ 1,817,869				
12	EM&V Costs (PA and Energy Division) ^{6,7}	\$ 1,524,065	\$ 1,524,065		4.0%	4.0%		\$ 1,613,480	\$ 1,613,480		4.0%	4.0%		\$ 1,651,143	\$ 1,651,143		4.0%	4.0%		\$ 1,682,378	\$ 1,682,378		4.0%	4.0%	
12a	EM&V - PA	\$ 419,118	\$ 419,118					\$ 443,707	\$ 443,707					\$ 454,064	\$ 454,064					\$ 462,654	\$ 462,654				
12b	EM&V - ED	\$ 1,104,947	\$ 1,104,947					\$ 1,169,773	\$ 1,169,773					\$ 1,197,079	\$ 1,197,079					\$ 1,219,724	\$ 1,219,724				
13	Total Portfolio Budget (includes PA Program and EM&V Budget + SW ME&O) ⁸	\$ 38,101,637	\$ 38,101,637					\$ 40,336,986	\$ 40,336,986					\$ 41,278,573	\$ 41,278,573					\$ 42,059,441	\$ 42,059,441				
14	PA Spending Budget Request (PA Program and EM&V) ⁹		\$ 38,101,637						\$ 40,336,986						\$ 41,278,573						\$ 42,059,441				
15	Total Third-Party Implementer Contracts + CEC AB 841 (as defined per D.16-08-019, OP 10) ^{10,11}	\$ -	\$ -		0.0%	60.0%		\$ -	\$ -		0.0%	60.0%		\$ -	\$ -		0.0%	60.0%		\$ -	\$ -		0.0%	60.0%	

Notes:

1. 10% cap requirement based on D. 09-09-047 is set for IOU only.

2. New Third party program definition per D.16-08-019, OP 10. For Row 3 of this table, the "Third Party & Partnership" administrative costs under the "Non-Third Party Qualifying Costs" column are costs for programs that met the old Third Party definition prior to the transition to the new third party definition.

3. Target Exempt Programs are Non-Resource Programs which include: Emerging Technologies, Workforce Education & Training, Strategic Energy Resources (SER) program, 3P Placeholder for Public LGPs, and Codes & Standards programs (excluding Building Codes Advocacy, Appliance Standards Advocacy and National Standards Advocacy).

4. Statewide Marketing & Outreach (SW ME&O) is excluded from the Marketing and Outreach cost target calculation per D.13-12-038, at p. 82.

5. Statewide ME&O budgets for October 2019 through 2021 were requested in Advice Letter 4058-07544-E and supplements, and are pending approval. The amount in Line 7 represents the portion allocated to EE.

6. For IOUs, EM&V costs only includes IOU's Total EM&V budget (PA + ED) and does not include REN or CCAs EM&V budget. For RENs & CCAs, include EM&V-PA Budget and EM&V-ED = \$0.

7. The EM&V percentage is based on PA's total portfolio budget of \$X, which excludes SWME&O, RENs, CCAs and CEC AB 841. This is the Total in line 13, minus SWME&O in line 7.

8. As directed in the Energy Efficiency Policy Manual Version 5 July 2013, page 92, this total includes SW ME&O and excludes REN and CCA budgets and is the denominator used to calculate the IOU PA Admin, Marketing, and Direct Implementation Non-Incentives percentages.

9. IOU PA's 2021 Proposed Budget of \$X excludes SWME&O budget of \$Y.

10. IOU PA's percentage for Third-Party Implementer Contracts uses \$X as its denominator, which is IOU PA Subtotal including EM&V, but excluding SWME&O, REN, and CCA. This is the Total in line 13.15, minus SWME&O in line 7.

11. IOU's Third-Party Implementer Contracts (as defined per D.16-08-019, OP 10) includes third-party contract and incentive budgets and statewide qualifying contract and incentive budgets.

Pa Name:
Budget Year:
FUNCTION DEFINITIONS

Bay Area Regional Energy Network (BayREN)
2024-2031

Aggregated Category	Definition	Functional Category	Detailed Definition
Policy, Strategy, and Regulatory Reporting Compliance	Includes policy, strategy, compliance, audits and regulatory support	Planning & Compliance	DSM Goal Planning; lead legislative review/positioning; policy support on reg proceedings; portfolio optimization; end use-market strategy; DSM lead for PRP, DRP, ES; locational targeting; audit support; SOX certifications; developing control plans; developing action plans; continuous monitoring; inspections; program/product QA/QC; decision compliance oversight/tracking; data requests; policies & procedures
		Company Regulatory Support	Case management for EE proceedings
Program management	Includes labor, contracts, admin costs for program design, program implementation, product and channel management for all sectors	Program Management & Delivery	Market Segment & Locational Resource programs; Business Core & Finance Programs; Large Power DR Programs; Non-Res HVAC & Technical Services; Program Integration & Optimization; Residential EE & DR Programs (incl. Res HVAC QI); IQP & Economic Assistance Programs; Mass Market DR Programs; Education & Information Products & Services; Energy Leader Partnerships; Institutional & Federal Partnerships; REN Coordination; Strategic Plan Support; Energy/Water Program Mgt; Service Level Agreement Tracking
		Product Management	Manage end-to-end new products and services (P&S) intake, evaluation, and launch process; develop and facilitate P&S governance teams, coordination of all sub-process owners, stakeholders, and technical resources required to evaluate and launch new products; evaluate and launch new services and OOR opportunities; develop external partnerships & strategic alliances; work with various companies and associations to help advance standards, products, and tech.; work with external experts to help reduce SCE costs to deliver new prog. and products; develop and launch new customer technologies, products, services for residential and business customers; conduct customer pilots of new technologies and programs; lead customer field demonstrations of new technologies and products; align new P&S to savings programs/incentives; develop new programs/incentives in support of savings goals
		Channel Management	
		Contract Management	Budget forecasting, spend tracking, invoice processing, and contract management with vendors and suppliers; Regulatory support for ME&O activities
Engineering Services	Includes engineering, project management, and contracts associated with workpaper development and pre/post sales project technical reviews and design assistance	Custom project support	Management of Emerging Products projects; Customized reviews; LCR/RFO support; Ex-ante review management; Technical policy support; Technical assessments; Workpapers; Tool development; End use subject matter expertise
		Deemed workpapers	
		Project management	
Customer Application/Rebate and Incentive Processing	Costs associated with application management and rebate and incentive processing (deemed and custom)	Rebate & Application Processing	
Inspections	Costs associated with project inspections	Inspections	
Portfolio Analytics	Includes analytics support, including internal performance reporting and external reporting	Data analytics	Data development for programs, products and services; Standard and ad hoc data extracts for internal and external clients; Database management; CPUC, CAISO reporting; Data reconciliation; E3 support; Compliance filing support; Funding Oversight; ESPI support; Program Results Data & Performance
EM&V	EM&V expenditures	EM&V Studies	Program and product review; manage evaluation studies
		EM&V Forecasting	EE lead for LTPP and IEPR; market potential study; integration w/ procurement planning; CPUC Demand Analysis Working Group
ME&O	Costs associated with utility EE marketing; no statewide; focus on outsourced portion	Marketing	Customer Programs, Products, and Services Marketing; Digital Product Development; Digital Content & Optimization
		Customer insights	Voice of the Customer; Customer satisfaction study measurement and analysis (JD Power, SDS); Customer testing/research
Account Management / Sales	Costs associated with account rep energy efficiency sales functions	Account Management	
IT	IT project specific costs and regular O&M	IT - project specific	Projects and minor enhancements. Includes project management/business integration ("PMO/BID"). Excluded: maintenance (which SCE defines as when something goes down, normal batch processing, verifying interfaces, etc.).
		IT - regular O&M	
Call Center	Costs associated with call center staff fielding EE program questions	Call Center	
Incentives	Costs of rebate and incentive payments to customers	Incentives	

Pa Name:	Bay Area Regional Energy Network (BayREN)
Budget Year:	2024-2027
PORTFOLIO SUMMARY	

Sector	2020 E Portfolio Expenditure (Expected)				2024 E Portfolio Budget				2025 E Portfolio Budget				2026 E Portfolio Budget				2027 E Portfolio Budget				2020 E Portfolio Savings (Expected)				2024 E Portfolio Forecast Savings				2025 E Portfolio Forecast Savings				2026 E Portfolio Forecast Savings				2027 E Portfolio Forecast Savings			
	Labor	Non-Labor (incl. Incentives)	Incentives	Total	Labor	Non-Labor (incl. Incentives)	Incentives	Total	Labor	Non-Labor (incl. Incentives)	Incentives	Total	Labor	Non-Labor (incl. Incentives)	Incentives	Total	Labor	Non-Labor (incl. Incentives)	Incentives	Total	KWH	KW	MTHRS	KWH	KW	MTHRS	KWH	KW	MTHRS	KWH	KW	MTHRS								
Residential	\$ 798,460	\$ 8,833,697	\$ 4,496,161	\$ 15,128,318	\$ 15,435,563	\$ 3,417,732	\$ 5,436,084	\$ 10,254,460	\$ 8,117,767	\$ 5,423,748	\$ 10,000,000	\$ 19,393,915	\$ 3,413,118	\$ 4,460,700	\$ 10,000,000	\$ 19,524,892	\$ 3,525,890	\$ 5,493,015	\$ 10,000,000	\$ 19,666,408	2,330,693	308	0.15	6,316,410	226	114,535	6,414,084	229	110,513	6,460,880	229	105,093	6,554,997	236	106,308					
Commercial	\$ 68,254	\$ 1,162,776	\$ -	\$ 1,230,030	\$ 1,480,136	\$ 1,052,435	\$ 5,000,000	\$ 8,382,793	\$ 1,770,758	\$ 1,913,209	\$ 10,000,000	\$ 9,649,790	\$ 1,782,212	\$ 1,952,463	\$ 10,000,000	\$ 10,704,682	\$ 1,819,712	\$ 1,934,838	\$ 6,000,000	\$ 9,760,500	-	-	-	5,572,463	719	124,422	6,113,290	789	136,497	5,791,913	747	129,322	5,400,008	697	120,572					
Industrial	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Agricultural	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Transportation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Energy	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Construction	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Healthcare	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Education	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Government	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Other	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Grand Total	\$ 866,714	\$ 9,996,493	\$ 4,496,161	\$ 15,359,368	\$ 16,915,700	\$ 4,470,167	\$ 10,400,000	\$ 18,738,453	\$ 9,128,534	\$ 7,337,957	\$ 20,000,000	\$ 19,043,780	\$ 5,326,230	\$ 6,413,163	\$ 20,000,000	\$ 20,429,574	\$ 5,345,702	\$ 7,427,853	\$ 16,000,000	\$ 20,726,908	2,330,693	308	0.15	6,316,410	226	114,535	6,414,084	229	110,513	6,460,880	229	105,093	6,554,997	236	106,308					
Non-Spending Budget Request	\$ 1,168,872	\$ 17,765,524	\$ 4,496,161	\$ 23,450,557	\$ 24,401,724	\$ 7,702,793	\$ 15,798,646	\$ 33,600,000	\$ 23,763,377	\$ 7,929,167	\$ 15,511,313	\$ 31,686,486	\$ 6,036,936	\$ 8,164,855	\$ 15,579,003	\$ 31,740,455	\$ 4,276,275	\$ 8,400,755	\$ 16,510,000	\$ 31,740,455	\$ 4,242,051	2,380,620	300	0.15	11,888,872	944	238,957	12,527,314	1,014	247,410	12,252,802	976	235,415	11,950,015	893	228,881				

** For SDG&E and SCG the loan pool is not part of the authorized EE portfolio budget and is collected and tracked through a separate balancing account.

A. - Attachment A, Question C.10

"There is a single table summarizing energy savings targets, and expenditures by sector for the on-specification sector. This table should enable: (i) identification of relative contributions of the sectors to savings targets, and relative efficiency measures."

1. The ENR and CRA invite the PAs to prepare a common table format for this information. "Where" have anything specific is stated.

2. Additionally, include a brief description of the method used by the PA to estimate the costs provided in the C.5 Table.

Pa Name:
Budget Year:
PORTFOLIO STAFFING

Bay Area Regional Energy Network (BayREN)
2024-2027

Functional Group	2020 EE Portfolio FTE (2)	2022 EE Portfolio FTE (2)	2023 EE Portfolio FTE (2)	2024 EE Portfolio FTE (2) (3)	2025 EE Portfolio FTE (2) (3)	2026 EE Portfolio FTE (2) (3)	2027 EE Portfolio FTE (2) (3)
Policy, Strategy, and Regulatory Reporting Compliance	1.6	1.8	1.8	4.1	4.1	4.1	4.1
Program Management	2.1	2.6	3.4	12.5	13.0	13.5	13.5
Engineering Services	-	-	-	2.1	2.1	2.1	2.1
Customer Application/Rebate/Incentive Processing	-	-	-	1.5	1.7	2.0	2.0
Customer Project Inspections	-	-	-	-	-	-	-
Portfolio Analytics (1)	-	-	-	0.3	0.3	0.3	0.3
EM&V	-	-	-	-	-	-	-
ME&O (Local)	-	1.0	1.0	12.3	12.3	12.3	12.3
Account Management / Sales	-	-	-	-	-	-	-
IT	-	-	-	0.0	0.0	0.0	0.0
Call Center	-	-	-	-	-	-	-
Total	3.7	5.4	6.2	32.8	33.6	34.3	34.3

Notes:

(1) SDG&E does not have a Portfolio Analytics group. Each group performs their own analytics.

(2) FTE is equal to productive labor of 1788 hour per year.

(3) Beginning in 2024, BayREN's FTE figure reflects staffing at ABAG/MTC and BayREN member agencies. Prior to 2024, BayREN's FTE figure reflects only staffing at A

II
A. → Narrative description of in-house departments/organizations supporting the PA's EE portfolio

¶

- → Functions conducted by each department/organization¶
- → Management structure and org chart¶
- → Staffing needs by department/organization, including current and forecast for 2018, as well as a description of what changes are expected in the near term (2019-2020) or why it's impossible to predict beyond 2018, if that's the PA's position.¶
- → Non-program functions currently performed by contractors (e.g. advisory consultants), as well as a description of what changes are expected in the near term (2019-2020) or why it's impossible to predict beyond 2018, if that's the PA's position.¶
- → Anticipated drivers of in-house cost changes by department/organization¶
- → Explanation of method for forecasting costs¶

¶

¶

B. → Table showing PA EE headcount by department/organization

¶

- → TURN and ORA like this example, taken from testimony PG&E's 2017 GRC addressing its Energy Procurement department. We would be looking for 2016 or 2017 "recorded" positions, depending on what's most appropriate for the PA, or both, if that provides the most clarity. For forecast years, we'd want at least 2018.¶

			2020 EE Portfolio Expenditures (Expected) (4)	2022 EE Portfolio Budget (4)	2023EE Portfolio Budget (4)	2024 EE Portfolio Budget (4) (5)	2025 EE Portfolio Budget (4) (5)	2026 EE Portfolio Budget (4) (5)	2027 EE Portfolio Budget (4) (5)
Sector	Cost Element	Functional Group							
Residential	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	\$ 325,880.070	\$ 504,566.343	\$ 489,182.823	\$ 553,246.280	\$ 568,461.250	\$ 584,824.480	\$ 600,870.780
		Program Management	\$ 283,280.560	\$ 467,363.710	\$ 472,930.210	\$ 1,106,768.820	\$ 1,143,442.060	\$ 1,172,422.270	\$ 1,219,176.010
		Engineering services	\$ -	\$ -	\$ -	\$ 289,960.560	\$ 298,658.880	\$ 307,618.560	\$ 316,847.160
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ 98,424.100	\$ 101,376.800	\$ 104,418.100	\$ 107,550.650
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		ME&O (Local)	\$ 179,299.840	\$ 267,880.947	\$ 277,697.967	\$ 1,169,322.210	\$ 1,206,028.210	\$ 1,243,904.900	\$ 1,280,945.290
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ 788,460.470	\$ 1,239,811.000	\$ 1,239,811.000	\$ 3,217,721.970	\$ 3,317,967.200	\$ 3,413,188.310	\$ 3,525,389.890
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Other Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Program Implementation	\$ 6,353,717.160	\$ 7,132,025.964	\$ 6,768,401.769	\$ -	\$ -	\$ -	\$ -
		Policy, Strategy, and Regulatory Reporting Compliance	\$ 329,889.110	\$ 332,394.554	\$ 373,221.187	\$ 596,304.500	\$ 617,263.640	\$ 625,961.540	\$ 634,905.390
		Program Management	\$ -	\$ -	\$ -	\$ 2,464,946.530	\$ 2,422,955.260	\$ 2,433,564.800	\$ 2,439,069.770
		Engineering services	\$ -	\$ -	\$ -	\$ 1,400,000.000	\$ 1,400,000.000	\$ 1,400,000.000	\$ 1,400,000.000
		Customer Application/Rebate/Incentive Processing	\$ 254,289.640	\$ 279,576.822	\$ 295,272.103	\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ 66,210.140	\$ 97,914.378	\$ 139,975.270	\$ 48,750.000	\$ 48,750.000	\$ 48,750.000	\$ 48,750.000
		ME&O (Local)	\$ 1,330,833.210	\$ 1,622,153.283	\$ 1,993,294.671	\$ 916,683.000	\$ 924,794.900	\$ 942,427.350	\$ 958,292.950
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT	\$ -	\$ -	\$ -	\$ 10,000.000	\$ 10,000.000	\$ 10,000.000	\$ 10,000.000
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	\$ 6,496,163.050	\$ 8,750,000.000	\$ 9,050,000.000	\$ 10,600,000.000	\$ 10,650,000.000	\$ 10,650,000.000	\$ 10,650,000.000
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ 14,831,102.310	\$ 18,214,065.000	\$ 18,620,165.000	\$ 16,036,684.030	\$ 16,073,763.800	\$ 16,110,703.690	\$ 16,141,018.110
Residential Total			\$ 15,619,562.780	\$ 19,453,876.000	\$ 19,859,976.000	\$ 19,254,406.000	\$ 19,391,731.000	\$ 19,523,892.000	\$ 19,666,408.000
	Other (collected through GRC) (2)	Labor Overheads	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) BayREN's Residential Budget Detail includes the Single Family (BayREN08), Green Labeling (BAYREN07), and Multifamily (BAYREN02) programs.

(5) Beginning in 2024, BayREN's labor costs are forecasted to be incurred by both ABAG/MTC and BayREN member agencies.

Prior to 2024, BayREN's labor costs reflected those only incurred directly by ABAG/MTC, with all member agencies' costs reflected as non-labor.

C. → Table showing costs by functional area of management structure

- ¶
- Expenses broken out into labor, non-labor O&M (with contract labor identified)¶
 - Identify any capital costs¶

B. → Attachment A, Question C.9

¶

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”¶

- ¶
- TURN and ORA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind.¶
 - Additionally, include a brief description of the method used by the PA to estimate the cpts presented in the C.9 Table.¶

			2020 EE Portfolio Expenditures (Expected) (4)	2022 EE Portfolio Budget (4)	2023 EE Portfolio Budget (4)	2024 EE Portfolio Budget (4) (5)	2025 EE Portfolio Budget (4) (5)	2026 EE Portfolio Budget (4) (5)	2027 EE Portfolio Budget (4) (5)
Sector	Cost Element	Functional Group							
Commercial	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	\$ 57,230.790	\$ 129,966.938	\$ 129,966.938	\$ 346,893.220	\$ 357,006.990	\$ 367,564.100	\$ 378,285.490
		Program Management	\$ 11,023.280	\$ 25,033.062	\$ 25,033.062	\$ 477,207.220	\$ 491,337.660	\$ 505,879.540	\$ 521,244.920
		Engineering services	\$ -	\$ -	\$ -	\$ 281,906.100	\$ 290,362.800	\$ 299,073.600	\$ 308,045.850
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ 268,482.000	\$ 276,536.000	\$ 284,832.000	\$ 293,377.000
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		ME&O (Local)	\$ -	\$ -	\$ -	\$ 295,088.280	\$ 304,052.880	\$ 313,494.130	\$ 323,023.180
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT	\$ -	\$ -	\$ -	\$ 10,739.280	\$ 11,061.440	\$ 11,393.280	\$ 11,735.080
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ 68,254.070	\$ 155,000.000	\$ 155,000.000	\$ 1,680,316.100	\$ 1,730,357.770	\$ 1,782,236.650	\$ 1,835,711.520
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Other Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Program Implementation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Policy, Strategy, and Regulatory Reporting Compliance	\$ 1,057,590.330	\$ 1,517,822.794	\$ 1,639,805.953	\$ 109,500.000	\$ 109,500.000	\$ 109,500.000	\$ 109,500.000
		Program Management	\$ 48,523.000	\$ 69,638.794	\$ 75,235.469	\$ 116,297.900	\$ 117,237.630	\$ 118,205.010	\$ 119,196.480
		Engineering services	\$ -	\$ -	\$ -	\$ 300,000.000	\$ 350,000.000	\$ 350,000.000	\$ 350,000.000
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ 300,000.000	\$ 400,000.000	\$ 400,000.000	\$ 400,000.000
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ 300,000.000	\$ 400,000.000	\$ 400,000.000	\$ 400,000.000
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ 145,500.000	\$ 145,500.000	\$ 145,500.000	\$ 145,500.000
		ME&O (Local)	\$ 55,662.650	\$ 79,885.412	\$ 86,305.578	\$ 361,137.000	\$ 371,154.600	\$ 379,240.340	\$ 390,642.000
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT (4)	\$ -	\$ -	\$ -	\$ 20,000.000	\$ 20,000.000	\$ 20,000.000	\$ 20,000.000
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	\$ -	\$ 2,000,000.000	\$ 2,000,000.000	\$ 5,000,000.000	\$ 6,000,000.000	\$ 6,000,000.000	\$ 6,000,000.000
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ 1,161,775.980	\$ 3,667,347.000	\$ 3,801,347.000	\$ 6,652,434.900	\$ 7,913,392.230	\$ 7,922,445.350	\$ 7,934,838.480
Commercial Total (5)			\$ 1,230,030.050	\$ 3,822,347.000	\$ 3,956,347.000	\$ 8,332,751.000	\$ 9,643,750.000	\$ 9,704,682.000	\$ 9,770,550.000
	Other (collected through GRC) (2)	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) BayREN's Commercial Sector Detail includes BayREN Business (BAYREN06) and BayREN Business Refrigerant Replacement (BAYREN10) programs.

(5) Beginning in 2024, BayREN's labor costs are forecasted to be incurred by both ABAG/MTC and BayREN member agencies.
Prior to 2024, BayREN's labor costs reflected those only incurred directly by ABAG/MTC, with all member agencies' costs reflected as non-labor.

C. → Table showing costs by functional area of management structure

- Expenses broken out into labor, non-labor O&M (with contract labor identified)
- Identify any capital costs

B. → Attachment A, Question C.9

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

- TURN and ORA invite the PAs to propose a common table format for this information. “We don’t have anything specific in mind.”
- Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

			2020 EE Portfolio Expenditures (Expected)	2022 EE Portfolio Budget	2023 EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Sector	Cost Element	Functional Group							
Industrial	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance							
		Program Management							
		Engineering services							
		Customer Application/Rebate/Incentive Processing							
		Customer Project Inspections							
		Portfolio Analytics							
		ME&O (Local)							
		Account Management / Sales							
		IT							
		Call Center							
	Labor Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)							
		Local/Government Partnerships Contracts (3)							
		Other Contracts							
		Program Implementation							
		Policy, Strategy, and Regulatory Reporting Compliance							
		Program Management							
		Engineering services							
		Customer Application/Rebate/Incentive Processing							
		Customer Project Inspections							
		Portfolio Analytics							
		ME&O (Local)							
		Account Management / Sales							
		IT (4)							
		Call Center							
		Facilities							
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs							
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)							
	Non-Labor Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Industrial Total (5)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other (collected through GRC) (2)	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

C. → Table showing costs by functional area of management structure

- → Expenses broken out into labor, non-labor O&M (with contract labor identified)
- → Identify any capital costs

B. → Attachment A, Question C.9

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

- → TURN and ORA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind.
- → Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

Sector	Cost Element	Functional Group	2020 EE Portfolio Expenditures (Expected)	2022 EE Portfolio Budget	2023 EE Portfolio Budget	2024 EE Portfolio Budget	2025 EE Portfolio Budget	2026 EE Portfolio Budget	2027 EE Portfolio Budget
Agricultural	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance							
		Program Management							
		Engineering services							
		Customer Application/Rebate/Incentive Processing							
		Customer Project Inspections							
		Portfolio Analytics							
		ME&O (Local)							
		Account Management / Sales							
		IT							
		Call Center							
	Labor Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)							
		Local/Government Partnerships Contracts (3)							
		Other Contracts							
		Program Implementation							
		Policy, Strategy, and Regulatory Reporting Compliance							
		Program Management							
		Engineering services							
		Customer Application/Rebate/Incentive Processing							
		Customer Project Inspections							
		Portfolio Analytics							
		ME&O (Local)							
		Account Management / Sales							
		IT (4)							
		Call Center							
		Facilities							
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs							
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)							
	Non-Labor Total		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Agricultural Total (\$)			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Other (collected through GRC) (2)	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) IT Costs are included in " Policy, Strategy, and Regulatory Reporting Compliance".

C. → Table showing costs by functional area of management structure

- Expenses broken out into labor, non-labor O&M (with contract labor identified)
- Identify any capital costs

B. → Attachment A, Question C.9

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

- TURN and ORA invite the PAs to propose a common table format for this information. We don't have anything specific in mind.
- Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

			2020 EE Portfolio Expenditures (Expected) (4)	2022 EE Portfolio Budget (4)	2023 EE Portfolio Budget (4)	2024 EE Portfolio Budget (4) (5)	2025 EE Portfolio Budget (4) (5)	2026 EE Portfolio Budget (4) (5)	2027 EE Portfolio Budget (4) (5)
Sector	Cost Element	Functional Group							
Public Sector	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	\$ -	\$ -	\$ -	\$ 239,299.530	\$ 246,092.510	\$ 253,175.050	\$ 260,364.260
		Program Management	\$ -	\$ -	\$ -	\$ 718,033.310	\$ 738,291.030	\$ 759,105.600	\$ 780,492.680
		Engineering services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ 63,635.210	\$ 65,416.990	\$ 67,248.670	\$ 69,131.630
		ME&O (Local)	\$ -	\$ -	\$ -	\$ 163,730.760	\$ 168,556.670	\$ 173,808.840	\$ 178,969.330
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ -	\$ -	\$ -	\$ 1,184,698.810	\$ 1,218,357.200	\$ 1,253,338.160	\$ 1,288,957.900
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Other Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Program Implementation	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Policy, Strategy, and Regulatory Reporting Compliance	\$ -	\$ -	\$ -	\$ 138,865.080	\$ 140,063.580	\$ 150,897.080	\$ 151,027.080
		Program Management	\$ -	\$ -	\$ -	\$ 483,926.440	\$ 360,448.020	\$ 369,272.560	\$ 392,482.820
		Engineering services	\$ -	\$ -	\$ -	\$ 200,385.000	\$ 396,735.000	\$ 496,035.000	\$ 697,635.000
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ 16,432.500	\$ 17,734.500	\$ 17,734.500	\$ 17,734.500
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ 6,573.000	\$ 17,734.500	\$ 17,734.500
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ 11,302.700	\$ 19,592.200	\$ 18,580.700	\$ 17,130.700
		ME&O (Local)	\$ -	\$ -	\$ -	\$ -	\$ 3,286.500	\$ 5,911.500	\$ 5,911.500
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT (4)	\$ -	\$ -	\$ -	\$ 45,810.770	\$ 24,140.840	\$ 22,817.840	\$ 22,817.840
		Call Center	\$ -	\$ -	\$ -	\$ 42,352.200	\$ 43,676.660	\$ 43,676.660	\$ 43,676.660
		Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	\$ -	\$ -	\$ -	\$ -	\$ 246,487.500	\$ 490,654.500	\$ 490,654.500
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ -	\$ -	\$ -	\$ 922,642.190	\$ 1,257,435.800	\$ 1,633,314.840	\$ 1,856,805.100
Public Sector Total (5)			\$ -	\$ -	\$ -	\$ 2,107,341.000	\$ 2,475,793.000	\$ 2,886,653.000	\$ 3,145,763.000
	Other (collected through GRC) (2)	Labor Overheads				\$ -	\$ -	\$ -	\$ -

Notes:

(1) Labor costs are already loaded with (state loaders covered by EE)

(2) These costs are collected through GRC D.16-06-054

(3) LGP contracts that directly support the sector is included/not included in this item

(4) BayREN's Public Sector Detail includes the Integrated Energy Services (BAYREN11) and Targeted Decarbonization Resources (BAYREN12) program

(5) Beginning in 2024, BayREN's labor costs are forecasted to be incurred by both ABAG/MTC and BayREN member agencies.
Prior to 2024, BayREN's labor costs reflected those only incurred directly by ABAG/MTC, with all member agencies' costs reflected as non-labor.

C. → **Table showing costs by functional area of management structure**

- Expenses broken out into labor, non-labor O&M (with contract labor identified)
- Identify any capital costs

B. → **Attachment A, Question C.9**

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

- TURN and ORA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind.
- Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

			2020 EE Portfolio Expenditures (Expected) (4)	2022 EE Portfolio Budget (4)	2023 EE Portfolio Budget (4)	2024 EE Portfolio Budget (4) (5)	2025 EE Portfolio Budget (4) (5)	2026 EE Portfolio Budget (4) (5)	2027 EE Portfolio Budget (4) (5)
Sector	Cost Element	Functional Group							
Cross-Cutting	Labor(1)	Policy, Strategy, and Regulatory Reporting Compliance	\$ 65,955.850	\$ 213,634.250	\$ 221,726.450	\$ 341,944.000	\$ 342,150.860	\$ 345,295.370	\$ 351,038.300
		Program Management	\$ 245,366.250	\$ 446,365.750	\$ 463,273.550	\$ 1,036,627.000	\$ 1,067,365.110	\$ 1,098,989.450	\$ 1,131,949.390
		Engineering services	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ 33,428.690	\$ 34,364.700	\$ 35,326.910	\$ 36,316.060
		ME&O (Local)	\$ -	\$ -	\$ -	\$ 480,333.200	\$ 492,484.660	\$ 506,177.760	\$ 518,959.240
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Labor Total		\$ 311,322.100	\$ 660,000.000	\$ 685,000.000	\$ 1,892,332.890	\$ 1,936,365.330	\$ 1,985,789.490	\$ 2,038,262.990
	Non-Labor	Third-Party Implementer (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Local/Government Partnerships Contracts (3)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Other Contracts	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Program Implementation	\$ 982,732.910	\$ 960,168.080	\$ 948,239.190	\$ -	\$ -	\$ -	\$ -
		Policy, Strategy, and Regulatory Reporting Compliance	\$ 30,819.250	\$ 50,642.120	\$ 46,284.360	\$ 226,140.000	\$ 233,640.000	\$ 236,462.400	\$ 236,462.400
		Program Management	\$ 144,965.710	\$ 171,039.800	\$ 119,826.450	\$ 4,440,156.110	\$ 4,719,811.170	\$ 4,955,243.200	\$ 5,180,633.960
		Engineering services	\$ -	\$ -	\$ -	\$ 147,120.000	\$ 141,120.000	\$ 145,353.600	\$ 145,353.600
		Customer Application/Rebate/Incentive Processing	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Customer Project Inspections	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Portfolio Analytics	\$ -	\$ -	\$ -	\$ 58,800.000	\$ 58,800.000	\$ 60,564.000	\$ 60,564.000
		ME&O (Local)	\$ -	\$ -	\$ -	\$ 113,525.000	\$ 117,495.500	\$ 123,790.310	\$ 128,065.050
		Account Management / Sales	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		IT (4)	\$ -	\$ -	\$ -	\$ 5,000.000	\$ 5,000.000	\$ 5,000.000	\$ 5,000.000
		Call Center	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Facilities	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Incentives--(PA-implemented and Other Contracts Program Implementation) Programs	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
		Incentives--Third Party Program (as defined per D.16-08-019, OP 10)	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	Non-Labor Total		\$ 1,158,517.870	\$ 1,181,850.000	\$ 1,114,350.000	\$ 4,990,741.110	\$ 5,275,866.670	\$ 5,526,413.510	\$ 5,756,079.010
Cross-Cutting Total (5)			\$ 1,469,839.970	\$ 1,841,850.000	\$ 1,799,350.000	\$ 6,883,074.000	\$ 7,212,232.000	\$ 7,512,203.000	\$ 7,794,342.000
	Other (collected through GRC) (2)	Labor Overheads							
			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Notes:

- (1) Labor costs are already loaded with (state loaders covered by EE)
- (2) These costs are collected through GRC D.16-06-054
- (3) LGP contracts that directly support the sector is included/not included in this item
- (4) BayREN's Cross Cutting Sector Detail includes the Codes & Standards (BAYREN03), Water Upgrades Save (BAYREN04), and Climate Careers (BAYREN09) progr ¶
- (5) Beginning in 2024, BayREN's labor costs are forecasted to be incurred by both ABAG/MTC and BayREN member agencies.
Prior to 2024, BayREN's labor costs reflected those only incurred directly by ABAG/MTC, with all member agencies' costs reflected as non-labor.

- C. → Table showing costs by functional area of management structure¶
- → Expenses broken out into labor, non-labor O&M (with contract labor identified)¶
- → Identify any capital costs¶

B. → Attachment A, Question C.9¶

“Using a common budget template developed in consultation with interest stakeholders (hopefully agreed upon at a “meet and confer” session), display much of each year’s budget each PA anticipates spending “in-house” (e.g., administration, non-outsourced direct implementation, other non-incentive marketing), by sector and by cross-cutting program.”¶

• → TURN and ORA invite the PAs to propose a common table format for information. We don’t have anything specific in mind.¶

• → Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.¶

[illegible]

[illegible]

[illegible]

Pa Name:

Bay Area Regional Energy Network (BayREN)

Budget Year:

2024-2027

Comments and Suggestions

This is an optional space to offer comments, feedback, and/or suggestions for improving information exchange between the Commission and PAs. Please keep this section focused on this and other instruments used for the Energy Efficiency Applications

APPENDIX C

SUPPLEMENTAL BUDGET INFORMATION NARRATIVE

Table of Contents

Background:	2
I. DESCRIPTION OF IN-HOUSE EE ORGANIZATIONAL STRUCTURE & ASSOCIATED COSTS	2
A. Narrative description of in-house departments/organizations supporting the PA's EE portfolio	2
B. Table showing PA EE "Full Time Equivalent" headcount by department/organization	7
C. Table showing costs by functional area of management structure	7
D. Table showing cost drivers across the EE organization	7
E. Explanation of allocation of labor and O&M costs between EE-functions and GRC- functions or other non-EE functions	10
II. BUDGET TABLES INCLUDING INFORMATION IDENTIFIED IN THE SCOPING MEMO	12
A. Attachment-A, Question C.8	12
B. Attachment-A, Question C.9	12
C. Attachment-A, Question C.10	13

**Approved Meet & Confer Document by Program Administrators, Office of Ratepayers
(Public Advocates Office) and The Utility Reform Network in A.17-01-003 et. al.**

Required by D.18-05-041 OP #44 and reaffirmed in D.21-05-031, COL # 22

BACKGROUND:

Decision (D.) 18-05-041 Ordering Paragraph 44 provides:

Beginning with the annual budget advice letters due on September 3, 2019, the program administrators must include updated budget estimates in the same format as the supplemental budget information filed in this proceeding on June 12, 2017.

Thereafter in D.21-05-031, the Commission required zero-based budgeting for the funding proposals in the business plan and four-year portfolio application, so that the included expenditures were justified.¹

Below is the narrative justification that provides the basis for the tables included in Exhibit 03, Appendix B.

I. DESCRIPTION OF IN-HOUSE EE ORGANIZATIONAL STRUCTURE & ASSOCIATED COSTS

A. Narrative description of in-house departments/organizations supporting the PA's EE portfolio

ABAG was created in 1961 to provide a forum for local elected officials to discuss topical issues, specifically around regional planning and, in later years, services. ABAG was the first Council of Governments established in California – recognizing that community issues transcend local boundaries, ABAG now examines issues of regional and local concern by addressing planning and research needs related to land use, environmental, and water resource protection. Through this mission, ABAG also builds local governments' capacity regarding disaster resilience and energy and water efficiency and provides financial services to local counties, cities, and towns. On July 16, 2012

¹ D.21-05-031, p. 77, COL # 22.

ABAG filed a Motion for Consideration of the BayREN requesting to be a program administrator of energy efficiency funds; the Commission granted said motion in D.12-11-005. ABAG has administered BayREN since January 1, 2013.

In July 2017, through a contract for services², the staff of ABAG were consolidated under the Metropolitan Transportation Commission (MTC), the transportation planning, financing, and coordinating agency for the nine-county San Francisco Bay Area. As a result of the staff consolidation, MTC's policies for administration, personnel, payroll, employee relations purchasing, contracting, and other business operations apply to the operations of ABAG and, by extension, BayREN.

BayREN member organizations are county governments of the nine-county San Francisco Bay Area or public agencies chosen to represent the counties (both hereinafter referred to as "member agencies").³ All member agencies were required to sign a Memorandum of Understanding (MOU) that established the agency has energy efficiency expertise and the resources to provide BayREN services to the jurisdictions in their counties. ABAG, as the program administrator of BayREN, is responsible for overall portfolio administration including maintaining contracts with Pacific Gas and Electric Company (PG&E), consultants, and member agencies. In this role, ABAG reviews monthly invoices submitted by each member agency and consultant and consolidates approved invoices for presentation to PG&E. ABAG also has on staff the managers of several BayREN programs. This relationship is illustrated in Attachment 2, which also identifies the agencies leading each of BayREN's programs. Because each county has different organizational structures and ranges of salary, benefits, and overhead cost components, this supplemental budget information focuses on the organizational structure and policies of ABAG/MTC while also providing transparency into the staffing levels and funding proposed by member agencies in the accompanying portfolio application.

1. Functions conducted by each department/organization

² https://abag.ca.gov/sites/default/files/mtc_abag_approved_contract_for_services_final.pdf

³ StopWaste is the BayREN member agency representing Alameda County; the Sonoma County Regional Climate Protection Authority is the BayREN member agency representing Sonoma County.

Multiple sections within ABAG/MTC support work on BayREN, including Energy, Administration and Facilities, Technology Services, Budget and Revenue, Treasury, the Office of General Counsel, and Executive Management. The Energy Section is the only department with full-time staff employed with EE funding; it is also the only section that directly charges to the BayREN budget. Attachments 3 and 4 describe function descriptions performed by each respective department and role(s) that support BayREN's EE portfolio.

2. Energy Efficiency Management Structure and Org Chart

The consolidated staff of ABAG and MTC function under one executive director; however, ABAG and MTC continue to be separate governance entities with their own statutory authorities and responsibilities, policy positions, assets, liabilities, revenues, debts and local collaboration programs. Attachment 1 depicts the ABAG/MTC governance structure and consolidated organizational chart.

3. Staffing needs by department/organization, including current and forecast for 2022-2023, as well as a description of what changes are expected between 2024-2027 or why it's impossible to predict beyond 2024, if that's the PA's position.

Full Time Equivalents (FTEs) are a unit of measure showing how many employees work on BayREN assuming all employees work a full-time schedule. For the purposes herein, a full-time schedule refers to a 34.4-hour work week, or 1,788 hours worked a year, after deducting for typical holiday and vacation hours. In 2020, ABAG/MTC employed 3.7 FTE's supporting BayREN, or about 6,567 total hours.

In 2022 and 2023, BayREN forecasts having approximately 5.8 FTEs supporting BayREN's EE portfolio each year, or about 10,728 hours, due to anticipated hiring of an Energy Programs Finance Coordinator and Regional Communications Coordinator, both expected to be hired in 2022. These figures are exclusive of FTEs employed by member agencies which are discussed separately below.

In 2024 and each year thereafter, BayREN forecasts having 8.6 FTEs employed by ABAG/MTC, due to the hiring of two project managers each leading a proposed public sector program, and a Regional Convener that coordinates energy efficiency activities

among BayREN member agencies, local community choice energy agencies, and related industry organizations. The desire for the latter position is based on extensive stakeholder feedback and an expanded role for BayREN in the region.

In its Portfolio Application, BayREN has also included a forecast of 24.2 FTEs in 2024 employed at member agencies which administer, market, and implement BayREN's programs, rising to 25.7 in 2027. BayREN has not previously maintained records forecasting staffing at member agencies. These figures are intended to demonstrate a more thorough examination of staffing levels of member local governments. The staffing variations are tied to a variety of factors such as whether staff are the lead for a regional program, the size of the county, outreach goals, etc. The BayREN member agencies are identified in Attachment 2.

Proposed Approximate Staffing by BayREN Member Agency and Program Year				
	2024	2025	2026	2027
ABAG/MTC	8.6	8.6	8.6	8.6
StopWaste (for County of Alameda)	5.7	5.7	5.7	5.7
County of Contra Costa	1.0	1.0	1.0	1.0
County of Marin	1.8	1.8	1.8	1.8
County of Napa	2.5	2.5	2.5	2.5
City and County of San Francisco	6.1	6.8	7.6	7.6
County of San Mateo	2.0	2.0	2.0	2.0
County of Santa Clara	2.2	2.2	2.2	2.2
Regional Climate Protection Authority (for County of Sonoma)	2.9	2.9	2.9	2.9
County of Solano	0.1	0.1	0.1	0.1

In determining the proposed staffing figures, BayREN has provided FTEs by functional group (contained within Exhibit 03, Appendix B – Table 10, Portfolio FTE), as defined by the functional definitions developed jointly by the PAs, TURN, and the Public Advocate's Office.

4. Non-program functions currently performed by contractors (e.g. advisory consultants), as well as a description of what changes are expected between 2024-2027 or why it's impossible to predict beyond 2024, if that's the PA's position.

ABAG currently has no consultants retained solely for the purpose of engaging in “non-program functions”. Certain consultants have scopes of work that include tasks related to general BayREN communications, regulatory, and EM&V support. ABAG will continue to engage consultants to support these BayREN specific tasks.

5. Anticipated drivers of in-house cost changes by department/organization

We interpret ‘in-house cost’ to be any BayREN-associated cost (including labor) paid directly by ABAG/MTC. Based on this interpretation, these costs are driven by the addition of new staff and/or an increase to our program portfolio budget.

6. Explanation of method for forecasting costs

ABAG/MTC does not maintain accounting records in the cost categories specified in the supplemental EE excel file (template), submitted concurrently herewith. Therefore, to prepare these responses, staff analyzed actual historical costs and estimated the amount that was spent in the various cost categories. The relative historical amounts in each category were then applied to future budgets to estimate the forecasted amounts in the requested categories. Costs are estimated by using a ‘bottom-up’ approach at the program level. Each BayREN program lead estimates the required administration, marketing, implementation, and incentives budget needs based on the expected scope and participation in the program. Where appropriate, forecasts include anticipated impacts related to the COVID-19 pandemic.

B. Table showing PA EE “Full Time Equivalent” headcount by department/organization

7. TURN and CAL PA like this example, taken from testimony PG&E’s 2017 GRC addressing its Energy Procurement department. We would be looking for 2019, 2020, or 2021 “recorded” positions, depending on what’s most appropriate for the PA, or both, if that provides the most clarity. For forecast years, we’d want at least 2024.

BayREN’s response is provided in Exhibit 03, Appendix B – Table 10, Portfolio FTE. As noted in the response to Question 3 above, beginning in 2024 FTE figures are inclusive of BayREN member agencies and not solely ABAG/MTC, as had been reported in prior years.

C. Table showing costs by functional area of management structure

8. Expenses broken out into labor and non-labor O&M, with contract labor identified. (Note: in case of conflict, excel budget template will control.)

BayREN’s response is provided in Exhibit 03, Appendix B – Tables 9 ‘Portfolio Summary’, and Tables 11 through 16, containing sector Budget details.

9. Identify any capital costs

None.

D. Table showing cost drivers across the EE organization

10. TURN and CAL PA like this example, taken from testimony PG&E’s 2017 GRC addressing its Energy Procurement department.

- While this example pertains to departmental cost increases, for BayREN, cost increases or decreases would be attributed to major cost drivers, described below.

TABLE 6-2(a)
EP COST INCREASE
2015-2017 EXPENSE BY COST DRIVER

Line No.	Description	Increase in Thousands of \$	Percent of Total Increase
1	Escalation	3,597	57
2	Portfolio Complexity	1,136	18
3	Regulatory Mandates	1,192	19
4	Process Improvements	400	6
5	Total	6,324	100

(a) See WP Table 6-6, Exhibit (PG&E-5).

The BayREN administrative budget includes costs associated with the general functioning of the approved programs, as well as activities required for overall management of the portfolio.⁴ These tasks are typically standardized across all programs in the portfolio and include accounting, reporting, legal, regulatory compliance, regular BayREN staff meetings, and procurement/contracting. Given the relatively small size of staff working on BayREN, many activities are split between administration and implementation, resulting in efficiencies and overall lower administrative costs.

The Energy Efficiency Policy Manual, Version 5, lists discrete activities under the recognized budget categories for administration and implementation. The level of need for each of these activities will impact the budget.

The overall drivers of administrative costs include:

- The number of programs in the portfolio
- The number of participating agencies
- Procurement and contracting with expansion of portfolio and natural contracting cycle timeline for current programs
- Increased regulatory participation
- Reporting requirements

⁴ D.12-11-015 did not limit BayREN's administrative budget as prior decisions have done for the IOUs. However, the BayREN's Business Plan and Portfolio Application budget requests set forth an administrative budget below 10%.

- IT services

The drivers of implementation costs include:

- The number of participants in a program
- Processing of rebate applications
- Inspecting rebated/incentivized measures
- Engineering related activities
- Development of metrics and gathering of associated data used to assess program performance and/or value
- Education and training of contractors/partners/customers
- Project management activities (i.e. planning scopes of work, working with contractors and customers, setting goals, reviewing goals, reacting to market conditions, and responding to customer inquiries (i.e. calls, emails, letters))
- Program planning, development and design
- Customer support
- Energy audits and continuous energy improvement
- Market transformation and long-term strategic plan support
- Compiling and maintaining information (i.e., data, customer records) for projects
- Licensing fees or IT development cost for program-specific applications related to implementation (e.g., benchmarking tool or project management tool);
- Direct-implementation specific IT costs (e.g., licensing fees or IT development cost for program-specific applications)
- Staff travel to undertake direct implementation-specific work activities (excluding conference participation)
- Program planning/design/project management and information gathering costs related to specific Strategic Plan related non-resource and resource programs
- Whether the program is new or existing

- The amount of technical assistance provided both in terms of customers and effort⁵
- If the program target is a “hard-to-reach” market since this typically requires more interaction/education/marketing to get the customer to act

E. Explanation of allocation of labor and O&M costs between EE-functions and GRC-functions or other non-EE functions

11. When an employee spends less than 100% of her/his time on EE, how are costs tracked and recovered (e.g., on a pro rata basis between EE rates and GRC rates; when time exceeds a certain threshold, all to EE; etc.).

While ABAG is not engaged in ‘GRC-functions’, both ABAG and MTC consistently implement grant-funded projects which necessitate systems to ensure all staff time is tracked on an hourly basis by program and fund source. ABAG staff time spent on BayREN activities is tracked within time sheets that are reviewed by appropriate management before submission to the MTC finance department (payroll) on a bi-weekly basis.⁶ On a monthly basis, ABAG provides a report to PG&E (BayREN’s fiscal agent), which includes all expenses associated with the EE portfolio, including staff time itemized by individual, rate, program and budget category (administration, marketing, and implementation). Operating budgets, current expenditures, and remaining budgets are clearly identified in a format proposed by PG&E. The BayREN member agencies submit to ABAG on a monthly basis the same breakdown of labor and costs.

12. Describe the method used to determine the proportion charged to EE balancing accounts for all employees who also do non-EE work.

Currently, approximately 4 FTE EE employees (as calculated and identified in Section I.3) directly charge time to EE programs. The hourly rates for all ABAG/MTC employees are fully loaded. Therefore, the cost of non-EE employees performing general

⁵ Technical assistance (for at least the multifamily program) is planned to decline over time and shift to implementation activities that leverage other market drivers.

⁶ Time sheets are reviewed and approved by the Energy Programs Manager, the Executive Office, and accounting staff.

functions which qualify as overhead (e.g., Administration and Facilities, Technology Services, Legal, etc.) are shared amongst the agency and contained within the fully loaded rate of EE employees. In the event there is no direct staff time charged to EE work, the EE programs do not incur an overhead cost.

Annually, MTC prepares and presents an indirect cost allocation plan (ICAP) rate proposal to the California Department of Transportation (Caltrans).⁷ This serves as a reminder and clarification of the role of a cognizant agency with respect to the review of Indirect Cost Allocation Plan/Indirect Cost Rate Proposals and approval of indirect cost rates.

13. Identify the EE functions that are most likely to be performed by employees who also do non-EE work (e.g. Customer Account Representatives?)

The departments containing employees who are likely to perform EE functions but that also do non-EE work, as identified in Attachment 3, are Administration and Facilities, Technology Services, Budget and Revenue, Treasury, the Office of General Counsel, and Executive Management. Attachments 3 and 4 also contain department, function, and personnel descriptions.

15. How are burden benefit-related administrative and general (A&G) expenses for employees who work on EE programs recovered (EE rates or GRC rates)? **PG&E allocates these costs to EE pursuant to a settlement agreement with MCE and TURN, which was adopted in D.14-08-032.

Not applicable.

16. When EE and non-EE activities are supported by the same non-labor resources, how are the costs of those resources or systems allocated to EE and non-EE activities?

General administrative resources are allocated via the overhead rate included in all labor rates. Labor costs are charged to individual programs (BayREN or non-

⁷ More information about the ICAP rate, approval process, and historical rates are available online at: <https://mtc.ca.gov/about-mtc/administrative-requirements/mtc-indirect-cost-allocation-plan-icap-rate>

BayREN) as appropriate, and thus the overhead costs are spread appropriately to the individual programs.

17. Identify the EE O&M costs that are most likely to be spread to non-EE functions as well as EE, if any

General administrative resources are allocated via the overhead rate included in all labor rates. Labor costs are charged to individual programs (BayREN or non-BayREN) as appropriate, and thus the overhead costs are spread appropriately to the individual programs.

II. BUDGET TABLES INCLUDING INFORMATION IDENTIFIED IN THE SCOPING MEMO

This section refers to the April 14, 2017 Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judges in A.17-01-003 et. al.

A. Attachment-A, Question C.8

“Present a single table summarizing energy savings targets, and expenditures by sector (for the six specified sectors). This table should enable / facilitate assessment of relative contributions of the sectors to savings targets, and relative cost-effectiveness.”

18. TURN and CAL PA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.8 Table.

BayREN’s response is provided in Exhibit 03, Appendix B – Table 7.

B. Attachment-A, Question C.9

“Using a common budget template developed in consultation with interested stakeholders (hopefully agreed upon at a “meet and confer” session), display how much of each year’s budget each PA anticipates spending “in-house” (e.g., for administration, non-outsourced direct implementation, other non-incentive costs, marketing), by sector and by cross-cutting program.”

19. TURN and CAL PA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind.

BayREN’s response is provided in Exhibit 03, Appendix B – Tables 11 through 16.

20. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.9 Table.

ABAG has administered BayREN since its inception, and currently uses a blended approach to estimating future expenses. In-house staff expenses are relatively modest with a portfolio administered by roughly four (4) FTE equivalents, so a historical average is used with additions including a fixed cost of living adjustment and, when appropriate, funding for additional staff such as the anticipated hiring of positions as described in the response to question I.3, above. For consultants and partner organizations, cost categories (administration, marketing and outreach, and implementation) are estimated using a historical baseline, with the incorporation of known program workplans for future years.

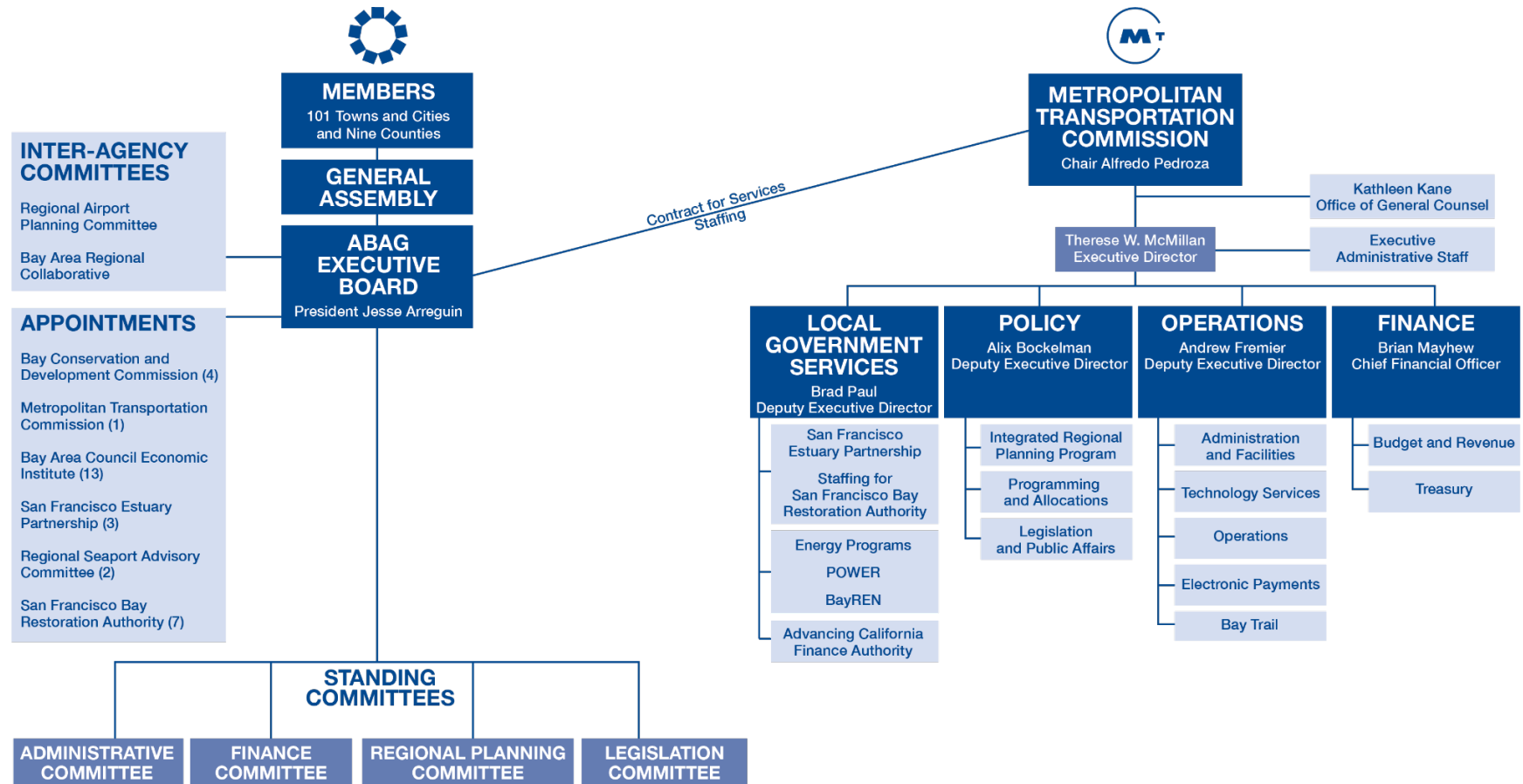
C. Attachment-A, Question C.10

“Present a table akin to PG&E’s Figure 1.9 (Portfolio Overview, p 37) or SDG&E’s Figure 1.10 (p. 23) that not only shows anticipated solicitation schedule of “statewide programs” by calendar year and quarter, but also expected solicitation schedule of local third-party solicitations, by sector, and program area (latter to extent known, and/or by intervention strategy if that is more applicable). For both tables, and for each program entry on the calendar, give an approximate size of budget likely to be available for each solicitation (can be a range).”

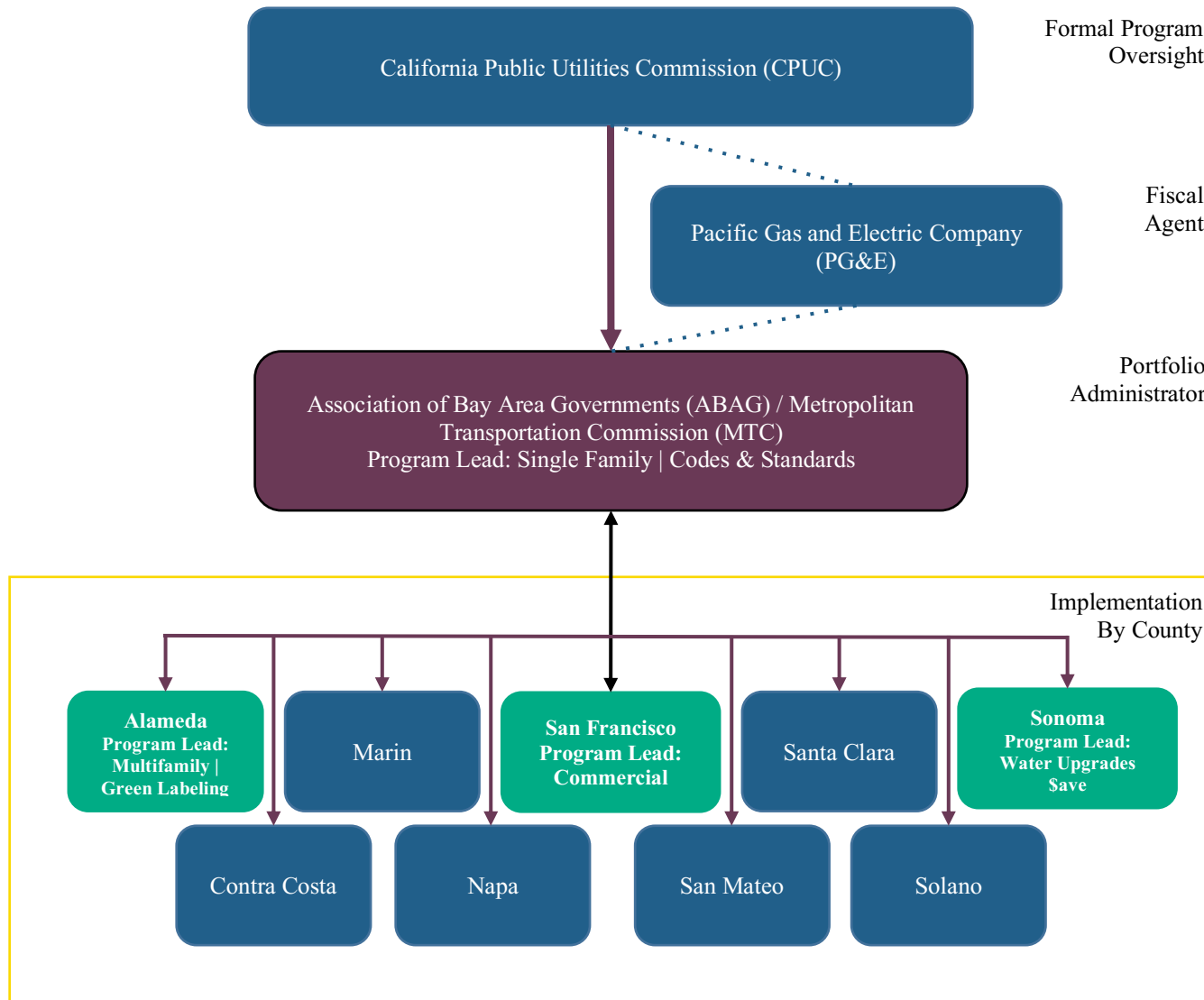
21. TURN and CAL PA invite the PAs to propose a common table format for this information. We don’t have anything specific in mind. Additionally, include a brief description of the method used by the PA to estimate the costs presented in the C.10 Table.

BayREN does not currently administer any statewide programs, as indicated in Exhibit 03, Appendix B – Table 6 Statewide Programs. Accordingly, there are no anticipated solicitation schedules.

Attachment 1
ABAG/MTC Governance Structure and Consolidated Organizational Chart



Attachment 2
Structure of BayREN and Member Agencies



Attachment 3
Summary Department and Function Descriptions

Department	Function Description	Primary Representative Functional Group(s)
Executive Board	Policy guidance, procurement review, ultimate decision authority and oversight.	Planning and Compliance
Executive Office	Policy review, approval of contracts and senior staff decision maker.	All
Office of General Counsel	Review of contracts and other legal documents.	Agency Regulatory Support
Energy	This department performs the majority of tasks for BayREN, including program and portfolio management, invoice review and approval, coordination with PG&E, CCAs, local Energy Watch programs, and other stakeholders. This list is not exhaustive.	Policy, Strategy, and Regulatory Reporting Compliance; Program Management; Portfolio Analytics; Contract Management
Budget and Revenue	Invoice review and submittal; preparation of ABAG internal review and budgeting, audit compliance, etc.	Contract Management
Treasury	Initiate and verify electronic funds transfers, monthly bank reconciliation, and fiscal management.	Contract Management
Technology Services	Website management	IT – Project Specific; IT – Regular O&M

Attachment 4
Summary Personnel Descriptions

Department	Representative Positions	Function Description
Energy Programs	Director, Energy Programs	Manager for all energy programs. Leads regulatory compliance and program oversight. Develops internal and portfolio budgets. Responsible for administrative tasks for the entire BayREN portfolio.
Energy Programs	Program/Project Manager	Subprogram oversight. Tasks include policy, strategy and regulatory compliance and overall program management.
Energy Programs	Energy Programs Coordinator	Provides administrative support to Program Managers and Director.
Budget and Revenue	Accountant / Accounting Specialist	Invoice preparation, review and submittal; preparation of ABAG internal review and expense monitoring, audit compliance, etc.
Budget and Revenue	Accounting Supervisor	Prepare financial reporting and budget preparation/review.
Treasury	Financial Analyst	Initiate and verify electronic fund transfers.
Office of General Counsel	General Counsel	Review of contracts and other legal documents relating to BayREN.
Executive Office	Deputy Executive Director	Provide strategy of section within agency; overall managerial tasks.
Technology Services	Webmaster	Website management.
Administration and Facilities	Contracts Analyst / Specialist	Review of contracts and oversight of BayREN procurement.

APPENDIX D

EQUITY METRICS REPORT

CAEECC-Hosted Equity Metrics Working Group

Report and Recommendations to the California Public Utilities Commission and the Energy Efficiency Program Administrators

FINAL REPORT

October 20, 2021

Table of Contents

Section 1: Introduction and Overview	5
1.1 Working Group Charge and Overview	5
1.2 Background on Newly Created Equity Segment	6
1.3 Report Outline	7
1.4 Structure of Objective, Metrics, Targets, and Indicators	7
1.5 Approach to Seeking Consensus	8
1.6 Working Group Members.....	8
Section 2: Principles.....	10
2.1 Background	10
2.2 Consensus Principles Recommendations	10
Principle #1: Segment vs. Program	10
Principle #2: Guidelines to Setting Metrics.....	10
Principle #3: Program Portfolios	10
Principle #4: Best Practices for Program Development	11
Principle #5: Reporting.....	11
2.3 Non-Consensus Principles Recommendation	12
Principle #6: Target-Setting.....	12
Principle #7: Community Engagement.....	14
Section 3: Objective	15
3.1 Background	15
3.2 Primary Objective Recommendation	15
Section 4: Metrics and Indicators.....	16
4.1 Background	16
4.2 A: Metrics and Indicators to Measure Who and How Target Populations are “Served”	16
Consensus Metrics Recommendations – Who and How Target Populations are “Served”	16
Metric A.1: Total # residential (single family (SF) or multifamily (MF) unit) equity-targeted households (HHs) served by the Equity programs	16
Metric A.2: Total # MF equity-targeted buildings served by the Equity programs.....	16
Metric A.3: Total # Ag or Ind. equity-targeted customers served by the Equity programs	16
Metric A.4: Total # equity-targeted public facilities and equipment or community projects served by the Equity programs	16
Metric A.5: Total # small and medium business (SMB)* equity-targeted** participants served by the Equity programs.....	16
Metric A.6: Total # of companies/non-profits served by Equity Segment programs	17
Metric A.7: Total # of contractors/workers served by Equity Segment programs	17
A.8: Total [(# indicator for all) and (% metric for PAs with no relevant legal restriction) of] contractors and/or workers that are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity Segment programs	17

A.9: Total [(# indicator for all) and (% metric for PAs with no relevant legal restriction) of] companies/non-profits who are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity Segment programs	18
4.3 B: Metrics and Indicators to Assess Energy and/or Cost Savings in Targeted Populations	18
Consensus Metric Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations	18
Metric B.1: Expected first-year bill savings in total \$ for Equity-targeted participants*	18
Consensus Indicator Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations ...	19
Indicator B.2: Direct Savings from Equity-segment programs *	19
Non-Consensus Indicator Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations	19
Indicator B.3 Community Engagement	19
4.4 C: Metrics and Indicators for “Holistic” Benefits	19
Indicator C.1: Benefits to participants and to society as a whole	19
<i>Section 5: Additional Issues from the Prospectus and Raised Through EMWG Process.....</i>	<i>21</i>
5.1 Background	21
5.2 How to Address Non-Consensus Issues in February 2022 Filings	21
5.3 Definition of “Underserved”	21
5.4 Reporting Templates	25
A.1-A.9: Metrics & Indicators to Measure Who and How Target Populations are “Served”	26
B.1-B.3: Metrics & Indicators to Assess Energy and/or Cost Savings in Targeted Populations	27
C.1: Indicators for “Holistic” Benefits.....	27
5.5 Demographic Data and Data Systems Integration Ideas.....	27
<i>Appendix A: Working Group Member Organizations and Representatives</i>	<i>28</i>
<i>Appendix B: Rationale and EMWG Member Preferences for Community Engagement Non-Consensus Options.....</i>	<i>29</i>
<i>Appendix C: Organization-Level Comments on Non-Consensus Option Choices.....</i>	<i>35</i>
Principle #6: Target Setting	35
Option 1: Targets will be set by the PAs for Equity segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data)	35
Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all Equity segment metrics	35
Community Engagement as a Principle or Indicator	35
Option 1: Community engagement as an Indicator	35
Option 2: Community engagement as a Principle.....	36
Underserved Definition.....	36
Option 1: Use ESJ Action Plan Definition	36
Option 2: Use ESJ Action Plan Definition + allow an avenue for PAs to propose additional ‘underserved’ with rationale	36
Option 3: Allow the PAs to determine Underserved	37
<i>Appendix D: Equity Metrics Workshop Participation and Input.....</i>	<i>38</i>
D.1 Background	38
D.2 Workshop Attendee List	38

D.3 Summary of Input from Breakout Groups	42
<i>Appendix E: Small-Medium Business Definition</i>	49

Table of Figures

Figure 1: Structure: Objectives, Metrics, Targets, and Indicators	8
Figure B.1: Example Visual Illustration of Community Engagement Option 1 Proposal.....	31
Figure D.1: Equity Workshop “Mural” Input from Breakout Group A.....	44
Figure D.2: Equity Workshop “Mural” Input from Breakout Group B.....	45
Figure D.3: Equity Workshop “Mural” Input from Breakout Group C.....	46
Figure D.4: Equity Workshop “Mural” Input from Breakout Group D.....	47
Figure D.5: Equity Workshop “Mural” Input from Breakout Group E.....	48
Figure D.6: Equity Workshop “Mural” Input from Breakout Group F.....	49

Table of Tables

Table 1: EMWG Member Organizations.....	9
Table 2: EMWG Support of Target-Setting Options 1 and 2.....	13
Table 3: EMWG Support of “Underserved” Definitions Options 1, 2, and 3.....	24
Table A.1: EMWG Member Leads and Alternates.....	28
Table B.1: Recommended Community Engagement Activities.....	30
Table B.2: EMWG Support of Community Engagement Options 1 and 2.....	34
Table D.1: Equity Metrics Workshop Attendee List.....	38
Table E.1. IOU Definition of Commercial Customer Classes.....	49

Section 1: Introduction and Overview

1.1 Working Group Charge and Overview

The charge of the Equity Metrics Working Group (EMWG) was to identify and define the most important Objectives and associated key Metric(s) for the new Equity portfolio segment established in California Public Utilities Commission (CPUC) in Decision 21-05-031.¹ The Objectives and associated key Metric(s) for each objective will be used to support and provide rationale for portfolio segmentation and program design, as well as used for program benefit/value forecasting, tracking, and evaluation. Although the Working Group (WG) was not tasked with setting the specific numeric Targets for the Metric(s) used in each Program Administrator's (PA's) filing, they were tasked with outlining guidance for *how* to set targets. As such, the EMWG recommends a Principle on target-setting.

The full EMWG met four times between July and September 2021. The facilitation team also hosted a workshop targeting input from a broader range of stakeholders. A sub-working group (sub-WG) focused on refining the Objective and brainstorming and refining key associated Metrics met twice. The sub-WG was convened by Lara Ettenson and Julia de Lamare from the Natural Resources Defense Council (NRDC). The culmination of the EMWG is this Report submitted directly to the Commission to inform the forthcoming application filings by the Program Administrators (PAs).

As outlined in the Prospectus,² and at the direction of the CPUC, the EMWG was charged with answering the following key questions:

- **Objective and Metric(s) - setting questions**
 - What are the specific Objectives for each segment?
 - What are the specific associated key Metric(s) for each Objective?
 - For each Objective and key Metric(s) describe whether it will be expressed quantitatively, qualitatively, or a mixture of both—and when each will be established and by whom.
 - For each Objective and associated key Metric(s) describe whether its primary application is to justify portfolio segmentation and program design; forecasting of benefits/values from the budgeted program; tracking and evaluation; or some combination?
 - What must all PAs include in their filings with respect to Objectives, associated key Metrics, and Targets for Metrics, and under what conditions can PAs propose additional Objectives, Metrics, and Targets?

¹ See CPUC Decision 21-05-031: <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M385/K864/385864616.PDF>

² See EMWG landing page: <https://www.caeec.org/equity-metrics-working-group-meeting>

- What should be the basis (i.e., principles and guidance) for the PAs to set their own Targets for associated key Metric(s) in their filing?
- **Procedural questions:**
 - How will any non-consensus Objectives and/or associated key Metric(s) be addressed in the PA filings?

The California Energy Efficiency Coordinating Committee (CAEECC) convened and facilitated two distinct but related Working Groups, one on Market Support Metrics and another on Equity Metrics. The Market Support Metrics report can be found on the CAEECC website:

<https://www.caeccc.org/market-support-metrics-wg>.

1.2 Background on Newly Created Equity Segment

On May 20, 2021, the CPUC unanimously approved Proposed Decision 21-05-031 on the “Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process” (in Rulemaking 13-11-005). The Decision directs PAs to “further segment their portfolios based on the primary program purpose, into the following three segments”: *Resource Acquisition, Market Support, and Equity*. The decision then directs CAEECC to form a Working Group “to develop and vet new reporting metrics for the market support and equity program categories that will be considered alongside the portfolio filings due from all program administrators in February 2022.”³

The decision required the PAs to segment their portfolios into categories, based on the primary program purpose. The equity segment is defined as “*programs with a primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission’s Environmental and Social Justice (ESJ) Action Plan. Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.*”⁴ Note that the Equity category is distinct from Energy Savings Assistance (ESA) programs so as to avoid overlap with program offerings that low-income populations could receive at no cost through existing channels.⁵

³ D.21-05-031, Page 84. The Decision also rules, with respect to PA requirements, that “All energy efficiency program administrators should be required to develop metrics and criteria for evaluating progress of all programs, with particular focus on market support and equity programs that may not have measurable energy savings” (page 65).

⁴ Ibid. Page 14

⁵ Ibid. Page 15, “We also clarify that the “equity” category is distinct from our separate low-income energy efficiency Energy Savings Assistance (ESA) programs, which have separate goals and regulatory treatment. While there is some overlap in customers within the target segments, the “equity” category is intended to be defined within the energy efficiency programs covered in this rulemaking that are not specifically targeting low-income populations with program offerings that low-income populations could receive at no cost from the ESA program.” Low-income customers are those that meet [CARE income guidelines](#). This effort is focused on customers who are not eligible for the ESA program.

The Decision creates a combined budget cap of 30% for Equity and Market Support segments⁶ per Program Administrator (excluding the Regional Energy Networks (RENs)). PAs must use the new portfolio segmentation categorization scheme for the interim budget filings (for program years 2022 and 2023) due November 2021, and for the Strategic Business Plan and Four-Year Portfolio (for program years 2024 and beyond) due February 15, 2022.

1.3 Report Outline

This report outlines the outcomes and recommendations of the EMWG and is organized as follows:

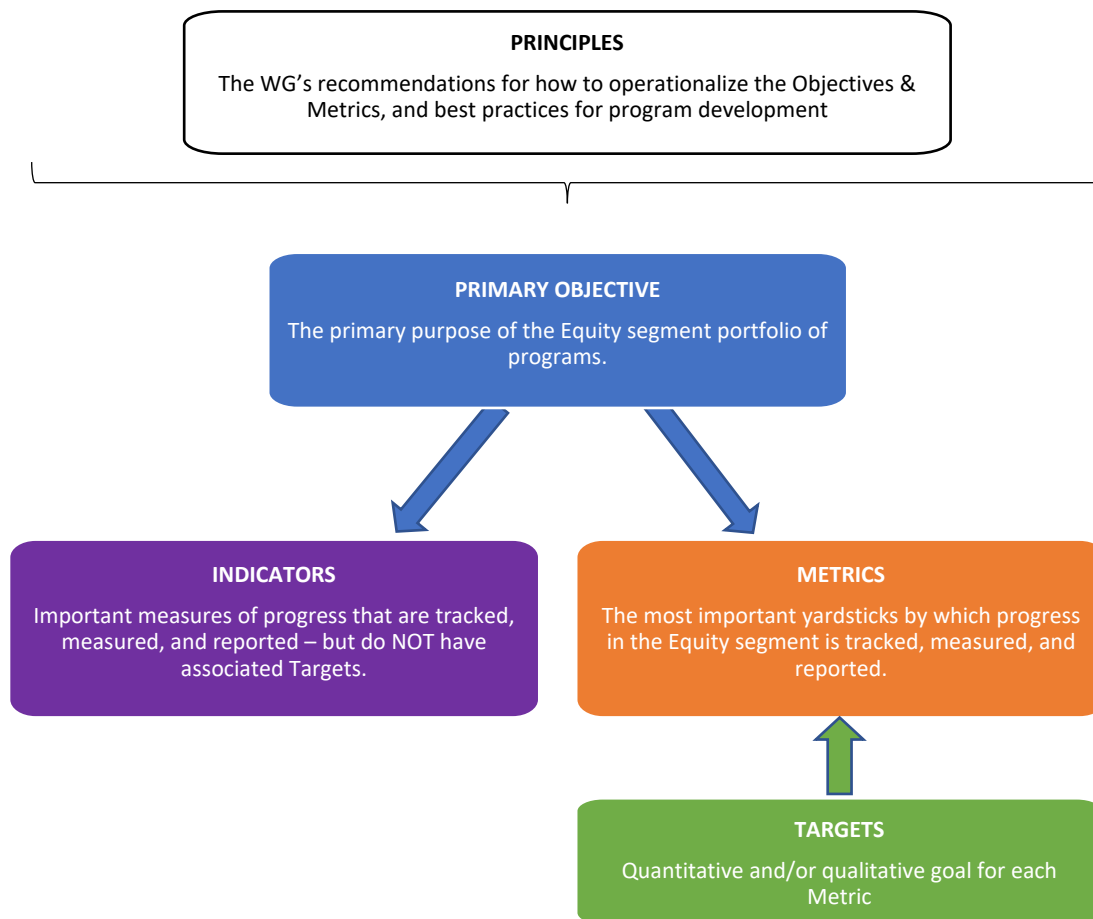
- Section 2: Principles
- Section 3: Objective
- Section 4: Metrics and Indicators
- Section 5: Additional Issues from the Prospectus and Raised Through Working Group Process
- Appendix A: Working Group Member Organizations and Representatives
- Appendix B: Rationale and EMWG Member Preferences for Community Engagement Non-Consensus Options
- Appendix C: Organization-Level Comments on Non-Consensus Option Choices
- Appendix D: Equity Metrics Workshop Participation and Input
- Appendix E: Small-Medium Business Definition

1.4 Structure of Objective, Metrics, Targets, and Indicators

Figure 1, below, illustrates the relationship between the segment Objective and the key associated Metrics proposed herein by the EMWG. It also shows the relationship to targets that are tied to each of the Metrics that will eventually be proposed by Program Administrators. Finally, it shows that Indicators can be associated with Metrics, but are distinct in that Indicators, while tracked, measured, and reported do not have associated Targets. Each proposed Principle, Metric, or Indicator ties directly to a component of the proposed Objective.

⁶ The Regional Energy Networks are exempt from the 30% portfolio cap. D.21-05-031 “EE Potential & Goals and Portfolio Approval & Oversight”. May 20, 2021. <https://www.caeec.org/cpuc-documents>. Page 2.

Figure 1: Structure: Objectives, Metrics, Targets, and Indicators



1.5 Approach to Seeking Consensus

The recommendations within this Report are made by consensus of the EMWG Members (where consensus is defined as unanimity among the Member organizations), except for three instances noted in this document. Consistent with the EMWG's goals and Groundrules, we provide two or more options for any non-consensus recommendation and list the EMWG Members that support each option. The non-consensus option descriptions and their rationales were drafted by the proponents of each option.

1.6 Working Group Members

The EMWG's twenty-four voting member organizations and four Ex-Officio organizations shown in Table 1 are drawn largely but not exclusively from the CAEECC's Membership. Following notification to the CPUC energy efficiency and Energy Savings Assistance Program service lists and direct outreach to relevant organizations, CAEECC also had an application process for interested non-CAEECC Member organizations to be part of the EMWG. Those organizations have an * after their names. CAEECC Facilitators Dr. Scott McCreary and Katie Abrams

facilitated the EMWG meetings and workshop. A list of the lead representatives and alternates for each EMWG Member organization is provided in Appendix A.

Table 1: EMWG Member Organizations⁷

Organization
Bay Area Regional Energy Network (BayREN)
California Efficiency + Demand Management Council (CEDMC)
Center for Sustainable Energy (CSE)
CodeCycle
Energy Efficiency Council (EEC)*
High Sierra Energy Foundation*
MCE
Natural Resources Defense Council (NRDC)
Pacific Gas and Electric (PG&E)
Public Advocates Office (Cal Advocates)
Redwood Coast Energy Authority (RCEA)
Resource Innovations*
Rising Sun Center for Opportunity*
San Joaquin Valley Clean Energy Organization (SJVCEO)
San Diego Gas and Electric (SDG&E)
Silent Running LLC*
Small Business Utility Advocates (SBUA)
Southern California Edison (SCE)
Southern California Gas (SCG)
Southern California Regional Energy Network (SoCalREN)
The Energy Coalition (TEC)
TRC*
Tri-County Regional Energy Network (3C-REN)
Viridis Consulting*
Ex-Officio/Resource (non-voting):
American Council for an Energy-Efficient Economy (ACEEE)
California Air Resources Board (CARB)
California Energy Commission (CEC)
California Public Utilities Commission (CPUC)

⁷ See Appendix A for a detailed list of each Equity Metrics Work Group Member lead representative and alternate

Section 2: Principles

2.1 Background

This section includes a series of recommended Principles related to how to formulate and operationalize the Objective and Metrics within the new Equity segment. The EMWG developed the following Principles based on the MSMWG proposed set of Principles, with modifications and additions when appropriate to align with the EMWG structure and charge. In addition, although the EMWG was not tasked with setting the specific numeric Targets for the Metric(s) used in each PA's filing, they were tasked with outlining guidance for how to set targets. As such, the EMWG recommends a Principle on target-setting.

2.2 Consensus Principles Recommendations

Principle #1: Segment vs. Program

- A) New Equity metrics proposed by the working group (WG) should focus on measuring performance of the overall segment, not of individual programs.
- B) When developing metrics, the WG should take a top-down approach meant to assess whether the Equity segment is performing against the primary Objective.

Principle #2: Guidelines to Setting Metrics

- A) The recommendations of the WG should not prevent program and portfolio design flexibilities as this is important in the Equity segment.
- B) Metrics and indicators can be revisited in the future to adjust as needed, in a TBD stakeholder process.
- C) The EMWG did not address all definitions and methodologies for the metrics so PAs should pursue the most cost efficient and feasible approaches to collecting data.
- D) PAs should collaborate and share methodologies for tracking and reporting metrics and indicators. The methodologies would be outlined as part of the regular reporting for all metrics and indicators.

Principle #3: Program Portfolios

- A) Equity programs must have a primary focus of "providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission's Environmental and Social Justice (ESJ) Action Plan. Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide

corollary benefits such as increased comfort and safety, improved air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.”⁸

- B) Although Equity segment programs can contribute to Resource Acquisition program participation in the short and long term, Equity segment programs are not required to do so.
- C) The Equity Segment should build and enable the foundation for future long-term energy savings that align with Commission and California climate policy.
- D) PAs may file [in a formal proceeding] additional or refined Equity Segment Objective and associated Metric(s) if and when they identify an intervention that they believe fits into the overall Equity segment but does not clearly fit into the current framework of Equity Segment Objective and associated Metrics, after receiving feedback through CAEECC.
- E) PAs must propose program level metrics for all their Equity programs. Note: PAs may use common metrics, segment level metrics, or develop their own program level metrics.

Principle #4: Best Practices for Program Development

The following principles for program design would be included in the forthcoming Program Implementation Plans (IPs) and/or via annual reporting to enable Energy Division and stakeholders to assess how these principles are being integrated into the Equity segment portfolios. Note: these principles should be applied when designing Equity segment programs, to the extent applicable.

- A) Prioritize customers in most need (need is defined in the main doc).
- B) Support concurrent equity efforts, such as those that align with related Social Determinants of Health (e.g., physical environment).
- C) Advance climate resiliency (e.g., keeping indoors cool during heatwaves and ensuring tight building shell to protect from wildfire smoke).
- D) Align with local grid reliability needs (e.g., focus efforts that reduce energy usage at critical times and locations).

Principle #5: Reporting

- A) PAs must propose Equity program-level metrics with targets in their applications that demonstrate progress toward segment defined Objectives in accordance with Equity principles. PAs may also propose Equity program-level indicators as appropriate.
- B) PAs should begin tracking all Equity relevant metrics and reporting on all Equity metrics during program years 2022-2023. Note, if a particular metric is not being addressed by

⁸ Ibid. Page 14

any PA program it would be reported as such in the reporting. A consistent reporting format should be applied across PAs.

2.3 Non-Consensus Principles Recommendation

There were two non-consensus Principles recommendations.

Principle #6: Target-Setting

The EMWG members are divided on the approach to target-setting. Two options are presented below for consideration. Members' first choice as well as acceptable options are shown in the table below the option descriptions and their rationales.

Option 1: Targets will be set by the PAs for Equity segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data).

All Equity segment metrics should have meaningful targets based on available data. Since little or no data exists for new programs, pilots and/or programs still being designed, targets cannot be reasonably established. Similarly, existing programs that are moved into the Equity segment may not necessarily have relevant data to be able to report on the newly determined Equity segment metrics. PAs should have the time to collect baseline data so that targets are both appropriate and reportable. Additionally, D.18-05-041 Ordering Paragraph 9 allows for new or modified metrics or indicators to be proposed in annual budget advice letter filings. Therefore, Tier 2 advice letters (such as the True Up Advice Letter) may be an appropriate avenue for also providing targets.

Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all Equity segment metrics.

All metrics proposed must have targets. The appropriate venue to propose and litigate targets is the budget application proceeding, where the evidence underlying proposed targets can be considered and alternatives proposed and considered. Most PAs already have the data and/or experience to set targets based on existing programs.

For any metrics that PAs think target setting isn't feasible without collecting baseline data, the proponents of Option 2 propose that the PAs include in their applications a proposal for a date certain by which the PAs will file a Petition for Modification (PFM) to the budget application decision. That PFM would include the proposed targets for each metric that had the targets deferred and include the evidentiary basis for the proposed target.

In addition, for those metrics that currently have uncertain baseline data, more significant adjustments to targets may be needed in the future after initial targets are set in applications or PFMs. The PAs should propose a process for making such adjustments (e.g., rely on the reporting requirements through CAEECC, use the annual reporting process to seek adjustment as needed, etc.) in their budget applications.

The EMWG members who prefer each option and find each option acceptable is presented below in Table 2. In addition, some Working Group Members (indicated by a *) have provided comments on their option choices in Appendix C.

Table 2: EMWG Support of Target-Setting Options 1 and 2

Target-Setting Option	First Choice Option	Acceptable Option
Option 1: Targets will be set by the PAs for Equity segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data). (12 first choice, 21 acceptable)	3C-REN* BayREN* CEDMC MCE PG&E RCEA SCE SCG SDGE* Silent Running LLC* SJVCEO Viridis Consulting	3C-REN BayREN CEDMC CodeCycle CSE High Sierra Energy Foundation MCE PG&E RCEA Resource Innovations Rising Sun Center for Opportunity SBUA SCE SCG SDGE Silent Running LLC SJVCEO SoCalREN The Energy Coalition TRC Viridis Consulting
Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all Equity segment metrics (12 first choice, 19 acceptable)	Cal Advocates CodeCycle CSE EEC High Sierra Energy Foundation NRDC Resource Innovations* Rising Sun Center for Opportunity SBUA* SoCalREN* The Energy Coalition TRC	3C-REN BayREN Cal Advocates CEDMC CodeCycle CSE EEC High Sierra Energy Foundation MCE NRDC Resource Innovations Rising Sun Center for Opportunity SBUA SCG Silent Running LLC SoCalREN The Energy Coalition TRC Viridis Consulting

Principle #7: Community Engagement

The EMWG members are divided on the approach to community engagement. The two options are presented below with the full rationales and summary table of EMWG Member preferences are provided in Appendix B.

Option 1: Community engagement as an Indicator

Option 2: Community engagement as a Principle

Section 3: Objective

3.1 Background

CPUC Decision 21-05-031 defines the Equity segment as “programs with a *primary purpose of providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission’s Environmental and Social Justice (ESJ) Action Plan. Improving access to energy efficiency for ESJ communities, as defined in the ESJ Action Plan, may provide corollary benefits such as increased comfort and safety, improved air quality, and more affordable utility bills, consistent with Goals 1, 2, and 5 in the ESJ Action Plan.*”⁹

The EMWG used this language as a foundation for developing an Objective that captures the key activities and purposes the Equity segment is intended to support.

3.2 Primary Objective Recommendation

The EMWG recommends the following primary Objective for the Equity segment:

For hard-to-reach, disadvantaged, and/or underserved individuals, households, businesses, and communities: address disparities in access to energy efficiency programs and workforce opportunities*; promote resilience, health, comfort, safety, energy affordability, and/or energy savings; and reduce energy-related greenhouse gas and criteria pollutant emissions***.**

** The term “workforce opportunities” includes, but is not limited to, the energy efficiency supply chain, companies/non-profits that deliver efficiency services, as well as the workers who implement the work **within equity segment programs**. This language does not presume that PAs must create programs to address all or some of the items listed here, nor does it infer that we have consensus that this segment should have workforce specific programs. The purpose of the “*” is to clarify what the term “workforce opportunities” encompasses. Any substantive issues should be addressed within the context of the workforce metric(s).*

*** Energy affordability pertains to bill savings achieved through increased efficiency in energy use, delivering the same or improved level of service with a lower cost to the customer.*

****The term “criteria pollutant” refers to: ground-level ozone, particulate matter, carbon monoxide, lead, sulfur dioxide, and nitrogen dioxide (<https://www.epa.gov/criteria-air-pollutants>).*

⁹ Ibid. Page 14

Section 4: Metrics and Indicators

4.1 Background

Metrics for the new Equity segment will be used as rationale for portfolio segmentation and program design and for program tracking and evaluation within the Equity segment.

As we move away from traditional cost-effectiveness metrics to this new segmentation approach, it is important to use Metrics as a way of assessing progress and to ensure that customer funds are being prudently spent. As noted above in Figure 1, Metrics are the most important yardstick by which progress in the Equity segment is tracked, measured, and reported. Indicators can be associated with Metrics, but are distinct in that Indicators, while tracked, measured, and reported do not have associated Targets.

The Metrics and Indicators listed below are organized into the following three categories

- A) Metrics and Indicators to Measure Who and How Target Populations are “Served”
- B) Metrics and Indicators to Assess Energy and/or Cost Savings in Targeted Populations
- C) Indicator to Assess “Holistic” Benefits

4.2 A: Metrics and Indicators to Measure Who and How Target Populations are “Served”

Consensus Metrics Recommendations – Who and How Target Populations are “Served”

Metric A.1: Total # residential (single family (SF) or multifamily (MF) unit) equity-targeted¹⁰ households (HHs) served by the Equity programs

Metric A.2: Total # MF equity-targeted buildings served by the Equity programs

Metric A.3: Total # Ag or Ind. equity-targeted customers served by the Equity programs

Metric A.4: Total # equity-targeted public facilities and equipment or community projects served by the Equity programs

Metric A.5: Total # small and medium business (SMB)* equity-targeted** participants served by the Equity programs.

*See Appendix E for SMB definitions. **The benefits of the program must accrue to eligible populations

¹⁰ The term “equity-targeted”, used throughout this report, refers to those targeted by the Equity Segment programs. Per the Decision, this includes DAC, HTR and underserved populations. The term “equity-targeted” is a shorthand form for DAC, HTR and underserved.

Notes:

- For A.1-A.5: See Section 5.4 Reporting Expectations for additional details.
- For A.6-A.7: There are already two workforce, education, and training (WE&T) program metrics that could potentially capture some of the activities in this segment. (1) Percent of total WE&T training program participants that meet the definition of disadvantaged worker and (2) Percent of incentive dollars spent on contracts* with a demonstrated commitment to provide career pathways to disadvantaged workers.¹¹

**Applies only to programs that install, modify, repair, or maintain EE equipment where the incentive is paid to an entity other than a manufacturer, distributor, or retailer of equipment. This applicability standard is adopted from the language the July 9th ruling on workforce standards. It excludes contracts such as those for upstream incentives, Codes and Standards, and mid-stream distributor programs.*

Metric A.6: Total # of companies/non-profits served by Equity Segment programs

Metric A.7: Total # of contractors/workers served by Equity Segment programs

A.8: Total [(# indicator for all) and (% metric for PAs with no relevant legal restriction) of] contractors and/or workers that are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity Segment programs¹²

Metric for those PAs for whom there's not a legal restriction: % of contractors and/or workers that are disadvantaged workers¹³ or otherwise underrepresented, who are directly involved in implementing Equity Segment programs.¹⁴

Indicator (without targets) for all PAs: # of contractors and/or workers that are disadvantaged workers¹⁵ or otherwise underrepresented, who are directly involved in implementing Equity Segment programs.

¹¹ D.18-05-041 has this metric (at high level)

¹² While deemed consensus, SDG&E and SBUA provided the following comments. SDG&E notes "We want programs that SERVE this group - while nice to have some that are implementing these programs, it shouldn't be required as well. Might support it as an indicator but, really think we need to focus on the program servicing and not who is implementing." SBUA notes "SBUA supports the above approach and is in consensus, with the caveat that small business employees, not explicitly included in the Disadvantaged Worker definition, are also disadvantaged by many challenges."

¹³ Disadvantaged worker definition from D.19-08-006, Attachment B, p.6: "Disadvantaged Worker" means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

¹⁴ Metric A.8 is deemed consensus pending resolution of outstanding questions such as (a) how this relates to the required indicator of disadvantaged workers per D.18-10-008, (b) the distinction between worker and contractor, and (c) other potentially unresolved questions

¹⁵ Disadvantaged worker definition from D.19-08-006, Attachment B, p.6: "Disadvantaged Worker" means a worker that meets at least one of the following criteria: lives in a household where total income is below 50 percent of Area Median Income; is a recipient of public assistance; lacks a high school diploma or GED; has previous history of incarceration lasting one year or more following a conviction under the criminal

A.9: Total [(# indicator for all) and (% metric for PAs with no relevant legal restriction) of companies/non-profits who are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity Segment programs¹⁶

Metric for those PAs for whom there's not a legal restriction: % of companies/non-profits who are Diverse Business Enterprises (DBE)¹⁷ or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity segment programs

Indicator (without targets) for all PAs: # of companies/non-profits who are Diverse Business Enterprises (DBE)¹⁸ or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity segment programs

4.3 B: Metrics and Indicators to Assess Energy and/or Cost Savings in Targeted Populations

Consensus Metric Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations

Metric B.1: Expected first-year bill savings in total \$ for Equity-targeted participants*.

*There still needs to be clarity on the methodology, including how to manage for fuel substitution.

Given the time constraint of this process, the proposal at this stage is two-fold. First, use this metric as an initial proxy to start to look at how programs strive to reduce a customer's energy burden (i.e., the percentage of gross household income spent on energy costs). Second, by mid-cycle, review whether this is the most appropriate metric to do so. If not, the PAs should propose (in line with proposed Principle #3D) whether this metric should be modified or if an additional metric should be adopted.

justice system; is a custodial single parent; is chronically unemployed; has been aged out or emancipated from the foster care system; has limited English proficiency; or lives in a high unemployment ZIP code that is in the top 25 percent of only the unemployment indicator of the CalEnviroScreen Tool.

¹⁶ While deemed consensus, SDG&E, EEC, and SBUA provided the following comments. SDG&E notes "We want programs that SERVE this group - while nice to have some that are implementing these programs, it shouldn't be required as well. Might support it as an indicator but, really think we need to focus on the program servicing and not who is implementing." EEC notes "This appears to focus on contractors and not necessarily their employee base which we believe is important." SBUA notes "SBUA supports the above approach and is in consensus, with the caveat that small businesses may also be underrepresented with contracts to implement Equity segment programs, but are not explicitly included in the above options."

¹⁷ <https://www.cpuc.ca.gov/supplierdiversity/>

¹⁸ <https://www.cpuc.ca.gov/supplierdiversity/>

Consensus Indicator Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations

Indicator B.2: Direct Savings from Equity-segment programs *

- A. GHG reductions (tons)
- B. Total kWh savings
- C. Total therm savings
- D. Total kW savings

*apply existing methodology

Non-Consensus Indicator Recommendation – to Assess Energy and/or Cost Savings in Targeted Populations

Indicator B.3 Community Engagement

The Equity Metrics Working Group (EMWG) members are divided on the approach to community engagement. One option is to include it as a Principle, and another option is to include it as an Indicator. The full rationales and the table of EMWG Member preferences are provided in Appendix B.

4.4 C: Metrics and Indicators for “Holistic” Benefits

Metric Recommendation – for “Holistic” Benefit

There are no proposed metrics in this category.

Consensus Indicator Recommendation – for “Holistic” Benefit

Indicator C.1: Benefits to participants and to society as a whole

The EMWG is proposing this indicator of “combined total benefits” for the Equity Segment to advance the industry by exploring ways to look at both energy and non-energy benefits together – under a “combined total benefits” metric – that would be used for programs in the Equity segment. All A-E below in \$ and/or units until units can be monetized.

- A) Energy and climate benefits (monetized within TSB)
- B) Health “counts of participants receiving this benefit” until we can monetize.
Reporting at least one of:
 - a. Indoor air quality
 - b. Outdoor air quality (e.g., reduction in emissions from gas combustion appliances that vent to nearby outdoor air)
 - c. Reduction in interior contaminants/biologics
 - d. Other (e.g., change in healthcare utilization, change in ability to utilize healthcare, change in healthcare expenditure, change in indoor

environmental quality, # households treated who are already working with community health worker, etc.)

C) Comfort - in “counts of participants receiving this benefit” until we can monetize.

Reporting at least one of:

- a. Reduced drafts
- b. Quieter interior
- c. Managed interior temperature (e.g., cool during heatwave, warm during cold spell)
- d. Other (e.g., improvements in temperature stability between rooms and floors; increase in usability of interior space)

D) Safety - in “counts of participants receiving this benefit” until we can monetize.

Reporting at least one of:

- a. Improved safety of appliances (e.g., no gas leaks, combustion safety, etc.)
- b. Other (e.g., railings, steps, floors, improvements in lumens of travel areas in living spaces, improvements to landscaping to reduce wildfire risk; door locks; outdoor lighting, improved panels to ensure safe electrification upgrades, electrical hazard reduction – building sealing and reducing use of out-of-date space heaters or stoves for indoor heating, # of households treated with existing safety issues, etc.)

E) Economic or other “non-energy benefits” (as proposed by the PAs or program) in dollars or “counts of participants receiving this benefit” until we can monetize.

The proposal is to commit to establishing a methodology and approach in order to make this a Metric for the 2028-2031 cycle (i.e., we would need a Commission approved methodology before 2026, when the next application would be submitted for the 2028 program cycle). This proposal is a first step to exploring alternative ways of measuring non-energy benefits, per D.21-05-031.¹⁹

¹⁹ D.21-05-031, p.23-24 “Furthermore, in the future, the Commission may consider whether or how to transition to an evaluation of non-energy benefits when considering the reasonableness of costs related to market support and equity programs.”

Section 5: Additional Issues from the Prospectus and Raised Through EMWG Process

5.1 Background

This section includes topics outlined in the Prospectus as key questions for the EMWG to address (such as how to address non-consensus issues in the February 2022 filings). It also presents topics and proposals that the EMWG discussed but did not finalize (such as a definition for “underserved” and reporting expectations).

5.2 How to Address Non-Consensus Issues in February 2022 Filings

The PAs will follow any consensus recommendations in developing their Equity programs, metrics, and targets for their Business Plans/4 Year Applications to be filed in February 2022. There is no current plan for the Commission to resolve any non-consensus issues prior to the February 2022 filings. Therefore, for any non-consensus issues, the PAs will be free to use their best judgement but should either select one or the other option, or both, but should not propose a new and different option.

5.3 Definition of “Underserved”

While there are specific definitions for Hard-to-Reach²⁰ and Disadvantaged Communities,²¹ there is no clear definition of “underserved.” While a number of options were discussed, the EMWG members preferred to present a non-consensus issue given the limited time to complete this process. Three options are presented below for consideration. Members’ first choice as well as acceptable options are shown in the table below the option descriptions and their rationales.

Before delving into the specific options, it is important to note that the Equity Metrics Workshop input yielded a number of additional considerations for who might be deemed “underserved” that extend beyond setting inclusive definitions:

1. Some customers will be left behind not because they do not fit into one of the defined categories, but rather because of ongoing systemic racism that continues to influence where funding is invested and how programs are designed.
2. There are a number of groups that have been marginalized, left out, or otherwise negatively impacted by government/regulated programs in the past and may continue to lack trust in such offerings. This would result in being left out even if these customers fit into one of the categories.

²⁰ D.18-05-041 Section 2.5.2, p.4.1

²¹ SB 350, as referenced in D.18-05-041 Section 2.5.1, p.39

3. There are a number of customers who are eligible for equity segment programs that may still be left out because homes and/or community buildings need additional repairs prior to being able to participate in energy efficiency or electrification programs (e.g., upgrading electrical panels, fixing holes in the wall or roof, etc.).
4. There are a number of people who choose to decline to participate in the Energy Savings Assistance (ESA) program. These people would also be left behind if there were no alternative approaches that may be more appealing.

These factors will need to be considered in program design and highlight the importance of community engagement to ensure programs are meeting the needs of communities.

Another suggestion was to rely on the CPUC's 2019 Affordability Report,²² which notes that "Essential utility service charge" refers to the costs borne by a representative household for the quantity of utility service required to enable a ratepayer's health, safety, and full participation in society." Therefore, a customer who is underserved would be one whose level of (affordable) utility service does not enable their health, safety, and/or full participation in society. However, since this is not an easily quantifiable approach at this moment, we include it here for reference in the event the PAs, stakeholders, or the Commission would like to take it up at a later time.

Option 1: Use ESJ Action Plan Definition

The first option is to use the CPUC's Environmental and Social Justice (ESJ) Action Plan definition.²³ In the plan, ESJ communities that are underserved would include the following:

1. Predominantly communities of color or low-income.
2. Underrepresented in the policy setting or decision-making process.
3. Subject to a disproportionate impact from one or more environmental hazards.
4. Likely to experience disparate implementation of environmental regulations and socio-economic investments in their communities.²⁴

²² CPUC 2019 Annual Affordability Report. <https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/reports/2019-annual-affordability-report.pdf>

²³ [ESJ Action Plan](#), p.9

²⁴ Government Code section 65040.12.e: https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=65040.12. For purposes of this section, "environmental justice" means the fair treatment and meaningful involvement of people of all races, cultures, incomes, and national origins, with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. (2) "Environmental justice" includes, but is not limited to, all of the following: (A) The availability of a healthy environment for all people. (B) The deterrence, reduction, and elimination of pollution burdens for populations and communities experiencing the adverse effects of that pollution, so that the effects of the pollution are not disproportionately borne by those populations and communities. (C) Governmental entities engaging and providing technical assistance to populations and communities most impacted by pollution to promote their meaningful participation in all phases of the environmental and land use decisionmaking process. (D) At a minimum, the meaningful consideration of recommendations from populations and communities most impacted by pollution into environmental and land use decisions.

This would include, but not be limited to:

1. Disadvantage Communities located in the top 25% of communities identified by Cal EPA's CalEnviroScreen.²⁵
2. All Tribal lands.
3. Low-income households.²⁶
4. Low-income census tracts.²⁷

Option 2: Use ESJ Action Plan Definition + allow an avenue for PAs to propose additional 'underserved' with rationale

Even with the addition of the ESJ definition, members and stakeholders continue to be concerned that certain communities or individuals will be left out (e.g., renters, housing type, Black customers/workers, undocumented customers/workers, non-English speakers, isolated/remote communities, seniors, public agencies/facilities, those with barriers to employment, etc.). In addition, other members referenced the need to define various customer types, such as socially disadvantaged farmers (e.g., via AB 1348²⁸) and small business (e.g., via the Department of General Services Certification Programs²⁹).

Therefore, Option 2 is including the ESJ definition as in Option 1, plus the opportunity for PAs to propose inclusion of additional potential customers, participants, or communities that may not fall squarely within these definitions (e.g., a school in a location that does not meet any definition but the students who attend would meet eligibility requirements).

Option 3: Allow the PAs to determine underserved

Option 3 would be to allow the PAs to define what "underserved" is in their applications as well as through a to-be-determined mechanism to allow for future modifications that would occur after a decision is made on the applications.

The EMWG members who prefer each option and find each option acceptable is presented below in Table 3. In addition, some Working Group Members (indicated by a *) have provided comments to clarify and elaborate on their option choices in Appendix C.

²⁵ <https://oehha.ca.gov/calenviroscreen>

²⁶ Household incomes below 80 percent of the area median income.

²⁷ Census tracts with household incomes less than 80 percent area or state median income.

²⁸ Farmers or ranchers who are members of a "socially disadvantaged group," which means a group whose members have been subjected to racial, ethnic, or gender prejudice because of their identity as members of a group without regard to their individual qualities. These groups include all of the following: African Americans, Native Indians, Alaskan Natives, Hispanics, Asian Americans, Native Hawaiians and Pacific Islanders. https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180AB1348

²⁹ California Department of General Services definition of "small business" uses the following criteria (1) Be independently owned and operated; (2) Not dominant in field of operation; (3) Principal office located in California; (4) Owners (officers, if a corporation) domiciled in California; and (5) Including affiliates, be either: (i) A business with 100 or fewer employees; (ii) An average annual gross receipts of \$15 million or less, over the last three tax years; (iii) A manufacturer with 100 or fewer employees; or (iv) A microbusiness. A small business will automatically be designated as a microbusiness, if gross annual receipts are less than \$3,500,000 or the small business is a manufacturer with 25 or fewer employees.

Table 3: EMWG Support of “Underserved” Definitions Options 1, 2, and 3

Underserved Definition	First Choice Option	Acceptable Option
Option 1: Use ESJ Action Plan Definition (2 first choice, 13 acceptable³⁰)	Cal Advocates CodeCycle	3C-REN BayREN Cal Advocates CEDMC CodeCycle High Sierra Energy Foundation Resource Innovations Rising Sun Center for Opportunity SBUA SCE SCG SJVCEO TRC
Option 2: Use ESJ Action Plan Definition + allow an avenue for PAs to propose additional ‘underserved’ with rationale. (19 first choice, 21 acceptable)	3C-REN BayREN CEDMC CSE* EEC* NRDC PG&E Resource Innovations Rising Sun Center for Opportunity* SBUA* SCE SCG SDGE Silent Running LLC* SJVCEO SoCalREN* The Energy Coalition TRC Viridis Consulting	3C-REN BayREN CEDMC CodeCycle CSE EEC High Sierra Energy Foundation NRDC PG&E Resource Innovations Rising Sun Center for Opportunity SBUA SCE SCG SDGE Silent Running LLC SJVCEO SoCalREN The Energy Coalition TRC Viridis Consulting
Option 3: Allow the PAs to determine underserved. (3 first choice, 14 acceptable)	High Sierra Energy Foundation MCE* RCEA	3C-REN BayREN CEDMC CodeCycle High Sierra Energy Foundation MCE RCEA Resource Innovations Rising Sun Center for Opportunity SBUA SCE SCG SJVCEO TRC

³⁰ Members were asked if “Regardless of your 1st choice, are all three options acceptable to your organization?” – some Members found only two of three options acceptable. See Appendix C for details

5.4 Reporting Templates

PG&E, BayREN, and SCE collaborated on the development of these tables as a visual illustration of how the reporting of the new Equity segment metrics and indicators would work in practice. The intent of these tables is to help PAs understand the information they would be expected to collect, track, and report, and for stakeholders to see what information would be available, and how it would be presented, for their review, if the CAEECC WG current proposal were to be adopted.

It is included here based on advocates' interest in holding a conversation with interested stakeholders prior to the February 2022 filing to discuss issues such as the following: what happens with programs that fit into multiple categories, how do you show progress in the Equity segment for program categorized as Resource Acquisition that also make significant impact towards the Equity segment objective, and how to consistently track programs that aren't applicable.

Note, the categories proposed below each metric are ways to define what "served" means in the context of the metric. These were designed with the intention of being manageable to track (i.e., only 2-3 categories are listed per metric). As noted in Principle 5B, **only applicable programs would have to report**. These categories would be indicators to help inform overall progress toward the metric.

The tables below can be found on the CAEECC website³¹ and are reproduced here for illustrative purposes.

³¹ <https://www.caeccc.org/equity-metrics-working-group-meeting>

A.1-A.9: Metrics & Indicators to Measure Who and How Target Populations are “Served”

Metric (dark green) and Metric/Indicator (light blue) to Measure Who and How Target Populations are “Served”	DAC/HTR/Underserved customer/HH/building/project/participant count:
A.1. Total # residential (SF or MF unit) equity-targeted <u>households (HHs)</u> served by the Equity programs	
Single Family – equity market support (ex: education, information, training, technical support, etc.)	
Single family – equity resource acquisition (ex: energy saving action, etc.)	
Multifamily – equity market support (ex: education, information, training, technical support, etc.)	
Multifamily – equity resource acquisition (ex: energy saving action, etc.)	
A.2. Total # MF equity-targeted <u>buildings</u> served by the Equity programs	
Equity - Market support (ex: education, information, training, technical support, etc.)	
Equity - resource acquisition (ex: energy saving action, etc.)	
A.3. Total # <u>Ag or Ind.</u> equity-targeted <u>customers</u> served by the Equity programs	
Ag – equity market support (ex: education, information, training, technical support, etc.)	
Ag – equity resource acquisition (ex: energy saving action, etc.)	
Ind – equity market support (ex: education, information, training, technical support, etc.)	
Ind – equity resource acquisition (ex: energy saving action, etc.)	
A.4. Total # equity-targeted <u>public facilities and equipment or community projects</u> served by the Equity programs	
Equity - Market support (ex: education, information, training, technical support, etc.)	
Equity - resource acquisition (ex: energy saving action, etc.)	
A.5. Total # <u>small and medium business (SMB)</u> equity-targeted <u>participants</u> served by the Equity programs	
Equity - Market support (ex: education, information, training, technical support, etc.)	
Equity - resource acquisition (ex: energy saving action, etc.)	
A.6. Total # of companies/non-profits served by the Equity Segment programs	
Equity - Market support (ex: education, information, training, technical support, etc.)	
Equity - resource acquisition (ex: energy saving action, etc.)	
A.7. Total # of <u>contractors/workers</u> served by Equity Segment Programs	
A.8. Total # (indicator for all) [and % (metric for PAs with no relevant legal restriction)] of <u>contractors and/or workers that are disadvantaged workers or otherwise underrepresented, who are directly involved in implementing Equity Segment programs</u>	
A.9. Total # (indicator for all) [and % (metric for PAs with no relevant legal restriction)] of <u>companies/non-profits who are Diverse Business Enterprises (DBE) or otherwise underrepresented (e.g., BIPOC-owned) with contracts to implement Equity Segment programs</u>	
Notes:	
Record each household/building/customer only once	
Counts of market support participants should be market support engagement only with no resource acquisition elements	
Resource acquisition counts include participants with claimable savings	

B.1-B.3: Metrics & Indicators to Assess Energy and/or Cost Savings in Targeted Populations

Metric (dark green), Consensus Indicator (light green), and Non-Consensus Indicator (tan) to Assess Energy and/or Cost Savings in Targeted Populations	Savings	
B.1. Expected first-year bill savings in total \$ for equity-targeted program participants (metric) <i>[Note: intent is to ensure relevant programs are designed to help the participant directly save money even if not through a CPUC program. Calcs would be prospective and compared to baseline conditions to focus upgrades on the most impactful measures/strategies. This is a broader or "more loose" calculation of energy savings that would include kits, etc.] [participant perspective/all savings]</i>	\$	
B.2. Direct Savings from Equity Segment programs		
GHG reductions (tons)		
Total kWh savings		
Total therm savings		
Total kW savings		
B.3. Non-Consensus Item: Count and type of community engagement activities targeted at disadvantaged, hard-to-reach, and underserved communities:		B.3. is a non-consensus item
Community engagement activities during program design and to identify community needs and solutions	(count)	(types)
Community engagement activities during program implementation	(count)	(types)
Community engagement activities during program assessment	(count)	(types)
Metrics = dark green		
Consensus Indicator (light green)		
Non-Consensus Indicator (tan)		

C.1: Indicators for "Holistic" Benefits

Indicator for "Holistic" Benefits	\$	Units/count
C.1. Combined total benefits to participants and to society as a whole (all A-E below in \$ and/or units until units can be monetized)		
A. Energy and climate benefits (monetized within TSB)	(=TSB)	
B. <u>Health</u> – "non-energy benefits" in "counts of participants receiving this benefit" until we can monetize. Reporting at least one of: Indoor air quality, Outdoor air quality (e.g., reduction in emissions from gas combustion appliances that vent to nearby outdoor air), Reduction in interior contaminants/biologics, other		
C. <u>Comfort</u> – "non-energy benefits" in "counts of participants receiving this benefit" until we can monetize. Reporting at least one of: reduced drafts, quieter interior, managed interior temp, other		
D. <u>Safety</u> – "non-energy benefits" in "counts of participants receiving this benefit" until we can monetize. Reporting at least one of: improved safety of appliances, other		
E. <u>Economic or other "non-energy benefits"</u> (as proposed by the PAs or program) in dollars or "counts of participants receiving this benefit" until we can monetize		
Note: white cells indicate where a standard calculation methodology is not yet determined for this indicator; a PA may have a method for populating		

5.5 Demographic Data and Data Systems Integration Ideas

The following two items were raised at the 9/29/2021 EMWG meeting but were not thoroughly discussed.

1. Collect and track specific demographic data (race, ethnicity, gender, geography, and/or income (REGGI))
2. Data Systems Integration: Track yes/no

One or more Members found value in these items and inquired as to whether such issues could be taken up by the CPUC's reporting team or through another avenue that would enable data tracking of demographics and/or data systems (two separate topics) to apply to the full energy efficiency portfolio.

Appendix A: Working Group Member Organizations and Representatives

Table A.1: EMWG Member Leads and Alternates

Organization	Lead	Alternate
Bay Area Regional Energy Network (BayREN)	Jennifer Mitchell-Jackson	Jenny Berg
California Efficiency + Demand Management Council (CEDMC)	Serj Berelson	Greg Wikler
Center for Sustainable Energy (CSE)	Stephen Gunther	Fabi Lao
CodeCycle	Dan Suyeyasu	
Energy Efficiency Council (EEC)	Allan Rago	Ron Garcia
High Sierra Energy Foundation	Pam Bold	
MCE	Stephanie Chen	Qua Vallery
Natural Resources Defense Council (NRDC)	Julia de Lamare	Lara Ettenson
Pacific Gas and Electric (PG&E)	Lucy Morris	
Public Advocates Office (Cal Advocates)	Dan Buch	Augie Clements
Redwood Coast Energy Authority (RCEA)	Aisha Cissna	Stephen Kullmann
Resource Innovations	Corey Grace	Bobby Johnson
Rising Sun Center for Opportunity	Alejandro Castelan	Julia Hatton
San Diego Gas and Electric (SDGE)	Elaine Allyn	DeDe Henry
San Joaquin Valley Clean Energy Organization (SJVCEO)	Courtney Kalashian	Samantha Doderio
Silent Running LLC	James Dodenhoff	
Small Business Utility Advocates (SBUA)	Ted Howard	Theo Love
Southern California Edison (SCE)	Christopher Malotte	Patty Neri
Southern California Gas (SCG)	Kevin Ehsani	Halley Fitzpatrick/Art Montoya
Southern California Regional Energy Network (SoCalREN)	Lujuana Medina	Sheena Tran
The Energy Coalition	Laurel Rothschild	Melanie Peck
TRC	Sophia Hartkopf	Marissa Van Sant
Tri-County Regional Energy Network (3C-REN)	Alejandra Tellez	Marisa Hanson-Lopez
Viridis Consulting	Mabell Garcia Paine	Don Arambula
Ex-Officio/Resource (non-voting):		
American Council for an Energy-Efficient Economy (ACEEE)	Roxana Ayala	Ariel Drehobl
California Air Resources Board (CARB)	Emma Tome	Melanie Zauscher
California Energy Commission (CEC)	Brian Samuelson	
California Public Utilities Commission (CPUC)	Ely Jacobsohn	

Appendix B: Rationale and EMWG Member Preferences for Community Engagement Non-Consensus Options

The high-level description of options for how to frame community engagement appear in the related section (i.e., Section 2 for Principle and Section 4 for Indicator). Because the options span multiple chapters in this report, we've included the detailed rationale text in this appendix, as well as a table summarizing EMWG Member preferences.

Option 1: PAs should track and report the counts and types of community engagement activities targeted at disadvantaged, hard-to-reach, and underserved communities as the following three sub-indicators:

1. Sub-Indicator 1: Community engagement activities during program design and to identify community needs and solutions
2. Sub-Indicator 2: Community engagement activities during program implementation
3. Sub-Indicator 3: Community engagement activities during program assessment

PAs should track and report the counts and types of community engagement activities as the three sub-indicators listed for the Equity Segment. It may be the case that activities are tracked at the program level and then aggregated for reporting on segment level indicators (please refer to Figure B.1 for a visual illustration). Regarding community engagement as an indicator will demonstrate the PAs are intentional about operationalizing equity in their Equity Segment programs. Considering community engagement solely as a principle, which would not be required to be tracked and reported on consistently, is not sufficient to demonstrate the prioritization of equity. Furthermore, no two communities are the same, therefore, the energy efficiency needs and solutions identified by residents in one community will vary from those identified by another. It would be less effective and impactful for PAs to execute the same types and number of community engagement activities to address this range of needs and solutions. A more targeted approach is for PAs to develop engagement activities tailored for the communities in each of their territories.³² Additionally, tracking community engagement as an indicator (with sub-indicators) will provide insights and establish processes for potential future metric development for Equity Segment programs.

Recommended community engagement and outreach activities that PAs could execute include, but are not limited to:

³² There is precedent for this customized approach. The CPUC's San Joaquin Valley Disadvantaged Communities Pilots Projects (per D.18-12-015) has a [tailored](#) outreach and engagement plan for each of the 11 communities in the pilot.

Table B.1: Recommended Community Engagement Activities

Recommended Community Engagement Activities³³			
	Sub-Indicator 1: Community Engagement Activities During Program Design and to Identify Community Needs and Solutions	Sub-Indicator 2: Community Engagement Activities During Program Implementation	Sub-Indicator 3: Community Engagement Activities During Program Assessment
Consult with advisory board/council/committee ³⁴	✓	✓	✓
Partner with community-based organizations (CBOs) to conduct engagement, education and outreach	✓	✓	✓
Community-based participatory research and pre- and post-treatment participant satisfaction surveys	✓	✓	✓
Community and stakeholder meetings, webinars and calls	✓	✓	✓
Community benefit agreements	✓		
Door-to-door canvassing	✓	✓	
Educational events (e.g., workshops, present during existing community events)	✓	✓	
Educational materials and information sharing (e.g., website, social media, flyers, signs in project area, radio, newspaper)	✓	✓	
Focus groups and listening sessions	✓	✓	✓
Staff positions focused on community engagement, outreach and education	✓	✓	✓

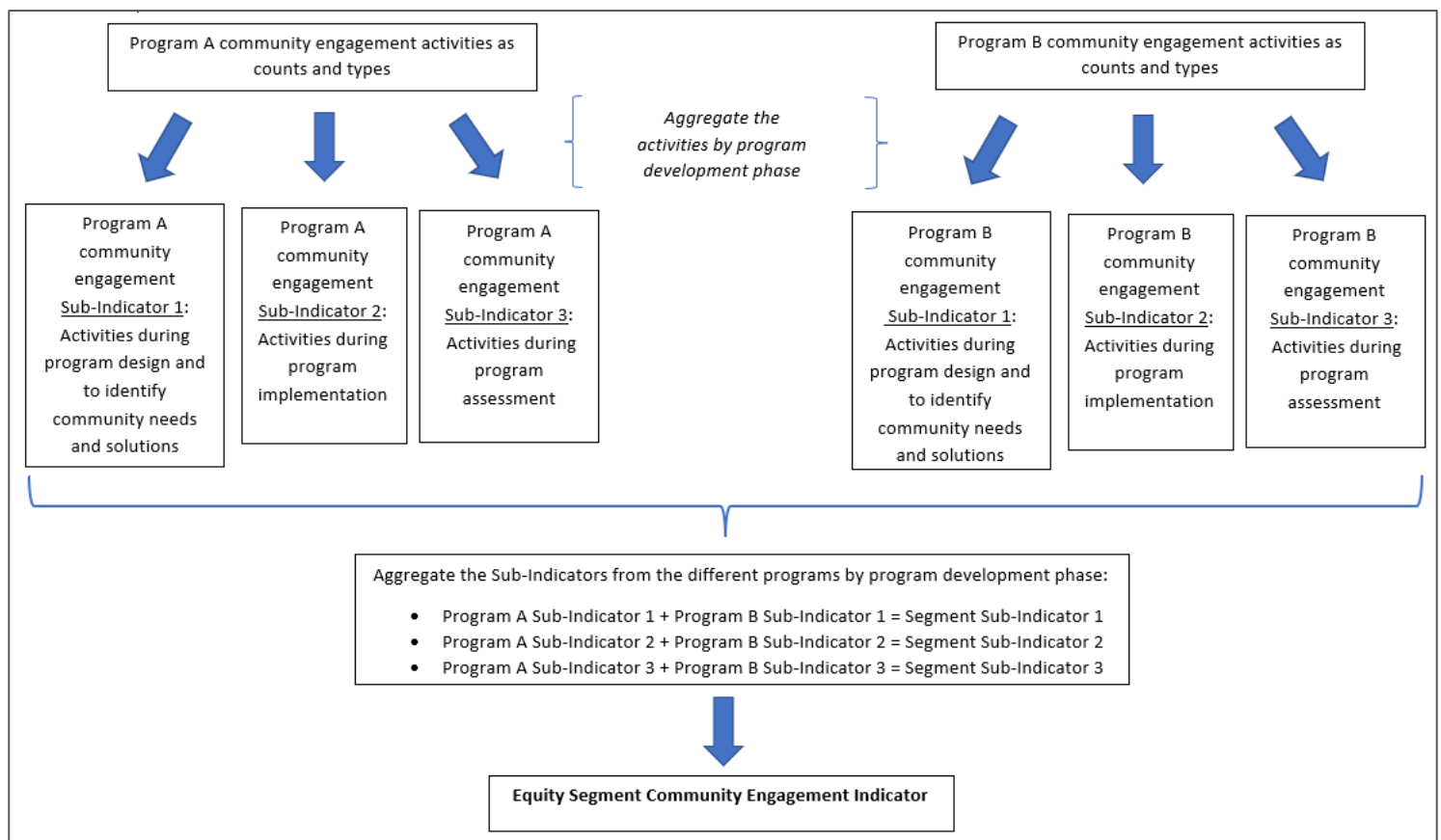
³³ The table is adapted from the California Air Resources Board's Community Inclusion Guidance (https://4930400d-24b5-474c-9a16-0109dd2d06d3.filesusr.com/ugd/849f65_c20ff8e70e4e4d299457425028da3840.pdf) for its Sustainable Transportation Equity Project (STEP).

³⁴ If a PA has an existing community advisory body or is in the process of creating one (e.g., PGE's Community Perspectives Advisory Council (https://www.pge.com/pge_global/common/pdfs/for-our-business-partners/purchasing-program/bid-opportunities/2021-COA-RFP-118185-CBO-Community-Advisory-Council.pdf)), the PA should consult this body so it may provide input on the Equity Segment program(s).

This table serves as a guide, as a starting point for PAs. They should employ a combination of activities that is most appropriate to the context and needs of the communities in their territories. Consulting with community leaders and CBOs can help PAs identify which engagement activities would be the most effective and impactful, including ones that might not be listed in the table. The check marks in the table are guides to help PAs determine which engagement activities will assist with different phases of program development (each sub-indicator represents a different phase). After incorporating community feedback into their decision-making, a PA can decide that for the context of a program, one of the recommended check marks does not fit their purposes. If so, the PA should indicate in their reporting narrative, including the input received from community leaders and CBOs, the rationale for this choice (e.g., X activity only applies to program design & implementation; Y activity only applies to program implementation).

Figure B.1: Example Visual Illustration of Community Engagement Option 1 Proposal

(Note: there could be one program or more than two programs for the Equity segment)



If an engagement activity includes partnering with community leaders and CBOs, PAs should compensate them for their time and expertise.³⁵ Along with conducting education and outreach tasks, CBOs and community leaders should also be consulted in the design and iterative assessment of the program's overall outreach and engagement strategies. Their feedback should be incorporated as program updates and changes are made.

PAs should address both the quantity and quality of their engagement and outreach activities in the narrative of the program reporting to ensure accountability of the Equity Segment. For example, if a PA chooses to hold community meetings to inform customers about the Equity Segment program(s), the PA should include in its report the number of meetings that were held, the number of attendees in each meeting, and a description of what was discussed during those meetings. If a PA chooses to consult with an advisory body, such as a council or committee, the PA should describe in its report when it consulted this body, as well as the topics that were discussed and the feedback received.

Option 2: Community engagement as a principle.

Community Engagement should be a stand-alone principle that indicates the importance of engaging community members (at the appropriate levels) when designing, implementing and evaluating programs. This position is based on the following:

- The deadlines for the working group report did not allow sufficient time for discussion of a community engagement indicator. More time and thought should be put into how to measure community engagement.
- We note that the current proposal is not one indicator, but rather a complex matrix and flow chart with supporting directions that was not vetted or agreed upon within the working group. It was clarified days after the final meeting that the current proposal is for one indicator with three sub-indicators. While this clarification is useful (since previous iterations appeared to be 10, or perhaps even 30 indicators), there is a need for further discussion to make sure that the examples provided will really provide stakeholders with relevant and reliable information. Currently, it is not sufficiently clear to all of the PAs what is being requested in this formulation and moreover several of the PAs have alternative community engagement approaches that are underway and should also be discussed before adopting a suggested approach.
- While indicators are not required to have targets, they should have most of the S.M.A.R.T. characteristics of a metric, i.e., they should be Specific, Measurable, Achievable, Relevant and Time-Bound. While we acknowledge that many of the 10 items

³⁵ Examples of advisory council and compensation structures can be found in SCE's Request For Proposal ([https://www.sce.com/sites/default/files/custom-files/Request for Proposal SCE CRLG Final \(2\).pdf](https://www.sce.com/sites/default/files/custom-files/Request%20for%20Proposal%20SCE%20CRLG%20Final%20(2).pdf)) for its Climate Resilience Leadership Group, PGE's Contract Opportunity Announcement (https://www.pge.com/pge_global/common/pdfs/for-our-business-partners/purchasing-program/bid-opportunities/2021-COA-RFP-118185-CBO-Community-Advisory-Council.pdf) for its Community Perspectives Advisory Council, and the Request For Applications ([https://calsomah.org/sites/default/files/AC Cohort 2.0 Request for Application.pdf](https://calsomah.org/sites/default/files/AC%20Cohort%202.0%20Request%20for%20Application.pdf)) for the second cohort of the Solar on Multifamily Affordable Housing (SOMAH) Program's Advisory Council.

shown in the “Recommended Community Engagement Activities” table of the proposal are valuable, some of the items in the current matrix (e.g., educational materials and information sharing described as website, social media, flyers, signs in project area, radio, newspaper) are shown to be within two different indicators and would need further clarification in terms of measurement and relevancy. In the proposed indicator example, it is unclear if a PA should count a website as one thing, and social media as a second thing, or if you would count the number of impressions for each (e.g., 200,000 website hits and 20,000 social media impressions). Moreover, the educational materials – while an important part of any program – represent activities that inform (in one direction) rather than really engaging community members (in two directions) and so may not be a specific (or relevant) indicator of community engagement. Other items in the table, such as door-to-door canvassing, may not be appropriate for some DAC, HTR or underserved HH, businesses and communities. While this is recognized in the text surrounding the proposed indicator, there is an assumption behind the measurement (and interpretation) of any indicator that it should move in a specific direction, e.g., more is better or less is better. In the case of this proposed indicator, 200,000 engagements would most likely be viewed as more valuable than 400 engagements, but the 200,000 may be impressions while the 400 are in-depth discussions with equity-targeted groups. As such, we feel that the current proposal has not been vetted well enough to be specific, relevant or reliable and as currently presented, may not accurately convey the quantity or quality of the community engagement to stakeholders – especially if the PAs do not understand what is needed and could then provide inconsistent information.

As such, we propose that Community Engagement be a principle that is aligned with the ESJ Action Plan, as described below until there is sufficient time to consider and discuss this topic further.

Principle #7: Community Engagement

Equity-segment programs must have a primary focus of “providing energy efficiency to hard-to-reach or underserved customers and disadvantaged communities in advancement of the Commission’s Environmental and Social Justice (ESJ) Action Plan.” Equity-segment programs should also seek to **enhance outreach and public participation opportunities for ESJ communities to meaningfully participate in both the program development process and benefit from CPUC programs** (as paraphrased by Goal 5 of the ESJ). This includes ESJ Goal 5 objectives that directly relate to Equity-segment programs, including:

- Interacting directly with communities to understand how they want to engage with Equity-segment programs.
- Creating outreach strategies that introduce Equity-segment program benefits to ESJ communities.
- Fostering open dialogues on environmental and social justice and enhancing program opportunities and delivery to ESJ communities.

- Disseminating appropriate and useful information to key stakeholders affected in ESJ communities.

The EMWG members who prefer each option and find each option acceptable is presented below in Table B.2. In addition, some Working Group Members (indicated by a *) have provided comments to clarify and elaborate on their option choices in Appendix C.

Table B.2: EMWG Support of Community Engagement Options 1 and 2

Community Engagement Option	First Choice Option	Acceptable Option
Option 1: Community engagement as an Indicator (8 first choice, 17 acceptable)	CSE MCE NRDC Rising Sun Center for Opportunity SBUA* Silent Running LLC* SoCalREN The Energy Coalition*	CEDMC CodeCycle CSE EEC High Sierra Energy Foundation MCE NRDC Rising Sun Center for Opportunity RCEA Resource Innovations SBUA Silent Running LLC SJVCEO SoCalREN The Energy Coalition TRC Viridis Consulting
Option 2: Community engagement as a principle (16 first choice, 22 acceptable)	3C-REN BayREN* Cal Advocates CEDMC CodeCycle EEC High Sierra Energy Foundation PG&E RCEA Resource Innovations SCE SCG SDGE SJVCEO TRC Viridis Consulting	3C-REN BayREN Cal Advocates CEDMC CodeCycle EEC High Sierra Energy Foundation MCE NRDC PG&E RCEA Resource Innovations Rising Sun Center for Opportunity SBUA SCE SCG SDGE SJVCEO SoCalREN The Energy Coalition TRC Viridis Consulting

Appendix C: Organization-Level Comments on Non-Consensus Option Choices

The comments below are intended as a supplement to the option descriptions in the body of the report; these comments represent individual Working Group Members' additional perspectives and commentary.

Principle #6: Target Setting

Option 1: Targets will be set by the PAs for Equity segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data)

3C-REN: Option 2 acceptable but it will just add more work to PA's

BayREN: Option 2 (which requires additional filings through a Petition for Modification) would result in significant regulatory effort by the Commission and PAs, which is contrary to the goal of reducing regulatory churn.

SDGE: Having a baseline to be able to set targets is crucial, given this is a new designation with little or no background information for PAs to use.

Silent Running LLC: Option #1 is reasonable and should also have PA s and stakeholders fine tune access to and practical collection of data.

Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all Equity segment metrics

Resource Innovations: Waiting 2 years to set metrics seems too long. Maybe the timeline in Option 1 could be changed or metrics could be set with a date for re-aligning them with the data once it comes in if needed.

SBUA: While we prefer Option 2, if a Petition for Modification is filed by a PA regarding collecting baseline data, we would support an expedited process wherever feasible.

SoCalREN: I think maybe just clarifying that metric targets could be true-d up in the mid-cycle advice letters if option 2 is chosen may be helpful to other PAs. The market and industry is always evolving but we need to start showing some accountability for equity

Community Engagement as a Principle or Indicator

Option 1: Community engagement as an Indicator

SBUA: SBUA supports Option 1, while recognizing some valid concerns raised for the rationale of Option 2 listed in Appendix B of the Final Report. We trust that the indicators proposed in Option 1 can be applied with sufficient flexibility to diminish those concerns.

Silent Running: I believe Community Engagement is a "guiding principle" in most ee programs today. Yet we clearly do not have sufficient community engagement to make our current programs equitable. Having CE as an indicator will catalyze the success of Equity Segment programs.

The Energy Coalition: Authentic community engagement and feedback are critical to equity programs and should not be limited to PAs to determine the level of engagement. For example, third-party implementers should also be expected to determine what meaningful community engagement activities should be conducted relative to the unique community to be served.

Option 2: Community engagement as a Principle

BayREN: We fully support community engagement but more thought is required before determining the best measurement of community engagement. It is not clear to all of the PAs what is being requested and several of the PAs have alternative community engagement approaches that are underway and should also be discussed before adopting a suggested approach. The current proposal for an indicator was not able to be discussed fully with the working group. Several PAs were not given a chance to provide comments during the working group meeting due to time limitations.

Underserved Definition

Option 1: Use ESJ Action Plan Definition

[no comments]

Option 2: Use ESJ Action Plan Definition + allow an avenue for PAs to propose additional 'underserved' with rationale

CSE: We find Option 1 acceptable.

EEC: Options 1 or 2 would be ok but we don't support #3.

Rising Sun Center for Opportunity: The first and second options are acceptable, not Option 3

SBUA: SBUA prefers Option 2, as it enables PAs to include certain customer segments which may not be included in the CPUC ESJ definition, including small businesses and other customer classes listed under Option 2 in Section 5.3.

Silent Running: Option 2 is a fair and reasonable compromise. The PA s have previously shown their inability to define undeserved customers and to equitably serve them.

SoCalIREN: Our concern is that PAs will utilize the definition to include categories or communities who are more affluent and distinctly different than those who would be underserved or experiencing inequitable environmental justice so that they can meet the definition. More resources must be identified to reach those in the most need in particular vulnerable communities and marginalized communities.

Option 3: Allow the PAs to determine Underserved

MCE: MCE's first choice would be Option 3, and Option 2 would also be acceptable. Option 1 may be overly narrow when it comes to implementation, and would not be acceptable to MCE.

Appendix D: Equity Metrics Workshop Participation and Input

D.1 Background

On August 31, 2021, the CAEECC hosted a workshop to solicit stakeholder input on Objectives and Metrics for the Equity segment. The workshop was held via Zoom. A total of 78 members of the public participated, plus 35 representatives from 24 WG Member organizations (including Leads, Alternates and Ex Officio). A full list of meeting attendees is provided in section B.2 Workshop Attendee List, below.

To solicit input virtually, a platform called Mural was used, which allows participants to provide input online. Participants were randomly assigned to one of six breakout groups, each of which was facilitated by a member of the CAEECC facilitation team or a WG member. In keeping with the purpose of the workshop, non-WG members were given priority during the discussion.

The four breakout questions were as follows:

1. What do you think the new Equity segment should achieve?
2. Should we focus on customers or also energy efficiency service providers?
3. Who is at risk of not being served?
4. How should we measure progress?

See section B.3 Input Summaries from Breakout Groups for screenshots of the Murals from the six breakout groups.

D.2 Workshop Attendee List

Table D.1: Equity Metrics Workshop Attendee List

Organizational Affiliation	First Name	Last Name
Equity Working Group Member Representatives, Alternates, and Presenters		
3C-REN	Alejandra	Tellez
BayREN	Jennifer	Berg
BayREN	Jenn	Mitchell-Jackson
CalPA	Daniel	Buch
CalPA	Augustus	Clements
California Efficiency + Demand Management Council	Serj	Berelson
Center for Sustainable Energy	Fabiola	Lao
Energy Efficiency Council	Ron	Garcia
Energy Efficiency Council	Allan	Rago
High Sierra Energy Foundation	Pam	Bold
MCE	Stephanie	Chen

Natural Resources Defense Council	Julia	de Lamare
Natural Resources Defense Council	Lara	Ettenson
Pacific Gas and Electric	Lucy	Morris
Redwood Coast Energy Authority	Aisha	Cissna
Resource Innovations	Corey	Grace
Rising Sun Center for Opportunity	Alejandro	Castelan
Silent Running LLC	James	Dodenhoff
Small Business Utility Advocates	Ted	Howard
SoCalGas	Kevin	Ehsani
SoCalGas	Halley	Fitzpatrick
SoCalREN	Fernanda	Craig
Southern California Edison	Christopher	Malotte
Southern California Edison	Patricia	Neri
The Energy Coalition	Melanie	Peck
The Energy Coalition	Laurel	Rothschild
Viridis	Don	Arambula
Ex-Officio		
ACEEE	Roxana	Ayala
California Air Resources Board	Emma	Tome
California Energy Commission	Kristina	Duloglo
California Energy Commission	Aparna	Menon
CPUC	Ely	Jacobsohn
CPUC	Nils	Strindberg
CPUC	Jason	Symonds
CPUC	Leuwam	Tesfai
Other Interested Stakeholders		
Bidgely	Raine	Giorgio
Bidgely	Pauravi	Shah
BluePoint Planning	Yeymi	Rivas
California Energy Commission	Troy	Dorai
California Energy Commission	Tiffany	Mateo
CPUC	Nicole	Cropper
CPUC	Peter	Franzese
CPUC	Peng	Gong
CPUC	Valerie	Kao
CPUC	Sarah	Lerhaupt
CPUC	Monica	Palmeira

CPUC	Asia	Powell
CPUC	Agatha	Wein
CPUC	Cheryl	Wynn
CHEEF	Kaylee	D'Amico
City of Irvine	Jose	Castaneda
Daikin North America	Matt	Baker
East Bay Community Energy	Beckie	Menten
Energy Solutions	Britney	Blankenship
Energy Solutions	Evan	Kamei
Enervee	Anne	Niederberger
Franklin Energy	Jonathan	Budner
Franklin Energy	Chad	Ihrig
Franklin Energy	Justin	Kjeldsen
FS Consulting	Frank	Spasaro
Gemini Energy Solutions	Anthony	Kinslow II
Greencat	David	Shallenberger
ICF International	Alice	Liddell
Idaho Power Company	Jim	Burdick
Idaho Power Company	Chris	Cockrell
Idaho Power Company	Marc	Patterson
Institute for Governance & Sustainable Development	Amelia	Murphy
Lawrence Berkeley National Laboratory	Molly	Bertolacini
Lincus	Cody	Coeckelenbergh
MCE	Jennifer	Green
MCE	Michelle	Nochisaki
Opinion Dynamics	Malena	Hernandez
Orange County Power Authority	Antonia	Graham
Pacific Corp	April	Brewer
Pacific Gas and Electric	Claire	Coughlan
Pacific Gas and Electric	Robert	Marcial
Pacific Gas and Electric	Jeffrey	McDowell
Pacific Gas and Electric	Lindsey	Tillisch
Pacific Power	Hallie	Gallinger
Pacific Trade	Ty	Keith
PacifiCorp	Heide	Caswell
PacifiCorp	Nancy	Goddard
PacifiCorp	Peter	Schaffer

Portland General Electric	Jason	Salmi Klotz
Portland General Electric	Jake	Wise
Quality Conservation Services	Richard	Esteves
Recurve	Carmen	Best
Redwood Coast Energy Authority	Marianne	Bithell
Resource Refocus	Anna	LaRue
San Gabriel Valley Council of Governments	Vanessa	Guerra
San Gabriel Valley Council of Governments	Sophia	Sousa
Sierra Business Council	Kari	Sinoff
Southern California Edison	Jose	Buendia
Southern California Edison	Carol	Edwards
Southern California Edison	Tory	Weber
Southern California Gas Company	Rodney	Davis
Southern California Gas Company	Allison	Dourigan
Southern California Gas Company	Karen	Mar
Staples and Associates Inc.	Dennis	Guido
Strategic Energy Innovations	Hannah	Maryanski
Strategic Energy Innovations	Stephen	Miller
The Mendota Group	Grey	Staples
The Ortiz Group LLC	Rachel	Etherington
ThirdACT PBC	Diane	Schrader
Tierra Resource Consultants	Floyd	Keneipp
Tierra Resource Consultants	Gabriela	Limon
Tierra Resource Consultants	Steven	Nguyen
Tre' Laine Associates	Pepper	Hunziker
Verdant Associates	Amy	Buege
Willdan	Antuan	Cannon
Willdan	Liz	Fitzpatrick
Willdan	Spencer	Lipp
Yinsight	Carol	Yin
Facilitators		
CONCUR	Katie	Abrams
CONCUR	Scott	McCreary

D.3 Summary of Input from Breakout Groups

This section includes six screenshots, one for each of the six breakout groups, showing individual responses to each of the four breakout questions. It has been anonymized. Icons such as stars and checkmarks were used to prioritize sticky notes for the summaries. Within a given breakout group and question, the sticky notes appear in no particular order, except in Breakout E (Figure D.6), some sticky notes were rearranged to group together sticky notes of a similar theme to provide more accurate prioritization.

Acronyms used in the Mural screenshots below:

AB1348 – Assembly Bill 1348
AMI – Area Median Income
CARE - California Alternate Rates for Energy
CBO – community-based organization
DAC – Disadvantaged community, as defined by the CPUC
DBE – Diverse Business Enterprise
DER – Distributed Energy Resources
EE – energy efficiency
ESA – Energy Savings Assistance program
ESL – English as a second language
ESCO – Energy service companies
FERA - Family Electric Rate Assistance program
GHGs – Greenhouse gases
HSC – Health safety and comfort
HTR – Hard to reach, as defined by the CPUC
HUD – (U.S. Department of) Housing and Urban Development
LMI – Low and moderate income
MBE – Minority Business Enterprise
MF – Multifamily (residence)
NEB – Non-energy benefit
SB350 – Senate Bill 350
SBE –Small Business Enterprise
SF – Single family (residence)
WBE – Women Business Enterprise
YOY – Year over year

Figure D.1: Equity Workshop “Mural” Input from Breakout Group A



Figure D.2: Equity Workshop “Mural” Input from Breakout Group B

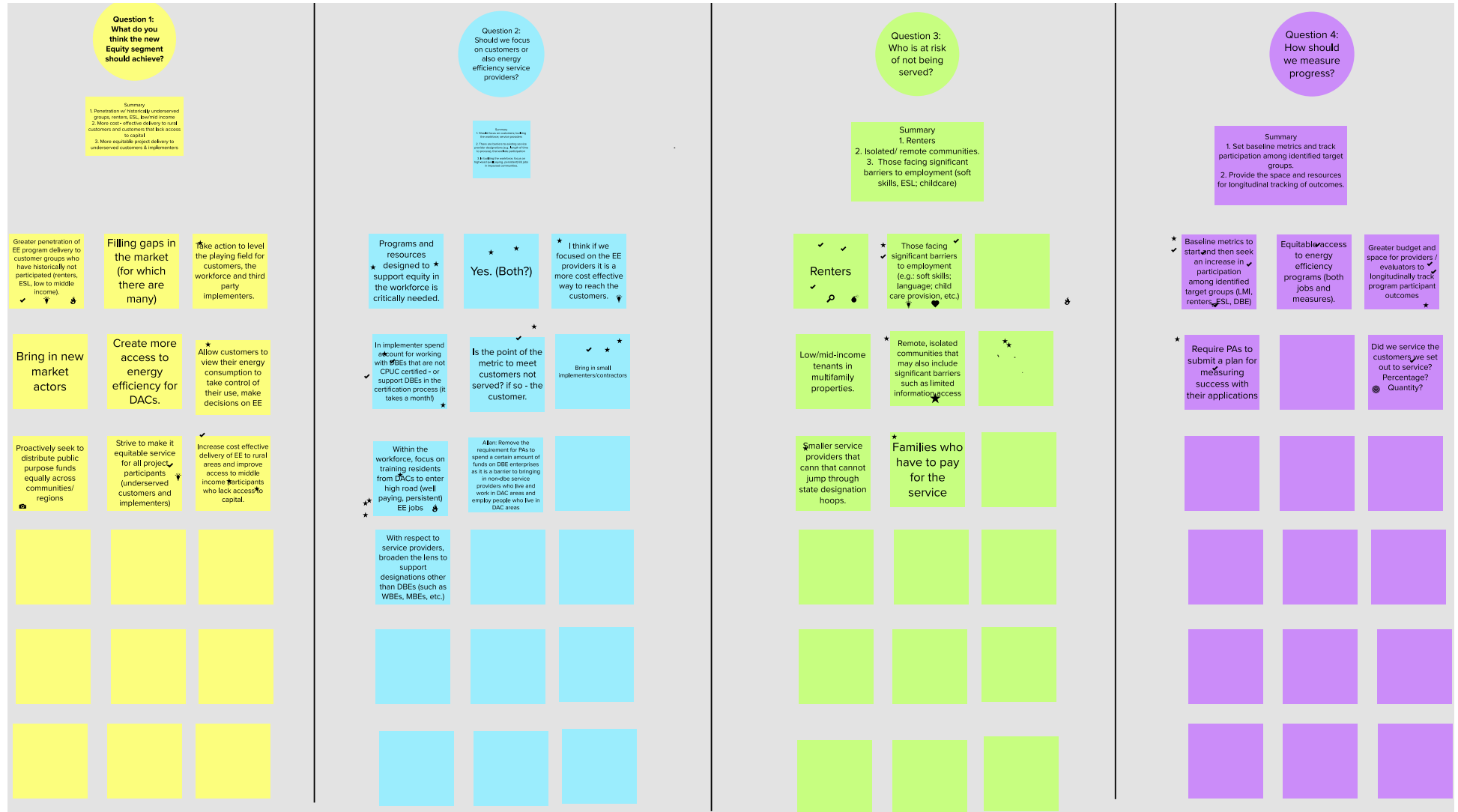


Figure D.3: Equity Workshop “Mural” Input from Breakout Group C

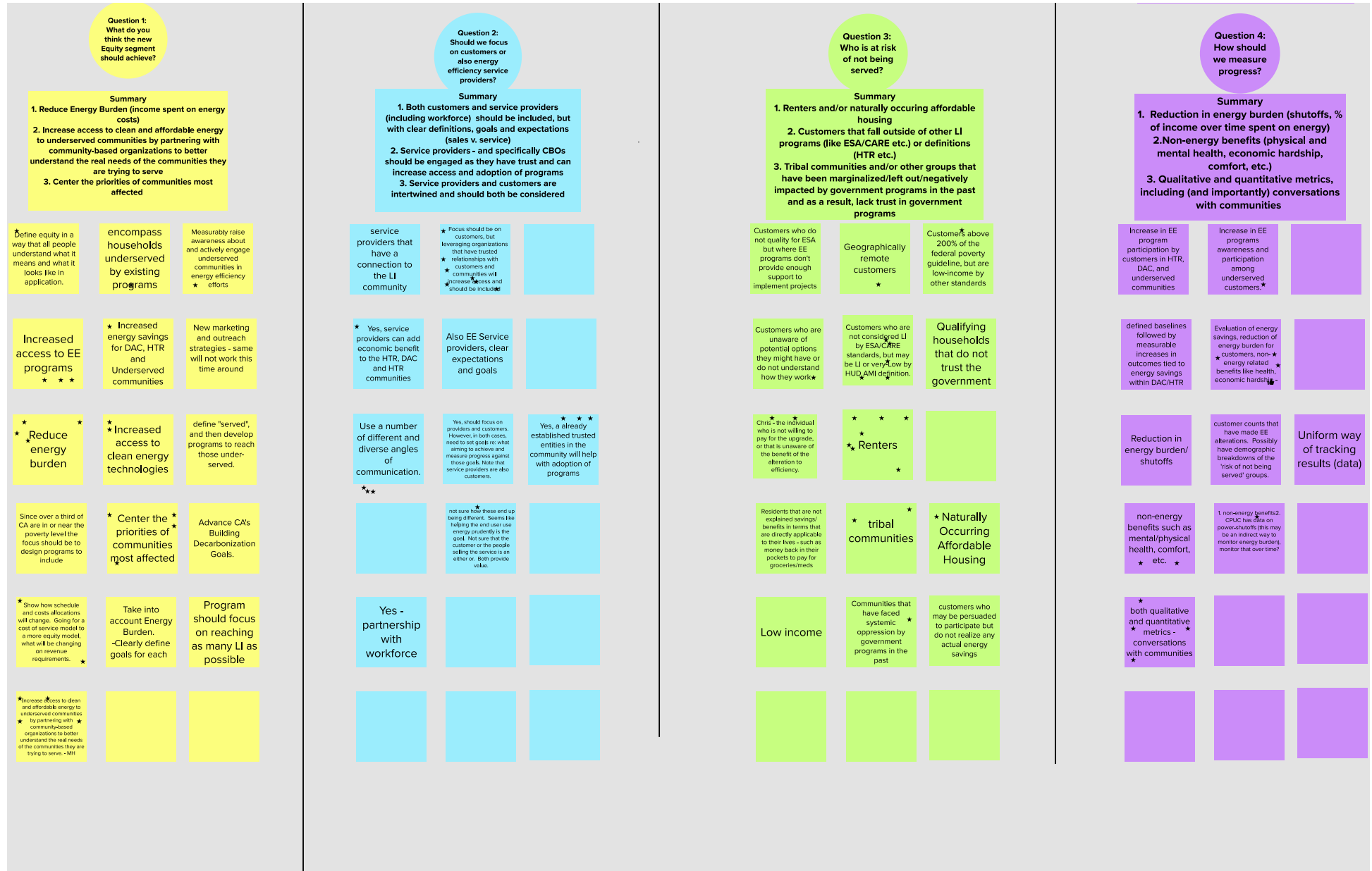


Figure D.4: Equity Workshop “Mural” Input from Breakout Group D

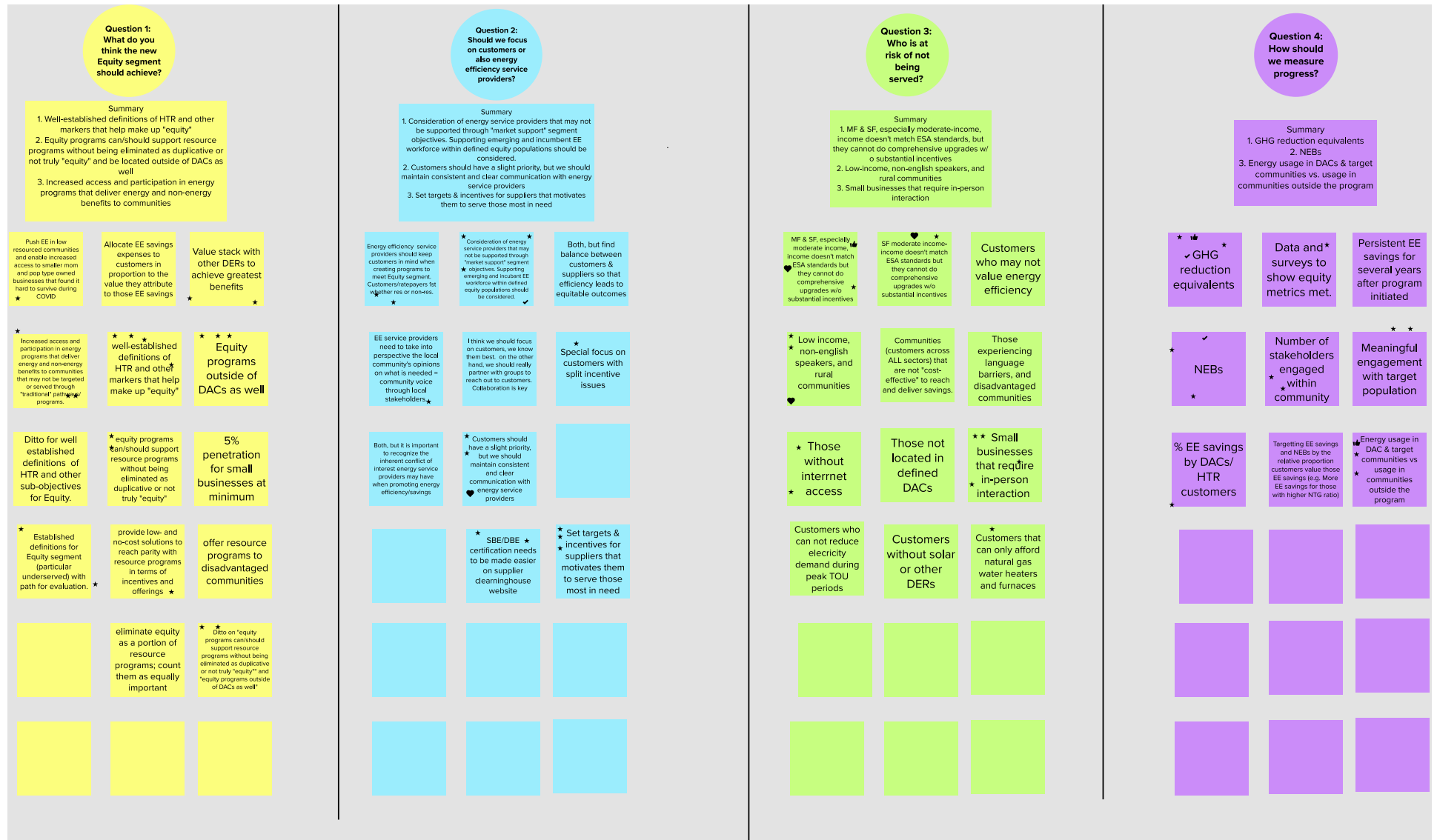


Figure D.5: Equity Workshop “Mural” Input from Breakout Group E

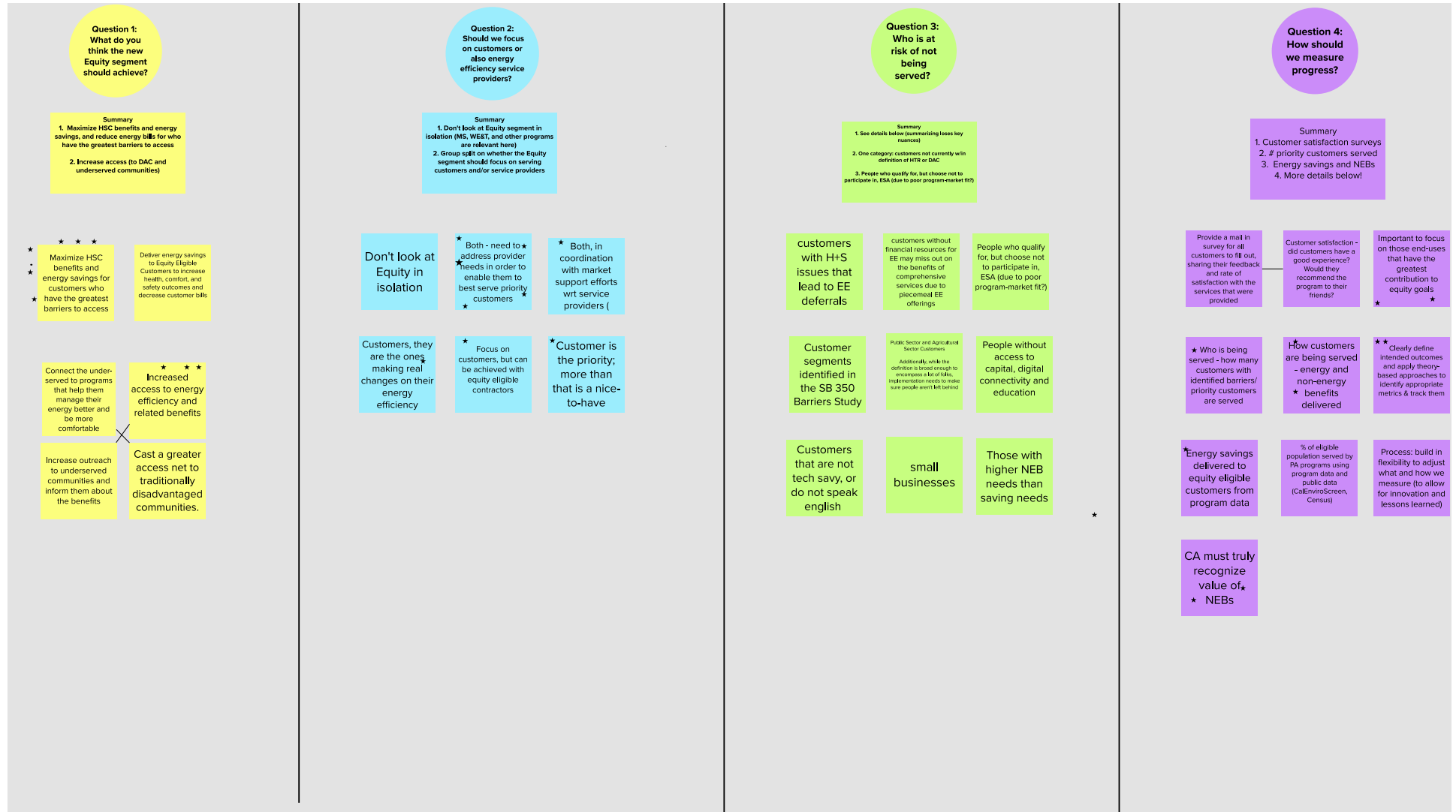
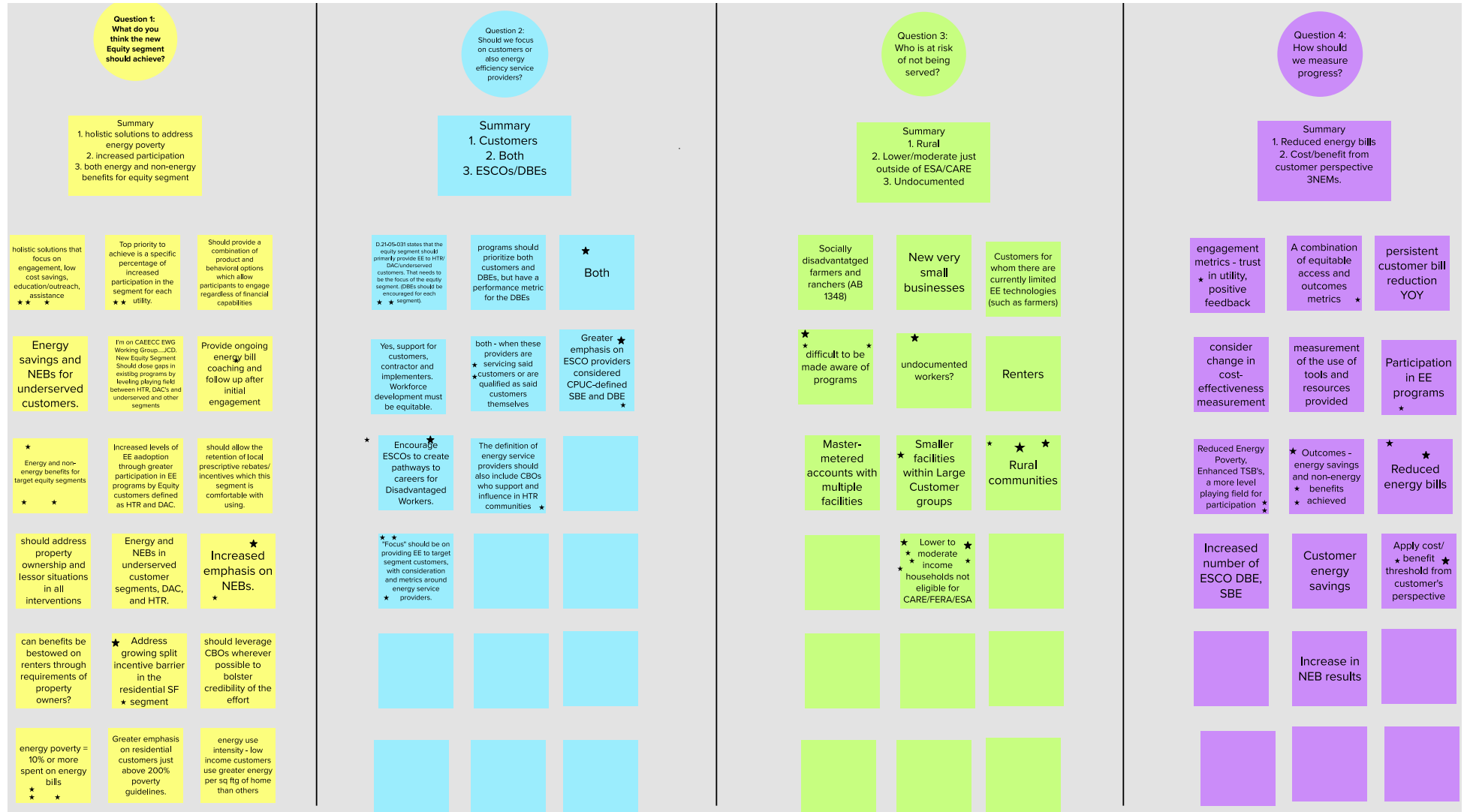


Figure D.6: Equity Workshop “Mural” Input from Breakout Group F



Appendix E: Small-Medium Business Definition

This Appendix provides definitional context for “Metric A.5: Total # small and medium business equity-targeted participants served by the Equity programs”. The content below is from the SMB Definition Per UWG Analysis June 2021.³⁶

As illustrated in the table below, the utilities each have a strict definition of customer class based on usage; however, it does not align across all investor- owned utilities (IOUs). Note that REN and CCA definitions are not included in this analysis.

Table D.1. IOU Definition of Commercial Customer Classes

Utility	Small	Medium	Large
SCE	<50 kW	≥50 kW, < 250 kW	≥250 kW
PG&E	<40,000 kWh; <10,000 therms	40,000-500,000 kWh; 10,000-250,000 therms	≥500,000 kWh; ≥250,000 therms
SDG&E ³⁷	<20 kW; <10,000 therms	20-199 kW	>200 kW; >10,000 therms
SCG	<10,000 therms	10,000 - 50,000 therms	>50,000 therms

California has additional definitions relevant to SMBs and energy efficiency. The official adopted definition of a “small business” adopted in Resolution E-4939 is as follows:

“A small business customer is defined as a non-residential customer with an annual electric usage of 40,000 kilowatt hours (kWh) or less, or an energy demand of 20 kilowatt (kW) or less, or annual consumption of 10,000 therms of gas or less. Alternatively, a small business customer is a customer who meets the definition of “micro-business” in California Government Code Section 14837.”

This definition brings up additional considerations beyond usage by referencing “micro-business”, which is defined by the California Government Code Section 14837 “as a business, together with affiliates, that has average annual gross receipts of \$3,500,000 or less over the previous three years, or is a manufacturer, as defined in Section 14837 subdivision (c), with 25 or fewer employees.” The California Department of General Services (DGS) is authorized to amend the gross receipt amount, and in January 2010 DGS increased the gross receipt amount from \$2,750,000 to the current amount of \$3,500,000. (see, California Office of Administrative Law, Regulatory Action Number 2000-1110-01S.) It is important to mention that this definition does not include fixed usage or unmetered rate schedule customers.

³⁶ “Analysis of Whether Small and Medium Businesses are Underserved by Energy Efficiency Programs in California”. <https://www.caeec.org/underserved-working-group-2020> page 9

³⁷ SDG&E eligibility for commercial programs is based on electrical consumption only, per contracts

APPENDIX E

MARKET SUPPORT METRICS REPORT

CAEECC-Hosted Market Support Metrics Working Group

Report and Recommendations to the California Public Utilities Commission and the Energy Efficiency Program Administrators

October 6, 2021

Table of Contents

Section 1: Introduction and Overview	4
1.1 Working Group Charge and Overview	4
1.2 Background on Newly Created Market Support Segment	5
1.3 Report Outline	5
1.4 Structure of Primary Objective, Sub-Objectives, Metrics and Targets	6
1.5 Approach to Seeking Consensus	7
1.6 Working Group Members.....	7
Section 2: Principles.....	9
2.1 Background	9
2.2 Consensus Principles Recommendations	9
Principle #1: Segment vs. Program	9
Principle #2: Guidelines to Setting Metrics.....	9
Principle #3: Relationship between Programs and sub-Objectives	9
Principle #4: Program Portfolios	10
Principle #5: Reporting.....	10
2.3 Non-Consensus Principles Recommendation	10
Principle #6: Target-Setting.....	10
Section 3: Primary Objective and Sub-Objectives	13
3.1 Background	13
3.2 Primary Objective Recommendations	13
3.3 Sub-Objectives Recommendations	13
Sub-Objective #1: Demand	13
Sub-Objective #2: Supply	13
Sub-Objective #3: Partnerships.....	14
Sub-Objective #4: Innovation and Accessibility	14
Sub-Objective #5: Access to Capital	14
Section 4: Metrics	15
4.1 Background	15
4.2 Metrics Recommendations.....	15
Metrics for Sub-Objective #1: Demand.....	15
Metrics for Sub-objective #2: Supply	16
Metrics for Sub-objective #3: Partnerships.....	17
Metrics for Sub-objective #4: Innovation and Accessibility	17
Metrics for Sub-Objective #5: Access to Capital	18
Section 5: Other Key Scope Questions	20
5.1 How to Address Non-Consensus Issues in February 2022 Filings	20
5.2 Distinction between Market Transformation and Market Support Objectives	20

<i>Appendix A: Working Group Member Organizations and Representatives</i>	<i>23</i>
<i>Appendix B: Organization-Level Comments on Non-Consensus Option Choices</i>	<i>24</i>

Table of Figures

Figure 1: Structure: Primary Objective, Sub-Objectives, Metrics, and Targets	6
Figure 2: Conceptual Distinctions between MT and MS	22

Table of Tables

Table 1: Market Support Metrics Working Group Member Organizations.....	7
Table 2: MSMWG Support of Target-Setting Options 1 and 2.....	12

Section 1: Introduction and Overview

1.1 Working Group Charge and Overview

The charge of the Market Support Metrics Working Group (MSMWG) was to identify and define the most important Objectives and associated key Metric(s) for the new Market Support portfolio segment established in California Public Utilities Commission (CPUC) Decision 21-05-031. The Objectives and associated key Metric(s) for each objective will be used to support and provide rationale for portfolio segmentation and program design, as well as used for program benefit/value forecasting, tracking, and evaluation. Although the Working Group (WG) was not tasked with setting the specific numeric Targets for the Metric(s) used in each Program Administrator's (PA's) filing, the MSMWG did discuss and recommend a Principle on target-setting.

The full MSMWG met four times between July and September 2021. A sub-working group (sub-WG) focused primarily on developing key associated Metrics met four times. The sub-WG was convened by Cody Coeckelenbergh representing SoCalREN, Sophie Babka from Cal Advocates, and Mary Sutter representing BayREN. The culmination of the MSMWG is this Report submitted directly to the Commission and the Program Administrators (PAs).

As outlined in the Prospectus¹, and at the direction of the CPUC, the MSMWG was charged with answering the following key questions:

- **Objective and Metric(s) - setting questions**
 - What are the specific Objectives for each segment?
 - What are the specific associated key Metric(s) for each Objective?
 - For each Objective and key Metric(s) describe whether it will be expressed quantitatively, qualitatively, or a mixture of both—and when each will be established and by whom.
 - For each Objective and associated key Metric(s) describe whether its primary application is to justify portfolio segmentation and program design; forecasting of benefits/values from the budgeted program; tracking and evaluation; or some combination?
 - What must all PAs include in their filings with respect to Objectives, associated key Metrics, and Targets for Metrics, and under what conditions can PAs propose additional Objectives, Metrics, and Targets?
 - What should be the basis (i.e., principles and guidance) for the PAs to set their own Targets for associated key Metric(s) in their filing?

¹ See MSMWG landing page: <https://www.caeccc.org/market-support-metrics-wg>

- **Procedural questions:**
 - How will any non-consensus Objectives and/or associated key Metric(s) be addressed in the PA filings?

The California Energy Efficiency Coordinating Committee (CAEECC) ran two distinct but related Working Groups, one on Market Support Metrics and another on Equity Metrics. The Equity Metrics report can be found on the CAEECC website: <https://www.caeccc.org/equity-metrics-working-group-meeting>.

1.2 Background on Newly Created Market Support Segment

On May 20, 2021, the California Public Utilities Commission (CPUC) unanimously approved Proposed Decision 21-05-031 on the “Assessment of Energy Efficiency Potential and Goals and Modification of Portfolio Approval and Oversight Process” (in Rulemaking 13-11-005). The Decision directs PAs to “further segment their portfolios based on the primary program purpose, into the following three segments”: *Resource Acquisition, Market Support, and Equity*. The decision then directs CAEECC to form a Working Group “to develop and vet new reporting metrics for the market support and equity program categories that will be considered alongside the portfolio filings due from all program administrators in February 2022”.²

The Decision defines **Market Support** as “programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness”.³

The Decision creates a combined budget cap of 30% for Market Support and Equity segments⁴ per Program Administrator (excluding the Regional Energy Networks (RENs)). PAs must use the new portfolio segmentation categorization scheme for the interim budget filings (for program years 2022 and 2023) due November 2021, and for the Strategic Business Plan and Four-Year Portfolio (for program years 2024 and beyond) due February 15, 2022.

1.3 Report Outline

This report outlines the outcomes and recommendations of the MSMWG and is organized as follows:

² Page 84. The Decision also rules, with respect to PA requirements, that “All energy efficiency program administrators should be required to develop metrics and criteria for evaluating progress of all programs, with particular focus on market support and equity programs that may not have measurable energy savings” (page 65)

³ D.21-05-031 “EE Potential & Goals and Portfolio Approval & Oversight”. May 20, 2021. <https://www.caeccc.org/cpuc-documents>. Page 14

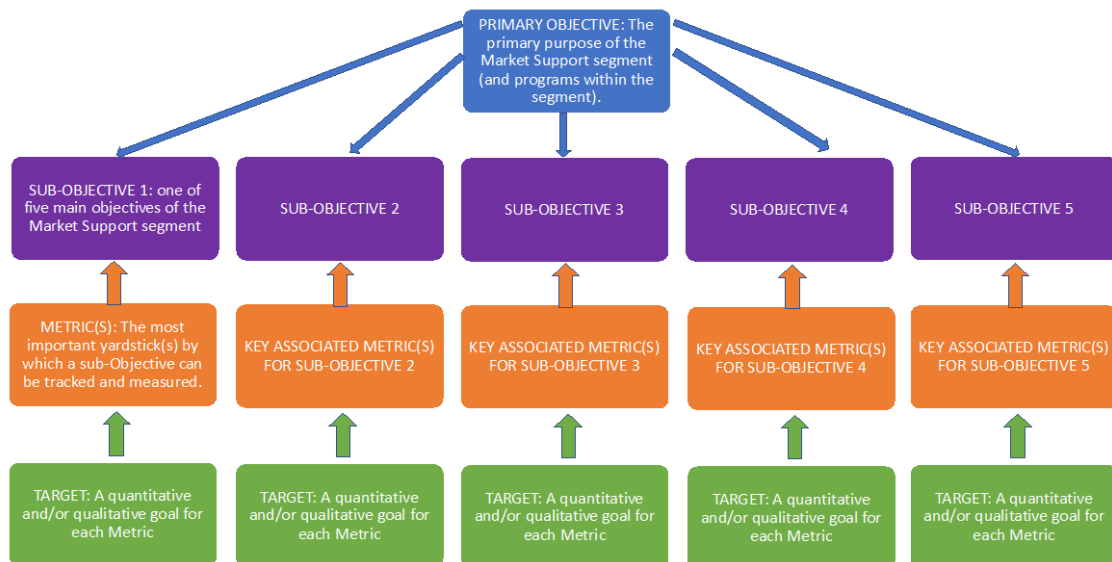
⁴ The Regional Energy Networks are exempt from the 30% portfolio cap. D.21-05-031 “EE Potential & Goals and Portfolio Approval & Oversight”. May 20, 2021. <https://www.caeccc.org/cpuc-documents>. Page 2.

- Section 2: Principles
- Section 3: Primary Objective and Sub-Objectives
- Section 4: Metrics
- Section 5: Other Key Scope Questions
- Appendix A: MSMWG Member Organizations and Representatives
- Appendix B: Organization-Level Comments on Non-Consensus Option Choices

1.4 Structure of Primary Objective, Sub-Objectives, Metrics and Targets

Figure 1, below, illustrates the relationship between the primary Objective from the Commission Order, the five sub-Objectives proposed by the MSMWG that flow beneath the primary Objective, and the key Metric(s) associated with each sub-Objective that are also proposed herein by the MSMWG, and the targets tied to each of the Metrics that will eventually be proposed by Program Administrators.

Figure 1: Structure: Primary Objective, Sub-Objectives, Metrics, and Targets



The MSMWG chose this structure for the simultaneous flexibility and specificity it provides in ensuring that metrics are tied to the intent (sub-Objective) of a given program within the segment.

1.5 Approach to Seeking Consensus

The recommendations within this Report are made by consensus of the MSMWG Members (where consensus is defined as unanimity among the Member organizations), except for one instance noted in this document (a principal on target setting). Consistent with the MSMWG's goals and Groundrules, we provide two or more options for that non-consensus recommendation and list the MSMWG Members that support each option. The non-consensus option descriptions and their rationales were drafted by the proponents of each option.

1.6 Working Group Members

The MSMWG's nineteen voting member organizations and two Ex-Officio organizations shown in Table 1 are drawn largely but not exclusively from the CAEECC's Membership. CAEECC also had an application process for interested non-CAEECC Member organizations to be part of the MSMWG, and those organizations have an * after their names. CAEECC Facilitators Dr. Jonathan Raab and Katie Abrams facilitated the MSMWG meetings. A list of the lead representatives and alternates for each MSMWG Member organization is provided in Appendix A.

Table 1: Market Support Metrics Working Group Member Organizations⁵

Organization
Bay Area Regional Energy Network (BayREN)
California Efficiency + Demand Management Council (CEDMC)
California Hub for Energy Efficiency Financing (CHEEF)*
Center for Sustainable Energy (CSE)
CodeCycle
Nexant*
Pacific Gas and Electric (PG&E)
Public Advocates Office (Cal Advocates)
Redwood Coast Energy Authority (RCEA)
San Diego Gas & Electric (SDGE)
San Joaquin Valley Clean Energy Organization (SJVCEO)
Small Business Utility Advocates (SBUA)
Southern California Edison (SCE)
Southern California Gas (SCG)
Southern California Regional Energy Network (SoCalREN)
The Energy Coalition

⁵ See Appendix A for a detailed list of each Market Support Metrics Work Group Member lead representative and alternate

The Mendota Group*
Tri-County Regional Energy Network (3C-REN)
Viridis Consulting*
Ex-Officio/Resource (non-voting):
California Energy Commission (CEC)
California Public Utilities Commission (CPUC)

Section 2: Principles

2.1 Background

This section includes a series of recommended Principles related to how to formulate and operationalize the sub-Objectives and Metrics within the new Market Support segment. In addition, although the MSMWG was not tasked with setting the specific numeric targets for the Metric(s) used in each PA's filing, the MSMWG discussed and proposed a Principle related to target-setting.

2.2 Consensus Principles Recommendations

Principle #1: Segment vs. Program

- A) New Market Support (MS) metrics proposed by the working group (WG) should focus on measuring performance of the overall segment, not of individual programs.
- B) When developing metrics, the WG should take a top-down approach meant to assess whether the MS segment is performing against the five sub-objectives.

Principle #2: Guidelines to Setting Metrics

- A) The recommendations of the WG should not prevent program and portfolio design flexibilities as this is important in the MS segment.
- B) Sub-objectives, metrics, and indicators can be revisited in the future to adjust as needed, in a to-be-determined stakeholder process.
- C) The MSMWG did not address all definitions and methodologies for the metrics so PAs should pursue the most cost-efficient and feasible approaches to collecting data

Principle #3: Relationship between Programs and sub-Objectives

- A) MS programs must have a primary focus of "supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness"⁶ and serve at least one MS sub-objective.
- B) PAs may file [in a formal proceeding] additional or refined Market Support sub-Objectives and associated Metric(s) if and when they have a program that they believe fits into the overall Market Support segment but does not clearly fit into one or more of the sub-Objectives, after vetting through CAEECC.

⁶ D.21-05-031 "EE Potential & Goals and Portfolio Approval & Oversight". May 20, 2021. <https://www.caeec.org/cpuc-documents>. Page 14

Principle #4: Program Portfolios

- A) PAs (especially the Investor-Owned Utility Program Administrators (IOU-PAs)) are encouraged, but not required, to offer a portfolio of programs that support all 5 of the MS segment sub-Objectives.
- B) PAs must propose MS program-level metrics with targets in their applications that demonstrate progress toward segment defined sub-objectives in accordance with MS principles.⁷ PAs may also propose MS program-level indicators as appropriate.
- C) Although MS segment programs can contribute to Resource Acquisition program participation in the short and long term, MS segment programs are not required to do so.
- D) Non-Resource Codes and Standards (C&S) activities should be segmented within C&S and not MS.
- E) The Market Support Segment should build and enable the foundation for future long-term energy savings that align with Commission and California climate policy.

Principle #5: Reporting

- A) PAs should begin tracking all MS relevant metrics and reporting on all MS metrics during program years 2022-2023. Note if a particular metric is not being addressed by any PA program it wouldn't have a value in the reporting.

2.3 Non-Consensus Principles Recommendation

Principle #6: Target-Setting

The MSMWG members are divided on the approach to target-setting for MS segment metrics. Two options are presented below for consideration. Members first choice as well as acceptable options are shown in the table below the option descriptions and their rationales.

Option 1: Targets will be set by the PAs for MS segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data).

All MS segment metrics should have meaningful targets based on available data. Since little or no data exists for new programs, pilots and/or programs still being designed, targets cannot be reasonably established. Similarly, existing programs that are moved into the MS segment may not necessarily have relevant data to be able to report on the newly determined MS segment metrics. PAs should have the time to collect baseline data so that targets are both appropriate and reportable. Additionally, D.18-05-041 OP9 allows for new or modified metrics or indicators to be proposed in annual budget advice letter filings. Therefore, tier 2 advice letters (such as the True Up Advice Letter) may be an appropriate avenue for also providing targets.

⁷ These could be drawn from Segment metrics, and/or additional metrics, as appropriate.

Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all MS segment metrics.

All metrics proposed must have targets. The appropriate venue to propose and litigate targets is the budget application proceeding, where the evidence underlying proposed targets can be considered and alternatives proposed and considered. Most PAs already have the data and/or experience to set targets based on existing programs.

For any metrics that PAs think target setting isn't feasible without collecting baseline data, the proponents of Option 2 propose that the PAs include in their applications a proposal for a date certain by which the PAs will file a Petition for Modification (PFM) to the budget application decision. That PFM would include the proposed targets for each metric that had the targets deferred and include the evidentiary basis for the proposed target.

In addition, for those metrics that currently have uncertain baseline data, more significant adjustments to targets may be needed in the future after initial targets are set in applications or PFMs. The PAs should propose a process for making such adjustments (e.g., rely on the reporting requirements through CAEECC, use the annual reporting process to seek adjustment as needed, etc.) in their budget applications.

The MSMWG members who prefer each option and find each option acceptable are shown below in Table 2. In addition, some Working Group Members (indicated by a *) have provided comments on their option choices in Appendix B.

Table 2: MSMWG Support of Target-Setting Options 1 and 2

Target-Setting Option	First Choice Option	Acceptable Option
Option 1: Targets will be set by the PAs for MS segment metrics following the collection of the first two program years of data (or a baseline has been set using reasonable proxy data). (15 first choice, 18 acceptable)	3C-REN BayREN CEDMC CHEEF Nexant PG&E* RCEA SCE SCG* SDGE* SJVCEO SoCalREN The Energy Coalition The Mendota Group* Viridis Consulting*	3C-REN BayREN CEDMC CHEEF CodeCycle CSE Nexant PG&E RCEA SBUA SCE SCG SDGE SJVCEO SoCalREN The Energy Coalition The Mendota Group Viridis Consulting
Option 2: In their Budget Applications, PAs will propose targets and/or set a date certain by which they will propose targets for all MS segment metrics. (4 first choice, 13 acceptable)	Cal Advocates CodeCycle CSE SBUA*	Cal Advocates CEDMC CHEEF CodeCycle CSE Nexant SBUA SJVCEO SoCalREN The Energy Coalition The Mendota Group Viridis Consulting SBUA

Section 3: Primary Objective and Sub-Objectives

3.1 Background

CPUC Decision 21-05-031 defines the Market Support segment as “programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness”.⁸

The MSMWG used this language as a foundation for developing a high-level Primary Objective, as well as five sub-Objectives that capture the key activities the Market Support segment is intended to support.

3.2 Primary Objective Recommendations

The MSMWG recommends the following primary Objective for the Market Support segment: “Supporting the long-term success of the energy efficiency (EE) market”.

The Working Group proposes defining “EE Market” as “individuals and organizations participating in transactions around energy efficiency products or services including customers and market actors (which notably includes demand and supply side).”

3.3 Sub-Objectives Recommendations

The MSMWG recommends the following five sub-Objectives:

Sub-Objective #1: Demand

Build, enable, and maintain demand for energy efficient products, and services in all sectors and industries to ensure interest in, knowledge of benefits of, or awareness of how to obtain energy efficiency products and/or services. [Activity e.g., educating customers, building demand]

Sub-Objective #2: Supply

Build, enable, and maintain supply chains to increase the capability and motivation of market actors to supply energy efficient products, and/or services and to increase the ability, capability, and motivation of market actors to perform/ensure quality installations that optimizes energy efficiency savings. [Activity e.g., training contractors]

⁸ D.21-05-031 “EE Potential & Goals and Portfolio Approval & Oversight”. May 20, 2021. <https://www.caeec.org/cpuc-documents>. Page 14

Sub-Objective #3: Partnerships

Build, enable, and maintain partnerships with consumers, governments, advocates, contractors, suppliers, manufacturers, community-based organizations and/or other entities to obtain delivery and/or funding efficiencies for energy efficiency products, and/or services and added value for partners. [Activity e.g., building partnerships]

Sub-Objective #4: Innovation and Accessibility

Build, enable, and maintain innovation and accessibility in technology, approaches, and services development to increase value of, decrease costs of, increase energy efficiency of, and/or increase scale of and/or access to emerging or existing energy efficient products, and/or services. [Activity e.g., moving beneficial technologies towards greater cost-effectiveness]

Sub-Objective #5: Access to Capital

Build, enable, and maintain greater, broader, and/or more equitable access to capital and program coordination to increase affordability of and investment in energy efficient projects, products, or services. [Activity e.g., access to capital]

Section 4: Metrics

4.1 Background

Metrics for the new Market Support segment will be used for justifying portfolio segmentation and program design, for the Market Support segment budget, and for program tracking and evaluation.

4.2 Metrics Recommendations

The MSMWG recommends a series of key associated Metrics for each of the five sub-Objectives. Each recommendation includes the following:

- Applicable existing Metrics that will continue to be tracked and data collected
- New Metrics with data that can be collected now (program outputs for relevant programs)
- New Metrics with data that needs to be collected later

Note: In developing the metrics, the MSMWG noted that there can be useful data in Marketing Education & Outreach (ME&O) and other evaluations.

Two sub-Objectives also include recommended indicators.

Metrics for Sub-Objective #1: Demand

Applicable Existing Metrics that will continue to be collected

There are not currently applicable existing metrics in this category.

New Metrics with data that can be collected now (program outputs for relevant programs)

- Number and % increase/decrease of inquiries and/or requests for information on EE products and services through relevant MS programs
- Number and % increase/decrease of customers receiving information, education, or outreach on EE projects, products, and services through relevant MS programs

New Metrics with data that needs to be collected later

- AKAB⁹ Survey to IOU Customers¹⁰
 - % of customer sample aware of EE product/service (awareness)
 - % of customer sample that is knowledgeable of EE product/service's benefits (knowledge)
 - % of customer sample that is interested in obtaining an EE product/service (attitude)

⁹ AKAB (Awareness, Knowledge, Attitudes, and Behavior) is a framework for understanding theory of behavior change

¹⁰ Any AKAB surveys for the MS segment should be led by single entity in a timely fashion with fidelity down to applicable PAs. It could be done by a contractor to Energy Division or by a lead PA.

- % of customer sample that has taken action towards obtaining EE product/service (behavior a)
- % of customers that have obtained EE products/services (behavior b)

Metrics for Sub-objective #2: Supply

Applicable Existing Metrics that will continue to be collected

Workforce Education & Training (WE&T) Common Metrics

- Number of collaborations by Business Plan sector to jointly develop or share training materials or resources.
- Number of participants by sector
- Percent of participation relative to eligible target population for curriculum
- Percent of total WE&T training program participants that meet the definition of disadvantaged worker.
- Percent of incentive dollars spent on contracts with a demonstrated commitment to provide career pathways to disadvantaged workers
- Number Career & Workforce Readiness (CWR) participants who have been employed for 12 months after receiving the training

New Metrics with data that can be collected now (program outputs for relevant programs)

- Number of Contractors (that serve in PA service territory) with knowledge and trained by relevant MS programs to provide quality installations that optimize EE

New Metrics with data that needs to be collected later

- AKAB survey to market actors around capability and desire to supply
 - % of market actors aware of energy efficient products and/or services that can be supplied to customers (awareness)
 - % of market actors knowledgeable of energy efficient products and/or services that can be supplied to customers (knowledge)
 - % of market actors that are interested in supplying energy efficient products and/or services to customers (attitude)
 - % of market actors that have supplied energy efficient products and/or services to customers (behavior)
- AKAB survey to market actors around increased ability, capability and desire to realize quality installations
 - % of market actors aware of what is required to perform/ensure quality installation of energy efficient products and/or services that optimizes energy efficiency savings (awareness)

- % of market actors knowledgeable of how to perform to perform/ensure quality installation of energy efficient products and/or services that optimizes energy efficiency savings (knowledge)
- % of market actors that are interested in performing/ensuring quality installation of energy efficient products and/or services that optimizes energy efficiency savings (attitude)
- % of market actors that have performed/ensured quality installation of energy efficient products and/or services that optimizes energy efficiency savings (behavior)

Metrics for Sub-objective #3: Partnerships

Applicable Existing Metrics that will continue to be collected

There are not currently applicable existing metrics in this category.

New Metrics with data that can be collected now (program outputs for relevant programs)

- Number of EE customers/market actors reached through partner networks and partner communications channels

New Metrics with data that needs to be collected later

- Assessed value of the partnership by partners
- % of partners that have taken action supporting energy efficiency

Indicators (for relevant programs)

- Number of partners by type and purpose
- Dollar value of non-ratepayer in kind funds/contributions utilized via partnerships

Metrics for Sub-objective #4: Innovation and Accessibility

Applicable Existing Metrics that will continue to be collected

ETP Common Metrics

- ETP-T1: Prior year: % of new measures added to the portfolio that were previously ETP technologies
- ETP-T2: Prior Year: # of new measures added to the portfolio that were previously ETP technologies
- ETP-T3: Prior year: % of new codes or standards that were previously ETP technologies
- ETP-T4: Prior Year: # of new codes and standards that were previously ETP technologies
- ETP-T5: Savings of measures currently in the portfolio that were supported by ETP, added since 2009. Ex-ante with gross and net for all measures, with ex-post where available
- Et al

New Metrics with data that can be collected now (program outputs for relevant programs)

- Number of new, validated technologies recommended to CalTF¹¹
- Number of market support projects (outside of ETP) that validate the technical performance, market and market barrier knowledge, and/or effective program interventions of an emerging/under-utilized or existing energy efficient technology
- Cost effectiveness of a technology prior to market support programs relative to cost effectiveness of a technology after intervention by the market support programs (% change in cost effectiveness)

New Metrics with data that needs to be collected later¹²

- Percent market penetration of emerging/under-utilized or existing EE products or services
- Percent market participant aware of emerging/under-utilized or existing EE products or services
- Aggregated confidence level in performance verification by product, project, and service (for relevant programs)

Indicators (for relevant programs):

- Number of providers for performance verification services

Metrics for Sub-Objective #5: Access to Capital

Applicable Existing Indicators that will continue to be collected¹³

- Participant data, e.g. credit score, census tract income, CalEnviroScreen Scores of areas served, zip code
- Comparisons between market-rate capital vs. capital accessed via EE programs, e.g. interest rate, monthly payment

New Metrics with data that can be collected now (program outputs for relevant programs)

- Total projects completed/measures installed and dollar value of consolidated projects¹⁴
- Ratio of ratepayer funds allocated to private capital leveraged¹⁵
- Differential of cost defrayed from customers (e.g., difference between comparable market rate products and program products).

¹¹ "New" refers to technology that has not previously been assigned a measure code by any CA ratepayer funded PA. "Validated" refers to assessment of technology/market/program characteristics by a PA or entity that is financially independent of the manufacturer.

¹² The MSMWG is recommending not setting targets for individual products and services, but for products and services collectively.

¹³ These indicators are currently collected only by CHEEF programs as required by the Commission and reported publicly. There may be additional pre-existing indicators/metrics (e.g., On-Bill Financing programs).

¹⁴ This indicator is currently collected only by CHEEF programs as required by the Commission and reported publicly. The MSMWG is recommending it become a formal Market Sector indicator.

¹⁵ Ibid

New Metrics with data that needs to be collected later

- % of market participants aware of capital access opportunities for investments in energy efficient projects, products, and/or services (awareness)
- % of market participants knowledgeable about capital access opportunities for investments in energy efficient projects, products, and/or services (knowledge)
- % of market participants interested in leveraging capital access opportunities for investments in energy efficient projects, products, and/or services (attitude)
- % of market participants that were unable to take action due to access to capital or affordability of energy efficient projects, products, or services (behavior)

Section 5: Other Key Scope Questions

As discussed in Section 1, the Prospectus outlined a series of key questions for the MSMWG to address. Two key scope questions not specifically addressed elsewhere in this report include how Program Administrators and the Commission address non-consensus issues (including Principles and Metrics), and the distinction between Market Transformation and Market Support Objectives. The MSMWG recommendations on these topics are below.

5.1 How to Address Non-Consensus Issues in February 2022 Filings

The PAs will follow any consensus recommendations in developing their Market Support programs, metrics, and targets for their Business Plans/4 Year Applications to be filed in February 2022. The Commission, through the Energy Division, has implied that it is not planning to resolve any non-consensus issues prior to the February 2022 filings. If that is the case, on any non-consensus issues, the PAs will be free to use their best judgement but should either select one or the other option, or both, but should not propose a new and different option.

5.2 Distinction between Market Transformation and Market Support Objectives

The Center for Sustainable Energy initially developed the following distinction between Market Transformation (MT) and Market Support (MS) Objectives, which was reviewed, discussed, and is supported by the WG.

Background

The California energy efficiency (EE) market will benefit most from a collaborative approach between the Market Transformation Administrator (MTA) and EE Rolling Portfolio Program Administrators. The CPUC has indicated in several venues that it believes MT and the Market Support (MS) segment are separate and distinct efforts, however, further clarity on how stakeholders understand that distinction will help inform MS objectives and avoid duplication or a competitive environment.

Objectives

Develop a shared understanding on the general distinctions between Market Transformation Initiatives (MTI) and Market Support programs and determine whether objectives need to be clearly distinct.

D.09-09-047 Market Transformation Definition

D.09-09-047, p. 88- 89: “Market transformation is long-lasting, sustainable changes in the structure or functioning of a market achieved by reducing barriers to the adoption of energy efficiency measures to the point where continuation of the same publicly-funded intervention

is no longer appropriate in that specific market. Market transformation includes promoting one set of efficient technologies, processes or building design approaches until they are adopted into codes and standards (or otherwise substantially adopted by the market), while also moving forward to bring the next generation of even more efficient technologies, processes or design solutions to the market.”

D.21-05-031 Market Support Definition

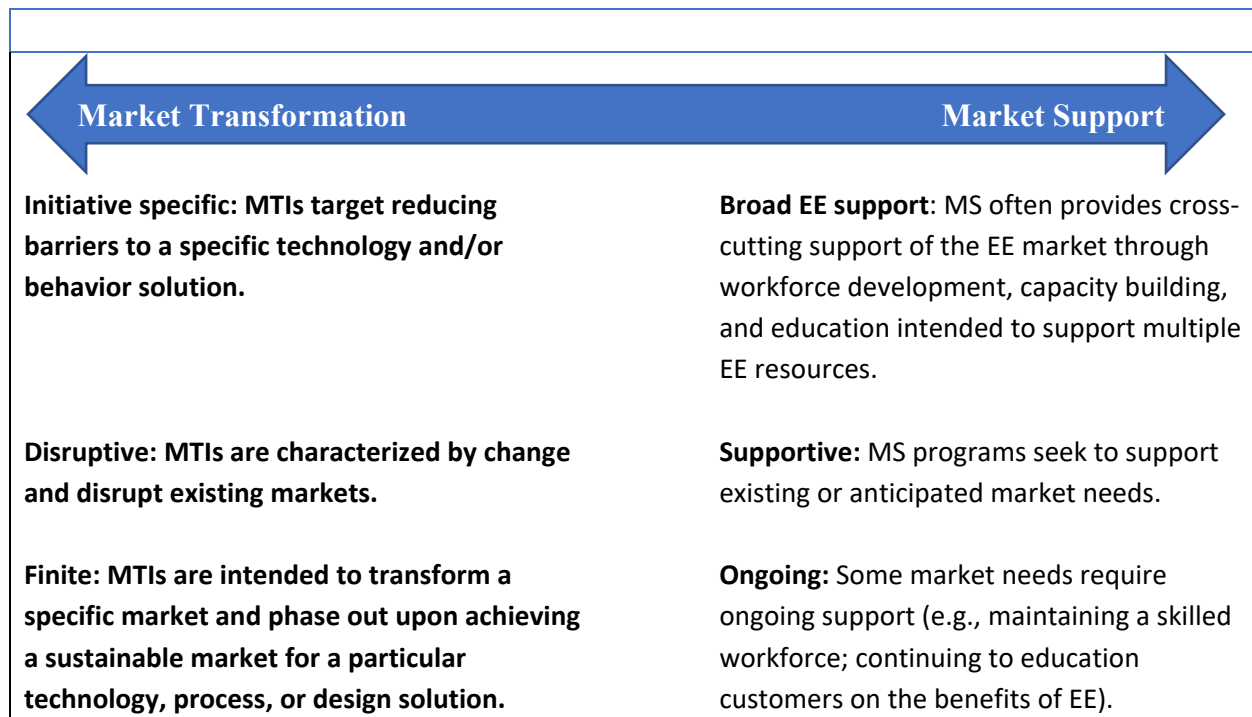
D.21-05-031, p. 14: “Market Support: Programs with a primary objective of supporting the long-term success of the energy efficiency market by educating customers, training contractors, building partnerships, or moving beneficial technologies towards greater cost-effectiveness.”

Working Group Recommendation on Distinction between Market Transformation vs Market Support Objectives

The California energy efficiency (EE) market will benefit most from a collaborative approach between the Market Transformation Administrator (MTA) and EE Rolling Portfolio Program Administrators. The CAEECC Working Group understands MT and the Market Support (MS) segment to be distinct efforts and offers the following guidance:

- MT and MS efforts will require ongoing and significant collaboration among administrators and stakeholders to be successful.
- MTIs and MS programs will not operate in silos and activities within each effort are anticipated to influence the other; including providing additional support or changing the needs of the EE market.
- Administrators should not be inhibited by rigid distinctions but should consider conceptual differences when designing MS programs and identifying MTIs.

Figure 2: Conceptual Distinctions between MT and MS



Appendix A: Working Group Member Organizations and Representatives

Organization	Lead	Alternate
Bay Area Regional Energy Network (BayREN)	Mary Sutter	Jenny Berg
California Efficiency + Demand Management Council (CEDMC)	Greg Wikler	Serj Berelson
California Hub for Energy Efficiency Financing (CHEEF)	Kaylee D'Amico	Bill Heberger
Center for Sustainable Energy (CSE)	Stephen Gunther	
CodeCycle	Dan Suyeyasu	
Nexant	Dan Sperber	Kimberly Rodriguez
Pacific Gas and Electric (PG&E)	Ben Brown	Rob Bohn
Public Advocates Office (Cal Advocates)	Dan Buch	Sophie Babka
Redwood Coast Energy Authority (RCEA)	Stephen Kullman	Marianne Bithell
San Diego Gas & Electric (SDGE)	Elaine Allyn	DeDe Henry
San Joaquin Valley Clean Energy Organization (SJVCEO)	Samantha Doderio	Courtney Kalashian
Small Business Utility Advocates (SBUA)	Ted Howard	Theo Love
Southern California Edison (SCE)	Christopher Malotte	Patty Neri
Southern California Gas (SCG)	Kevin Ehsani	Art Montoya/Halley Fitzpatrick
Southern California Regional Energy Network (SoCalREN)	Cody Coeckelenbergh	Patrick Ngo
The Energy Coalition	Craig Perkins	Chris Ford
The Mendota Group	Grey Staples	
Tri-County Regional Energy Network (3C-REN)	Erica Helson	Jordan Garbayo
Viridis Consulting	Mabell Garcia Paine	Don Arambula
Ex-Officio/Resource (non-voting):		
California Energy Commission (CEC)	Brian Samuelson	
California Public Utilities Commission (CPUC)	Ely Jacobsohn	Alexander Merigan/Peng Gong

Appendix B: Organization-Level Comments on Non-Consensus Option Choices

The comments below are intended as a supplement to the option descriptions in the body of the report; these comments represent individual Working Group Members' additional perspectives and commentary.

PG&E: PG&E strongly supports Option 1 for Principle 6 on target setting and recommends that the PAs submit targets in their 2023 true-up advice letter. This approach gives PAs a clear timeline for gathering the necessary information to provide targets and eliminates the need for additional regulatory filings. Both target-setting options require additional logistical details to be confirmed before baselines and targets for the survey-based (AKAB) metrics can reasonably be established. PG&E recommends having a stakeholder engagement process to work through the logistical details, including survey cadence, funding source(s), roles, and responsibilities.

SCG: Option 1 may read more accurately if the word "set" is replaced with "proposed," however the intent of this Option and its differentiation from Option 2 is clear with either word.

SDGE: MS segment metrics have been outlined. Without a baseline, we would not have a reasonableness of the targets. Setting them prior to baseline information would not lend itself to meaningful targets. The targets should be reported out through the annual report process.

The Mendota Group: Although we agree with Cal Advocates that proposed metrics should have targets, we are concerned that the metrics as written will be difficult for PA's to estimate and track. Therefore, we prefer deferring the requirement to provide targets to a later date. This is also why we are comfortable with the second part of the Cal Advocates proposal, namely for PA's to identify a date certain for filing PFMs, because this alternative could provide sufficient time to devise targets. In either case, the additional time will enable PAs to determine if the information is, indeed, available and trackable, and to devise appropriate targets.

SBUA: We prefer Option 2, while noting a potential concern that a Petition for Modification (PfM) could cause significant delay, and may dissuade certain potential bidders from participating in related solicitations. We recommend accelerating the PfM process when feasible.

Viridis Consulting: If we want to ensure success of the new portfolio and these new non-resource programs, we need to prioritize data over timing. In other words, the PAs will be able to set effective metrics (and implementers can come up with subsequent

effective KPIs) with real-world data. Slowing things down, allowing time to see how these programs run and then identifying metrics a couple of years out, will result in the most optimal portfolio results. On the other hand, setting metrics along at the same time as the program budgets, is not unreasonable. I just think it will create unnecessary issues that would not exist if we went with option 1.