Application No.: A.26-03-XXX

Exhibit No.: SDG&E-02

Witness: Kwok

PREPARED DIRECT TESTIMONY OF

ALTON KWOK

ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

PROGRAM CARDS

BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

March 16, 2026

Program Name: SW C&S- Compliance Enhancement		
Program ID: SDG&E3251 **New / Existing:** Existing **Expected Program Duration:** 2028 – onwards		
Portfolio Segment: Codes & Standards	**Program Implementer Type:** IOU Core	**Third-Party Program Implementer:** N/A
Applicable Sector: Cross-Cutting		**Customer Group(s):** Cross-Cutting
Sector Challenges: Energy codes have undergone significant changes in each of the recent code updates compared to other codes, thus creating a challenge for officials to maintain their expertise. There are also limited resources available for enforcement of Title 24, Part 6 (Building Energy Efficiency Standards), and Title 20 (Appliance Efficiency Standards), building decarbonization measures and zero net energy (ZNE) design.		**Sector Opportunities (Expected Outcome(s)):** Improved code compliance and enforcement
Brief Program Description: The Compliance Enhancement subprogram targets market actors throughout the entire compliance chain, providing education, outreach, and technical support and resources to improve compliance with both the building and appliance energy standards.		
Known Equity Concerns in the Selected Markets (if applicable): There is a high population of non-English speakers in construction industry.		**Proposed Solutions to Equity Concerns (if applicable):** Provide multi-lingual training and educations resources.
Intervention Strategy: Advocacy, Technical Assistance, Training		**Delivery Type:** Codes & Standards
Measurement and Verification Methods: Other		**Program Total System Benefit (TSB) for 2028-2031:** $0
Annual Budgets for 2028-2031: 2028: $1,115,475 2029: $1,149,086 2030: $1,183,526 2031: $ 847,506		**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.		**Market Actors necessary for success:** Local Governments & Jurisdictions, Code Setting & Enforcement Entities, Energy Consultants & Trade Associations, Building Department Staff, Contractors, Design Professionals, Manufacturers, Distributors, Retailers, utility staff.
High-level description of delivery workforce including necessary scale and its risks: Workforce requirements include training partners, building department personnel, and industry market actors such as architects, designers, contractors, energy consultants, distributors, retailers, and manufacturers. Given the program's reach across nearly all buildings and appliance supply chains, the workforce operates at significant scale and requires ongoing engagement, coordination, and training to remain effective. Key risks include uneven participation across jurisdictions, resource limitations within building departments, turnover among contractors and retail staff, and potential disruption among major distributors, retailers, or trade partners that could reduce the program's ability to deliver training and outreach.		

Near-term Program Output(s) (1-4 years): Develop and implement 250 role-based compliance trainings, 60 compliance resources, and 9 compliance tools that help market actors understand codes and standards. Prepare building and appliance industries for implementing existing and new Codes & Standards. Automate verification and completion of compliance forms submitted for permits and forms completed by installers. Improve appliance certification and verification process.	
Long Term Outcome (5-10 years): Develop and implement 250 role-based compliance trainings, 60 compliance resources, and 9 compliance tools annually that helps market actors understand codes and standards offered across CA in collaboration with SCE and PG&E. Incorporate ZNE designs, building decarbonization and water measures into compliance requirements. Maximize compliance with existing and newly adopted building codes and appliance efficiency standards.	
Does this program interact with other programs in this PA portfolio? If so, describe: This program offers education on new building and appliance standards updates that will inform EE offerings in the portfolio.	
Program Metrics and Indicators (KPIs): Increase in code compliance knowledge pre/post training, Number of partners by type and purposes, Number of jurisdictions with staff participating in an Energy Policy Forum, Percent of jurisdictions with staff participating in an Energy Policy Forum, Percentage of partners that have taken action supporting EE by type, Number of courses delivered, Number of market actors, reported in segments, that complete courses (e.g. building officials, builders, architects, etc.), Average knowledge swing, Average satisfaction rating	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** cedars.cpuc.ca.gov/documents/download/3149/mainchange_summary%7Cmain%7Credline)/

Program Name: SW C&S- Reach Codes		
Program ID: SDG&E3252 **New / Existing:** Existing **Expected Program Duration:** 2028 – onwards		
Portfolio Segment: Codes & Standards	**Program Implementer Type:** IOU Core	**Third-Party Program Implementer (applicable to IOUs only):** N/A
Applicable Sector: Cross-Cutting	**Customer Group(s):** Cross-Cutting	
Sector Challenges: Local jurisdictions often lack the technical expertise, staffing, and resources to draft and adopt energy codes that go beyond state minimums.	**Sector Opportunities (Expected Outcome(s)):** Accelerated adoption of above-code building standards	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Reach Codes subprogram supports the development and adoption of local reach codes that exceed California's minimum statewide energy standards by working with local governments and stakeholders across various sectors. The program provides technical support, policy guidance, and market-facing resources through midstream and downstream channels to help jurisdictions craft and implement advanced building requirements. Through these strategies, the program aims to expand local adoption of above-code ordinances and improve consistency in high-efficiency building practices.		
Known Equity Concerns in the Selected Markets (if applicable): There is a high population of non-English speakers in construction industry.	**Proposed Solutions to Equity Concerns (if applicable):** Provide multi-lingual training and educations resources.	
Intervention Strategy: Advocacy, Technical Assistance, Training	**Delivery Type:** Codes & Standards	
Measurement and Verification Methods: Other	**Program Total System Benefit (TSB) for 2028-2031:** $0	
Annual Budgets for 2028-2031: 2028: $1,045,128 2029: $1,076,618 2030: $1,108,886 2031: $ 773,450	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** Local Governments & Jurisdictions, Code Setting & Enforcement Entities, Energy Consultants & Trade Associations, Building Department Staff Contractors, Design Professionals, Manufacturers, Distributors, Retailers, utility staff	
High-level description of delivery workforce including necessary scale and its risks: The delivery workforce consists primarily of technical policy experts and market engagement personnel who support the development and adoption of local reach codes that exceed statewide energy standards. Because the program operates across sectors and delivers resources through midstream and downstream channels, it requires a sufficiently scaled and technically experienced team capable of advising multiple jurisdictions simultaneously and providing sector-specific guidance. Essential workforce risks include insufficient technical capacity to develop advanced codes, limited ability to engage and support diverse market actors, variability in local government readiness, and potential loss of specialized expertise due to staff turnover, all of which could hinder reach code adoption and reduce program effectiveness.		
Near-term Program Output(s) (1-4 years): Educate 12 jurisdictions annually regarding the value of reach codes, requirements and best practices for reach code adoption. Develop and implement reach codes focusing on water		

efficiency, electrification, greenhouse gas reduction, alternative fuel vehicles, grid flexibility and sustainability, indoor air quality and equity related to EE.	
Long Term Outcome (5-10 years): Educate 12 jurisdictions annually regarding the value of reach codes, requirements and best practices for reach code adoption. Develop and implement reach codes focusing on water efficiency, electrification, greenhouse gas reduction, alternative fuel vehicles, grid flexibility and sustainability, indoor air quality and equity related to EE.	
Does this program interact with other programs in this PA portfolio? If so, describe: This program offers education on new building and appliance standards updates that will inform EE offerings in the portfolio.	
Program Metrics and Indicators (KPIs): The number of local government Reach Codes implemented, Number of partners by type and purpose, Number of jurisdictions with staff participating in an Energy Policy Forum, Percent of jurisdictions with staff participating in an Energy Policy Forum, Percentage of partners that have taken action supporting EE by type.	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** cedars.cpuc.ca.gov/documents/download/3150/mainchange_summary%7Cmain%7Credline)/

Program Name: SW C&S- Planning Coordination		
Program ID: SDG&E3253 **New / Existing:** Existing **Expected Program Duration:** 2028 – onwards		
Portfolio Segment: Codes & Standards	**Program Implementer Type:** IOU Core	**Third-Party Program Implementer (applicable to IOUs only):** N/A
Applicable Sector: Cross-Cutting	**Customer Group(s):** Cross-Cutting	
Sector Challenges: The ambitious goals set by the CPUC and CEC require the participation of many different entities. Without proactive coordination, it will be difficult to prepare the market for future code adoption (i.e., improve code readiness), ensure higher code compliance rates, and advance the CPUC Strategic Plan goals for achieving zero net energy.	**Sector Opportunities (Expected Outcome(s)):** Improved code compliance and enforcement	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Planning and Coordination subprogram supports state and federal agencies, emerging technology partners, and market actors by coordinating strategies for priority technologies that advance ZNE and other policy goals. It accelerates commercialization for code adoption, improves compliance through targeted outreach and industry engagement, and maintains alignment with code-setting agencies. These efforts aim to streamline statewide coordination, promote cost-effective technology adoption, and strengthen overall code compliance.		
Known Equity Concerns in the Selected Markets (if applicable): There is a high population of non-English speakers in construction industry.	**Proposed Solutions to Equity Concerns (if applicable):** Provide multi-lingual training and educations resources.	
Intervention Strategy: Advocacy, Technical Assistance, Training	**Delivery Type:** Codes & Standards	
Measurement and Verification Methods: Other	**Program Total System Benefit (TSB) for 2028-2031:** $0	
Annual Budgets for 2028-2031: 2028: $773,101 2029: $796,396 2030: $820,265 2031: $578,745	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** Local Governments & Jurisdictions, Code Setting & Enforcement Entities, Energy Consultants & Trade Associations, Building Department Staff, Contractors, Design Professionals, Manufacturers, Distributors, Retailers, utility staff	
High-level description of delivery workforce including necessary scale and its risks: Program delivery relies on a broad, statewide workforce composed of technical experts, trainers, program administrators, and market-facing professionals who support energy code readiness, compliance, and coordination activities. Workforce scale is significant, as activities span multiple sectors, requiring continuous coordination and training to maintain consistent implementation. Interruptions in statewide collaboration, delays in code-related training, or diminished participation from stakeholders could limit the program's ability to support code readiness, compliance improvement, and long-term planning objectives, thereby posing risks to program effectiveness.		

Near-term Program Output(s) (1-4 years): Expand relationships with external stakeholder groups and trade associations.	
Long Term Outcome (5-10 years): A finalized long-term plan to achieve the State's energy, water and GHG goals through enhanced building stock and appliance market.	
Does this program interact with other programs in this PA portfolio? If so, describe: This program offers education on new local above code ordinances that will inform EE offerings in the portfolio.	
Program Metrics and Indicators (KPIs): The number of local government Reach Codes implemented, Number of partners by type and purpose, Number of jurisdictions with staff participating in an Energy Policy Forum, Percent of jurisdictions with staff participating in an Energy Policy Forum, Percentage of partners that have taken action supporting EE by type	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** SDGE3253_Planning & Coordination IP_Appendix A_20230129_CLEAN

Program Name: SW FIN- On Bill Finance		
Program ID: SDG&E3262 **New / Existing:** Existing **Expected Program Duration:** 2028 – onwards		
Portfolio Segment: Market Support	**Program Implementer Type:** IOU Core	**Third-Party Program Implementer (applicable to IOUs only):** N/A
Applicable Sector: Commercial		**Customer Group(s):** Non-residential customers (including institutional customers) and owners of multifamily units who do not reside on the premises
Sector Challenges: Many businesses, especially small and medium facilities, struggle to pay the up-front capital cost of energy-efficient equipment and, as a result, often cannot invest in real and sustainable long term energy cost reductions.		**Sector Opportunities (Expected Outcome(s)):** Increased participation in EE programs and adoption of EE measures
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The On-Bill Financing (OBF) Program offers interest-free, unsecured loans to eligible non-residential customers, including commercial, industrial, agricultural, and institutional sectors, to help them install approved EE measures. Customers repay the loan through a fixed monthly charge on their utility bill. The program leverages other EE programs to support project development and customer participation, with the goal of overcoming upfront cost barriers and increasing adoption of energy-efficient equipment.		
Known Equity Concerns in the Selected Markets (if applicable): Small business and HTR customers lack the necessary capital for EE improvements.		**Proposed Solutions to Equity Concerns (if applicable):** Provide no-interest **loans** that aim for bill neutrality.
Intervention Strategy: Finance		**Delivery Type:** Downstream
Measurement and Verification Methods: Other		**Program Total System Benefit (TSB) for 2028-2031:** $0
Annual Budgets for 2028-2031: 2028: $109,719 2029: $112,723 2030: $115,799 2031: $118,951		**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements. Note: For SDG&E, the loan pool is not part of the authorized EE portfolio budget and is collected and tracked through a separate On Bill Financing balancing account.		**Market Actors necessary for success:** Non-residential customers, trade professionals, utility staff
High-level description of delivery workforce including necessary scale and its risks: Program delivery relies primarily on utility program managers, account executives, and trade professionals who collectively support program marketing, customer intake, project reviews, inspections, and loan processing. Workforce scale can expand or contract based on participation levels and the volume of loans. However, the program's fixed loan pool places a natural limit on how large the delivery workforce can grow, since contractors and administrators can only support as many projects as		

available loan capital allows. Because the program depends on a network of trade professionals and third-party implementers with responsibility for measure installation, customer education, and ongoing coordination, a disruption in contractor availability, administrative staffing, or third-party program operations could pose risks to timely project delivery, loan processing, and overall program effectiveness.
Near-term Program Output(s) (1-4 years): Provide loans to 3 customers that undertake EE/Clean Energy projects.
Long Term Outcome (5-10 years): Provide loans to 3 customers that undertake EE/Clean Energy projects.
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, the OBF Program interacts with other portfolio programs, including commercial, industrial, agricultural, and public energy-efficiency programs, as all measures in an OBF project must qualify for another utility rebate/incentive program. Trade professionals and third-party implementers working on other programs promote OBF and communicate requirements to customers. Administrative funding for expanded OBF is covered by the administrative cost of the EE OBF program.
Program Metrics and Indicators (KPIs): First year annual kW net for projects funded by OBF, First year annual kWh net for projects funded by OBF, First year annual Therm net for projects funded by OBF, Percent of HTR customer participants in portfolio by commercial sector, OBF-funded projects completed, Dollar value of consolidated OBF loans

Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/1562/mainchange_summary%7Cmain%7Credline)/

Program Name: Local Residential Fuel-Substitution		
Program ID: SDG&E4175 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Market Support	**Program Implementer Type:** IOU Core	**Third-Party Program Implementer (applicable to IOUs only):** N/A
Applicable Sector: Residential		**Customer Group(s):** Residential Customers- Single-Family
Sector Challenges: The sector faces low customer awareness of electrification technologies, energy usage, bill impacts, and available incentives, along with a complex and fragmented landscape of utility, state, and federal programs that is difficult for customers to navigate. High upfront costs, such as electric panel upgrades and heat pump installations, further limit participation for low-income households. The contractor market also presents challenges, including limited familiarity with electrification technologies and incentive structures.		**Sector Opportunities (Expected Outcome(s)):** Simplified access to clean-energy technologies for income-qualified households accelerating equitable home electrification.
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Customer Home Electrification Readiness Program (CHERP) targets single-family households that have dual fuel to support their transition to home electrification. The program employs a concierge-style strategy that guides customers through site assessments, electrification roadmaps, incentive navigation, contractor coordination, and installation of eligible technologies such as heat pumps, solar, storage, and panel upgrades. By leveraging a unified Electrification Incentive Tool and bundling local, state, and federal incentives, CHERP reduces financial and logistical barriers while expanding contractor training to strengthen the regional workforce. The expected outcomes include increased adoption of electrification technologies, improved customer understanding of energy usage and bill impacts, enhanced participation from DACs, and valuable data insights to support SDG&E's long-term grid and program planning.		
Known Equity Concerns in the Selected Markets (if applicable): A substantial share of single-family customers are hard-to-reach customers and located across SDG&E's service territory.		**Proposed Solutions to Equity Concerns (if applicable):** Offer customer support payment to provide additional financial support for the time and effort necessary to learn about the benefits of fuel substitution and integrating electrification equipment into the home.
Intervention Strategy: Technical Assistance		**Delivery Type:** Downstream
Measurement and Verification Methods: Other		**Program Total System Benefit (TSB) for 2028-2031:** $0
Annual Budgets for 2028-2031: 2028: $1,061,954 2029: $1,054,405 2030: $1,071,371 2031: $1,076,048		**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.		**Market Actors necessary for success:** participating contractors, third-party implementers, Federal and State incentive program administrators

High-level description of delivery workforce including necessary scale and its risks: The delivery workforce for CHERP requires a coordinated network of qualified contractors, Energy Consultants, and third-party implementers capable of managing the full customer journey, from outreach and site assessments to installation and incentive recovery. Contractors must possess specialized skills in electrification technologies, including heat pumps, solar, storage, and electric panel upgrades, and must meet workforce standards set by leveraged programs such as Self Generation Incentive Program (SGIP) and TECH Heat Pump Water Heater. CHERP also depends on sufficient staffing of trained Energy Consultants who serve as single points of contact and guide customers through program requirements, application processes, and project timelines. To achieve program goals at scale, the workforce must expand steadily each year, supported by CHERP's contractor training workshops designed to build technical capacity and broaden the pool of disadvantaged and small-business contractors. However, risks include limited contractor availability, uneven levels of electrification expertise, potential bottlenecks in training, and the challenge of maintaining high-quality installations while scaling up. Workforce gaps could slow project timelines, reduce customer satisfaction, and hinder adoption in DACs, making contractor education and workforce development critical components of program success.	
Near-term Program Output(s) (1-4 years): Provide Energy Consultant support for 90 customers during the program implementation period.	
Long Term Outcome (5-10 years): 20% of customers who complete a project implement all recommendations in the program's Electrification Road Map.	
Does this program interact with other programs in this PA portfolio? If so, describe: CHERP interacts with several other programs within SDG&E's portfolio, as its design intentionally leverages existing utility-administered offerings to support multi-DER projects. The program coordinates closely with SDG&E's solar equity programs, such as the San Diego Solar Equity Program (SDSEP), and integrates incentives from statewide programs like DAC-SASH, SGIP, and TECH HPWH to streamline the customer journey and maximize funding opportunities. It also aligns with SDG&E's Workforce Education & Training (WE&T) initiatives by coordinating contractor training workshops and leveraging established curricula. Additionally, CHERP incorporates tools and insights from SDG&E's Home Energy Report Program to support customer education.	
Program Metrics and Indicators (KPIs): Count of equity target participants in market support segment, by sector Percent of HTR customer participants in portfolio, by residential single-family, Percent of disadvantaged community customer participants in portfolio, Number of unique participants by sector that complete training, Percent of participation relative to eligible target population for curriculum	
Does this program utilize Integrated Demand Side Management (IDSM)? None	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3224/mainchange_summary%7Cmain%7Credline)/

<table>
<tr><th colspan="3">Program Name: SW HVAC QI/QM Program[1]</th></tr>
<tr><td colspan="3">Program ID: SDGE_SW_HVAC_QIQM
New / Existing: Existing
Expected Program Duration: 2028 - Onwards</td></tr>
<tr><td>Portfolio Segment: Market Support</td><td>Program Implementer Type: Third-Party Solicited</td><td>Third-Party Program Implementer (applicable to IOUs only): Frontier Energy, Inc.</td></tr>
<tr><td colspan="2">Applicable Sector: Residential</td><td>Customer Group(s): Residential Customers- Single-Family, Multi-family</td></tr>
<tr><td colspan="2">Sector Challenges:
The residential HVAC market faces a significant sector challenge driven by a long-standing market failure in which customers generally do not recognize the value of high-quality installation and maintenance services. Because customers tend to prioritize the lowest price and are unaware of the performance or long-term benefits associated with quality HVAC work, contractors have little incentive to offer higher-quality services, resulting in a “race to the bottom” where quality is undervalued and inconsistently delivered. Most contractors either lack the training, resources, or market demand needed to provide high-quality installation or maintenance, and even those who routinely deliver superior services struggle to find customers willing to pay for them, making it financially difficult to sustain best-practice work. This challenge is further compounded in DACs and hard-to-reach markets, where contractors face additional barriers such as limited access to training, capital, and recognition, reducing their ability to compete or consistently deliver high-quality HVAC services. Together, these factors create a systemic gap in customer awareness, contractor capability, and market incentives that the QIQM program is specifically designed to address.</td><td>Sector Opportunities (Expected Outcome(s)):
Increased contractor engagement, improved workforce capabilities, and increased adoption of high-quality HVAC installation and maintenance practices.</td></tr>
<tr><td colspan="3">Brief Program Description: (Including customer target, program strategies employed, expected program outcome):
The Statewide Residential HVAC Quality Installation and Quality Maintenance (QIQM) Program targets residential customers by engaging licensed HVAC contractors and technicians who perform installation, service, and maintenance work. The program employs strategies such as tiered contractor incentives, comprehensive workforce training, development of standardized quality service requirements, and targeted outreach through an Industry Advisory Panel, with a particular focus on DACs and hard-to-reach customer segments. Through these strategies, the program aims to elevate the quality and consistency of HVAC services, increase contractor capability and professionalism, and improve customer understanding of HVAC work.</td></tr>
<tr><td colspan="2">Known Equity Concerns in the Selected Markets (if applicable):
There is a high population of disadvantaged workers that do not participate in EE programs.</td><td>Proposed Solutions to Equity Concerns (if applicable):
Identify and provide targeted outreach to HVAC contractors who have a high percentage of workers (e.g., technicians) who fall into the CPUC definition of “Disadvantaged Worker" and those who are located in DACs, DBE-certified, or a small business.</td></tr>
</table>

[1] As part of the instant Application, SDG&E is requesting to transition the statewide lead Program Administrator of HVAC QI/QM from SDG&E to SoCalGas. *See* Exhibit SDG&E-01 Chapter 5.

Intervention Strategy: Incentive/Rebate, Training	**Delivery Type:** Midstream
Measurement and Verification Methods: Other	**Program Total System Benefit (TSB) for 2028-2031:** $0
Annual Budgets for 2028-2031: 2028: $684,480 2029: $684,480 2030: $684,480 2031: $684,480	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.00 PAC: 0.00
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** Licensed HVAC Contractors and Technicians, Industry Organizations and Trade Partners
High-level description of delivery workforce including necessary scale and its risks: The QIQM Program requires a broad and capable delivery workforce made up of licensed C-20 HVAC contractors and technicians across California's residential market, spanning entry-level workers through highly skilled professionals aligned with the program's Tier I–III structure. To achieve program goals, the workforce must scale to include both large and small contractors statewide, with a strong emphasis on training technicians to perform quality installation and maintenance services and advancing them through progressively higher skill tiers. The program also depends on engaging contractors serving DACs and hard-to-reach customers to ensure equitable market transformation. Key risks to achieving the necessary workforce scale include limited baseline skills among many technicians, inconsistent contractor ability to meet quality standards, workforce shortages in disadvantaged areas, and the possibility that contractors may struggle to adopt or sustain higher-quality practices without sufficient incentives or customer demand. These challenges create potential barriers to service consistency, market penetration, and long-term program effectiveness.	
Near-term Program Output(s) (1-4 years): Provide incentives to 47 contractors to adhere to industry and program standards for the installation and maintenance of HVAC equipment.	
Long Term Outcome (5-10 years): 24% of the workforce has received training aiming to increase the pool of qualified contractors.	
Does this program interact with other programs in this PA portfolio? If so, describe: The QIQM Program coordinates with statewide EE offerings to avoid overlap and ensure alignment. This includes interaction with programs such as Residential HVAC, Plug Load and Appliance, Residential New Construction, and the Technology and Equipment for Clean Heating (TECH) initiative. These interactions allow the QIQM Program to complement existing efforts by ensuring that contractors and customers receive consistent guidance, that incentives are not duplicated, and that quality HVAC installation and maintenance practices are reinforced across multiple statewide channels. This coordination helps maximize program effectiveness, streamline contractor participation, and support broader market transformation goals across the portfolio.	
Program Metrics and Indicators (KPIs): Number of unique participants by sector that complete training, Number of contractors (that serve in the portfolio administrator service areas) with knowledge and trained by relevant market support programs to provide quality installations that optimize EE, Percent of participation relative to eligible target population for curriculum, Number of partners by type and purposes, Assessed value of the partnership by partners	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/2831/mainchange_summary%7Cmain%7Credline)/

Program Name: Single Family Program		
Program ID: SDG&E4001 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Synergy Companies
Applicable Sector: Residential	**Customer Group(s):** Residential Customers Single-Family	
Sector Challenges: Single-family residential customers face difficulty in navigating the complex and fragmented landscape of EE and zero-net-energy (ZNE) improvements. Homeowners often struggle with limited awareness, confusing technology choices, financing barriers, and lack of coordinated support to undertake deeper efficiency upgrades beyond basic direct-install measures.	**Sector Opportunities (Expected Outcome(s)):** Increased participation in EE programs to create pathways for deeper EE, renewable energy, storage, and EV-charging investments.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Residential Energy Solutions (RES) Program targets single-family homeowners and renters by guiding them through a structured path toward improved home EE and Zero Net Energy (ZNE). The program begins with no-cost direct-install measures such as HVAC efficiency upgrades, and water-saving devices, then transitions customers into complimentary whole-home assessments and personalized consultations that identify advanced EE, renewable energy, storage, and EV-charging opportunities. Expected outcomes include greater installation of cost-effective energy-saving technologies, enhanced customer readiness for deeper retrofits, and measurable reductions in energy use.		
Known Equity Concerns in the Selected Markets (if applicable): A substantial share of single-family customers are hard-to-reach customers located across SDG&E's service territory.	**Proposed Solutions to Equity Concerns (if applicable):** Use targeted outreach strategies, such as DAC-mapped canvassing, HOA engagement, virtual enrollment, and neighborhood signage. Integrate ESA enrollment, if applicable, and offer no cost direct installation.	
Intervention Strategy: Direct Install, Incentive/Rebate	**Delivery Type:** Downstream – Direct Install	
Measurement and Verification Methods: Deemed	**Program Total System Benefit (TSB) for 2028-2031:** $22,010,721	
Annual Budgets for 2028-2031: 2028: $5,462,816 2029: $5,478,950 2030: $5,493,186 2031: $5,489,420	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.03 PAC: 1.04	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with	**Market Actors necessary for success:** Third-Party Direct Install Implementer, HOAs & Community Organizations, Water Agencies, financing partners, participating customers	

2031 and will be revised in the next application following release of updated portfolio requirements.	
High-level description of delivery workforce including necessary scale and its risks: The program relies on a skilled, multi licensed delivery workforce led by the third-party implementer that requires a CLSB license for HVAC, weatherization, plumbing, electrical, and solar to implement the program's scope. Key risks include labor shortages, maintaining consistent quality across a large field staff, meeting inspection standards, and ensuring continuous compliance and safety, all of which can impact program throughput and customer satisfaction.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 19,152 customers during the program implementation period.	
Long Term Outcome (5-10 years): Convert 15% of homes treated to more high-efficiency appliances.	
Does this program interact with other programs in this PA portfolio? If so, describe: The program interacts directly with the ESA program by enrolling eligible low-income customers during visits, ensuring seamless coordination between the two offerings and reducing participation barriers for disadvantaged households. The program will also install fuel substitution measures recommended by program SDGE4175. Additionally, it will refer customers to other complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/2749/mainchange_summary%7Cmain%7Credline)/

Program Name: Multi Family Program		
Program ID: SDG&E4002 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Synergy Companies
Applicable Sector: Residential		**Customer Group(s):** Residential Customers- Multi-Family, Manufactured Homes
Sector Challenges: The split incentive between property owners and tenants often discourages investment in EE upgrades, since owners pay for improvements while tenants receive most of the savings. In addition, the wide variety of multifamily building types makes it difficult to design uniform program models and upgrade packages that effectively meet the needs of every property.		**Sector Opportunities (Expected Outcome(s)):** Increased awareness, adoption, and long-term investment in EE, solar, and storage technologies
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Residential Zero Net Energy Transformation (RZNET) Program targets multifamily and manufactured housing property owners and residents across SDG&E's service territory, with a focus on disadvantaged and hard-to-reach communities. The program employs a turnkey strategy that begins with no-cost direct install measures and offers complimentary ASHRAE Level 1 audits, sales consultations, and pathways to advanced EE, solar PV, and battery storage installations. Expected outcomes include increased energy savings, higher participation in advanced efficiency and renewable upgrades, and a transformational shift in how residential properties pursue comprehensive energy improvements.		
Known Equity Concerns in the Selected Markets (if applicable): A substantial share of multi-family and manufactured homes customers are disadvantaged and hard-to-reach customers located across SDG&E's service territory.		**Proposed Solutions to Equity Concerns (if applicable):** Use targeted outreach strategies, such as DAC-mapped canvassing and community based engagement. Integrate ESA enrollment, if applicable, and offer no cost direct installation and complimentary audits.
Intervention Strategy: Direct Install, Incentive/Rebate		**Delivery Type:** Downstream – Direct Install
Measurement and Verification Methods: Deemed		**Program Total System Benefit (TSB) for 2028-2031:** $52,884,549
Annual Budgets for 2028-2031: 2028: $10,925,066 2029: $10,957,878 2030: $10,985,772 2031: $13,086,164		**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.18 PAC: 1.19
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.		**Market Actors necessary for success:** Third-Party Direct Install Implementer, Multi-Family & Manufactured Housing Property Owners, Water Agencies, financing partners, participating customers.

High-level description of delivery workforce including necessary scale and its risks: The program relies on a skilled, multi licensed delivery workforce led by the third-party implementer that requires a CLSB license for HVAC, weatherization, plumbing, electrical, and solar to implement the program's scope. Key risks include labor shortages, maintaining consistent quality across a large field staff, meeting inspection standards, and ensuring continuous compliance and safety, all of which can impact program throughput and customer satisfaction.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 12,780 customers during the program implementation period.	
Long Term Outcome (5-10 years): Convert 15% of multi-family sites and manufactured homes to more high-efficiency appliances.	
Does this program interact with other programs in this PA portfolio? If so, describe: The program interacts directly with the ESA program by enrolling eligible low-income customers during visits, ensuring seamless coordination between the two offerings and reducing participation barriers for disadvantaged households. The program will also install fuel substitution measures recommended by program SDGE4175. Additionally, it will refer customers to other complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3234/mainchange_summary%7Cmain%7Credline)/

Program Name: Industrial Sector Program		
Program ID: SDG&E4006 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Cascade Energy, Inc.
Applicable Sector: Industrial: 66%, Commercial: 33%, Agricultural: 1%	**Customer Group(s):** All non-residential customers	
Sector Challenges: Organizations often find it difficult to prioritize energy management amid competing operational demands, and the technical complexity of identifying, implementing, and maintaining long-term energy management practices, along with the ongoing data management required, makes sustained commitment challenging to achieve.	**Sector Opportunities (Expected Outcome(s)):** Increased adoption of long-term energy management practices.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Savings, Measurement, Assistance, Rebates, and Training (SMART) Industrials Program helps customers implement energy-saving opportunities tailored to their needs. While this program has traditionally focused on serving industrial facilities, SDG&E is proposing to expand the Strategic Energy Management (SEM) approach to a broader range of sectors, including commercial and agricultural customers. SEM provides multi-year coaching, educational modules, and site-specific activities, such as Energy Maps, Treasure Hunts, and Energy Management Assessments to build internal capabilities, achieve cost-effective energy savings, and support customers in becoming increasingly self-sufficient in their energy management practices.		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Offer a lower-touch/higher-volume form of SEM for SMBs by tailoring staffing requirements and modifying the structure of workshops and educational modules to address the resource limitations and operational realities of smaller facilities, while still adhering to all SEM requirements.	
Intervention Strategy: SEM (Audit, Technical Assistance, Training), Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: SEM M&V	**Program Total System Benefit (TSB) for 2028-2031:** $39,004,558	
Annual Budgets for 2028-2031: 2028: $9,709,236 2029: $9,527,107 2030: $9,331,065 2031: $9,298,223	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.07 PAC: 1.04	

Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer/SEM Delivery Team, utility staff, participating customers.
High-level description of delivery workforce including necessary scale and its risks: SEM relies on a skilled delivery workforce that includes SEM Coaches, third-party implementer staff, utility account executives, and customer energy teams, all of whom must support a multi-year sequence of educational modules and site-specific activities across numerous participating facilities. Because each customer engagement spans several years and requires consistent coaching, technical support, and coordination, the program depends on maintaining sufficient staffing levels and continuity. Disruptions such as workforce shortages, or changes in customer-side staffing and leadership, pose risks to effective delivery and can hinder progress in developing and sustaining long-term energy management practices.	
Near-term Program Output(s) (1-4 years): >30% of the commercial, industrial and agricultural sector customers in SDG&E territory adopt ISO 50001 levels of energy management practices and annually implement measures that are forecasted to be cost-effective.	
Long Term Outcome (5-10 years): >60% of the commercial, industrial and agricultural sector customers in SDG&E territory adopt ISO 50001 levels of energy management practices and annually implement measures that are forecasted to be cost-effective.	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/2837/mainchange_summary%7Cmain%7Credline)/

Program Name: IDSM Local Residential Behavioral Program (EE)		
Program ID: SDG&E4040 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Bidgely, Inc.
Applicable Sector: Residential		**Customer Group(s):**Residential Customers
Sector Challenges: Residential customers generally lack clear, personalized, and actionable information about their energy use, making it difficult for them to understand which behaviors or appliances drive consumption. This lack of awareness limits their ability to make informed decisions that could reduce energy use. Additionally, traditional personalized in-home assessments are costly and time-intensive, preventing utilities from scaling energy insights across large customer populations.		**Sector Opportunities (Expected Outcome(s)):** Increased understanding of energy use, participation in EE programs, and adoption of EE measures.
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Home Energy Audits and Reports (HEAR) Program targets residential customers and uses behavior-based strategies to encourage reductions in energy usage and peak demand. By delivering personalized Home Energy Reports along with AI-driven appliance-level insights, comparative usage benchmarks, and tailored recommendations, the program helps customers better understand their energy consumption and adopt cost-saving behaviors. These strategies include randomized control trials, digital alerts timed to billing cycles, and a web portal that provides itemized energy data and self-service audit capabilities. Expected outcomes include sustained reductions in kWh, kW, and Therm usage, increased customer engagement and satisfaction, and long-term behavioral changes that contribute to SDG&E's EE and demand response goals.		
Known Equity Concerns in the Selected Markets (if applicable): A substantial share of residential customers reside in DACs and rental housing located across SDG&E's service territory.		**Proposed Solutions to Equity Concerns (if applicable):** Continue to deliver tailored energy-saving behavioral insights and connect customers to no- and low-cost programs and measures.
Intervention Strategy: Training		**Delivery Type:** Downstream
Measurement and Verification Methods: Randomized Controlled Trial (RCT)		**Program Total System Benefit (TSB) for 2028-2031:** $33,884,712
Annual Budgets for 2028-2031: 2028: $2,546,357 2029: $2,900,563 2030: $3,703,147 2031: $5,340,374		**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 2.34 PAC: 2.34
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.		**Market Actors necessary for success:** third-party implementer, utility staff, participating customers

High-level description of delivery workforce including necessary scale and its risks: The delivery workforce for the program primarily consists of utility program management staff and the third-party implementer, which provides data analytics, Home Energy Report production, digital alert delivery, and customer support technology. Because the program treats nearly 900,000 residential customers annually, the workforce must operate at a large and sustained scale to manage high-volume data integration, report generation, and ongoing measurement and verification. Key risks include potential data-quality issues that could disrupt analytics, workforce capacity constraints that may affect timely delivery of reports and alerts, and dependence on specialized technical staff for maintaining AI-based disaggregation and web platform performance. Additional risks involve maintaining statistical integrity of RCT groups and managing customer churn or opt-outs that could impact savings achievement.	
Near-term Program Output(s) (1-4 years): Maintain active enrollment of 900,000–1,000,000 customers.	
Long Term Outcome (5-10 years): Maintain a 1-2% reduction in electric and/or gas usage for the residential sector.	
Does this program interact with other programs in this PA portfolio? If so, describe: This program does interact with other programs in the portfolio, primarily by serving as an entry point that increases customer awareness of additional energy-efficiency and demand-response offerings. Through its Home Energy Reports, digital alerts, and web portal, the program provides personalized recommendations and targeted program offers that guide customers toward other utility programs aligned with their usage patterns and energy-saving opportunities. This includes promoting demand response events through Behavioral Demand Response alerts and directing customers to efficiency upgrades or rebates identified through appliance itemization and personalized insights. By improving customer energy literacy and engagement at scale, this program enhances participation and savings in complementary programs across the broader portfolio.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, Lifecycle ex-ante kWh net, Lifecycle ex-ante Therm net	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3448/mainchange_summary%7Cmain%7Credline)/

Program Name: Lodging (Hotels/Motels)		
Program ID: SDG&E4168 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Mendota Group, LLC.
Applicable Sector: Commercial	**Customer Group(s):** Commercial Lodging Customers (Hotels, Motels)	
Sector Challenges: Incentive levels can be insufficient to motivate energy-saving investments.	**Sector Opportunities (Expected Outcome(s)):** Higher incentives based on measured savings resulting in more EE projects.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Grid-Responsive Incentive Design-Lodging (GRID-Lodging) Program helps hotels, motels, and other lodging facilities in SDG&E's territory reduce energy use by partnering with qualified Aggregators who identify and implement whole-building efficiency projects. Using a Market Access model and performance-based incentives tied to metered savings and Total System Benefit (TSB), the program supports a broad array of measures such as HVAC, lighting, hot water, and controls, while offering technical assistance and financing options. The program aims to increase contractor participation, simplify project delivery, and produce cost-effective, grid-beneficial energy and demand savings.		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Offer higher incentive rates for HTR and DAC-qualifying projects.	
Intervention Strategy: MAP, Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: NMEC – Population, NMEC – Site	**Program Total System Benefit (TSB) for 2028-2031:** $9,371,808	
Annual Budgets for 2028-2031: 2028: $1,824,860 2029: $1,830,891 2030: $1,834,752 2031: $1,837,753	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.07 PAC: 1.30	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, Aggregators/trade professionals, participating customers, financing partners, M&V Subcontractor.	
High-level description of delivery workforce including necessary scale and its risks: The GRID-Lodging Program's "open to all" market access program approach attracts a wide variety of contractors/aggregators and is not limited to one implementer or its subcontractors. The workforce must be broad enough to support multiple lodging projects across SDG&E's territory. Risks include reduced aggregator engagement and workforce shortages in specialized trades, as well		

as underperformance during the measurement period, all of which could slow project delivery and reduce achievable savings.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 65 customers during the program implementation period.	
Long Term Outcome (5-10 years): Move 20% of the lodging market to high efficiency equipment.	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3404/mainchange_summary%7Cmain%7Credline)/

Program Name: Groceries, Restaurants and Food Storage		
Program ID: SDG&E4169 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Franklin Energy, DBA AESC, Inc.
Applicable Sector: Commercial	**Customer Group(s):** Commercial Grocery, Restaurant, and Food Storage Customers	
Sector Challenges: Low margins, limited capital, complex refrigeration and HVAC systems, and historically insufficient incentives leave large amounts of potential savings stranded.	**Sector Opportunities (Expected Outcome(s)):** Increased claimable savings and maximized incentives based on measured savings make deeper, more comprehensive retrofits financially viable.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Groceries, Restaurants and Food Storage (GRFS) Program serves medium and large grocery stores, food storage facilities, and small or hard-to-reach food businesses through Pop-NMEC, Site-NMEC, and Deemed pathways. The Program leverages meter-based savings, targeted outreach, and aggregator-led project delivery to identify, install, and verify energy-saving projects. Expected outcomes include reduced energy consumption, lower operating costs, and increased adoption of cost-effective efficiency measures.		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Leverage the cost effectiveness of larger projects to fund a direct- install style turnkey installation solution with higher incentive levels for smaller and/or HTR customers.	
Intervention Strategy: MAP, Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: NMEC – Population, NMEC – Site, Deemed	**Program Total System Benefit (TSB) for 2028-2031:** $10,872,422	
Annual Budgets for 2028-2031: 2028: $2,374,614 2029: $1,992,133 2030: $1,999,400 2031: $2,000,155	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.76 PAC: 1.32	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, Aggregators/trade professionals, participating customers, financing partners, M&V Subcontractor	
High-level description of delivery workforce including necessary scale and its risks: The Program relies on a delivery workforce composed of enrolled and subcontracted aggregators, refrigeration and HVAC technicians, and licensed contractors responsible for scoping, installing, and verifying EE measures. Sufficient quantities of these workers exist in the market; however, insufficient engagement or workforce limitations, such as unfamiliarity with NMEC requirements		

or challenges maintaining project performance throughout the M&V period, can hinder effective participation and reduce achievable savings.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 120 customers during the program implementation period.	
Long Term Outcome (5-10 years): Bring 15% of small and underserved customers into meter based savings pathways.	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? No	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3385/mainchange_summary%7Cmain%7Credline)/

Program Name: Wholesale/Retail/Office, including Entertainment Services		
Program ID: SDG&E4170 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** TRC Solutions, Inc.
Applicable Sector: Commercial	**Customer Group(s):** Commercial Retail, Office, and Wholesale Customers, including Entertainment and Services	
Sector Challenges: Complex multi-layered decision-making processes, split-incentive barriers between tenants and landlords, and limited customer resources impede adoption of energy-saving upgrades.	**Sector Opportunities (Expected Outcome(s)):** Simplified decision-making, leading to greater adoption of EE measures.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The SD EnergyEdge Program supports commercial retail, office, wholesale, and entertainment/service customers by providing comprehensive EE services designed to help businesses identify, evaluate, and implement cost-effective retrofit opportunities. The Program employs strategies such as targeted outreach, trade-ally engagement, concierge-style technical assistance, Deemed, Custom, and NMEC pathways, flexible incentives, and a suite of financing options to simplify project development and overcome financial and technical barriers. Expected outcomes include increased customer participation, greater adoption of energy-efficient and decarbonization technologies, deeper multi-measure savings, and delivery of cost-effective Total System Benefit (TSB).		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Develop multilingual collateral to engage HTR customers; tailor incentive offers based on customer need rather than fixed rates.	
Intervention Strategy: Incentive/Rebate, Finance, Audit, Technical Assistance	**Delivery Type:** Downstream	
Measurement and Verification Methods: Deemed, Custom, NMEC – Site	**Program Total System Benefit (TSB) for 2028-2031:** $38,417,158	
Annual Budgets for 2028-2031: 2028: $6,139,780 2029: $6,162,883 2030: $6,183,210 2031: $6,183,970	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.45 PAC: 1.56	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, trade professionals, participating customers, financing partners	
High-level description of delivery workforce including necessary scale and its risks: Workforce requirements include a network of trained trade professionals, such as contractors and sales representatives, to identify opportunities, perform installations, and support customers throughout the retrofit process. The program maintains a broad pool of these		

workers through an actively managed trade professional network. While sufficient contractor capacity exists in the market, risks include limited familiarity with program requirements or changes to eligible measures, as well as potential gaps in contractor engagement, any of which could delay installations, reduce savings realization, and hinder program effectiveness.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 1,260 customers during the program implementation period.	
Long Term Outcome (5-10 years): Move 25% of the retail, office, wholesale market to high efficiency equipment	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3325/mainchange_summary%7Cmain%7Credline)/

Program Name: Private Institutions/Healthcare		
Program ID: SDG&E4171 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Mendota Group, LLC
Applicable Sector: Commercial	**Customer Group(s):** Commercial Private Institutions and Healthcare Customers	
Sector Challenges: Customers face competing priorities and frequently prioritize short-term needs over long-term investments.	**Sector Opportunities (Expected Outcome(s)):** Improved flexibility in the types of equipment that can be installed and higher incentive rates reduce payback and allow more projects to proceed due to attractive returns on investment	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Grid-Responsive Incentive Design-Private Institutions and Healthcare (GRID-PIH) Program targets SDG&E's private institutions and healthcare customers, helping them reduce energy use by partnering with qualified Aggregators who identify and implement whole-building efficiency projects. Using a Market Access model and performance-based incentives tied to metered savings and Total System Benefit (TSB), the program supports a broad array of measures such as HVAC, lighting, hot water, and controls, while offering technical assistance and financing options. The program aims to increase contractor participation, simplify project delivery, and produce cost-effective, grid-beneficial energy and demand savings.		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Offer higher incentive rates for HTR and DAC-qualifying projects.	
Intervention Strategy: MAP, Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: NMEC – Population, NMEC – Site	**Program Total System Benefit (TSB) for 2028-2031:** $12,625,265	
Annual Budgets for 2028-2031: 2028: $1,690,516 2029: $1,696,116 2030: $1,699,707 2031: $1,702,501	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.35 PAC: 1.90	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, Aggregators/trade professionals, participating customers, financing partners, M&V Subcontractor	
High-level description of delivery workforce including necessary scale and its risks: The GRID-PIH Program's “open to all” market access program approach attracts a wide variety of contractors/aggregators and is not limited to one implementer or its subcontractors. The workforce must be broad enough to support multiple private institutions and healthcare projects across SDG&E’s territory. Risks include reduced aggregator engagement and workforce shortages in		

specialized trades, as well as underperformance during the measurement period, all of which could slow project delivery and reduce achievable savings.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 76 customers during the program implementation period.	
Long Term Outcome (5-10 years): Move 20% of the private institutions and healthcare market to high efficiency equipment.	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3402/mainchange_summary%7Cmain%7Credline)/

Program Name: Market Access Program - Residential		
Program ID: SDG&E4201 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Mendota Group, LLC
Applicable Sector: Residential	**Customer Group(s):** Residential Customers- Single-Family. Multi-family	
Sector Challenges: Residential customers often lack the upfront capital needed to pursue more comprehensive energy-efficiency upgrades.	**Sector Opportunities (Expected Outcome(s)):** increasing residential participation through open-access aggregator models and performance-based incentives that reward deeper energy savings.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Grid-Responsive Incentive Design-Market Access Program (GRID-MAP) Program targets residential single-family and multifamily customers providing an open-access, performance-based market access approach to expand participation in whole-building EE projects. The program employs metered savings methods, a tiered TSB-aligned incentive structure, installation payments, and a streamlined online platform to support aggregators in designing and delivering cost-effective projects. By aligning incentives with measurable grid benefits and enabling broad contractor participation, the program aims to increase energy savings, reduce peak and net-peak demand, drive deeper HVAC and hot-water upgrades, and ultimately maximize Total System Benefit across the SDG&E territory.		
Known Equity Concerns in the Selected Markets (if applicable): A substantial share of residential customers are disadvantaged and HTR customers located across SDG&E's service territory.	**Proposed Solutions to Equity Concerns (if applicable):** Offer higher incentive rates for HTR and DAC-qualifying projects.	
Intervention Strategy: MAP, Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: NMEC – Population, NMEC – Site	**Program Total System Benefit (TSB) for 2028-2031:** $1,283,974	
Annual Budgets for 2028-2031: 2028: $324,476 2029: $325,723 2030: $326,598 2031: $327,329	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 0.87 PAC: 1.01	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, Aggregators/trade professionals, participating customers, financing partners, M&V Subcontractor	
High-level description of delivery workforce including necessary scale and its risks: The GRID-MAP Program's "open to all" market access program approach attracts a wide variety of contractors/aggregators and is not limited to one implementer or its subcontractors. The workforce must be broad enough to support multiple residential projects across		

SDG&E's territory. Risks include reduced aggregator engagement and workforce shortages in specialized trades, as well as underperformance during the measurement period, all of which could slow project delivery and reduce achievable savings.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 120 customers during the program implementation period.	
Long Term Outcome (5-10 years): Move 5% of the residential single-family market to high efficiency equipment	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional residential EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3428/mainchange_summary%7Cmain%7Credline)/

Program Name: Market Access Program - Commercial		
Program ID: SDG&E4202 **New / Existing:** Existing **Expected Program Duration:** 2028 - Onwards		
Portfolio Segment: Resource Acquisition	**Program Implementer Type:** Third-Party Solicited	**Third-Party Program Implementer (applicable to IOUs only):** Mendota Group, LLC
Applicable Sector: Commercial	**Customer Group(s):** Commercial Retail, Office, and Wholesale Customers, including Entertainment and Services	
Sector Challenges: Incentive levels can be insufficient to motivate energy-saving investments and these customers often have a lack of capital for EE upgrades.	**Sector Opportunities (Expected Outcome(s)):** increasing commercial (retail, office, and wholesale customers, including entertainment and services customers) participation through open-access aggregator models and performance-based incentives that reward deeper energy savings.	
Brief Program Description: (Including customer target, program strategies employed, expected program outcome): The Grid-Responsive Incentive Design-Market Access Program (GRID-MAP) Program targets Retail, Office, and Wholesale Customers, including Entertainment and Services customers providing an open-access, performance-based market access approach to expand participation in whole-building EE projects. The program employs metered savings methods, a tiered TSB-aligned incentive structure, installation payments, and a streamlined online platform to support aggregators in designing and delivering cost-effective projects. By aligning incentives with measurable grid benefits and enabling broad contractor participation, the program aims to increase energy savings, reduce peak and net-peak demand, drive deeper HVAC and hot-water upgrades, and ultimately maximize Total System Benefit across the SDG&E territory.		
Known Equity Concerns in the Selected Markets (if applicable): There are several small and medium businesses (SMBs) within SDG&E's service territory, and some are considered HTR.	**Proposed Solutions to Equity Concerns (if applicable):** Offer higher incentive rates for HTR and DAC-qualifying projects.	
Intervention Strategy: MAP, Incentive/Rebate, Finance	**Delivery Type:** Downstream	
Measurement and Verification Methods: NMEC – Population, NMEC – Site	**Program Total System Benefit (TSB) for 2028-2031:** $9,955,791	
Annual Budgets for 2028-2031: 2028: $2,058,670 2029: $2,065,569 2030: $2,036,998 2031: $2,073,522	**Cost Effectiveness (TRC and PAC Test Ratios) for 2028-2031:** TRC: 1.17 PAC: 1.24	
Anticipated directional and scale changes in budget for years 2032-2035: The 2032–2035 budget is aligned with 2031 and will be revised in the next application following release of updated portfolio requirements.	**Market Actors necessary for success:** third-party implementer, utility staff, Aggregators/trade professionals, participating customers, financing partners, M&V Subcontractor	

High-level description of delivery workforce including necessary scale and its risks: The GRID-MAP Program's "open to all" market access program approach attracts a wide variety of contractors/aggregators and is not limited to one implementer or its subcontractors. The workforce must be broad enough to support multiple commercial retail, office, and wholesale customers, including entertainment and services projects across SDG&E's territory. Risks include reduced aggregator engagement and workforce shortages in specialized trades, as well as underperformance during the measurement period, all of which could slow project delivery and reduce achievable savings.	
Near-term Program Output(s) (1-4 years): Install EE equipment for 68 customers during the program implementation period.	
Long Term Outcome (5-10 years): Move 25% of the retail, office, wholesale market to high efficiency equipment	
Does this program interact with other programs in this PA portfolio? If so, describe: Yes, this program will be supported by the On-Bill Financing (OBF) Program along with other regional commercial EE programs and a portfolio of statewide offerings. The third-party implementer will actively promote OBF and inform customers of all participation requirements. They will also refer customers to complementary programs, as appropriate, to help customers maximize their savings.	
Program Metrics and Indicators (KPIs): First year annual kW net, First year annual kWh net, First year annual Therm net, First year annual kWh net in DACs, First year annual Therm net in DACs, First year annual kWh net in HTR Markets, First year annual Therm net in HTR Markets	
Does this program utilize Integrated Demand Side Management (IDSM)? Yes	**Link to Existing Implementation Plan, if existing:** https://cedars.cpuc.ca.gov/documents/download/3426/mainchange_summary%7Cmain%7Credline)/