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**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking  
Regarding Building Decarbonization.

Rulemaking 19-01-011

**DECISION ON INCENTIVE LAYERING, THE WILDFIRE AND NATURAL  
DISASTER RESILIENCY REBUILD PROGRAM, DATA SHARING, RATE  
ADJUSTMENTS FOR ELECTRIC HEAT PUMP WATER HEATERS, AND  
PROPANE USAGE**

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**Appendix A** – Adopted Incentive Layering Guiding Principles and Requirements

**Appendix B** – Adopted Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) Program

**Appendix C** – Guidance on Data Sharing for the BUILD Program, TECH Initiative, and the WNDRR Program

**Appendix D** –Rate Adjustments for Heat Pump Water Heater and Guidance on Propane Usage

**Appendix E** – Abbreviations, Acronyms, and Definitions

**DECISION ON INCENTIVE LAYERING, THE WILDFIRE AND NATURAL DISASTER RESILIENCY REBUILD PROGRAM, DATA SHARING, RATE ADJUSTMENTS FOR ELECTRIC HEAT PUMP WATER HEATERS, AND PROPANE USAGE**

**Summary**

This decision adopts a set of guiding principles for the layering of incentives from various building decarbonization programs. This decision also adopts a statewide Wildfire and Natural Disaster Resiliency Rebuild Program known as the “WNDRR Program” to provide incentives to help homeowners impacted by a natural disaster rebuild all-electric homes in alignment with the state’s long-term climate and energy goals. Additionally, we provide guidance on data sharing of customer and other information among the Commission, the California Energy Commission, the participating electric utilities, and the implementers and evaluators of building decarbonization programs. Further, we direct California’s three large electric utilities (Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company) to each study net energy (electric and gas) bill impacts that result when a residential customer switches from a natural gas water heater to an electric heat pump water heater. If an IOU’s study reflects a net increase in energy bills, it shall propose a rate adjustment in a new Rate Design Window application in order to eliminate any financial disincentive for fuel switching. We direct these utilities to collect information from their new customers regarding space and water heating, and propane usage and report that information annually to Energy Division of the California Public Utilities Commission.

The details of the guidelines and programs adopted by this decision are summarized in Appendices A to D of this decision. Appendix E contains a list of abbreviations, acronyms, and definitions used in this decision.

This proceeding remains open.

## **1. Procedural Background**

On January 31, 2019, in response to the passage of Senate Bill (SB) 1477 (Stern, 2018), the California Public Utilities Commission (Commission) initiated this rulemaking to support the decarbonization of buildings in California. The proceeding was “designed to be inclusive of any alternatives that could lead to the reduction of greenhouse gas (GHG) emissions associated with energy use in buildings [related]...to the State’s goals of reducing economy-wide GHG emissions 40% below 1990 levels by 2030 and achieving carbon neutrality by 2045 or sooner.”<sup>1</sup>

### **1.1. Phase I**

A Scoping Memo was issued on May 17, 2019 and set forth the various issues to be considered in the proceeding (initial Scoping Memo). The initial Scoping Memo was amended on July 16, 2019 to include additional scoping issues in response to the request of the Commission’s Public Advocates Office (Cal Advocates) (amended Scoping Memo). Phase I was resolved in Decision (D.) 20-03-027 (Phase I decision), which established the two building decarbonization pilot programs required by SB 1477: (1) the Building Initiative for Low-Emissions Development (BUILD) Program and (2) the Technology and Equipment for Clean Heating (TECH) Initiative.

The BUILD Program aims to incent the deployment of near-zero-emission building technologies that reduce GHG emissions significantly beyond minimum code requirements in new residential buildings. The adopted BUILD Program

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<sup>1</sup> Order Instituting Rulemaking (OIR) 19-01-011 at 2.

provides incentives to new residential housing projects that are all-electric and have no hookup to the gas distribution grid.

The TECH Initiative is intended to advance California's market for low-emissions space and water heating technologies that are in an early stage of market development. Pursuant to SB 1477, the TECH Initiative is directed to

...advance the state's market for low-emission space and water heating equipment for new and existing residential buildings through upstream market development, consumer education, contractor and vendor training, and the provision of upstream and midstream incentives to install low-emission space and water heating equipment in existing and new buildings.<sup>2</sup>

The Phase I decision also directed the Commission's Energy Division staff (Staff) to conduct a workshop and "produce a proposal with a framework for how to address funding when combining incentives from separate program budgets."<sup>3</sup> This is known as incentive layering.

## **1.2. Phase II**

On June 30, 2020, Staff held a workshop on the topic of incentive layering, as directed in the Phase I decision. On August 25, 2020, the assigned Commissioner issued a second amended Scoping Memo setting forth the issues to be considered in Phase II of this proceeding (Phase II Scoping Memo). Attachment A of the Phase II Scoping Memo included a proposal developed by Staff (Staff Proposal). The Phase II Scoping Memo was served to the Service Lists of several related proceedings to provide parties to those proceedings an

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<sup>2</sup> SB 1477 (2018), Sec. 5, article 13, 922 (a)(1).

<sup>3</sup> D.20-03-027 (Phase I decision) at 86.

opportunity to comment.<sup>4</sup> Both the Phase II Scoping Memo and the Staff Proposal address three topics:

1. Incentive Layering: Developing a framework for "incentive layering," or accounting for program costs and benefits when multiple programs incentivize identical or overlapping decarbonization measures;
2. Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) Program: Supporting the construction of decarbonized buildings in communities affected by wildfires and other natural disasters; and
3. Electric Heat Pump Water Heater (HPWH) Baseline Allowance: Creating a new baseline allowance for residential customers who install electric HPWHs.

Staff held a second workshop on September 15, 2020, to address the portions of the Staff Proposal related to the WNDRR Program and HPWH baseline allowance.<sup>5</sup> On September 24, 2020, the assigned Administrative Law Judge (ALJ) issued a ruling setting a prehearing conference and directing comment on the Phase II Staff Proposal. The September 24, 2020 ALJ Ruling invited parties to comment on: (1) a set of questions related to each of the three topics in the Staff Proposal, (2) WNDRR Program incentive values, and

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<sup>4</sup> The Service Lists of the related proceedings were: (1) Building Decarbonization Proceeding, Rulemaking (R.) 19-01-011; (2) Mobilehome Park Safety Proceeding, R.18-04-018; (3) Self-Generation Incentive Program (SGIP) Proceeding, R.20-05-012; (4) Energy Efficiency Proceeding, R.13-11-005; (5) Microgrids and Resiliency Strategies Proceeding, R.19-09-009; (6) San Joaquin Valley Affordable Energy Proceeding, R.15-03-010; (7) Affordability Proceeding, R.18-07-006; (8) Investor-Owned Utility (IOU) Energy Savings Assistance and California Alternate Rates for Energy Programs and Budgets for Program Years 2021-2026, Application (A.) 19-11-003, et. al; (9) Southern California Edison Company (SCE) General Rate Case (GRC) Phase II, A.17-06-030; (10) San Diego Gas & Electric Company (SDG&E) GRC Phase II, A.19-03-002; and (11) Pacific Gas and Electric Company (PG&E) GRC Phase II, A.19-11-019.

<sup>5</sup> See the September 24, 2020 ALJ Ruling, Attachment C, the September 15, 2020 workshop slides.



(3) the September 15, 2020 workshop slides. Parties filed opening comments on October 9, 2020, and reply comments on October 16, 2020.<sup>6</sup>

This decision resolves the above issues and concludes Phase II of the proceeding. The proceeding remains open to consider additional issues in future phases.

## **2. Incentive Layering**

### **2.1. Multiple Program Incentives**

Since the passage of SB 1477, the Commission has approved more than a dozen different building decarbonization programs spread across four different categories: (1) Energy Efficiency, (2) Grid Optimization, (3) Community Support, and (4) Emissions Reduction. The Commission authorized over \$435 million in incentives across these programs for electric HPWHs, electric heat pump heating, ventilation, and air conditioning (HVAC) systems, and related devices that enable these technologies to achieve full functionality. These programs have different funding sources, design requirements, goals, and evaluation methodologies.<sup>7</sup>

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<sup>6</sup> Parties filing opening and/or reply comments were: (1) Association of Bay Area Governments (San Francisco Bay Area Regional Energy Network, or BayREN); (2) California Efficiency + Demand Management Council (CEDMC); (3) Southern California Gas Company (SoCalGas); (4) SDG&E; (5) Natural Resources Defense Council (NRDC); (6) Sierra Club; (7) California Environmental Justice Alliance (CEJA); (8) PG&E; (9) The Utility Reform Network (TURN); (10) Cal Advocates; (11) SCE; (12) Small Business Utility Advocates (SBUA); (13)-(15) Sonoma Clean Power, East Bay Community Energy, and Marin Clean Energy, (Joint CCAs); (16) Vermont Energy Investment Corporation (VEIC); (17) Recurve Analytics, Inc. (Recurve); (18) Sacramento Municipal Utility District (SMUD); (19) Environmental Defense Fund (EDF); (20) Center for Sustainable Energy (CSE); (21) Wild Tree Foundation (Wild Tree); (22) Southwest Gas Corporation (SWG); and (23) California Hydrogen Business Council (CHBC).

All further references to parties' comments in this decision are to their comments on the Staff Proposal unless otherwise specified.

<sup>7</sup> Staff Proposal at 7 to 8. Also see Fact Sheet: Heat Pump Water Heater Incentive Programs at

*Footnote continued on next page.*

While multiple program incentives add value to encourage customer participation, few processes are in place for efficient and effective coordination and administration across multiple program incentives. This creates challenges and barriers that discourage participation.

Recognizing the level of coordination necessary to reach the state's building decarbonization goals, as well as the need to spend program funds wisely, this decision adopts a set of incentive layering guiding principles for how to determine program costs and benefits when multiple programs have overlapping goals, incentives, or metrics. These non-binding guiding principles apply to the BUILD Program, the TECH Initiative, and the WNDRR Program adopted in this proceeding as well as other programs authorized in proceedings to incentivize clean heating technologies, specifically Energy Efficiency (EE) programs authorized in R.13-11-005, the HPWH sub-program of the Self-Generation Incentive Program (SGIP) authorized in R.20-05-012, and the PG&E WatterSaver program authorized in D.19-06-032 and approved by Resolution E-5073.

This decision encourages specific reporting approaches for EE programs, SGIP, the BUILD Program, and the TECH Initiative. We first provide a brief overview of the key elements of the Commission's EE and SGIP programs that are relevant to this decision below.

### **The Energy Efficiency Program**

The EE portfolio has several programs that may incentivize heat pump appliances, which appear in some programs' lists of approved measures. Notably, two new statewide programs for midstream HVAC and upstream plug load appliances (PLA), both administered by SDG&E, were approved to include heat pump appliances on their approved measure

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[https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/building-decarb/cpuc-hpwh-and-electrification-fact-sheet\\_q22020.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/building-decarb/cpuc-hpwh-and-electrification-fact-sheet_q22020.pdf).

lists. These two programs have a combined budget of \$101.7 million over three and a half years. Implementation will begin in 2021.<sup>8</sup> The HVAC program has been launched.<sup>9</sup> The PLA program is pending the submission of an Advice Letter by SDG&E.

### **Self-Generation Incentive Program**

This program provides incentives to support distributed energy resources by providing rebates for qualifying distributed energy systems installed on the customer's side of the electric meter. Qualifying technologies include advanced energy storage systems, and onsite electricity generation using 100% renewable fuel. In D.19-09-027, the Commission dedicated a \$4 million budget within the SGIP energy storage budgets for HPWHs. In D.20-01-021, the Commission authorized \$40.7 million in funding for general market HPWHs. Therefore, the total authorized funding for HPWHs in SGIP is approximately \$44.7 million through 2024. A Ruling with a Staff Proposal for a SGIP HPWH incentive program was issued on April 16, 2021.

A wide range of stakeholders are involved in designing and implementing the Commission's building decarbonization incentive programs, as noted in the Staff Proposal and detailed below.

1. Commission Staff: Staff in the Commission's Energy Division provide program oversight, regulatory direction, and managing program evaluations, as appropriate.
2. Program implementer of the TECH Initiative: Project team led by Energy Solutions play a convening role in implementation of the TECH Initiative. The TECH Initiative implementer will also manage incentive layering infrastructure necessary for the TECH Initiative to

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<sup>8</sup> The final implementation plan for the statewide HVAC program was posted at [https://cedars.sound-data.com/programs/SDGE\\_SW\\_HVAC\\_Up/details/2021](https://cedars.sound-data.com/programs/SDGE_SW_HVAC_Up/details/2021). The PLA implementation plan will be on the same website when it becomes available.

<sup>9</sup> SDG&E's Advice Letter 3648-E was approved for implementation effective December 11, 2020.

- coordinate and interact with other building decarbonization incentive programs.
3. Program administrators of EE programs: This category includes, but is not limited to, utility administrators and program implementers for the statewide PLA program, the statewide upstream HVAC program, the midstream HVAC program, and the residential new construction program.
  4. Original Equipment Manufacturers (OEMs) of appliances incentivized by EE or building decarbonization (BD) funds: This includes OEMs of HPWHs, heat pump HVAC systems, or any other related equipment that may receive incentives.
  5. Distributors, retailers, and wholesalers of appliances incented by EE, BD, or SGIP funds: This includes all entities in the supply chain connecting appliance manufacturers to the end-user.
  6. Contractors or installers: These entities are responsible for installation of heat pump appliances in buildings.
  7. Non-jurisdictional program administrators and utilities: Utilities or other agencies that are not under the jurisdiction of the Commission but will play a role as program administrators for building decarbonization incentive programs. Entities include municipal utilities and community choice aggregators, as well as Regional Energy Networks (RENs) insofar as they are administering non-Commission directed funds.
  8. Community-based organizations (CBOs): Organizations that may receive funding to conduct training or outreach to implement incentive programs.
  9. California Energy Commission (CEC): Among other roles, as directed in the Phase I decision, the CEC is the administrator of the BUILD Program.<sup>10</sup>

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<sup>10</sup> D.20-03-027 at 50.

As described in the Staff Proposal, incentives to increase the uptake of heat pump appliances target various parts of the supply chain – upstream, midstream, and downstream.

1. Upstream Incentives: Incentives aimed at encouraging OEMs to make the most efficient equipment available at competitive prices. This includes manufacturer buydowns to targeted channels, such as retailers that are not positioned to collect data from the purchaser or end-user.
2. Midstream Incentives: Incentives to wholesale distributors, retailers, e-commerce companies, and/or contractors to stock and/or sell more efficient products. This includes program elements that require a percentage pass-through of the incentive to the distributor's purchaser or a customer (*e.g.*, a spiff/management fee paid to the applicant for participating in the program and for meeting the program's requirements such as collecting data.)
3. Downstream Incentives: Incentives or rebates given directly to an end-user, which could include direct payment for part of the cost of the appliance, or for installation of enabling equipment such as an electrical panel upgrade or any alterations that may need to occur to install a heat pump appliance.

## **2.2. Staff Proposal**

The Staff Proposal addresses how diverse programs and incentives with different funding streams and program goals should be coordinated to support meaningful adoption of building decarbonization measures such as heat pump water heaters and heat pump HVAC systems, as well as a seamless customer experience. It also addresses how to allocate credit for program benefits (often referred to as "attribution") when multiple programs are contributing incentives to the same measure. Staff recognizes that program benefits attribution can be complex when programs providing incentives for a particular heat pump

appliance have multiple goals, and incentives are administered at different points in the supply chain (*e.g.*, upstream, midstream, downstream).

In addition, Staff pointed out that the Commission's existing building decarbonization incentive programs have multiple and sometimes differing goals. For instance, while the primary goal of the EE portfolio has traditionally been to reduce energy use, the BUILD Program and the TECH Initiative will be evaluated based on other metrics. The Phase I decision set out the following metrics for evaluation: (1) cost per metric ton of avoided GHG emissions; (2) projected annual and lifetime utility bill savings; (3) number of low-emission systems installed (BUILD Program only); and (4) market share for eligible technologies (TECH Initiative only). Notably absent from this list are any metrics associated with energy savings or any load-shifting that may occur.

The Staff Proposal includes the following key recommendations:

1. Layering incentives in such a way that the cost of an appliance to the customer is reduced enough to encourage fuel substitution.
2. Applying Energy Efficiency incentives to appliances first in the coordination process, thus establishing an incentive "baseline" from which other programs may layer additional incentives as necessary.
3. An evaluation formula that attributes success proportionally across overlapping programs according to the share of the total incentive amount contributed toward appliances by each program.
4. Using the new appliance tracking database – to be developed by the TECH Initiative implementer in compliance with the Phase I decision's requirement to coordinate marketing across programs – to track which specific appliances are receiving which incentives.

To facilitate coordination across programs, including those that are not subject to Commission oversight, the Staff proposes that the TECH Initiative implementer develop a memorandum of understanding (MOU) to be entered into by all relevant entities and program administrators, such as investor-owned utilities (IOUs, or utilities), community choice aggregators (CCAs), RENS, Air Quality Management Districts (AQMDs), publicly-owned utilities (POUs), state agencies, or any other entity that may offer incentives for heat pump appliances and related equipment.

## **2.3. Parties' Comments**

### **2.3.1. Customer Focus**

Numerous parties comment on the importance of maintaining a focus on the customer, emphasizing a simple and seamless experience, sector-specific approaches, and particular consideration of the needs of participants who are low-income or live in a disadvantaged community (DAC).<sup>11</sup>

In particular, CEJA suggests that low-income customers and those living in DACs may require additional downstream incentives, tenant protections, consideration of bill impacts, and multilingual outreach.<sup>12</sup> BayREN recommends that an adopted framework minimize the points of contact and "...not requir[e] the customer to participate in multiple programs,"<sup>13</sup> while CSE and SCE both call for a "seamless" customer experience.<sup>14</sup> SDG&E suggests developing a "clear

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<sup>11</sup> DACs are defined under SB 535 as the top 25% scoring areas in the Office of Environmental Health Hazard Assessment CalEnviroScreen tool, along with other areas with high amounts of pollution and low populations. More information can be found in the CalEPA report, *Designation of Disadvantaged Communities*, available at <https://calepa.ca.gov/wp-content/uploads/sites/6/2017/04/SB-535-Designation-Final.pdf>.

<sup>12</sup> CEJA's Opening Comments at 5-8.

<sup>13</sup> BayREN's Opening Comments at 2.

<sup>14</sup> CSE's Opening Comments at 2; SCE's Opening Comments at 2.

and simple, coordinated ‘program reference sheet’ for the market participant,” adding that participants “should not have to figure out how to combine these different programs with different rules and incentive levels that can vary depending on geographic location, income level, or what programs are available in the region.”<sup>15</sup> Similarly, VEIC recommends “uniform eligibility requirements and application processes for each layer of the supply chain, wherever possible,” arguing that this will yield “increased uptake and better results.”<sup>16</sup>

### **2.3.2. Program Administrator and Implementer Coordination**

SDG&E agrees that incentive layering should be “focused on continuous program coordination, while preserving programs’ existing requirements; [l]everage/enhance statewide or national existing inventory databases for tracking; [and l]everage a ‘partnership’ agreement concept across programs.”<sup>17</sup> In addition to partnerships for programs regulated by the Commission, SDG&E also supports Staff’s recommendation for MOUs with non-jurisdictional entities.<sup>18</sup> To facilitate coordination, SDG&E proposes that the TECH Initiative implementer serve as a single point of contact for the numerous programs in the market, and that it should track relevant information across all relevant programs in a new database.<sup>19</sup>

While supporting a role for the TECH Initiative implementer in coordinating among Commission-jurisdictional programs, PG&E does not

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<sup>15</sup> SDG&E’s Opening Comments at 3-4.

<sup>16</sup> VEIC’s Opening Comments at 6.

<sup>17</sup> SDG&E’s Opening Comments at 3.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at 6-7.



support pursuing MOUs with non-jurisdictional entities, contending that the Staff Proposal would “rely on the hope that an outside entity voluntarily adheres to a potentially unenforceable agreement.”<sup>20</sup> Instead, PG&E suggests that the TECH Initiative implementer attempt to determine what non-Commission jurisdictional incentives are available that overlap with Commission-jurisdictional programs. The TECH Initiative implementer would coordinate with Commission -jurisdictional program administrators to share that information, and those program administrators would then be required to take those external incentives into account when setting their own program incentive levels.<sup>21</sup>

The Joint CCAs note that if voluntary MOUs are pursued with non-Commission jurisdictional entities, these MOUs should also benefit those entities and their customers, for example by facilitating information sharing.<sup>22</sup>

Beyond SDG&E’s comments discussed above, the proposal for a database to track heat pump appliance adoption received several additional comments. BayREN commented that such a database should be focused on a small number of technologies – for instance, HPWHs. It argues that coordination across a larger number of measures could be challenging due to the need to interface with other implementers’ proprietary databases.<sup>23</sup> CEDMC warns against the usefulness of a database to assist with program attribution as they become outdated and rarely stay current with program status.<sup>24</sup> NRDC and Sierra Club

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<sup>20</sup> PG&E’s Opening Comments at 6.

<sup>21</sup> *Id.*

<sup>22</sup> Joint CCAs’ Opening Comments at 3.

<sup>23</sup> BayREN’s Opening Comments at 3.

<sup>24</sup> CEDMC’s Reply Comments at 7.

jointly support some form of incentive tracking, including what incentives are available and what incentives are given to a specific appliance, to the extent feasible and not burdensome; they also caution against overly prescriptive tracking requirements.<sup>25</sup>

### **2.3.3. Supporting Measures**

Parties generally agree that appliance incentives alone may be insufficient to ensure adoption.<sup>26</sup> Necessary supporting measures may include providing incentives to reduce the cost of enabling technologies (*e.g.*, electrical panel upgrades, CTA-2045 Universal Communication Modules, and thermostatic mixing valves), installation costs, workforce education and training, customer marketing, education, and outreach, or other initiatives. However, parties had varying perspectives as to whether and how such supporting measures could be integrated into an incentive layering framework or attribution formula.

In their comments, Cal Advocates addresses the issue of including the costs of panel or wiring upgrades in Staff's proposed attribution formula, as these same upgrades may benefit other programs, such as transportation electrification. According to Cal Advocates, "Incentives that enable additional performance should receive attribution proportional to the incremental benefits they contributed. For example, incentives for the installation of a CTA-2045 universal communication module should receive attribution equal to the additional benefits of the load shifting and load shed enabled by the module."<sup>27</sup>

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<sup>25</sup> NRDC's and SC's Joint Opening Comments at 3.

<sup>26</sup> BayREN's Opening Comments at 2; CEJA's Opening Comments at 13; CSE's Opening Comments at 6; EDF's Opening Comments at 4; Joint CCAs' Opening Comments at 4-5; PG&E's Opening Comments at 8; SDG&E's Opening Comments at 4-5; TURN's Opening Comments at 8; VEIC's Opening Comments at 7 and 10.

<sup>27</sup> Cal Advocates' Opening Comments at 6.

CEJA argues that “[i]t is critical to leverage existing programs” and that supporting measures “will factor into whether DAC or low-income community members can afford the technology.”<sup>28</sup> EDF supports making buildings “grid responsive-ready,” but does not offer specific suggestions as to how this goal should be integrated into incentive layering policies.<sup>29</sup> SBUA focuses on workforce education and training funds as being “unlikely to reduce the cost barriers faced by individual users and installers,” and therefore argues that such funds should not be incorporated into incentive layering in a manner that would preclude accessing additional funding.<sup>30</sup>

#### **2.3.4. Incentive Types**

As summarized in the Staff Proposal and outlined in their June 30, 2020 workshop presentation, the IOUs propose categorizing incentives in one of three ways: duplicative, layered/overlapping, and complementary. A duplicative incentive would provide no additional value beyond existing incentives and should be avoided. Layered/overlapping incentives would be offered to the same market segment, customer, or technology measure at the same time, such as when both an IOU and a CCA offer customers rebates on a particular appliance. In the IOUs' view, such incentives may be appropriate in some cases when they overcome particular market barriers, and not in other cases. Finally, complementary incentives would operate at different points in the

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<sup>28</sup> CEJA's Opening Comments at 13-14.

<sup>29</sup> EDF's Opening Comments at 5.

<sup>30</sup> SBUA's Opening Comments at 2.

supply chain, target different customer segments, or provide distinct incremental value in some other way.<sup>31</sup>

Other parties recommend that incentive layering focus on different segments of the supply chain. For example, SDG&E, SMUD, and TURN suggest a focus on directing incentives to “midstream” and “upstream” market actors (e.g., manufacturers, distributors, and retailers, rather than end users).<sup>32</sup> According to SDG&E and TURN, this would require less effort on the part of consumers. CEJA, however, argues for a special focus on downstream incentives. CEJA argues that targeted customer incentives are needed to ensure that low-income customers and those residing in disadvantaged communities receive sufficient incentives to enable them to adopt and benefit from decarbonization technologies.<sup>33</sup>

### **2.3.5. Cost and Benefit Calculation and Impact Attribution Methodologies**

Several parties express concern with Staff’s proposed attribution methodology of accounting for program success by splitting the “credit” for program impacts (e.g., kWh, kW, or tons of Carbon Dioxide or CO<sub>2</sub> saved) according to each program’s share of the total incentives applied to an

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<sup>31</sup> Staff Proposal at 13-15. Joint IOU slides, *CPUC Workshop on Incentive Layering*, June 30, 2020 are available at <https://www.cpuc.ca.gov/about-cpuc/divisions/energy-division/building-decarbonization/workshop-on-incentive-layering-for-building-decarbonization>.

<sup>32</sup> SDG&E’s Opening Comments at 3; SMUD’s Opening Comments at 4; TURN’s Opening Comments at 4.

<sup>33</sup> CEJA’s Opening Comments at 4-6.

appliance.<sup>34</sup> In particular, CEDMC, CSE, VEIC,<sup>35</sup> Joint CCAs,<sup>36</sup> and NRDC/Sierra Club<sup>37</sup> argue that this approach would disrupt both existing programs and those planning to go out to bid in the near future. CEDMC argues that “...energy efficiency programs are currently in the process of solicitation and launch, all of which have been proposed independently of one another and in the absence of any layering guidelines. Attempting to introduce specific guidelines at this time will disrupt all of those current solicitations.”<sup>38</sup> VEIC asserts that such an attribution formula does not capture the intention of market transformation programs which have different goals from resource acquisition programs, and should be treated separately.<sup>39</sup> VEIC states that while “resource acquisition programs can claim the savings they directly purchased, TECH Initiative’s success metrics should be more holistic and grounded in gross market impacts. That is, they should not simply be based on the fraction of incremental cost that TECH Initiative incentives help to buy down. In the case of TECH Initiative, such metrics could involve total heat pump market share, the number of contractors installing heat pumps, or product price over time.”<sup>40</sup>

PG&E, while largely agreeing with the incentive layering approach outlined in the Staff Proposal, is concerned about the proposed method of

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<sup>34</sup> CEDMC’s Opening Comments at 5-7; CSE’s Opening Comments at 3; Joint CCAs’ Opening Comments at 4; NRDC and Sierra Club’s Opening Comments at 3-4; Recurve’s Opening Comments at 4-5; VEIC’s Opening Comments at 5.

<sup>35</sup> CSE’s Opening Comments at 3.

<sup>36</sup> Joint CCAs’ Opening Comments at 4.

<sup>37</sup> NRDC/Sierra Club’s Opening Comments at 3.

<sup>38</sup> CEDMC’s Opening Comments at 4.

<sup>39</sup> VEIC’s Opening Comments at 4 to 5.

<sup>40</sup> VEIC’s Opening Comments at 5.

allocating savings, and states that there is a need for future workshops to further discuss it.<sup>41</sup> Wild Tree suggests that, depending on program design, a given program's benefits are not necessarily dictated by that program's share of total appliance incentives; it offers the California Solar Initiative (CSI)<sup>42</sup> as an example of a program with an outsize impact relative to the incentives it provided.<sup>43</sup>

Joint CCAs and CEDMC suggest that instead of splitting credit for program benefits, any program should be able to take credit for the full value of the measure's benefits.<sup>44</sup> CEDMC argues that this should be permitted because without any one of the contributing programs, the measure might not have been adopted.<sup>45</sup> However, Cal Advocates opposes this concept, arguing that credit for benefits should be allocated in proportion to the incremental benefits provided by a given program.<sup>46</sup> While not supporting the specific benefit attribution formula presented in the Staff Proposal, TURN also expresses support for the principle of ensuring that incentives are not duplicative but rather complementary in providing incremental value to ratepayers.<sup>47</sup>

Recurve, CEDMC, Sierra Club/NRDC (filing jointly) and VEIC further argue that if the Commission adopts a methodology for splitting the credit for

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<sup>41</sup> PG&E's Opening Comments at 2.

<sup>42</sup> Directed in SB1 (2006), CSI was a program that ran from 2006 to 2016 and offered incentives for rooftop solar. CSI is widely credited with reducing the price for solar in California. Information on CSI, as well as evaluation reports, is available at <https://www.cpuc.ca.gov/General.aspx?id=6043>

<sup>43</sup> Wild Tree's Opening Comments at 3.

<sup>44</sup> CEDMC's Opening Comments at 5; Joint CCAs' Opening Comments at 2.

<sup>45</sup> CEDMC's Opening Comments at 3.

<sup>46</sup> Cal Advocates' Opening Comments at 6.

<sup>47</sup> TURN's Opening Comments at 1.

benefits across multiple programs, Energy Efficiency programs should not be viewed as a “baseline” incentive.<sup>48</sup>

While Cal Advocates call for the total resource cost (TRC) test to be used as a standard metric,<sup>49</sup> other parties, such as Recurve, CEDMC, VEIC, and BayREN argue that program cost effectiveness methodologies should not incorporate the TRC test, at least not in the form currently implemented in the Energy Efficiency proceeding (R.13-11-005).

According to Recurve, “adopting a prescriptive approach (to incentive layering) will hinder the implementer's flexibility to test and identify the right level of incentives to drive market transformation. Ultimately, the incentive layering proposal is indicative of a larger problem: the Commission should focus oversight on the value delivered to synchronize the myriad of initiatives, and enable the blending of financing streams to support decarbonization.”<sup>50</sup>

Similarly, CEDMC argues, “Any arbitrary justification to dilute the value of an individual program or incentive will result in an increasingly large dead-weight loss to all programs—with the net outcome that all programs will perform worse, deliver less savings, less cost-effectively, and consequently progress on decarbonization and energy efficiency will be slowed.”<sup>51</sup> CEDMC

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<sup>48</sup> Recurve’s Opening Comments at 3-4; CEDMC’s Opening Comment at 8; NRDC and Sierra Club’s Opening Comments at 4; VEIC’s Opening Comments at 9.

<sup>49</sup> Cal Advocates’ Opening Comments at 4. The *Total Resource Cost Test* measures the net costs of a demand-side management program as a resource option based on the total costs and benefits of the program, including both the participants' and the utility's costs and benefits. See D.19-05-019.

<sup>50</sup> Recurve’s Opening Comments at 1 to 2.

<sup>51</sup> CEDMC’s Opening Comments at 5.

also contends that the TRC disincentivizes electrification efforts, but does not clearly state how it does so.<sup>52</sup>

BayREN states, “Energy savings should be attributed to efficiency programs that are mandated to show cost-effectiveness; traditional cost-effectiveness should not be ascribed to decarbonization programs.”<sup>53</sup>

Joint CCAs suggest that each program be allowed to apply its own cost or benefit framework to its share of measure costs and savings.<sup>54</sup>

Relatedly, several parties also call for funding to be based on the “value” that a measure provides as an alternative to traditional cost-effectiveness approaches.<sup>55</sup> VEIC explains this value-based funding as follows: “once the benefits from heat pumps are properly quantified, incentive-layering guidelines for resource acquisition programs can define pricing signals according to what the state is trying to buy (for example, GHG reductions and resource adequacy) and the collective value that a heat pump provides. Resource acquisition programs can be then targeted to purchase various value streams.”<sup>56</sup>

Recurve suggests that because participation in a market transformation program is often not cost effective using energy efficiency methods for counting measure costs, continued reliance on those methods discourages layering of Energy Efficiency programs with market transformation programs.<sup>57</sup> It argues that instead of including all measure costs regardless of funding source as the

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<sup>52</sup> CEDMC’s Reply Comments at 5.

<sup>53</sup> BayREN’s Opening Comments at 2.

<sup>54</sup> Joint CCAs’ Opening Comments at 2.

<sup>55</sup> Recurve’s Opening Comments at 4-6; SCE’s Opening Comments at 3; VEIC’s Opening Comments at 8.

<sup>56</sup> VEIC’s Opening Comments at 8

<sup>57</sup> Recurve’s Opening Comments at 5.



Energy Efficiency proceeding's rules require, a given program's accounting of a measure's cost should exclude program incentives from non-Energy Efficiency programs.<sup>58</sup> It further argues for development of a common valuation framework over the long term, while also noting that a better approach would be to price decarbonization (and other desired benefits) and pay implementers for the results, possibly by establishing a market to buy the carbon reductions (or other benefits) delivered by projects.<sup>59</sup>

SCE agrees that a "formal consolidated methodology or market transformation-like framework" is needed and suggests the use of a "least-cost, best-fit" framework, similar to the approach used to acquire new generation resources. It argues that least-cost, best-fit would be "simpler" and less "prescribed" than energy efficiency cost-effectiveness methodologies.<sup>60</sup> SoCalGas recommends exploring a long-term, consolidated market transformation incentive framework similar to that adopted in the California Solar Initiative.<sup>61</sup>

Yet regardless of the methodologies used to account for costs and benefits across programs, several parties do note that the sum of all layered incentives should not be excessive (*e.g.*, exceeding either the total costs or the total benefits of a measure).<sup>62</sup>

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<sup>58</sup> *Id.* at 5-6.

<sup>59</sup> *Id.* at 4 and 6.

<sup>60</sup> SCE's Opening Comments at 3.

<sup>61</sup> SoCalGas's Opening Comments at 3.

<sup>62</sup> Cal Advocates' Opening Comments at 2; CEDMC's Opening Comments at 3; SDG&E's Opening Comments at 3; TURN's Opening Comments at 5.

Finally, many parties suggest that rather than adopting a precise methodology defining how overlapping programs must account for their costs and benefits, the Commission should instead adopt a set of guiding principles and encourage programs to conform to those principles.<sup>63</sup> Similarly, SoCalGas and SDG&E recommend developing a framework focused on continuous program coordination, while preserving existing program requirements. Several parties, such as VEIC, and NRDC and Sierra Club, argue that a flexible approach is most appropriate given the dynamic nature of programs and markets, and given that many relevant programs are not under Commission jurisdiction.<sup>64</sup>

#### **2.4. Adopted Guiding Principles**

We agree with parties that precise formulas and implementation mandates are generally not appropriate at this time. The building decarbonization programs are in their early stages, many programs are in a state of flux, and programs and markets are expected to continue to change over time as building decarbonization technologies and markets mature.

With this in mind, we adopt a set of guiding principles to focus market participants, particularly program administrators and implementers, on the desired outcomes, and to help other proceedings over time. It is not our intention to make immediate changes that may have unintended and potentially disruptive consequences for California's diverse decarbonization-oriented programs. Rather, program administrators and implementers, and other market participants are encouraged to consider how the guiding principles below can best be applied in their particular circumstances. We also outline recommended

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<sup>63</sup> CEDMC's Opening Comments at 3; CSE's Opening Comments at 3; NRDC/ Sierra Club's Opening Comments at 3.

<sup>64</sup> NRDC and Sierra Club's Opening Comments at 1; VEIC's Opening Comments at 3.

reporting approaches to increase transparency for Energy Efficiency programs, SGIP, the BUILD Program, and the TECH Initiative.

The Commission adopts four overarching guiding principles for incentive layering, described in greater detail in the subsections below and summarized in Appendix A:

1. Ease of participation
2. Complementary incentives
3. Non-duplicative attribution of program benefits
4. Ongoing coordination between program administrators and implementers

#### **2.4.1. Ease of Participation**

The term “program participant” includes manufacturers, distributors, retailers, contractors, end users and other persons in the market receiving incentives or otherwise engaging in a program. Regardless of the participant types targeted by decarbonization programs, their experiences should be simple and seamless, and program design should account for their practical constraints. The heat pump market is in a nascent state, and natural gas and electric resistance appliances are currently more common and less expensive than heat pumps. Program administrators and implementers should therefore remove as many barriers as possible to ensure that electric heat pump appliances are on a level playing field with gas appliances.

We therefore adopt the following specific guidelines for program administrators and implementers to advance the goal of ensuring a participant friendly experience:

1. Eligibility:
  - a) Eligibility rules should be clear and simple, both to ease participant decision-making and to avoid unexpected outcomes for participants.
  - b) Eligibility for one program should not be conditional upon participation (or non-participation) in another program unless specifically directed otherwise.
  - c) Program administrators and implementers should develop strategies to ensure that market participants are aware of all incentive programs for which they may be eligible.
2. Ease of participation:
  - a) Contractors and end users have limited time to wait for payment. Payments to these participants should therefore be made as promptly as practicable.
  - b) Participants have limited time to fill out paperwork. Additionally, multiple payment sources for market participants increases complexity and the likelihood that they will simply default to the current technology. Program implementers and administrators should therefore coordinate to create a single, streamlined application for each supply chain level, where possible.
  - c) Program implementers and administrators should consider how incentive layering can reduce market barriers for low-income participants.
3. Recognition of practical constraints:
  - a) Incentives targeting different points in the supply chain may have separate applications to shield market participants from having to share sensitive sales or incentive information with one other.
  - b) Aim to remove as many barriers as possible, to ensure that electric heat pump appliances are on a level playing field with electric resistance and gas appliances.

#### **2.4.2. Complementary Incentives**

As described in the section above, parties reference diverse barriers to building decarbonization, such as inability of low-income residents to afford appliances with higher upfront costs, and lack of workforce training. We agree that substantial barriers exist at various points in the supply chain, and thus decline to call for a primary focus on any specific point in the supply chain. Instead, programs should be focused on addressing the barriers to decarbonization faced by their target participants. For example, programs targeting distributors and retailers should consider focusing on equipment-based measures such as increasing stock and reducing prices. Programs targeting contractors should consider placing increased focus on project barriers, such as project identification, installation costs, additional controls to support load shifting, or supporting measures such as panel upgrades. Programs targeting end users should consider focusing on supporting all participants with additional support for low-income customers and residents of disadvantaged communities.

While multiple programs may provide incentives for the same appliance at the same point in the supply chain, this should only be pursued if the incentives, when combined, do not exceed the total cost of the appliance, including installation costs.

The Commission therefore adopts the following specific guidelines for program administrators and implementers:

1. Program administrators and implementers should focus their programs on incentives that address distinct market needs or different program goals at various points in the supply chain.
2. Regardless of where in the supply chain each program operates, the sum of all incentives – including local, state,

and federal incentives – should not exceed the total cost of the appliance including installation costs.

3. Beyond equipment incentives, additional funding may be directed towards supporting measures such as panel upgrades, ducting, additional controls, installation costs, and workforce education and training. Additional funding may also be necessary for new construction incentives that help achieve bill savings requirements or are otherwise necessary to encourage program participation by homeowners and/or builders.

#### **2.4.3. Non-Duplicative Attribution of Program Benefits**

We agree with the view expressed by numerous parties that the program benefit attribution formula set forth in the Staff Proposal is too prescriptive, infeasible for immediate implementation and likely not appropriate in many, if not most, circumstances. Nevertheless, the Commission also agrees with Cal Advocates, TURN, and the IOUs, who emphasize the need to spend ratepayer funds wisely and avoid uncoordinated, duplicative incentives that may unintentionally incentivize a measure in excess of the value it provides to ratepayers.

We also note parties' discussions of approaches to allocating credit for program impacts and determining cost-effectiveness. The approaches used by programs and proceedings to assess program impacts and cost-effectiveness are critical to the Commission's ongoing decarbonization efforts because the outcomes of these assessments influence decision-making as to which programs are worth pursuing and which are not. However, while parties raise compelling concerns and suggest thoughtful alternative approaches, this proceeding is not the venue for revisiting the methodologies used to assess program impacts or determine cost-effectiveness in other proceedings. Instead, the Commission

adopts the following guidelines and encourages other programs and proceedings to consider how they may transition in an orderly manner over time to be more aligned with these guidelines, if they are not already aligned:

1. If only one program primarily targets a particular benefit (*e.g.*, only Energy Efficiency programs currently have Total System Benefit, the sum of the benefits that a measure provides to the electric and natural gas systems, as a primary goal), that program may claim credit for all achievement of that benefit, even though other programs are likely also influencing customer adoption. This principle will promote administrative efficiency and regulatory certainty for programs that are clearly not duplicative of others. As a corollary, if an Energy Efficiency incentive was received, all credit for energy savings must be attributed to the Energy Efficiency programs alone, unless and until the Commission adopts a different approach in this proceeding.<sup>65</sup>
2. If a program approved in this proceeding has a sub-goal or metric that is also targeted in another program (*e.g.*, reporting on kWh savings in programs primarily targeting decarbonization), progress toward that sub-goal or metric should continue to be tracked and reported. However, all program reports and evaluations should acknowledge the existence of other programs that may also be contributing to adoption levels and note that the metric being reported is also found in other program reports. This reporting will promote transparency around potentially duplicative goals and metrics without disrupting programs that are largely not duplicative.<sup>66</sup>
3. For new programs approved in this proceeding with goals and metrics that significantly overlap with other programs,

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<sup>65</sup> For example, the SGIP proceeding is currently considering a Staff Proposal to allow SGIP to claim load-shaping energy savings. The proposal would not alter the energy savings to be claimed by Energy Efficiency programs.

<sup>66</sup> Additional guidance on metrics and sub-metrics can be found in the Phase I decision (D.20-03-027), Appendix A, Section 1.1.

the relevant Commission decision should develop a coordinated approach for sharing credit for program success. This principle will ensure that measures are not incentivized in excess of their costs.

4. While we strongly encourage program administrators and implementers to consider and apply these guidelines, in order to allow flexibility, the guidelines are not binding.

While the incentive layering principles adopted in this decision are not binding, we establish certain binding requirements applicable to the TECH Initiative implementer, as further discussed below. Further, Energy Division staff shall work with the TECH Initiative implementer to ensure adherence with these principles in the implementation of the TECH Initiative.

Currently, many programs are largely in alignment with these principles. However, there is some overlap in goals and metrics across programs. For example, the Energy Efficiency proceeding adopts Total System Benefits, which incorporate kWh and Therm savings goals, and thus has a substantial focus on energy savings impacts. It also adopts kW savings goals (with a focus on demand impacts) and uses the TRC and other tests to determine cost-effectiveness, which among other things incorporates the values of energy savings, capacity savings, and greenhouse gas savings into assessing program costs and benefits. The proceeding also pursues market transformation impacts through its non-resource programs. The multifaceted program impact goals and cost-effectiveness methodologies cause the program to have significant overlap with programs in other proceedings, such as the BUILD Program and TECH Initiative, which pursue market transformation. Other proceedings may also have similar overlaps.

While we do not require any other proceeding or program to revise its cost-effectiveness methodologies or to change how it claims credit for program



impacts, over time the Commission may consider bringing the proceedings addressing building decarbonization more into alignment with the principles adopted here. Coordination could occur across individual proceedings or in a centralized proceeding such as the Integrated Distributed Energy Resources (IDER) proceeding (R.14-10-003) or its successor.

For example, the Commission may consider a common cost-effectiveness calculation to ensure that the sum of individual program costs does not exceed the sum of the benefits attributable to those programs. Another choice could be to merge programs with overlapping goals. Alternatively, the Commission and other entities may consider adopting more narrow impact goals or cost-effectiveness methodologies for individual programs that are complementary to and not overlapping with other existing programs (*e.g.*, only targeting one program impact, such as kWh savings, or evaluating program cost-effectiveness based on program funds expended per individual benefit such as tons of carbon dioxide (CO<sub>2</sub>) savings). In instances where the Commission determines that it is appropriate for multiple programs to pursue the same impact, the Commission may at a later time consider developing an approach to sharing attribution of program impacts that is similar to that suggested in the Staff Proposal.

This decision does not dictate what approach each proceeding, or program should take, nor does it mandate a timeframe. Rather, the Commission adopts these guidelines as a framework to support those proceedings in arriving at the most appropriate solution for their programs.

#### **2.4.4. Ongoing Coordination Among Program Administrators and Implementers**

Adherence to the above guidelines will require regular coordination among program administrators and implementers. To that end, program

administrators and implementers should strive to use common databases and to share measure and participation data, to the extent consistent with appropriate protection of customer privacy. The Commission's Energy Division may also facilitate data-sharing, provided that appropriate privacy protections (*e.g.*, non-disclosure agreements or NDAs, where necessary) are in place.

Administrators and implementers of relevant programs should ensure that their coordination efforts remain up to date by participating in periodic coordination meetings organized by the TECH Initiative implementer, as described in the section below.

While these guidelines apply to entities and programs under the Commission's jurisdiction, we encourage non-jurisdictional entities and programs to also consider these principles for the purposes of supplementing or complementing Commission-jurisdictional program offerings. Entities and programs under the Commission's jurisdiction are also encouraged to coordinate with entities and programs outside the Commission's jurisdiction as appropriate, consistent with these guiding principles.<sup>67</sup>

#### **2.4.5. Coordination Requirements for the TECH Initiative**

As the Commission's building decarbonization program with the most funding and the greatest scope of market transformation activities, the TECH Initiative is best suited to lead cross-program coordination efforts and to

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<sup>67</sup> The Phase I decision describes how the TECH Initiative implementer may do this: "We encourage bidders to consider innovative approaches to layer or stack TECH Initiative incentives with other programs, such as net energy metering, the Self-Generation Incentive Program, Home Upgrade, or the Energy Savings Assistance Program, as well as financing products such as the Residential Energy Efficiency Loan (REEL) program." (D.20-03-027 at 85.)

facilitate all programs' adherence to the guiding principles adopted in this decision.

As parties have noted, ensuring that program participants have a seamless experience is of fundamental importance in maximizing program uptake. Under the current contract, the TECH Initiative implementer is expected to develop a single online platform where distributors and contractors can submit and track applications for multiple programs at once.<sup>68</sup> This platform will further facilitate implementation of the incentive layering guiding principles, such as offering a participant-friendly experience.

Pursuant to the Phase I decision, the TECH Initiative implementer is required to host quarterly stakeholder meetings that are noticed to the Service List of this proceeding. We direct the TECH Initiative implementer to incorporate discussion of ongoing cross-program coordination efforts into these meetings in support of the incentive layering guiding principles established herein. Specifically, the TECH Initiative implementer is expected to discuss how the program is coordinating with Energy Efficiency, SGIP, and low-income programs in their efforts to incentivize heat pumps. Similar coordination should also occur via any other forms of stakeholder engagement to be pursued by the TECH Initiative implementer. The TECH Initiative implementer must actively facilitate implementation of the guiding principles in these coordination efforts, such as pursuing streamlined, multi-program applications for each supply chain level. We also require the TECH Initiative implementer to include the issue of barriers to low-income customers' access to program incentives, and potential solutions, as a standing discussion topic at quarterly stakeholder meetings. We

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<sup>68</sup> This is part of the existing contract between the TECH Initiative administrator and implementer.

encourage the TECH Initiative implementer to engage with, and seek input on this topic, as appropriate, from the Disadvantaged Communities Advisory Group to the Commission.

The TECH Initiative implementer has also been tasked with customer education and outreach, contractor training, and trade ally/vendor engagement.<sup>69</sup> The TECH Initiative implementer must incorporate the incentive layering guiding principles into these initiatives as well. For example, outreach to market participants offers a valuable opportunity to ensure that program participants are aware of all incentive programs for which they or their customers may be eligible.

The TECH Initiative implementer must also maintain a dynamic public-facing web page targeted at customers and contractors explaining all available incentive programs in the market including those administered by non-jurisdictional entities, eligibility criteria, and application processes. This can supplement the existing rebate finder on the *Switch is On*<sup>70</sup> website already supported by the TECH Initiative implementer. This web page must include an up-to-date compilation of other Commission incentive programs, beyond those pertaining to building decarbonization technologies, that are potentially applicable to affordable housing developers and low-income and disadvantaged communities.

We direct the TECH Initiative implementer to coordinate all its database-related activities in a manner consistent with the incentive layering guiding principles adopted herein. To support coordination with Energy

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<sup>69</sup> D.20-03-027, Section 5.2.3.

<sup>70</sup> <https://www.switchison.org/>

Efficiency programs, the TECH Initiative implementer is directed to upload program-specific TECH Initiative data outputs into the Energy Efficiency program webpage, California Energy Data and Reporting System (CEDARS), on at least a quarterly basis.<sup>71</sup> The two reporting platforms – CEDARS and the TECH Public Reporting Website<sup>72</sup> -- shall each include a link to the other.

#### **2.4.6. Reporting Guidelines for the EE, SGIP, BUILD Program, and TECH Initiative**

Consistent with the incentive layering guiding principles adopted in this decision, the Commission encourages the reporting guidelines set out below for ratepayer-funded Energy Efficiency programs, SGIP, BUILD Program, and TECH Initiative. All reports and evaluations for these programs that address building decarbonization technologies (*e.g.*, heat pump appliances) are encouraged to consider the following guidelines.

1. Program evaluations should acknowledge the overlapping nature of building decarbonization incentives and the fact that multiple programs may be influencing uptake and market share increases.
2. Attribute all credit for energy savings to Energy Efficiency programs alone, unless and until the Commission adopts a different approach in this proceeding or in another relevant proceeding.
3. For programs in which specific metrics are required to be reported, acknowledge the fact that these metrics are also being tracked and reported in more than one program.

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<sup>71</sup> Website for CEDARS is <https://cedars.sound-data.com/>. The Commission directed the utilities to “work with Commission Staff to implement this vision of a streamlined tracking database.” (D.12-05-015 at 359-360.)

<sup>72</sup> <https://energy-solution.com/tech/>

Consistent reporting requirements for the four existing programs<sup>73</sup> with the most potential for incentive overlap will improve transparency and administrative efficiency. Future programs linked to building decarbonization, as well as other existing programs such as WatterSaver,<sup>74</sup> are also encouraged to consider them along with the broader set of incentive layering guiding principles adopted in this decision.

### **3. The Wildfire and Natural Disaster Resiliency Rebuild (WNDRR) Program**

California has recently experienced – and is experiencing – some of the deadliest and most destructive wildfires in its history. Several factors contribute to increasing wildfire risks, including increased development in fire-prone areas, limited resources for forest management, climate change, and the role of utility infrastructure management.<sup>75</sup> To provide incentives and support owners of residential and multi-family properties in rebuilding lower-carbon, all-electric homes post-wildfire and other natural disasters, the Commission adopts the WNDRR Program as set forth in Appendix B of this decision. The program is based on the Staff Proposal as modified herein in response to party comments.

#### **3.1. Staff Proposal**

Staff recommends that a new program, the WNDRR Program, be established to provide incentives for all-electric rebuilds of “red-tagged”<sup>76</sup>

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<sup>73</sup> The EE Programs, SGIP, TECH Initiative, and the BUILD Program.

<sup>74</sup> WatterSaver is a PG&E program that is intended to promote electric water heating thermal energy storage. (See D.19-06-032 and Resolution E-5073.)

<sup>75</sup> Petek, Gabriel, 2020. “The 2020-21 Budget: Governor’s Wildfire-Related Proposals.” p.1. Legislative Analyst’s Office. <<https://lao.ca.gov/reports/2020/4172/wildfire-related-proposals-022120.pdf>>

<sup>76</sup> “Red-tagging” means a building has been determined to be unsafe for occupancy by the local building authority.

single-family and multi-family residential building in a city, county, or combined jurisdiction that declares a Local Emergency Proclamation.”<sup>77</sup> This includes rebuilds due to wildfire and other natural or man-made disasters (e.g., storms, floods, earthquake).

Staff proposes that all owners of red-tagged single-family and multi-family residential buildings in jurisdictions that declare local emergencies be eligible for the WNDRR Program, provided that the dwelling is located in a service territory eligible for IOU program funding disbursement. In furtherance of the state’s efforts to achieve Assembly Bill 32 emissions reductions goals,<sup>78</sup> Staff proposed that incentives be provided only to properties being rebuilt all-electric with no supplemental propane or other fossil fuel use for essential appliances, with higher incentives for higher modeled emissions reductions.

The Staff Proposal also recommends program principles, incentive values, an emission reduction calculation methodology, administration and implementation team requirements, funding and cost recovery mechanisms, program evaluation requirements, and other program implementation details.

The Staff Proposal identifies three primary principles for the WNDRR Program:

1. **Customer First** – Program delivery to the recipient should be simple, seamless, and clear. The proposed program rules are designed to acknowledge that homeowners and multi-family tenants have gone through a traumatic

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<sup>77</sup> Staff Proposal at 29, *citing* California Government Code § 8680.9, which defines a local emergency as a condition of extreme peril to persons or property proclaimed as such by governing body of the local agency affected by a natural or manmade disaster. See: [https://www.caloes.ca.gov/RecoverySite/Documents/Proclamation%20and%20CDAA%20Process%20Fact%20Sheet%20Final%20Feb%202019%20\(003\).pdf](https://www.caloes.ca.gov/RecoverySite/Documents/Proclamation%20and%20CDAA%20Process%20Fact%20Sheet%20Final%20Feb%202019%20(003).pdf).

<sup>78</sup> Assembly Bill 32, California Global Warming Solutions Act of 2006 (September 27, 2006, Chapter 488, Division 25.5 (§ 38500 *et. seq* of the Health and Safety Code)).

experience and first and foremost want to return to their “normal lives” as quickly as possible.

2. **Regulatory Simplicity** – To ensure the customer experience is simple, seamless, and clear, the regulatory rules proposed for the WNDRR Program are intended to ease the post-natural disaster reconstruction process. This approach is intended to ensure implementation teams could swiftly respond to impacted communities and customers after a natural disaster event.
3. **Dedicated Funding** – Program funding for the WNDRR Program is designed to be proactively available and ready to be deployed in response to natural disasters. Rather than deplete other existing program funds, Staff proposes that the WNDRR Program function as its own program, with its own dedicated funding.

To calculate the GHG emissions reductions from single-family and multi-family properties being rebuilt through the WNDRR Program, referred to as the “annual avoided GHG metric,” Staff proposes the following methodology:

**Step 1:** Calculate a “reference GHG emission baseline” metric using the building-appropriate California Building Energy Code Compliance (CBECC) software.<sup>79</sup> The baseline would incorporate the proposed building’s actual design features (e.g., orientation, height, number of fenestrations, type of foundation, attic type, roof material, etc.), except that it would include the minimum (prescriptive) requirements for insulation, air sealing, appliance efficiency, and other building parameters required of dual fuel buildings in that climate zone for energy code compliance. The “CO2 Generated: Total (metric tons/year)” calculated by CBECC under these code-minimum dual fuel design assumptions would be referred to as the “reference GHG emission baseline.”

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<sup>79</sup> CBECC was developed by the CEC to conform with Title 24, Part 6 Building Energy Code requirements. More information is available at: <https://www.energy.ca.gov/programs-and-topics/programs/building-energy-efficiency-standards>



**Step 2:** Calculate a “proposed GHG emissions design” metric using the building-appropriate CBECC software. The model would incorporate the proposed building’s actual design features, including the proposed levels of insulation, air sealing, appliance efficiency, and other building parameters as determined by the design team. To qualify for the WNDRR Program, the building would be required to use only electricity for its fuel source (“all-electric”). The “CO<sub>2</sub> Generated: Total (metric tons/year)” calculated by CBECC based on this proposed design would be referred to as the “proposed GHG emission design” metric.

**Step 3:** Calculate the difference between the “standard GHG emission baseline” and the “proposed GHG emission design” to calculate the “annual avoided GHG metric.” This metric would be used to determine the incentive tier in which the building design qualifies.

Staff proposes to provide incentives that are approximately equal to the avoided costs resulting from the anticipated GHG emissions reductions.<sup>80</sup> The avoided costs from the Commission’s most recently adopted Avoided Cost Calculator (ACC) would be used for initial implementation.<sup>81</sup> For ease of administration, emissions reductions would be split into tiers. To calculate the total incentive value for a given tier, the minimum level of avoided GHGs for that tier would be multiplied by the ACC’s avoided cost of carbon in a given year. A 30-year incentive horizon is assumed, so the avoided costs for each of the next thirty years would be summed to create one single avoided cost. This value would be rounded to the nearest thousand and paid as a single lump sum incentive (see table below).

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<sup>80</sup> The avoided costs used in the Staff Proposal were based on 2020 values.

<sup>81</sup> The most recent values were adopted in Resolution E-5077, available as of May 18, 2021, at <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M340/K054/340054558.PDF>. More information on the ACC can be found in the docket of the IDER proceeding, R.14-10-003, and at <https://www.cpuc.ca.gov/General.aspx?id=5267> (as of May 18, 2021).

Over time, the incentives would be updated to account for updates to the ACC. Incentives available for a given building design would also change over time, as updates to California’s Energy Code and CBECC software would change the standard GHG emission baseline inputs in Step 1 above, and the CBECC modeling outputs in Steps 1 and 2. To provide certainty for participants while still accounting for these updates, incentive levels would be set at the time the building permit is approved, regardless of when construction begins.

The following table provides the incentive tiers recommended in the Staff Proposal for 2021, based on the ACC and CBECC software in place in 2020 per the calculations described above:

<b>Tier</b>	<b>Annual GHG Avoided Tier (metric tons/year)</b>	<b>WNDRR Incentive Value (\$)</b>	<b>WNDRR Equity Incentive Value (\$)</b>
1	1.00-1.99	\$11,000	\$16,500
2	2.00-2.99	\$22,000	\$33,000
3	3.00-3.99	\$33,000	\$49,500
4	4.00-4.99	\$44,000	\$66,000
5	5.00-5.99	\$55,000	\$82,500

The table includes “equity incentives” set at 1.5 times the standard incentive, to facilitate decarbonization for eligible customers. Under the Staff Proposal, any single-family homeowner who was enrolled in the California Alternate Rates for Energy (CARE) program at the time of the natural disaster impacting their home, or is currently eligible for the program, would qualify for these higher incentives. Equity incentives would also be available to any multi-family property utilizing federal or state low-income housing tax credits to rebuild.

To fund the WNDRR Program, Staff proposes \$5 million be collected annually for a period of 10 years, totaling \$50 million in “WNDRR Compliance Costs.” Staff suggests funds be remitted by California’s four largest gas corporations on a quarterly basis, starting in 2022, and remain available for administration until the end of the calendar year 2032.<sup>82</sup> The Staff Proposal suggests collecting these funds through proceeds obtained by gas corporations from auctioning GHG emission allowances allocated as part of the state’s Cap-and-Trade program and acknowledged that doing so would place certain restrictions on how and where the funds could be spent – most notably by restricting program participation to communities receiving gas IOU service.

Staff proposes an implementation team that consists of the following stakeholders from each of the three large electric IOUs’ service territories:

The roles and responsibilities were outlined as follows:

1. **IOU as Program Administrator:** In its own service area each IOU would issue Requests for Proposals (RFP) for the third-party implementer role, identify the number of red-tagged buildings eligible for participation in service territory, disburse and account for program funds, file an annual program advice letter with the Commission, and coordinate other administrative tasks.
2. **Third-Party Program Implementer:** Provide technical assistance, review program applications, and identify, hire, and retain an adequate number of certified energy analysts (CEAs) to both provide technical assistance to homeowners and conduct the modeling required for participation in the WNDRR Program.
3. **Local Jurisdiction Member:** Coordinate with local permitting offices, recruit program participants, and

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<sup>82</sup> Any unspent funds remaining on July 1, 2033, would be returned to the ratepayers of the respective gas corporations as part of the California Climate Credit.

coordinate with a Community Based Organization (CBO) member of the implementation team to promote the program to eligible homeowners. Each natural disaster event would have a designated local jurisdiction team member.

4. **Community Based Organization:** Support recruitment efforts for program participants and assist other members with hosting community events. Each natural disaster event would have a designated CBO team member.
5. **Contracting Agent:** Establish a WNDRR Balancing Account to collect funds remitted by gas corporations, track issuance of program funds and accrued interest, issue RFP for program evaluator to produce 2025 and 2032 reports. Staff suggests SCE serve as the contracting agent for the WNDRR Program as a whole.

To streamline program administration, the Staff Proposal recommends that the Commission require SoCalGas, PG&E, and SDG&E to each file an annual report with Energy Division via Tier 1 Advice Letters to summarize program triggering events (*e.g.*, declared disasters), activities, and funding requests (Annual Report). Specifically, the Staff Proposal recommends that Annual Reports include at least the following:

1. Explanation of the Local Emergency Proclamation(s) that makes the natural disaster eligible for the WNDRR Program;
2. Explanation of the WNDRR Program team members;
3. Explanation of community engagement strategies implemented in the last year;
4. Program uptake figures based on the number of eligible properties to date, including properties seeking Passive House Certification;<sup>83</sup>

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<sup>83</sup> Passive House is an international building standard for low-energy building with location-specific and climate-responsive design features. Passive House Institute (PHI) and  
*Footnote continued on next page.*

5. Projected program GHG savings;
6. Justification of funding amount being requested including a program budget;
7. Inclusion of a biannual program evaluation as appropriate; and
8. All data required for gas corporations to comply with their reporting obligations pursuant to the Cap-and-Trade program.

Finally, to evaluate both cost and program effectiveness, Staff proposes that a program evaluator prepare two reports over a ten-year period comparing the modeled GHG emissions with the actual emissions based on a minimum of 12 months of normalized metered electricity data. These reports would be issued by December 31, 2025 and December 31, 2032. The reports would also include the average cost per metric ton of avoided GHG emissions and recommendations for program improvements.

The Staff Proposal recommends coordinating with the IOUs in 2026 to determine whether program modifications should be considered via Resolution. Staff would use the 2032 WNDRR Program evaluation report to recommend to the Commission whether or not the program should continue beyond that point.

### **3.2. Parties' Comments**

Overall, parties generally support a program incentivizing all-electric rebuilds in communities impacted by wildfires. Many parties also offered comments on specific aspects of the Staff Proposal. Points commonly raised related to the program's incentive levels, funding sources, and eligibility requirements.

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Passive House Institute US (PHIUS) are the two institutes in the United States that award Passive House certification to buildings. Sources: <https://passivehouse.com>, <http://phi.us.org>.

Only SoCalGas and TURN opposed any version of the WNDRR Program. SoCalGas opposes the exclusion of natural gas uses and TURN questions the program's effectiveness in reducing GHG emissions. Both parties' comments also take issue with the funding source of the program, as do some other parties.<sup>84</sup> TURN argues that the program cannot function as a "pilot" for new construction at the proposed incentive levels and that it is not scalable.<sup>85</sup>

We acknowledge the opposition to the WNDRR Program stated by SoCalGas and TURN but we find the merits of the program outweigh their concerns. For example, the fundamental goal of reducing GHG emissions does not reasonably permit inclusion of natural gas uses. Further, all-electric reconstruction will substantially promote efforts to achieve the state's central goal of reducing GHG emissions.

We largely adopt the Staff Proposal. For example, we adopt a budget of \$50 million. We also adopt roles and responsibilities for five participants specifically identified by Staff (*i.e.*, program administrator, program implementer, local member, CBO member, contracting agent) and the program evaluator. We discuss party comments on specific aspects of the Staff Proposal in the sections that follow. Where noted below, we diverge from the Staff Proposal in response to party comments. Appendix B describes all elements of the WNDRR Program adopted by this decision.

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<sup>84</sup> These parties are SCE, PG&E and SDG&E. For example, see SCE's Opening Comments at 4-5 (asking that the Commission identify additional funding sources for areas outside of natural gas IOUs' territories); PG&E's Opening Comments at 11; PG&E Reply Comments at 2-3; SDG&E Reply Comments at 10-11.

<sup>85</sup> TURN's Opening Comments at 9-11.

### **3.3. Program Scope and Funding Source**

Several parties argue for scope and funding that is statewide. We agree, to the extent explained below.

EDF, SCE and PG&E call for the Commission to explore how WNDRR Program eligibility could be expanded to electric ratepayers whose homes were located outside of natural gas service territories. CSE argues that residents should not be restricted to rebuild where the natural disaster took place, and should have the option to relocate wherever they wish to rebuild within California, but also shares their experience from previous programs that demonstrated the difficulties in accounting for rebuilding in a different IOU service territory.<sup>86</sup> EDF and SCE argue that projects should be eligible anywhere in an IOU service territory, even if the rebuild location is not the same as the location of the original home. Cal Advocates, CEDMC, NRDC, and Sierra Club recommend a statewide program implementer, rather than having separate program implementers for each IOU service territory, as proposed by Staff.

We agree with a statewide approach with a single statewide third-party implementer. This approach will promote economies of scale, allow for a more seamless program, and enable greater participation by including individuals who have moved from one IOU service territory to another. The Commission therefore diverges from the Staff Proposal to require a single statewide program implementer for the WNDRR Program. The statewide approach includes (but is

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<sup>86</sup> CSE's Opening Comments at 8.

also limited to) customers in service territories served by electric IOUs regulated by the Commission that participate in the WNDRR Program.<sup>87</sup>

PG&E argues that the WNDRR Program should be funded as a public purpose program (PPP), using electric ratepayer funds, rather than via natural gas Cap-and-Trade funds, as recommended by Staff. We agree. We authorize a statewide program across the service territories of electric IOUs under our jurisdiction that participate in the WNDRR Program with a single statewide program implementer and without territorial restrictions on incentive disbursements within the service area of utilities who participate in the WNDRR Program. In alignment with that approach, funds will be collected via a new non-bypassable PPP charge to be recovered in rates by all electric IOUs under our jurisdiction rather than from natural gas IOUs' Cap-and-Trade allowance proceeds. This provides greater flexibility over time in collection and use of funds without constraints that might apply to cap-and-trade funds.

Consistent with the Staff Proposal, SCE will serve as the contracting agent responsible for collecting and disbursing funding to the single statewide third-party program implementer. Given that SCE will have this role, it is administratively efficient for SCE also to be the sole statewide program administrator rather than have all electric IOUs fulfill this function separately.

As both contracting agent and statewide program administrator, SCE shall establish a balancing account with individual component tracking, or subaccounts, as necessary. The balancing account will provide for clear and transparent accounting to track total fund collections and disbursements for the

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<sup>87</sup> The WNDRR Program will not be available to customers of municipal utilities (*e.g.*, Los Angeles Department of Water and Power, Sacramento Municipal Utilities District, Cities of Palo Alto, Healdsburg, Ukiah, Redding, Roseville).



\$50 million WNDRR Program overall. It will also provide equally clear and transparent accounting to track SCE's own costs associated with fulfilling its duties as contracting agent and program administrator, offset by revenues received from the program for these services.

The Joint CCAs argue that local CCAs should automatically be included in the WNDRR Program implementation team for a given emergency, unless the CCA declines to join the team or a CCA is not operational in the affected area. We agree and adopt this approach with one exception. The exception is that participation is not dependent upon an area being affected by a natural disaster. That is, all CCAs will automatically be included in the WNDRR Program as long as they are in an area within the jurisdiction of a participating IOU regulated by this Commission potentially subject to a qualifying disaster. We direct each IOU to provide notice, within 30 days of the issuance of this decision, of the WNDRR Program to each CCA in the IOU's service territory. Unlike respondent IOUs, however, CCAs can decline to join. To decline, a CCA must by written Notice inform the Energy Division Director, Program Administrator, Program Implementer, Contracting Agent, and the service list for this proceeding (not the expanded WNDRR service list discussed below). The written Notice will promote clarity and transparency about participation or lack thereof. For participating CCAs, the program implementer will have control of implementation, including in the CCA's area, subject to consultation and input from the CCA. This is consistent with PPP charges being non-bypassable, the goal of making the program statewide, and the desired efficiency of having one implementer, rather than many implementers, throughout the state.

The three large IOUs (SCE, PG&E, and SDG&E) and the three smaller IOUs (Liberty Utilities (CalPeco Electric), Bear Valley Electric Service, Inc.

(Bear Valley), and PacifiCorp dba Pacific Power) will be included in the WNDRR Program.<sup>88</sup> This is consistent with our goal of the WNDRR Program being available for customers of all electric utilities under our jurisdiction throughout California. Accordingly, non-bypassable PPP charges will be charged to all residential customers of the participating electric IOUs, and those customers impacted by wildfires and natural disasters will be eligible for benefits.

The program budget is also modified from that proposed by Staff. We adopt a single budget over the duration of the program, rather than an annual budget.<sup>89</sup> This will streamline program administration and avoid start-stop implementation.

With these modifications, WNDRR Program incentives can be applied towards any qualifying project in a participating electric IOU's service territory regardless of the location of the red-tagged home, or the location of the reconstruction, as long as the reconstruction is within the service area of an electric IOU in the WNDRR Program. It also avoids the discontinuities and constraints of an annual budget.

Funds will be collected from each IOU in the following proportions based on the number of residential service accounts in each electric IOU service

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<sup>88</sup> The small IOUs were not named respondents in the Order Instituting Rulemaking. We informed them of the proposed decision in a letter from the assigned Commissioner dated September 30, 2021 (put into the record via a Ruling) and sent to them at the same time as the filing of the proposed decision. Energy Division staff also contacted each small IOU. Via the letter, the assigned Commissioner invited them to respond within 20 days to affirmatively state whether or not they agreed to be in the WNDRR Program. The letter said that a non-response would be understood to be rejection of the opportunity to participate being included in the WNDRR Program. Each small IOU filed a motion for party status. Each motion was granted. Each small IOU also filed a comment on the proposed decision stating their desire to be included in the WNDRR Program.

<sup>89</sup> Budget and cost recovery are addressed in greater detail in Sections 3.5 and 3.12 of this decision.

territory in 2019.<sup>90</sup> The funds will be provided in a single payment to be deposited in an interest-bearing account with the contracting agent (SCE) no later than 60 days after the advice letter establishing the balancing account is effective (discussed more below). Each IOU will recover its payment by a one-time charge to its PPP account and implemented in its rates during its annual PPP true-up advice letter, or as soon as practicable following issuance of this decision, to be recovered over 12 months. The utilities, percentages, and amounts are as follows:

IOU	Residential Accounts (2019)	Funding Percentage	Funding Amount
PacifiCorp dba Pacific Power	13,783	0.16%	\$80,759
Bear Valley Electric Service	22,709	0.27%	\$133,060
Liberty Utilities (CalPeco Electric)	44,918	0.53%	\$263,190
San Diego Gas & Electric	1,021,577	11.97%	\$5,985,774
Pacific Gas and Electric	3,457,476	40.52%	\$20,258,552
Southern California Edison	3,972,911	46.56%	\$23,278,644
TOTAL	8,533,374	100.00%	\$50,000,000

### 3.4. Selection of the Program Implementer

Mirroring the TECH Initiative implementer selection process adopted in the Phase I decision, the single statewide WNDRR Program implementer will be selected via a solicitation process with stakeholder input. As part of its role as the contracting agent and program administrator, SCE shall be responsible for administering the RFP, subject to Energy Division oversight, pursuant to the guidelines adopted below:

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<sup>90</sup> We use numbers of residential accounts to align with the program's focus on residential building reconstruction.

1. Bidders must demonstrate experience in various facets of custom residential construction,<sup>91</sup> and familiarity with both all-electric construction, and natural disaster rebuilds; bidders must also demonstrate experience with manufactured homes, modular homes, accessory dwelling units (ADUs),<sup>92</sup> and multi-family building construction.
2. Bidders must include their proposed incentive levels consistent with the requirements set out later in this order.
3. Bidders must describe their proposed marketing and outreach strategies and include their proposed marketing and outreach expenses as part of the available total program funding.
4. Bidders should describe strategies to maximize program participation and efficient program deployment, including but not limited to strategies to connect as early as possible with potential participants via engagement with local community leaders, CCAs, and CBOs.
5. Bidders should propose strategies to ensure ease of program participation, and minimize paperwork for participants.
6. Bidders should clearly describe how program design will balance statewide consistency with unique community-based needs as determined through engagement with local community leaders, CCAs, and CBOs.
7. Bidders should describe their outreach strategies for increasing adoption of all-electric new construction, including but not limited to homeowner education, and

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<sup>91</sup> We contrast ‘custom’ construction from production building, with custom homes being characterized as homes where the rebuild process is unique to each homeowner, whereas production builds refer to developments where many homes are typically constructed together for individual sale by a development entity.

<sup>92</sup> ADU is a secondary dwelling unit built on a residential lot. It can be attached, detached, or a conversion. It is also referred to as in-law or granny unit. (see [https://www.energy.ca.gov/sites/default/files/2020-10/2016%20Energy%20Code%20for%20Accessory%20Dwelling%20Units\\_ada.pdf](https://www.energy.ca.gov/sites/default/files/2020-10/2016%20Energy%20Code%20for%20Accessory%20Dwelling%20Units_ada.pdf))

strategies for targeted outreach to low-income households and disadvantaged communities.

8. Bidders should demonstrate how their proposal will align with state and federal low-income housing tax credit requirements.
9. Bidders should, for the purpose of maximizing GHG reductions and enhancing program participation, discuss whether and how incentive levels and other program elements should differ for (a) manufactured homes, (b) modular homes, and (c) ADUs.
10. Bidders should provide any other relevant information in support of their bid.

SCE, as program administrator and contracting agent, will draft the RFP, subject to oversight by and final approval from the Energy Division. The draft RFP will include proposed scoring criteria. The draft RFP will be circulated to the service list<sup>93</sup> for one round of quick comments. SCE and the Energy Division will consider the submitted comments in drafting the final RFP. SCE and Energy Division shall ensure that the final RFP complies with all necessary procurement rules, and that it is widely posted and publicized (including posting the final RFP on SCE's procurement website, and publicizing the RFP to reach a qualified pool of potential contractors). Once the RFP is issued, bidders will have eight weeks to submit bids to the contracting agent (subject to adjustment by Energy Division if more time is needed). Bidders and potential bidders must direct all communications and questions about the solicitation to SCE. Bids and scoring of

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<sup>93</sup> The Service List of this proceeding, not necessarily the expanded service list for the WNDRR Program as discussed in a later section of this decision, unless directed otherwise by the Energy Division.

bids shall be designated as confidential, market-sensitive information pursuant to D.06-06-066.<sup>94</sup>

Bids will be scored by a WNDRR Scoring Committee. Energy Division will convene the Scoring Committee, which will consist of one representative from each participating electric IOU and Energy Division.

The Scoring Committee will evaluate bids using the pre-established RFP scoring criteria and exercising professional judgment. The Scoring Committee may send questions to a bidder to seek clarification of a bid and may request interviews or presentations with finalists. The Scoring Committee will recommend the preferred choice. The Energy Division Director will make the final decision on the winning bid and will inform the contracting agent (SCE) of the selection.

SCE, with input from the Scoring Committee, will, as the designated contracting agent, negotiate and sign the contract with the winning bidder. SCE will submit a Tier 2 Advice Letter (Tier 2 Implementation Advice Letter) requesting Commission approval of the contract. In order to promote the potential for wide public review, and in consultation with Energy Division, SCE will add persons to the Service List of this proceeding for service of the Tier 2 Advice Letter including, but not necessarily limited to: local jurisdictions (*e.g.*, permitting offices), community-based organizations, others SCE and/or Energy Division believe have an interest in the WNDRR Program (expanded WNDRR service list). SCE will maintain the expanded WNDRR service list. Upon Energy Division's approval of the advice letter, the contract will be considered

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<sup>94</sup> D.06-06-066 at 41 to 43.

ratified. SCE, as contracting agent, will hold and administer the contract, manage the balancing account, and pay the program implementer.

The details of implementing the WNDRR Program are left to the program implementer, subject to oversight by the Commission and the program administrator (SCE), along with stakeholder collaborative input and advice. To secure that input and advice, the program implementer (with the assistance of the program administrator) will be required to facilitate at least semi-annual stakeholder meetings, to be noticed on all parties to this proceeding and the expanded WNDRR service list. The meetings will be public, and the implementer will collaborate with Energy Division to ensure public access to these meetings, both in-person and remotely. For the reasons stated below, we do not require the program implementer to employ certified energy analysts (CEAs) but, as part of the program implementer's staff, the program implementer shall, with Energy Division oversight, engage a person to serve as Local Jurisdiction Member and another person to serve as CBO member to perform the functions addressed in the Staff Proposal.

The duration of the program implementer contract will be limited to five years, with the option for extension. This will allow for a "mid-course" correction, if needed. Energy Division, with input from SCE and stakeholders, may choose to conduct a new round of bidding during year five of the program for program implementation in years six through ten. The selection criteria and process to choose a new program implementer must be substantially the same as described above for the selection of the initial statewide implementer. This includes submission of a Tier 2 Advice Letter by the program administrator for review of the renewed contract or the final new contract (if a new evaluator is selected). As program evaluations will be completed every other year starting

two years from the date on which the first WNDRR Program application is accepted, as described below (Evaluation), Energy Division must take program evaluation results into account in deciding whether to conduct a new round of bidding or, alternatively, renew the contract with the existing program implementer.

### **3.5. Budget**

Staff proposes an annual budget of \$5 million per year over ten years, for a total program budget of \$50 million. As discussed above (see Program Scope and Funding Source), the Commission diverges from the Staff Proposal to authorize a \$50 million overall program budget rather than separate \$5 million annual budgets. Multiple parties, including CEJA, EDF, NRDC and Sierra Club, SDG&E, and SUBA, requested that the Commission consider how to provide the WNDRR Program with additional funding beyond the \$50 million total proposed by Staff if program funds are exhausted and additional emergencies arise.

The Commission agrees that we should consider a method for possible additional funding should the need occur for more WNDRR Program funds. We also seek a streamlined approach that would facilitate administrative efficiency and, if there is high uptake, enable the program to serve more customers. Therefore, we authorize each electric IOU to request additional program funds in anticipation of any emergencies reasonably foreseeable after the initial \$50 million in funding has been spent, or is projected to be spent. The IOUs are encouraged to coordinate requests for additional program funds to limit the number of requests as well as demonstrate joint support for each request. Requests must be submitted via Tier 3 Advice Letter. For administrative efficiency, such advice letters may only be filed during the months of January



and July, and will be served on the expanded WNDRR service list described above.

Any additional authorized funding must be collected from the electric IOUs according to the proportions set forth above under Program Scope and Funding Source. This is consistent with maintaining statewide program availability for, and funding from, all residential customers of the participating electric IOUs.

To ensure effective use of funds beyond the original \$50 million, eligibility will be limited to homes that meet one of two cases: (a) being rebuilt in locations where dual fuel construction continues to be permitted under the California Energy Code or (b) being rebuilt in locations with an all-electric “reach” building code,<sup>95</sup> if the rebuild is beyond either the minimum or “reach” code requirements to achieve even greater decarbonization. Allowing the second case ensures that we do not discriminate against all-electric rebuilds that actually achieve more decarbonization. To be approved, the advice letter requesting additional funding must:

1. Provide the cumulative program budget expenditures and reservations to date.
2. Provide the cumulative additional program funding, beyond the original \$50 million budget, authorized to date.
3. Demonstrate a projected lack of funds to meet the needs of eligible applicants.
4. Request an amount of funding that is reflective of:
  - a) The number of homes subject to a potential covered emergency (or emergencies) for which a dual fuel

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<sup>95</sup> “Reach” building codes are those adopted by local permitting agencies that require standards above state minimums.

rebuild would be permitted under state and local laws and regulations.

- b) A reasonable rate of expected incentive take-up by customers.
- c) Program administration, implementation, and evaluation needs relating to the potential emergency (or emergencies), based on the set-aside percentages described below (Maximum Budgets for Program Administration, Marketing, Outreach, and Evaluation).
- d) Unspent funds already authorized.
- e) Anticipated WNDRR Program costs relating to past emergencies or to essential program administration (e.g., incentives to be distributed, program administration, and evaluation).
- f) Any other relevant information in support of the request.

### **3.6. Eligibility**

#### **3.6.1. Eligible Time Period**

The Staff Proposal does not recommend specific dates relating to eligibility, such as the date of the first qualifying emergency or the earliest approved permit date that would be eligible for participation. PG&E recommends that customers impacted by a wildfire before 2020 be eligible for the WNDRR Program because rebuilding after a fire takes a significant amount of time. For example, as of the date of PG&E's comments, only 10% of eligible customers had rebuilt homes destroyed by the Camp Fire of 2018 but there could be a substantial number of customers (about 15,000) who could be eligible and could benefit from the WNDRR Program. Additionally, PG&E argues that

because the Camp Fire of 2018 was near the North Complex Fire of 2020, allowing both sets of customers to enroll in WNDRR would reduce confusion.<sup>96</sup>

We agree that customer eligibility should extend to victims of wildfires that occurred pre-2020, but we do not find that providing incentives to customers who already planned to go all-electric in the absence of an incentive program is the best use of limited WNDRR Program funds. Rather, limited funds should be used to provide an effective incentive, not a reward for a decision made independently of the incentive. Therefore, the WNDRR Program will only be open to participants whose building permits are approved after the effective date of this decision with one exception. Applicants who have already received building permits are eligible if they can demonstrate that they applied for, but did not receive, funding to reconstruct all-electric through any of the pre-existing IOU-administered disaster rebuild programs for wildfire victims, such as the Advanced Energy Rebuild Program and the Clean Energy Resilience Program. Recognizing that it may take survivors of emergencies several years to decide to rebuild their home and to develop detailed construction plans, eligibility is open to qualified participants based on any emergency declared in 2017 or thereafter.

The WNDRR Program participating customers shall not be eligible for incentives provided by the BUILD Program.

### **3.6.1. Eligible Homes**

#### *Manufactured Homes*

The United States Department of Housing and Urban Development (HUD) defines a manufactured home as a home built to the federal Manufactured Home Construction and Safety Standards (HUD Code) and need not meet the new

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<sup>96</sup> PG&E's Opening Comments at 10.

construction requirements that California imposes as part of California's Title 24. Manufactured homes are built in the controlled environment of a manufacturing plant. The HUD Code, unlike conventional building codes, requires manufactured homes to be constructed on a permanent chassis.<sup>97</sup> CEJA, CEDMC, NRDC/Sierra Club and SDG&E support the idea of incorporating manufactured homes into the WNDRR Program.

We agree that manufactured homes should be included in the WNDRR Program. Manufactured homes can be a quick and affordable option to help households recover after a natural disaster, and there is no reason to exclude them from the program. To streamline the inclusion of manufactured homes in the WNDRR Program, the program implementer should work with manufactured home builders to identify models that qualify for WNDRR incentives. Manufactured home designs that meet the WNDRR Program requirements will be considered pre-qualified for those incentives and may be advertised as such.

The program implementer may suggest incentive levels for manufactured homes that are different from generally applicable WNDRR incentive levels. Bidders should articulate in their proposals whether, and how, incentive levels and other program elements might differ for manufactured homes in order to maximize GHG reductions and enhance program participation. At a minimum, manufactured homes incentivized through the WNDRR Program must comply with Energy Star Version 2 or higher certification.<sup>98</sup> Bidders may propose

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<sup>97</sup> [https://www.hud.gov/program\\_offices/housing/rmra/mhs/faqs](https://www.hud.gov/program_offices/housing/rmra/mhs/faqs)

<sup>98</sup> [https://energystar.gov/newhomes/energy\\_star\\_manufactured\\_homes](https://energystar.gov/newhomes/energy_star_manufactured_homes)

another building standard with demonstrably higher GHG savings than Energy Star Version 2 as eligibility for participation for manufactured homes.

Modular Homes

A modular home is also typically built off-site in a manufacturing plant, typically in large pieces, and transported to be permanently located at the place where it is assembled. However, unlike manufactured homes that are built to the HUD Code, modular homes are constructed to the same state, local or regional building codes as site-built homes. In comments, VEIC suggested that the program implementer develop a building specification and upstream incentive package for modular homes to shorten construction timelines and enhance the impact of the program.

We agree that modular homes should be included in the WNDRR Program. Like manufactured homes, modular homes can be a more affordable option for households after a natural disaster, and no party states a persuasive reason to exclude them from the program.

Consistent with our approach to manufactured homes and to streamline the inclusion of modular homes in the WNDRR Program, the program implementer should work with modular home manufacturers to identify models that qualify for WNDRR Program incentives. Modular home designs that meet the WNDRR Program requirements for a given set of incentives will be considered pre-qualified for those incentives and may be advertised as such. As with manufactured homes, the program implementer may suggest incentive levels for modular homes that are different from generally applicable WNDRR incentive levels. Bidders should articulate in their proposals how incentive levels and other program elements should differ for modular homes in order to capture maximum GHG reductions and enhance program participation.

Accessory Dwelling Units

The Staff Proposal does not distinguish between a primary dwelling unit and an ADU built on an applicant's property with regard to either program eligibility or incentive amounts. We note, however, that the Advanced Energy Rebuild Program offered a 50% reduced incentive for qualifying ADUs.<sup>99</sup> Therefore, for the WNDRR Program we allow the program implementer to propose in their bid a distinct incentive structure for ADUs, and include a distinct ADU incentive level in the initial Tier 2 Implementation Advice Letter (submitted for the program implementer by the program administrator and further discussed below regarding the initial incentive levels). Further, the program implementer can propose revisions to their incentive offerings based on market analysis and program evaluation findings, as discussed below, with revised incentives submitted to the Commission by the program administrator via Tier 3 Advice Letter.

**3.7. Incentive Levels**

**3.7.1. Base Incentives**

Several parties express concern with Staff's proposal to offer tiered incentives based on multiplying CBECC-modeled GHG savings by the avoided cost of carbon adopted in the ACC. PG&E notes that this approach "provides larger incentives to bigger houses, which raises an equity concern of providing greater funding to those who can afford to build large houses."<sup>100</sup> It also contends that the proposed approach may yield inaccurate results, may

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<sup>99</sup> TRC Presentation by Nic Dunfee at CPUC September 15, 2020 Workshop for R-19-01-011, "The Untapped Potential of the Manufactured Housing Market"; Slide 123: "Financial Incentives." (See the September 24, 2020 ALJ Ruling, Appendix C)

<sup>100</sup> PG&E's Opening Comments at i.

overestimate benefits given that code requirements increase over time, and “may be difficult to communicate to potential customers.”<sup>101</sup>

CEJA expresses concern that the incentive structure proposed by Staff “rewards those households who would have created the most GHG emissions prior to electrification, effectively penalizing lower-income households for lower overall energy use.”<sup>102</sup> TURN notes its general support for tying incentive levels to actual performance, yet also outlines “serious concerns” with the details of the Staff Proposal. TURN calls for substantial changes to the calculation methodology and also recommends a per-home cap on subsidies so that ratepayers are not “asked to subsidize the rebuild of mansions.”<sup>103</sup>

Similar to PG&E, NRDC and Sierra Club argue that home-specific energy modeling “is not simple and transparent enough for homeowners who have just been through a stressful disaster.”<sup>104</sup> Additionally, they note that the precision afforded by energy modeling “is not necessarily accurate.”<sup>105</sup> NRDC and Sierra Club instead call for flat incentives, scaled by number of bedrooms or dwelling units, with no building-specific energy modeling.<sup>106</sup> They add that this approach has the advantage of enabling potential participants to understand “at the very beginning of their rebuilding process” how large their incentive will be.<sup>107</sup>

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<sup>101</sup> *Id.* at 10-11.

<sup>102</sup> CEJA’s Opening Comments at 18.

<sup>103</sup> TURN’s Opening Comments at 12-13.

<sup>104</sup> NRDC and Sierra Club’s Opening Comments at 1-2.

<sup>105</sup> *Id.* at 7.

<sup>106</sup> *Ibid.*

<sup>107</sup> *Ibid.*

While it is impossible to know the needs of every household, particularly given that some households may be multi-generational, we agree that ratepayers should not provide greater subsidies for the development of larger homes. As PG&E, TURN, and CEJA note, large homes are inherently more likely to use more energy and have higher emissions than smaller homes of a similar design, and they may be disproportionately more likely to house higher-income families.

We also agree with PG&E, NRDC, and Sierra Club that the Staff Proposal is overly complex and may dissuade eligible homeowners from participating in the program. Building-specific modeling would also increase program administrative costs, without clear benefit.

We therefore adopt a flat base incentive per (a) single-family dwelling structure and (b) unit in a multi-family structure. That is, there will be a flat base incentive per single-family dwelling structure with the same or different incentive levels for each single-family home, manufactured home, modular home, and ADU. There will also be a flat base incentive per unit in a multi-family residential structure that can be the same or at different levels than for single-family dwelling structures.

We decline to dictate specific incentive levels. Rather, we give the program implementer, working in consultation with Energy Division, the flexibility to propose initial incentive levels. Mirroring the Staff Proposal, the equity incentive shall be 1.5 times the base incentive level unless the program implementer, in consultation with Energy Division, determines that a higher incentive level is more appropriate.

When the initial proposal is ready, the program administrator, on behalf of the program implementer, will submit a Tier 2 Advice Letter (with service on the Service List of this proceeding) to propose the initial structures and levels. The



program implementer (through the program administrator) may subsequently seek modification of the incentive levels, if necessary (with oversight from Energy Division staff), based on participation rates, market activity, costs, complementary programs, GHG emissions reductions, and program data. If modifications are sought, the program administrator, on behalf of the program implementer, will submit a Tier 3 Advice Letter (with service on the Service List of this proceeding) to propose those modifications. Incentive levels and the reasoning behind those incentive levels must be reported in the annual program advice letter discussed below (Reporting Requirements).

To qualify for WNDRR incentives, a participant must rebuild an all-electric home. No other fuels may be incorporated into the home construction. Additional measures beyond code-minimum all-electric construction may be eligible for additional incentives, as described below (Additional Incentives for Above-Code Emissions Reductions).

The program implementer will maintain a publicly accessible webpage that presents an overview and summary of the program, including eligibility requirements. The webpage will include information on the incentive structure and levels, regularly updated information on overall number of applications received and approved, number of applications seeking equity incentives received and approved, amount of funds disbursed, amount of funds for which an application is pending approval, amount of funds remaining in the WNDRR Program, and any other information necessary to explain the program and its status.

### **3.7.2. Additional Incentives for Above-Code Emissions Reductions**

In its proposal, Staff recommends providing additional incentives for Passive House certification as a way to incentivize deeper decarbonization. In comments, Cal Advocates support providing incentives for Passive House measures, but not for Passive House certification. The Joint CCAs recommend specific additional incentives for measures that include “storage and/or load control devices with all-electric homes or achieve an air leakage target of 0.6 ACH50- - equivalent to Passive House requirements.”<sup>108</sup> Similarly, in their workshop presentations the Joint CCAs note that their wildfire rebuild programs offered \$5,000 incentives for energy storage, in addition to added incentives for an all-electric rebuild.<sup>109</sup>

We agree that it is valuable to incentivize specific additional measures that will result in deeper decarbonization. This is particularly important since we choose to diverge from the Staff Proposal by adopting flat incentives for all-electric construction meeting minimum code requirements, rather than adopting energy modeling-based tiered incentives that would have inherently provided motivation to the participant for investing in additional measures to gain increased emissions reductions.

However, we agree with parties that incentives for the Passive House certification process itself would not be a valuable use of limited funds, because the certification process does not in and of itself lead to emissions reductions.

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<sup>108</sup> Joint CCAs’ Opening Comments at 7. ACH50 is the abbreviation for air changes per hour at 50 pascals pressure differential. It is the number of times the air volume in a building changes per hour at 50 pascals of pressure. It is a performance standard to quantify building air leakage.

<sup>109</sup> The September 24, 2020 ALJ Ruling, Appendix C, the September 15, 2020 Workshop presentations at 22.

Therefore, the Commission finds that additional incentives should only be warranted for specific measures offering GHG reductions above code requirements.

We decline to prescribe the specific measures eligible for additional incentives and the corresponding incentive levels, and defer that to the program implementer, in consultation with Energy Division. The measures must, however, be proven to reduce GHG emissions and may include but not be limited to energy storage systems, load flexibility tools, appliances utilizing low-GWP (global warming potential) refrigerants, and above-code energy efficiency such as Passive House measures. All measures must be specifically focused on the construction of all-electric homes with no other supplemental fuel, as previously established above.

Incentives proposed by the program implementer at the levels higher than range of flat base incentives per dwelling unit must be presented in the initial Tier 2 Implementation Advice Letter submitted by the program administrator. The higher levels must be based on reasonable factors such as incremental cost, non-monetary barriers, past customer adoption, and expected GHG reductions.

The program implementer will maintain up-to-date public reporting of measures and incentives, and the program administrator must include this information in its annual reporting discussed below (Reporting Requirements).

### **3.7.3. Criteria for Equity Incentives**

Staff proposes higher “equity” incentives for homeowners who are enrolled in the CARE program and for multi-family property owner utilizing federal or state low-income housing tax credits to rebuild.

In comments on the Staff Proposal, CEJA recommends eligibility criteria based on the definition of disadvantaged vulnerable communities and

households adopted in the Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation (R.18-04-019). CEJA recommends that eligibility include:

...the 25% highest scoring census tracts according to the California communities Environmental Health Screening Tool (CalEnviroScreen); all California tribal lands; census tracts with median household incomes less than 60% of state median income; and census tracts that score in the highest 5% of Pollution Burden within CalEnviroScreen, but do not receive an overall CalEnviroScreen score due to unreliable public health and socioeconomic data.<sup>110</sup>

We agree with CEJA that more inclusive criteria for establishing eligibility for equity incentives will improve access for vulnerable and disadvantaged households.<sup>111</sup> To maximize inclusion and be consistent with past precedent, we look to Phase I of this proceeding and adopt the following definitions established by SB 1477 (Stern, Statutes of 2018).<sup>112</sup> In particular, a household covered by the following definitions at the time of the disaster is eligible for a WNDRR Program equity incentive when the household is located in (1) a disadvantaged community, (2) a low-income community, (3) California tribal lands, or (4) low-income residential housing:

1. “Disadvantaged community” means a community identified as a disadvantaged community pursuant to Section 39711 of the Health and Safety Code.
2. “Low-income community” means a census tract or equivalent geographic area defined by the United States Census Bureau in which at least 50 percent of households

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<sup>110</sup> CEJA’s Opening Comments at 18.

<sup>111</sup> This is consistent with our “Environmental and Social Justice Action Plan” (Version 1.0; dated February 21, 2019). This plan is available at: <https://www.cpuc.ca.gov/news-and-updates/newsroom/environmental-and-social-justice-action-plan>.

<sup>112</sup> See Pub. Util. Code §§ 748.6, 910.4, 921, 921.1, 922.

- have an income less than 60 percent of the area median gross income.
3. “Low-income residential housing” means either of the following:
- a) A multi-family residential building of at least two rental housing units that is operated to provide deed-restricted low-income residential housing, as described in Section 2852(a)(3)(A)(i) of the Public Utilities (Pub. Util.) Code, and that meets one or both of the following conditions:
    - (i) The property is located in a disadvantaged community or low-income community.
    - (ii) At least 80 percent of the households living in the building have incomes at or below 60 percent of the area median income, as defined in subdivision (f) of Section 50052.5 of the Health and Safety Code.
  - b) An individual low-income residence, as described in Section 2852(a)(3)(C) of the Pub. Util. Code.

The Staff Proposal also notes that equity incentives would be available to any multi-family property utilizing federal or state low-income housing tax credits to rebuild. We clarify that a property may also receive equity incentives if it has applied for federal or state low-income housing tax credits, has been found to meet the eligibility criteria, and is currently on the waitlist for tax credits, even if it has not cleared the waitlist.

### **3.8. Certified Energy Analysts**

The Staff Proposal calls for the program implementer to retain an adequate number of CEAs to provide technical assistance to homeowners and conduct the modeling required for participation in the WNDRR Program. Because this decision does not adopt a modeling requirement, there is no need to mandate having to work with CEAs as part of the WNDRR Program. Any necessary

technical outreach can nevertheless be conducted under the program budget set aside for marketing and outreach.

### **3.9. Evaluation**

Staff proposes that program evaluation to be conducted every five years. Cal Advocates, CEJA, NRDC, SCE, and SoCalGas commented that the WNDRR Program should be evaluated more frequently. Parties contend this will help ensure oversight that the program is serving low-income individuals and disadvantaged communities as well as achieving the goals of reducing GHG emissions. We agree. An earlier evaluation can also inform Energy Division's decision on whether the five-year contract with the program implementer should be extended or put out for bid, as described in the above section (*see* Selection of the Program Implementer).

Accordingly, the program administrator will, on behalf of the program evaluator, submit the evaluation reports to Energy Division at least every other year, starting two years from the date that the first WNDRR Program application is accepted. Evaluation reports will also be served on the Service List of this proceeding or any successor proceeding. Energy Division will make the reports available on the Commission's website.

The process for selection of the program evaluator should be consistent with the process established for the evaluation of the BUILD Program and TECH Initiative as part of the Phase I decision. That is, the WNDRR Program administrator (SCE) must issue an RFP for a program evaluator, to be selected via a transparent solicitation process with Energy Division staff oversight. The process will be the same as stated above for selection of program implementer (*e.g.*, SCE drafts RFP subject to final approval by Energy Division (including scoring criteria and relevant bidding elements)); draft RFP served on the Service

List of this proceeding for comment; final RFP posted, published and served on a wide list of possible bidders; bidders have eight weeks to submit bids (subject to extension if authorized by Energy Division); bids scored by the WNDRR Program Scoring Committee; Energy Division Director makes final selection; SCE submits a Tier 2 Advice Letter for approval of final negotiated contract).

The program evaluator will prepare evaluation reports. The evaluation reports will address both cost and program effectiveness, with specific scope and content to be determined by Energy Division in consultation with the program evaluator. The reports will include, but are not limited to: (a) comparing modeled GHG emissions with actual emissions based on a minimum of 12 months of normalized metered electric data, (b) stating the average cost per metric ton of avoided GHG emissions, and (c) identifying the program evaluator's recommendations, if any, for program improvements.

### **3.10. Reporting Requirements**

The Staff Proposal recommends that each of the three large electric IOUs submit an annual Tier 2 Advice Letter incorporating both program reporting and additional funding requests. This decision separates funding requests, addressed above (Budget), from program reporting, which we address here.

Because this decision adopts a statewide program administrator and a statewide program implementer, there is no need for each electric IOU to submit a separate advice letter. Instead, SCE, in its role as program administrator, must submit a Tier 1 Advice Letter each year addressing each of the following program reporting requirements:

1. Explanation of any Local Emergency Proclamation(s) made in the past year that result in new participants being eligible for the WNDRR Program;

2. Description of the WNDRR Program team members addressing each Local Emergency Proclamation;
3. Description of community engagement strategies implemented in the last year;
4. Quantitative and qualitative information on the number of eligible properties from each eligible Local Emergency Proclamation to date, including:
  - a) the number and percentage of eligible properties seeking incentives by dwelling type (e.g., single-family home, manufactured home, modular home, ADU, multifamily dwelling unit);
  - b) the number and percentage of eligible properties awarded incentives by dwelling type (e.g., single-family home, manufactured home, modular home, ADU, multifamily dwelling unit);
  - c) the number and percentage of eligible properties seeking, and receiving equity incentives; and
  - d) the number and percentage of eligible properties seeking and receiving incentives for additional emissions reductions.
5. A list of current incentive levels with explanations of any changes, including base incentive levels, equity incentives, and additional emissions reduction measures and incentives;
6. Program expenditures in the past year and to date, broken down by Local Emergency Proclamation, incentive type, and other budget categories (administration, implementation, and evaluation); and
7. Inclusion of most recent program evaluation report, if issued since the last annual advice letter.

To facilitate efficient processing of the Tier 1 Advice Letter filing, the Energy Division Staff may create reporting templates in coordination with the program implementer consistent with the direction above. Energy Division Staff



may also modify such templates, as needed, provided that they remain consistent with the directions in this decision.

To further increase accessibility and transparency, the program implementer should host stakeholder meetings twice annually to provide updates on the program and receive stakeholder input on both program details and results. These semi-annual update meetings should be in conjunction with the semi-annual meetings discussed above regarding overall program implementation (*see* Selection of Program Implementer).

These meetings should allow for remote participation and must be planned in coordination with Energy Division and the program administrator. The meeting should be announced on the Service List of this proceeding (or a successor proceeding).

The meetings will provide an overview and progress report on the WNDRR Program. The information will include, but is not limited to: the number of eligible homes by service territory; outreach strategies; program enrollment; construction status; the relative participation by customers building traditional, manufactured, modular, and ADU homes; the relative participation by customers building single- and multi-family homes; the relative participation of customers qualifying for standard incentives, and equity incentives, and above code incentives; and the results of any recently completed evaluations. Energy Division may add further agenda items to these stakeholder meetings.

### **3.11. Maximum Budgets for Program Administration, Marketing, Outreach, and Evaluation**

The funding authorized for this program will cover participant incentives, marketing, outreach, program administration, and evaluation. Consistent with

the Phase I decision, the \$50 million authorization includes the following maximum budgets for administration and evaluation:

1. Administration:
  - a) No more than 10% (\$5 million) for program implementer (including compensation for local jurisdiction member and CBO member);
  - b) No more than 1% (\$500,000) for program administrator and contract agent responsibilities.
2. Evaluation: No more than 2.5% (\$1.25 million).

Thus, a minimum \$43.25 million of the \$50 million is available for program incentives, marketing, and outreach. The amount a bidder proposes to spend on marketing and outreach must be specified in their bids submitted in response to the RFP solicitation.

Any additional funding requests (discussed above, *see* Budget) should include no more than these percentages for administration and evaluation.

### **3.12. Cost Recovery**

As specified above, SCE will function as both the contracting agent and program administrator for all of the WNDRR Program, regardless of the service territory from which the program funds are received or are spent. Therefore, consistent with instructions stated above, SCE will establish a balancing account with individual component tracking or subaccounts as necessary.<sup>113</sup> One component will clearly and transparently record the \$50 million in WNDRR

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<sup>113</sup> "Balancing accounts ensure that a utility recovers its authorized revenue requirement from ratepayers for a given program or function. Balancing accounts track the difference between actual expenditures, revenue authorized for recovery, and the actual revenues collected within customer rates to cover those specific expenditures." (The Commission's September 2021 Standard Practice Audit Manual at 6)

<https://www.cpuc.ca.gov/about-cpuc/divisions/utility-audits-risk-and-compliance-division/utility-audits-branch>.)

Program funds received from all participating IOUs (including its own contribution), and record payments made (*e.g.*, incentives, program implementation, marketing, outreach).<sup>114</sup> The second component will clearly and transparently track costs associated with fulfilling its duties as contracting agent and program administrator, offset by revenues received from the program for these services. A third component, discussed more below, will clearly and transparently track SCE's share of the \$50 million funding offset by revenues from PPP charges.

In its capacity as both program administrator and contracting agent, SCE will have a fiduciary duty to safeguard the funds, disburse funds only for authorized program activities, and provide an audited accounting of the funds. Unless otherwise modified by the Commission, the WNDRR Program fund administered by SCE is capped at \$50 million, and will accrue interest during the duration that unspent funds remain in the account prior to disbursement for WNDRR Program expenses. SCE shall submit a Tier 1 Advice Letter to establish this balancing account no later than one month from the date of the adoption of this decision.

Each utility, except SCE, must separately establish a balancing account to record the payment each utility transmits to SCE to pay each utility's program funding obligation, and the revenues received via its PPP charges.<sup>115</sup> SCE may

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<sup>114</sup> This balancing account for the total WNDRR Program will operate over 10 years. The balance at the end of 10 years should either be zero, or remaining funds returned to ratepayers as an offset to PPP charges. Similarly, a balancing account is used for SCE's costs to perform its duties as program administrator and contracting agent.

<sup>115</sup> The account will expire in one year, absent a Commission decision to increase the WNDRR Program budget. If the budget is increased, each utility may create a new balancing account to track the credits and debits to the new account over a new one-year period, unless directed otherwise by the Commission. The advice letter to adjust the PPP charge (for recovery via the

*Footnote continued on next page.*

account for this in its overall balancing account, with clear and transparent tracking of this component. When a participating utility, including SCE, transfers its respective contribution to SCE for the program, it shall record that transfer in its appropriate balancing account, to be offset by revenues from PPP charges amortized over one year. Each utility's WNDRR Program balancing account is capped at its share of the program cap adopted herein, or as adjusted consistent with this decision. The revenues will be sought in the annual PPP advice letter which seeks adjustment in PPP charges, or as soon as practicable following issuance of this decision. Each utility, except SCE, shall submit a Tier 1 Advice Letter to establish its WNDRR Program balancing account no later than 30 days from the date of the issuance of this decision. Within this same 30-day period, SCE shall submit its own Tier 1 Advice Letter for the overall WNDRR Program, including this funding component.

### **3.13. Program Modifications**

The Staff Proposal recommends coordinating with the IOUs in 2026 to determine whether program modifications should be considered via Resolution. Finally, Staff would use the 2032 WNDRR Program evaluation report to recommend to the Commission whether or not the program should continue beyond that point.

We believe that it would be beneficial to allow for program modifications at times other than in 2026 and 2032. Accordingly, modifications may be proposed by the program administrator via a Tier 3 Advice Letter at any time. Commission Staff may propose modifications on its own motion via draft

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PPP charge over 12 months of the one-time WNDRR Program payment made by each utility to the program administrator), may include a reasonable forecast of interest on the balance in the account over the course of the year that revenues are received to offset the one-time payment.

Resolution at any time. Staff should use the 2030 WNDRR evaluation report to recommend to the Commission whether or not the program should continue beyond 2032.

#### **4. Guidance on Data Sharing for the BUILD Program, the TECH Initiative, and the WNDRR Program**

##### **4.1. Data Sharing via Commission Contracts or Interagency Agreement**

The Phase I decision adopted a selection process for a single program evaluator for the evaluation of both the BUILD Program and the TECH Initiative. The Phase I decision provides certain guidance on data collection and sharing. For example, the decision requires the BUILD Program administrator and the TECH Initiative implementer to collect data and directs them to work with the program evaluator to understand the data needs and implement processes to obtain and share program data.<sup>116</sup> Recognizing both the needs to obtain and the laws to protect confidential customer data, and to simplify the data sharing process, the Phase I decision concluded that it is reasonable for the program implementers and evaluator to sign a non-disclosure agreement (NDA) with the Commission instead of signing multiple NDAs with each IOU in order to gain access to confidential customer data.<sup>117</sup>

The implementer and evaluator of the WNDRR Program adopted in this decision will also need to access confidential customer data for the WNDRR Program implementation and evaluation. To ensure consistency of data sharing processes across programs and to protect confidential customer data from public disclosure, this decision provides additional guidance for the Commission

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<sup>116</sup> D.20-03-027, Ordering Paragraph (OP) 36.

<sup>117</sup> *Id.*, Findings of Fact (FOFs) 18 and 19, and Conclusions of Law (COLs) 29 and 30.

collection and sharing of confidential customer data with the implementers and evaluators of the BUILD Program, the TECH Initiative, and the WNDRR Program.

To the extent that it is feasible under the state contracting rules, the Commission may consider entering into a contract with the implementers and evaluators of the programs authorized in this proceeding before providing them any confidential customer data needed for the implementation and evaluation of these programs. Since the BUILD Program is being administered by another state agency, the CEC, the Commission may consider sharing data under an interagency agreement instead of a contract. Under the Commission contracts or interagency agreement, the implementers and evaluators shall also provide the Commission any processed data, analysis, and derivatives from the original data shared by the Commission, and ensure that secure systems are in place for data sharing. The implementers and evaluators shall destroy the original confidential data shared by the Commission and the data derivatives at the end of their contract term with the Commission. The implementers and evaluators shall also return all data, data derivatives and analysis back to the Commission at the end of the contract.

#### **4.2. Data Sharing via IOU NDAs**

In the event that the Commission is unable to enter into a contract or an interagency agreement for data sharing, we provide the following guidance. Energy Division should conduct a workshop within 90 days of the issuance of this decision to collaborate with stakeholders to resolve issues related to implementation.

#### 4.2.1. Participating Customer Data

In order for the implementers and evaluators of the programs adopted in this proceeding (the BUILD Program, TECH Initiative, and WNDRR Program) to design incentive programs that adhere to the guiding principles adopted in this decision, we direct the participating IOUs to provide the following participating customer information to these implementers and evaluators every six months, beginning six months after the issuance of this decision (biannual data submission). Energy Division shall consider stakeholder feedback provided at quarterly stakeholder meetings to be conducted by the TECH Initiative implementer, as required by the Phase I decision, to update the below preliminary data requirements. Energy Division staff shall provide the final updated data requirements to the IOUs at least 90 days before the bi-annual data submission is due. The IOUs are required to submit the following preliminary data as appropriate for the individual program for every individual incentive given to any residential customer, from every IOU-participated program to the implementers and evaluators of the programs adopted in this proceeding within 90 days of the date of issuance of this decision.

Category	Required Fields	Purpose
General	<ul style="list-style-type: none"> <li>· Incentive program name and ID</li> <li>· Incentive amount awarded</li> <li>· Measure code</li> </ul>	Document funding sources used by each TECH/BUILD/WNDRR participant
Utility Customer	<ul style="list-style-type: none"> <li>· Gas utility Service Account ID</li> <li>· Electric utility Service Account ID</li> </ul>	Match other program participating customers to TECH Initiative /BUILD Program/WNDRR Program participating customers and also

		to customers in utility meter data set
Equipment	<ul style="list-style-type: none"> <li>· Equipment type</li> <li>· Manufacturer name</li> <li>· Model name</li> <li>· Capacity</li> <li>· Efficiency rating</li> <li>· Serial number</li> <li>· Previous unit information (fuel type, capacity, model, efficiency)</li> </ul>	<p>(1) Document supply chain trends and map equipment sales through the supply chain, from manufacturers to end use customers</p> <p>(2) Document fuel substitution</p>
Installation	<ul style="list-style-type: none"> <li>· Completion date</li> <li>· Total installation cost (\$)</li> </ul>	<p>(1) Identify when the participating customer's consumption data should change due to installation of EE measure</p> <p>(2) Track equipment and installation cost trends</p>
Site	<ul style="list-style-type: none"> <li>· Premise ID</li> </ul>	<p>A premise is a contiguous geographic area used by a utility to track billing and usage. Knowing Premise ID allows the implementer to map EE measures to the sites at which the measures were installed.</p>

Each utility shall send this data via secure means to the program implementers, evaluators, and Energy Division. Non-jurisdictional program administrators are also encouraged to share this data in the manner described above.

In order to allow for program refinement and evaluation, WNDRR Program participation will be contingent on the participating customer agreeing



to provide the evaluator and program implementer access to information provided during the application process, and data on their energy use, and building characteristics.

#### **4.2.2. Non-Participating Customer Data**

To implement and evaluate the BUILD Program, TECH Initiative, and WNDRR Program, the selected implementers and evaluators may also need non-participant data similar to the participating customer data outlined in the section above.<sup>118</sup> Non-participating customer data may be necessary to establish baseline conditions, counterfactual scenarios, and control groups to measure program impacts.

Given that this decision establishes a single utility as the WNDRR Program administrator and the sole contracting entity with the program implementer and evaluator, it is necessary to provide guidelines for utilities to share non-participating customer data with the selected program implementers and evaluators of the BUILD Program, TECH Initiative, and WNDRR Program.

We recognize that the utilities may not have equipment-specific data for all non-participating customers. Also, each utility maintains its own customer database, which is not standardized among the utilities. Therefore, each utility would need to provide non-participating customer data to the program implementers and evaluators individually.

This decision does not specify the non-participating customer data that the utilities shall provide because it will be determined after the implementation and evaluation plans are developed. Therefore, we direct the utilities to cooperate

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<sup>118</sup> Non-participating customers are customers of the IOUs that do not participate in any of the programs adopted in this proceeding, *i.e.*, the BUILD Program, TECH Initiative, and WNDRR Program.

with the TECH Initiative, BUILD Program, and WNDRR program implementers and evaluators and provide them the necessary data and establish secure data sharing protocols.

To ensure secure data sharing and protect confidential information of non-participating customers, utilities should sign NDAs with the program implementers and evaluators. To the extent possible, the utilities shall initially use their existing NDA forms applicable for the sharing of non-participants information in order to avoid delay of data sharing.

We recognize that disparate NDA terms or lack of standardized data terms across utilities may create a logistical burden for the implementers and evaluators on an on-going basis and a standardized NDA form specifically developed for the purpose of sharing non-participants information is desirable and necessary. Therefore, the utilities shall work with the program implementers and evaluators and Energy Division to develop a standardized NDA. SCE shall submit a Tier 2 Advice Letter for Commission approval of the standardized NDA. The advice letter shall be served to all program implementers and evaluators in addition to the Service List of this proceeding.

#### **4.3. Data Sharing Mechanism and Data Protection**

To enable easy and timely data sharing, we consider utilizing an available database; *e.g.*, a CEC's database. As part of its authority established under the California Code of Regulations, Title 20, the CEC adopted regulations to collect certain customer data from all utilities in California.<sup>119</sup> The CEC is currently working on establishing a mechanism to systematically collect this data from all utilities on an ongoing basis. If the program implementers and/or evaluators

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<sup>119</sup> <https://efiling.energy.ca.gov/GetDocument.aspx?tn=223713&DocumentContentId=53875>.

determine the data within the CEC repository is needed for implementation and/or evaluation of the TECH Initiative, BUILD Program, and WNDRR Program, the utilities should work with the CEC to determine the feasibility and the legal process to allow the program implementers and evaluators who sign an NDA with the utilities to access the program participants and non-participants data directly from the CEC database. If accessing the CEC's database is not feasible, the utilities shall establish a mechanism for sharing both participant and non-participant data with the program implementers and evaluators on a recurring basis and until the last program evaluation is complete.

The program implementers and evaluators shall ensure that all original and processed data, algorithms, derivatives, and work products created through their contracts are transferred over to the Commission in a secure manner at the end of their contracts. The evaluators and program implementers shall keep this data secure, use it for the sole purpose of program evaluation and reporting, and upon request, securely share it with the Commission. Only aggregated and anonymized participant data may be made publicly available as part of program evaluation and reporting. No public access should be given to individual participant data or aggregated data that can be reverse engineered to reveal individual participant and non-participant information.

##### **5. Rate Adjustments for Electric Heat Pump Water Heaters and Propane Eligibility for All-Electric Rate**

The current design of the utilities' electric rates may discourage residential customers from switching from natural gas to electricity for water heating and, in particular, switching to highly efficient electric heat pump technology (fuel switching). To address this concern, we direct the three large electric IOUs (PG&E, SCE, and SDG&E) to each study net energy (electric and gas) bill impacts

that result when a residential customer switches from a natural gas water heater to an electric heat pump water heater. If an IOU's study reflects a net increase in energy bills, it shall propose a rate adjustment a new Rate Design Window (RDW) application in order to eliminate any financial disincentive for fuel switching. While we agree with Staff on the urgency of this issue, we decline to adopt its proposal to establish an interim HPWH baseline allowance via a Tier 3 Advice Letter process so that we may consider all related effects in a more comprehensive proceeding.

In addition, this decision also declines to adopt the Staff's proposal to preclude new customers with propane usage from eligibility for the all-electric rate defined in Section 739(b) of the Pub Util. Code. Instead, we direct the three large electric IOUs to collect information regarding space and water heating, and propane usage from customers as a part of a new service request process.

### **5.1. Electric Rate Design Barrier to Electric Water Heating Equipment**

Staff has identified a possible barrier caused by the design of electric rates that may impair the installation of electric HPWHs. In August 2020, at the time the Staff Proposal was issued, there were, for example, more than a dozen building decarbonization programs in various stages of development or implementation.<sup>120</sup> Most of these programs focus on replacing natural gas and electric resistance space and water heating equipment with highly efficient electric alternatives utilizing heat pump technology. Despite the state's support for these programs as a means to reduce GHG emissions, in certain situations,

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<sup>120</sup> See: [https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/building-decarb/cpuc-hpwh-and-electrification-fact-sheet\\_q22020.pdf](https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/building-decarb/cpuc-hpwh-and-electrification-fact-sheet_q22020.pdf).

customers switching from gas to electric could see an increase in their total energy bill, unless there are rate adjustments that offset the increase.

Replacing a gas water heater with an electric HPWH means the customer will use less gas, but more electricity for the same heating function. Electricity rates are designed to encourage conservation. Residential customers have been on an inclining block rate structure where usage below their baseline allowance (below baseline usage) is charged at a lower price, and electricity usage above baseline usage is charged at higher prices. By May 2022, most residential customers will be switched over to time-of-use (TOU) rates designed to encourage use during times when electricity is plentiful.<sup>121</sup> Under the utilities' new default TOU rates, both off-peak and on-peak rates are lower for below baseline usage than for above baseline usage.

Although the default residential TOU rates still include a lower price for baseline usage, there is no additional allowance for a customer switching from a gas water heater to an electric water heater. As such, without an adjustment in rates to reflect an electric HPWH's consumption, customers who opt to install an electric HPWH consistent with the state's climate goals will be more likely than a customer with a gas water heater to exceed their baseline allowance and pay more for electricity above baseline usage. This likely means customers will effectively be disincentivized and discouraged from fuel switching.

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<sup>121</sup> D.15-07-001 on residential rate reform and transition to Time-of-Use rates directed the electric IOUs to propose default TOU rates in Rate Design Window applications.

SCE and PG&E were recently granted a two-month extension and will be completing their transition by May 2022. SDG&E transition is complete.

## **5.2. Staff Proposal**

Staff proposes to establish an incremental baseline allowance. We first briefly describe the baseline allowance.

Pub. Util. Code Section 739(a)(1) defines “baseline quantity” (commonly referred to as baseline allowance) as “a quantity of electricity or gas allocated by the Commission for residential customers based on from 50 to 60 percent of average residential consumption.” The baseline allowance for customers living in different climate zones varies. A separate baseline allowance is calculated for electricity and natural gas. However, some customers do not have natural gas service and some customers only use natural gas for a few appliances. During the winter, customers who heat their home with electricity generally use more electricity than customers who use natural gas for heating. To ensure that customers relying on electric heat have affordable rates, the statute requires a separate baseline allowance for all-electric residential customers. The all-electric baseline allowance is established at 60 to 70 percent of average residential consumption during the winter heating season. Pub. Util. Code Section 739(b) defines “all-electric residential customers” as “residential customers having electrical service only or whose space heating is provided by electricity, or both.”

The Staff Proposal recognizes the current rate design barrier and recommends that the three large electric IOUs be required to introduce a new baseline allowance in addition to a customer’s existing electric baseline allowance to offset that customer’s bill increase resulting from switching from a gas water heater to an electric HPWH (new HPWH baseline allowance).<sup>122</sup> Staff proposes to finalize the HPWH baseline allowance in each IOU’s next GRC

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<sup>122</sup> Staff Proposal at 6.

(Phase II) or RDW applications.<sup>123</sup> However, Staff is concerned that there will be potential delays in the IOUs' implementation due to their respective GRC or RDW schedules. Staff also notes that GRC and RDW proceedings could take up to 18 months. To provide immediate rate relief to customers who install HPWH, Staff proposes that the IOUs submit Tier 3 ALs to establish an interim HPWH baseline allowance based on average HPWH electricity consumption. Staff proposes that the Tier 3 ALs should be submitted no later than 30 days from the issuance of this decision. The IOUs, according to Staff, should also include an implementation plan explaining how they each intend to provide rate relief in the near-term to customers who install electric water heating equipment.<sup>124</sup>

In addition, Staff proposes a change in the IOU processes used to determine eligibility for the "all-electric" baseline allowance, and to apply this process prospectively at the commencement of new service. Specifically, Staff proposes that the IOUs disallow propane users from receiving the all-electric baseline allowance unless they otherwise qualify by having electric space heating equipment installed.<sup>125</sup> Existing customers who may no longer qualify for the all-electric baseline allowance under the proposed new rules would not be stripped of the all-electric baseline allowance. Rather, the change would apply only to new service requests and thus take effect gradually. Staff's proposal was based on a review of the different screening processes for propane use currently used by the utilities.

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<sup>123</sup> *Id.* at 58.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.* at 59.

### 5.3. Parties' Comments

Parties generally support Commission efforts to promote electric HPWHs and agree that the current rate design could pose an obstacle to affordable electrification.<sup>126</sup> Parties acknowledge that increased electric bills could have an adverse impact on customers switching from gas to electric water heating.<sup>127</sup> However, parties disagree on Staff's proposed solutions and implementation processes. PG&E and SDG&E argue that a new HPWH baseline allowance should be first analyzed in a Commission ratesetting proceeding.<sup>128</sup> PG&E asserts that this rulemaking is categorized as a quasi-legislative proceeding, and it would be inappropriate to address what it considers to be ratesetting policy in this proceeding.

SDG&E suggests that instead of a new HPWH baseline allowance, a comparable incentive could be provided through a monthly discount equivalent to additional kWh at the lower Tier 1 rate via a monthly bill credit defined as:

$$(\text{Tier 2 rate} - \text{Tier 1 rate } (\$/\text{kWh})) * (\text{monthly proposed baseline adjustment amount } (\text{kWh}/\text{month}))^{129}$$

TURN supports the idea of considering whether the all-electric baseline should be revised as part of the consideration of high-level policies for rate design changes, but believes that the new HPWH baseline allowance proposed in the Staff Proposal would violate Pub. Util. Code Section 739.<sup>130</sup> TURN believes

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<sup>126</sup> PG&E's Opening Comments at i, SCE's Opening Comments at 6, SDG&E's Opening Comments at 14, and Cal Advocates' Opening Comments at 10.

<sup>127</sup> Cal Advocates' Opening Comments at 10, Joint CCAs' Opening Comments at 8, NRDC/Sierra Club's Opening Comments at 12, SCE's Opening Comments at 6.

<sup>128</sup> PG&E's Opening Comments 16, SDG&E's Opening Comments at 15.

<sup>129</sup> SDG&E's Opening Comments at 16.

<sup>130</sup> TURN's Comments on the OIR.



that the Staff Proposal raises legal issues regarding the Commission's statutory authority under Pub. Util. Code Section 739(a) and (g), and raised policy issues by proposing a unique baseline allowance for a single end-use.<sup>131</sup>

In addressing legal and policy concerns, Staff notes that, while the Commission cannot change the eligibility for the existing all-electric baseline that is directed by Pub Util. Code Section 739(b), it is explicitly authorized to experiment with new rate schedules by Pub Util. Code Section 739(g), which states that "Nothing contained in this section shall be construed to prohibit experimentation with alternative gas or electrical rate schedules for the purpose of achieving energy conservation." Staff argues that a baseline allowance specific to HPWHs is in conformance with Pub Util. Code Section 739(g) because HPWHs "achieve energy conservation both by reducing overall reliance on natural gas and by heating water mostly in the middle of the day rather than during peak hours, thus reducing the need for electricity provided by "peaker" power plants while utilizing electricity when solar penetration is higher and the GHG intensity of each kWh consumed is lower."<sup>132</sup>

TURN asserts that it is factually incorrect to assume that baseline allowances must be modified or else customers risk seeing higher electric bills, and reasons that customers could see a larger corresponding decrease in natural gas or propane bills that would offset the increased electric bill.<sup>133</sup> Therefore, not all parties agree that it is appropriate to introduce a new HPWH baseline

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<sup>131</sup> TURN's Opening Comments at 16.

<sup>132</sup> Staff Proposal, at 56 and 57.

<sup>133</sup> TURN's Opening Comments at 17.

allowance. On the other hand, Bay REN<sup>134</sup> and VEIC<sup>135</sup> support Staff's proposal; Cal Advocates,<sup>136</sup> CSE,<sup>137</sup> NRDC/Sierra Club,<sup>138</sup> CEJA,<sup>139</sup> SBUA,<sup>140</sup> and SCE<sup>141</sup> support Staff's proposed special baseline allowance as an interim step.

The Joint CCAs also support the Staff Proposal's recommendation for a new HPWH baseline allowance, but they ask that the IOUs be directed to work with CCAs in their service territory on rate development, particularly electrification rate development. They state:

CCAs are highly motivated to achieve carbon reductions through building electrification and represent a significant portion of California's ratepayers. They are thus key stakeholders in the design of rates intended to address electrification and should be included to ensure that new rates will work for CCAs as well. For example, ensure TOU periods match, rates are not anti-competitive, and that there are no cost allocation concerns.<sup>142</sup>

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<sup>134</sup> Bay REN's Opening Comments at 3.

<sup>135</sup> VEIC's Opening Comments at 12.

<sup>136</sup> Cal Advocates' Opening Comments at 10.

<sup>137</sup> CSE Opening Comments at 10.

<sup>138</sup> NRDC/Sierra Club Opening Comments.

<sup>139</sup> Joint Reply Comments of CEJA, NRDC, Sierra Club at 9 to 12.

<sup>140</sup> SBUA Opening Comments at 6.

<sup>141</sup> SCE Reply Comments at 10 to 11.

<sup>142</sup> Joint CCAs' Opening Comments at 8.

On the other side, PG&E,<sup>143</sup> TURN, Wild Tree, and SDG&E<sup>144</sup> do not support a new HPWH baseline allowance.<sup>145</sup> Wild Tree objects as a policy matter, stating,

[It would] provide lower rates for the use of greater electricity which would serve only to disincentivize customers to utilize the most efficient options and to install rooftop solar, add energy storage, and make other efficiency upgrades... If Staff has determined that there is a need to adjust rates to address increased bills resulting from increased electricity usage as a result of building electrification efforts, then the building electrification efforts would have resulted in increased grid electricity consumption and therefore, will not be true decarbonization... because we do not have a decarbonized grid, incentivizing customers to increase their electric demand will result in higher GHG emissions, not lower.<sup>146</sup>

TURN argues that there is insufficient data to determine whether the customer's electric bill increase caused by switching from a gas water heater to an electric HPWH is greater than the natural gas bill reduction. TURN points to the pilot proposals previously submitted in the Commission's San Joaquin Valley Affordable Energy proceeding (R.15-03-010) and asserts the possibility that "switching to a highly efficient heat pump water heater will reduce total energy bills (electric plus gas or propane)"<sup>147</sup> for certain customers. TURN therefore

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<sup>143</sup> PG&E's Opening Comments at 9.

<sup>144</sup> SDG&E's Reply comments at 2.

<sup>145</sup> PG&E and SDG&E support changes to the high usage charge to mitigate the potential for higher electricity bills when customers install HPWH.

<sup>146</sup> Wild Tree's Opening Comments at 8.

<sup>147</sup> TURN Opening Comments at 17 citing R.15-03-010 (Order Instituting Rulemaking to Identify Disadvantaged Communities in the San Joaquin Valley and Analyze Economically Feasible Options to Increase Access to Affordable Energy in those Disadvantaged Communities). For an example of projected energy bill savings *see* PG&E 2020 Annual Report filed in R.15-03-010, Appendix A Energy Impact Statement.

argues that any additional rate relief may not be justified. As noted previously, TURN is also concerned that the Staff Proposal is inconsistent with Pub. Util. Code Section 739, asserting that a legislative change would be necessary to introduce Staff's proposed new HPWH baseline allowance.<sup>148</sup>

The risk of a cost-shift or a subsidy that unfairly burdens other customers is of particular concern to TURN, PG&E, and SDG&E. Several of the Commission's adopted rate design principles are implicated: rates should avoid cross-subsidies, incentives (such as a discount to encourage policy goals) should be transparent, rates should encourage conservation during peak use periods, rates should be clear, and rates should encourage economically efficient decision-making.<sup>149</sup>

SDG&E underscores the need for further study, stating that:

[I]t is imperative that the Commission and the IOUs study and understand the potential for a cost shift between customers that participate in the program and those who do not, as well as the actual operational cost burden to customers purchasing electric water heaters.<sup>150</sup>

PG&E asserts that, because new technologies are being developed, the Commission should not adopt policies that "lock in difficult-to-change pricing structures, especially those that benefit some customers at the expense of others."<sup>151</sup>

PG&E notes single-appliance baselines may have unintended consequences for fair allocation of benefits.<sup>152</sup> Both PG&E and SDG&E suggest

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<sup>148</sup> TURN Opening Comments at 16.

<sup>149</sup> The Rate Design Principles were originally adopted in D.14-06-029.

<sup>150</sup> SDG&E's Reply Comments at 4.

<sup>151</sup> SDG&E's Reply Comments at 6.

<sup>152</sup> PG&E's Opening Comments at 19.

that a simpler and more effective interim approach would be to eliminate the high usage surcharge (HUC)<sup>153</sup> for customers so that it is not a barrier to increased electrification.<sup>154</sup>

PG&E states that a multiplicity of tariffs to support different policy goals can lead to customer confusion, mixed price signals, and undercollection of revenue.<sup>155</sup> Customer understanding of rates is an important element of effective rate design, as indicated by the Commission's rate design principles. The challenge of customer understanding – especially for residential customers – has been the subject of several proceedings. SDG&E notes that:

Baseline adjustments, tiered rates, and electric rates in general, are already confusing and difficult for customers to understand. SDG&E believes that adding an interim allowance for only a subset of customers serves to increase complexity, and would likely increase customer confusion around baseline allowance, adding to potential frustration with already-complicated electric rates....<sup>156</sup>

#### **5.4. Discussion**

While not all parties agree that fuel switching would increase customers' total energy bills or that a new HPWH baseline allowance is necessary to remove barriers to electrification, parties do not dispute that installing electric HPWHs would result in an increase in electricity usage in residential homes. We agree with Staff that the current design of the utilities' electric tiered rates may

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<sup>153</sup> The HUC was adopted in 2015 to encourage residential customers with the highest electricity use to conserve. Customers who use 400% or more electricity than the average customer pay a charge that is much higher than the cost of the electricity these customers use. The average electricity use is calculated consistent with Pub. Util. Code § 739.

<sup>154</sup> PG&E's Opening Comments at 28, SDG&E's Opening Comments at 10.

<sup>155</sup> PG&E argues that a "generally applicable, electrification-friendly rate design" would better support the Commission's goals compared to a "marginally effective, piecemeal solution[s] that cannot be implemented until 2022." (PG&E's Opening Comments at 25).

<sup>156</sup> SDG&E Reply Comments at 6.

discourage customers switching from gas to electricity by installing electric HPWH. Staff's proposal of introducing a new HPWH baseline allowance could potentially be one of the solutions. However, we share the concerns of several parties and agree that actual rate adjustments for electric HPWHs should be addressed in a rate design proceeding where we can assess all relevant effects, and reasonably consider complementary and competing rate design goals. Therefore, we decline to implement an interim HPWH baseline allowance in this decision. We similarly decline to direct implementation of a new HPWH baseline allowance in a future rate design proceeding, as recommended by Staff. Rather, as explained more below, we direct consideration of rate adjustments for incremental electricity consumption from HPWH use in a new Rate Design Window proceeding that can reasonably address all relevant factors.

PG&E asserts that, because new technologies are being developed, the Commission should not adopt policies that "lock in difficult-to-change pricing structures, especially those that benefit some customers at the expense of others."<sup>157</sup>

SCE, PG&E, and SDG&E each plan to propose, or have proposed, tariffs designed to benefit customers seeking to electrify their homes and/or charge their electric vehicles at home.<sup>158</sup> These tariffs acknowledge the increased volume of electricity use that will result from switching from natural gas to

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<sup>157</sup> SDG&E reply at 6.

<sup>158</sup> SDG&E plans to file an application for "a rate designed to give customers an incentive to electrify residential houses." (SDG&E's Reply comments at 2.) The proposed rate will be an untiered TOU rate with a fixed charge designed to promote electrification and would be available to customers with technologies such as electric water and space heating, behind the meter storage, and electric vehicles. (*Id.* at 8.)

PG&E proposes an E-ELEC rate to support customer electrification in A.19-11-019, which is pending Commission decision.

electricity for more appliances and attempt to mitigate those usage challenges through specially designed TOU rates. If these proposals sufficiently address an incremental HPWH electricity increase, it may not be necessary, PG&E and SDG&E argue, to develop a separate HPWH allowance. We agree that it would be premature to adopt an interim solution here. Rather, we direct a more complete examination of the issue in a rate design proceeding.

PG&E and SDG&E further argue that having tariff structures designed for multiple electrification efforts and technologies would be simpler, easier to implement, and easier to modify than having rate adjustments for individual technologies. SCE, which introduced the first beneficial electrification rate, TOU D-Prime, also believes in developing more durable long-term solutions through rate design.<sup>159</sup>

TURN raises a valid point that we do not know the full extent to which bills will be impacted by customers switching from a natural gas water heater to an electric HPWH. As such, it is important that the IOUs study those impacts before proposing rate adjustments.

A holistic review and development of HPWH rate adjustments in each IOU's rate design proceeding is important for the development of coordinated solutions that are non-discriminatory to other technologies and consistent with the Commission's rate design principles. Therefore, we conclude that the best approach is to address rate adjustments for incremental electricity consumption resulting from HPWH use in a rate design proceeding in which we can consider all relevant effects and factors.

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<sup>159</sup> SCE's Opening Comments at 6-7.

Therefore, in this decision we direct PG&E, SCE, and SDG&E each to first study net energy (electric and gas) bills impacts resulting from a residential customer switching from a natural gas water heater to an electric HPWH. Each IOU shall submit and serve its study to the Commission through a Tier 3 Advice Letter within 90 days of the issuance of this decision. The IOUs' net energy bill impact analysis shall take into account both electric bill increases, if any, and gas bill savings. The IOUs' studies shall not focus only on electric usage and/or bill increases. This requirement applies to all three IOUs including the utilities that may have already done a study on electric bill impacts associated with fuel switching.

If an IOU's study shows a net increase in customers' total energy bills resulting from fuel switching, it shall propose a rate adjustment in order to eliminate any financial disincentive for fuel switching in a new RDW application within six months of issuance of this decision.

Among other things, the IOUs' proposals should address all relevant rate design considerations, such as but not limited to the following rate design principles.

1. Rates must be just, reasonable, and non-discriminatory.
2. Rates should be based on marginal cost.
3. Rates should be based on cost-causation principles.
4. Rates should encourage conservation and energy efficiency.
5. Rates should encourage reduction of both coincident and non-coincident peak demand.
6. Rates should be stable and understandable and provide customer choice.



7. Rates should generally avoid cross-subsidies, unless the cross-subsidies appropriately support explicit state policy goals.
8. Incentives should be explicit and transparent.
9. Rates should encourage economically efficient decision making.
10. Transitions to new rate structures should emphasize customer education and outreach that enhances customer understanding and acceptance of new rates and minimizes and appropriately considers the bill impacts associated with such transitions.

In addition, the three IOUs' proposals should include, but are not limited to, the following:

1. Provide rate adjustments that are sufficient to cover the net energy bill increases as a result of switching from a natural gas water heater to an electric HPWH.
2. Provide the basis for determining the typical industry-prevalent gas and electric HPWHs that were used for calculating additional anticipated electricity use, gas savings, and net energy bill increases.
3. Apply the HPWH rate adjustment to all customers switching from a natural gas water heater to an electric HPWH, including customers already receiving an all-electric baseline allowance.
4. Explain how the HPWH rate adjustment does the following:
  - a) Reduces the cost barrier to customers shifting from natural gas water heaters to electric HPWHs;
  - b) Encourages TOU;
  - c) Can be easily understood by customers, and mitigates against customer confusion; and
  - d) Takes into account anticipated savings from reduced gas use.

5. Propose an evaluation mechanism to ascertain whether the proposed HPWH rate adjustment is appropriate after it is implemented so that it can be modified, if necessary, in the future.
6. Describe a transition plan and ongoing administration plan to maximize ease of transition and administration of the HPWH rate adjustment.
7. Describe how their proposal satisfies the wide range of rate design principles including, but not limited to:
  - a) being just, reasonable, and non-discriminatory (e.g., between technologies, between customers within a customer group, between customer groups);
  - b) being based on marginal cost and cost-causation principles;
  - c) encouraging conservation and energy efficiency;
  - d) avoiding cross-subsidies; and
  - e) encouraging economically efficient decision-making.

#### **5.5. Propane Usage and Eligibility for All-Electric Rate**

The Staff Proposal concludes that there are customers who use propane for heating or other uses who are nonetheless enrolled in the “all-electric” baseline allowance established under Pub Util. Code Section 739(b). The Staff Proposal highlighted two concerns about propane use. First, some customers might be on the “all-electric” rate, but are actually using propane to power one or more appliance. Staff proposes that these customers should not be eligible for an all-electric baseline allowance. Second, because customers who supplement with propane use less electricity than genuine all-electric customers, including them in the pool of all-electric customers used to calculate the all-electric baseline will bring the baseline allowance down – to the detriment of genuinely all-electric customers.

CEJA, NRDC, and PG&E support propane users to be eligible for an all-electric baseline provided they are also using electric space heating equipment. SDG&E also supports propane users to be eligible for the all-electric baseline on the grounds that it is “impossible for SDG&E to determine if customers use propane or not.” TURN supports the intent of the Staff Proposal to preclude customers who use propane from the all-electric baseline tariff.<sup>160</sup>

We conclude that it is not appropriate to implement changes to who qualifies for the all-electric baseline usage at this time and, as such, we do not adopt Staff’s recommendation to do so. However, we agree with Staff that there is a need for more data collection regarding this issue. Therefore, we require the IOUs to collect additional information from customers at the time of service commencement so that the Commission can consider this issue in the future.

The Pub Util. Code Section 739 “all-electric” baseline allowance is for customers who have electric service only or who have electric space heating. The statute does not prescribe a specific mechanism for identifying customers who use propane to power one or more appliance, nor does it clarify what “electric service only” means. As described in the Staff Proposal, each utility takes a different approach to identifying customers qualified for the all-electric baseline allowance. As a result, some utilities already limit participation by customers who supplement their electricity usage with propane usage and others do not. Per the Staff Proposal:

- PG&E provides both gas and electric service. According to the Staff Proposal, if a customer does not take gas service from PG&E, the customer is treated as eligible for the

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<sup>160</sup> CEJA’s Opening Comments at 23, NRDC’s Opening Comments at 13, PG&E’s Opening Comments at 17, CEJA/NRDC/Sierra Club’s Reply Comments at 10, SDG&E’s Opening Comments at 19, TURN’s Opening Comments at 21.

all-electric baseline allowance. PG&E has not made a practice of confirming that the customer does not use propane.<sup>161</sup>

- SDG&E is also a dual-fuel service provider and the Staff Proposal found that SDG&E follows the same model as PG&E for determining eligibility.
- SCE provides only electric service, and therefore does not have information on whether a customer has gas service. According to the Staff Proposal, SCE confirms at the time of electric service enrollment if the customer uses natural gas or propane in one or more appliance. Customers found to use natural gas or propane in addition to electricity are deemed ineligible for the all-electric baseline allowance.

Because of the differences in the way information is collected, we lack information on the demographics for propane use. However, in comments, CEJA asserts that customers who use propane make up a small proportion of ratepayers and are disproportionately low-income and part of disadvantaged communities that lack access to natural gas connections.<sup>162</sup> CEJA, NRDC/Sierra Club, and SCE all oppose to the Staff Proposal's approach to propane use. They note that propane is not as cheap as natural gas and propane users lack consumer protections available to natural gas customers served by a regulated IOU. Therefore, customers using propane are already at a disadvantage. In the joint comments of CEJA, NRDC, and Sierra Club, they state:

Low-income and rural customers disproportionately use propane because they do not have access to natural gas, and

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<sup>161</sup> In comments on the Staff Proposal, PG&E states that "Per PG&E's current tariff language, PG&E already disallows propane users from receiving the all-electric baseline allowance unless they otherwise qualify by having permanent electric space heating equipment installed. PG&E's All-Electric baseline allowance is only given to new customers who have permanent space heating as the primary heat source." (PG&E's Opening Comments at 26.)

<sup>162</sup> CEJA's Opening Comments (citing D.18-12-015) at 10 and 13.

disallowing them from receiving the baseline adjustment would unfairly penalize them.<sup>163</sup>

We diverge from the recommendation of the Staff Proposal and decline to implement any changes specific to propane users vis-à-vis existing practices already in place. However, we adopt Staff's recommendation to have the IOUs collect information that will allow the Commission and stakeholders to better understand propane use in the future. This data could be used to determine if further action should be taken in the future to discourage propane use.

In conformance with the recommendation in the Staff Proposal, the three large electric IOUs shall ask all customers commencing electric service the following questions: (1) whether the customer uses electric space heating equipment, (2) whether the customer uses electric water heating equipment, as well as whether any electric water heater being used is a HPWH specifically, and (3) whether the customer uses propane to power any appliance other than an outdoor grill. SCE shall further ask its customers a fourth question: (4) whether the customer receives natural gas (*i.e.*, not propane) service from a separate utility. Customers answering 'Yes' to Question 1 will be eligible for the existing all-electric baseline allowance under all circumstances. Customers who answer 'Yes' to Question 2 will be eligible for a possible HPWH rate adjustment only if they use an electric HPWH and will be directed to any available incentives (*e.g.*, PG&E's WatterSaver Program) to upgrade to a HPWH if they indicate that they rely on electric resistance water heating equipment. The data collection shall start on July 1, 2022.

The IOUs shall report the data regarding answers to the three questions – four in the case of SCE – to the Commission's Energy Division annually

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<sup>163</sup> Joint Reply Comments of CEJA, Sierra Club, NRDC at 10.

beginning on February 1, 2023, along with the number of total customers receiving the all-electric baseline allowance broken down by eligibility basis (*i.e.*, eligibility based on using electric space heating equipment or eligibility based on not taking gas service), as well as total customers receiving the new HPWH rate adjustment, if one was in place, by the end of the prior calendar year.

## **6. Conclusion**

Based on the record and the analysis above, we conclude the following:

1. We adopt a set of guidance on incentive layering to coordinate and administer incentives across multiple building decarbonization programs efficiently and effectively.
2. We adopt the WNDRR Program to provide incentives and support owners of residential properties in rebuilding lower-carbon, all-electric homes after wildfire and other natural disasters.
3. We provide guidance on data sharing to ensure complete and timely access of information to the program implementers and evaluators.
4. We direct the three large IOUs to each study net energy (electric and gas) bill impacts that result when a residential customer switches from a natural gas water heater to an electric heat pump water heater. If an IOU's study reflects a net increase in energy bills, it shall propose a rate adjustment a new RDW application in order to eliminate any financial disincentive for fuel switching. In addition, we direct the three large electric IOUs to collect propane use information from their new customers to provide information to assist in future treatment of propane use with all-electric service.

## **7. Categorization and Need for Hearings**

The Commission preliminarily determined in the OIR, and the initial Scoping Memo confirmed, that this is a quasi-legislative proceeding. Hearings are not necessary.

## **8. Public Comments**

Pursuant to the Rule 1.18 of the Commission's Rules of Practice and Procedure (Rule), public comments are published on the Docket Card of each Commission proceeding. There is one public comment on the Phase II Staff Proposal in this proceeding submitted by Western Propane Gas Association.

## **9. Comments on Proposed Decision**

The proposed decision of Commissioner Rechtschaffen in this matter was mailed to the parties in accordance with Pub Util. Section 311 and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on October 20, 2021 by BayRen, Bear Valley, CEJA/Sierra Club/NRDC jointly, CSE, EDF, Liberty Utilities, Marine Clean Energy, PacifiCorp, PG&E, SCE, SDG&E, SBUA, TURN, VEIC/Recurve jointly, and A.O. Smith Corporation. Reply comments were filed on October 25, 2022, 2021 by CEJA/Sierra Club/NRDC, PG&E, SDG&E, and TURN.

Consistent with the Rules, we give no weight to comments that fail to focus on factual, legal, or technical errors. (Rule 14.3(c)) In particular, we disregard comments that only reargue a party's position.

We made limited corrections and revisions to improve clarity and adjust deadlines to be more reasonable. We are persuaded by parties' comments to make limited substantive revisions to the incentive layering, the WNDRR Program, and the rate adjustments for HPWH and propane usage sections. In summary, we revise the proposed decision as follows:

### Section 2: Incentive Layering

- Adds a new guiding principle for ease of participation to address equity concerns (Section 2.4.1)
- Adds new requirements to address accessibility concerns (Section 2.4.5)

Section 3: The WNDRR Program

- Includes the three smaller IOUs (Liberty Utilities, Bear Valley, and PacifiCorp).
- Changes IOU accounting to balancing accounts where in some cases it had been by memorandum accounts.
- Clarify our decision to use PPP funds.
- Change applicability of funds beyond the initial \$50 million to include homes being rebuilt in locations with an all-electric “reach” building codes if the rebuild is beyond either the minimum or “reach” code requirements to provide greater decarbonization.
- Clarify how a CCA may declare its intention not to participate in the WNDRR Program.

We also address five specific comments. First, MCE recommends that the selection criteria for Program Implementer include experience (a) working with traumatized populations and (b) having empathetic high-touch customer service. This need not be an order of the Commission. This is already adequately addressed by ED having oversight of the RFP drafting, service of the draft RFP on the service list, and ED having approval authority of the final RFP. (Appendix B, Section V.B.1.) If ED, in consultation with others (*e.g.*, comments on the RFP), determines these criteria are valid, ED will include them in the final RFP.

Second, MCE recommends that bidders be required to propose a means to compensate local jurisdiction members for their participation in the WNDRR Program (*e.g.*, stipend; bill for time and expenses). This need not be an order of the Commission. We have insufficient information to determine whether local jurisdiction members need compensation here or are compensated (or eligible for compensation) in other ways (*e.g.*, agency or other budgets). Moreover, this is addressed by the requirement that each bid to be selected as the Program



Implementer include the bidder's (a) "strategies to maximize program participation and efficient program deployment" and (b) "marketing and outreach strategies and include proposed marketing and outreach expenses." (Appendix B, Sections V.A.3. and V.A.4.) Bidders will include compensation for local jurisdiction members in their proposed budget if they determine compensation is necessary for their participation, and the Scoring Committee will judge accordingly.

Third, MCE recommends that the WNDRR Program Evaluation Report include interviews with program participants. This is addressed by the specifics of the cost and program effectiveness elements of the Evaluation Reports being determined in consultation with ED. (Appendix B, Section IX.B.4.) ED can determine if interviews with program participants are appropriate for the Evaluation Reports.

Fourth, EDF recommends that SCE be directed to file a Tier 1 Advice Letter when WNDRR funds are less than \$5 million. This need not be an order of the Commission. The Program Implementer will hold at least semi-annual meetings with stakeholders. (Appendix B, Section V.C.2) Moreover, the Program Implementer must maintain a publicly available webpage with overview and program summary including "amount of funds remaining." (Appendix B, Section V.C.6.) ED can direct the Program Administrator (SCE) to send a Notice to ED with service on the service list if the semi-annual meetings and public website are not sufficient.

Finally, SBUA recommends that small business and small commercial customers be eligible for WNDRR along with residential customers. We decline to make this change now. Rather, the Commission will consider non-residential customer eligibility for WNDRR to a future phase of this proceeding or a future

proceeding that can address an appropriate range of non-residential considerations (*e.g.*, number of small business and commercial customers for allocation of WNDRR funding by participating IOUs; reasonableness of, and possible alternatives to, limitations recommended by SBUA (*e.g.*, 3000 square feet or 10% of budget); necessary reporting; expansion of the roles of the program administrator, program implementer, contracting agent, evaluator, and perhaps others; possible changes in budgets for expanded participant eligibility and roles of program implementer and others).

#### Section 5: Rate Adjustment for Electric HPWH and Propane Usage

In Section 5.4, we added a requirement for PG&E, SCE, and SDG&E to submit and serve their studies on net energy bill impacts resulting from customers switching from a natural gas water heater to an electric HPWH to the Commission through a Tier 3 Advice Letter within 90 days of the issuance of this decision. We agree with CEJA/Sierra Club/NRDC's comments on the proposed decision that there is an urgency to address net energy bill impacts resulted from residential customers' fuel switching. We added clarifications for the IOUs' net energy bill impact studies.

We clarify that if an IOU's study shows a net increase in customers' total energy bills resulting from fuel switching, the IOU shall propose a rate adjustment in a new RDW application within six months of issuance of this decision.

### **10. Assignment of Proceeding**

Clifford Rechtschaffen is the assigned Commissioner and Scarlett Liang-Uejio and Ava N. Tran are the assigned ALJs in this proceeding.

## **Findings of Fact**

1. The Commission initiated this proceeding to begin crafting a policy framework addressing decarbonization of buildings.
2. The Phase I decision established the BUILD Program and the TECH Initiative pursuant to SB 1477.
3. The BUILD Program provides incentives to new residential housing projects that are all-electric and have no hookup to the gas distribution grid.
4. The TECH Initiative provides incentives to new and existing residential buildings to advance the adoption of low-emissions space and water heating technologies.
5. The Phase II Scoping Memo determined the issues to be resolved in Phase II are the three topics addressed in the Staff Proposal: (1) incentive layering for multiple building decarbonization programs, (2) the WNDRR Program, and (3) HPWH baseline allowance.

### Incentive Layering

6. Since the passage of SB 1477, the Commission has adopted more than a dozen different building decarbonization programs spread across the categories of 1) EE, 2) Grid Optimization, 3) Community Support, and 4) Emission Reduction.
7. The Commission has authorized over \$435 million in incentives across multiple programs for electric HPWHs, electric heat pump HVAC systems, and related devices that enable these technologies to achieve full functionality.
8. The current programs have different funding sources, design requirements, goals, and evaluation methodologies.
9. A wide range of stakeholders are involved in designing and implementing the building decarbonization incentive programs.

10. Building decarbonization program incentives were designed to increase customers' adoption of heat pump appliances, targeting various parts of the supply chain – upstream, midstream, and downstream.

11. Multiple program incentives could be complementary, layered/overlapping, and duplicative to each other.

12. Few processes are in place for efficient and effective coordination and administration across multiple program incentives. This creates challenges and barriers that have discouraged customer participation and could result in unjust uses of program funds.

#### The WNDRR Program

13. The WNDRR Program is designed to provide incentives and support to owners of residential and multi-family properties in rebuilding lower-carbon, all-electric homes post-wildfire and other natural disasters.

14. A statewide approach to the WNDRR Program with a single statewide third-party implementer is designed to, and will, promote economies of scale, allow for a more seamless program, and enable greater participation by including individuals who are not served by a natural gas IOU or who have moved from one IOU service territory to another.

15. It is appropriate for a program designed to support all-electric reconstruction after a disaster to be funded by charges to electric customers for public purpose programs.

16. The participation of CCAs in the WNDRR Program is not dependent upon the CCAs being in an area affected by a natural disaster. All CCAs within the service areas of participating IOUs will automatically be included in the WNDRR program unless by written Notice they decline to be included.

17. A single budget over the 10-year duration of the WNDRR Program, rather than discrete and limited annual budgets, will streamline program administration and avoid start-stop implementation.

18. Collecting funds from each IOU in proportion to the number of residential service accounts in their service area aligns with the program's focus on residential building reconstruction.

19. An RFP-based competitive solicitation process as described in this decision and administered by the program administrator for selection of both the program implementer and the program evaluator, with the Energy Division Director selecting the winning bidders, is a reasonable process.

20. It is reasonable to leave details of implementing the WNDRR Program to the program implementer, subject to oversight by the Commission and the program administrator, along with at least semi-annual meetings with stakeholders for stakeholder collaborative input and advice.

21. Limiting the program implementer contract to five years, with an option for extension or a new round of bids, allows for a mid-course correction in program implementation, if necessary.

22. Requests by a Tier 3 Advice Letter for additional funds beyond the \$50 million authorized herein will provide Commission and public review before program expansion.

23. Customer eligibility for the WNDRR Program should extend to victims of disasters declared in 2017 and thereafter, but not to customers who already planned to go all-electric in the absence of an incentive program (so that limited WNDRR incentives can be used to provide the most efficient and equitable incentives) with the one exception stated in Section 3.6.1 of this decision.

24. Dwelling units used after a natural disaster can reasonably include not only the rebuilding of single-family homes, but also manufactured homes, modular homes, ADUs, and multi-family buildings.

25. Staff's proposal of tiered incentives for the WNDRR Program is not appropriate at this time.

26. Flat incentives enable potential participants to understand early in the rebuilding process how large the incentives will be, avoid the several disadvantages identified with basing incentives on modeled GHG savings, and are easier to administer.

27. The flat base incentive may be designed to provide a reasonable incentive while also differentiating between single-family homes, manufactured homes, modular homes, ADUs, and units in multi-family properties.

28. A participant must rebuild an all-electric home or dwelling structure to qualify for WNDRR incentives, and no other fuels may be incorporated into the structure.

29. Additional incentives for above-code emission reductions will incentivize deeper decarbonization.

30. Incentives for Passive Home certification would not be a valuable use of limited WNDRR funds because the certification process does not itself lead to emissions reductions.

31. More inclusive criteria for equity incentives than just homeowners enrolled in the CARE program will improve access for vulnerable and disadvantaged households.

32. Certified Energy Analysts are not needed in the adopted WNDRR Program because the adopted program does not adopt a modeling requirement;

technical outreach can be accomplished using the program budget set aside for marketing and outreach.

33. Requiring evaluation reports every two years will provide oversight that the program is achieving its goals of (a) reducing GHG emissions and (b) serving low-income persons and disadvantaged communities; and it will assist Energy Division in its evaluation of whether to renew or put to bid the contract for the program implementer in year five of the program.

34. Use of a Tier 3 Advice Letter to allow the program administrator to request modifications to the WNDRR Program, incentive structures, or incentive amounts will ensure Commission and public review of program modifications before they are made.

#### Data Sharing

35. The Phase I decision adopted a selection process for a single evaluator for both the BUILD Program and TECH Initiative.

36. This decision also adopts a selection process for an evaluator for the WNDRR Program.

37. Data collection and sharing are essential for the evaluations of the BUILD Program, TECH Initiative, and the WNDRR Program

38. The Phase I decision provided certain guidance on expected data collection and sharing for the administrative, implementers, and evaluator of the BUILD Program and the TECH Initiative in COLs 29 and 30, and OP 36.

#### HPWH Rate Adjustments and Propane Usage

39. Residential customers have been on an inclining block rate structure where the below baseline usage is charged at a lower price, and electricity usage above baseline usage is charged at a higher price (tiered rates).

40. Under the IOUs' new TOU rates, both off-peak and on-peak rates are lower for below baseline usage than for above baseline usage.

41. The customer will be using less gas, but more electricity for the same heating function when replacing a gas water heater with an electric HPWH. Therefore, without HPWH rate adjustments, the customer may see a net energy (electric and gas) bill increase after fuel switching.

42. The current tiered rates without a HPWH rate adjustment could disincentivize customers from fuel switching.

43. The Commission does not have sufficient information regarding customers' propane use to consider any change to the current enrollment of customers on the all-electric baseline.

## **Conclusions of Law**

### Incentive Layering

1. The Commission should adopt guidance on incentive layering to coordinate and administer incentives across multiple building decarbonization programs efficiently and effectively.

2. It is important to ensure that building decarbonization program participants have a seamless experience to maximize program uptake. The TECH Initiative implementer should develop a single online platform where distributors and contractors can submit and track applications for multiple programs at once.

### The WNDRR Program

3. The Commission should adopt the WNDRR Program to provide incentives and support owners of residential properties in rebuilding lower-carbon, all-electric homes after wildfires and other natural disasters.



4. The WNDRR Program should be adopted on the terms described in Appendix B.

5. SCE should serve as the WNDRR Program administrator and contracting agent with the duties and responsibilities stated in the body of this order and Appendix B, and should maintain the expanded WNDRR Program Service List described in this decision (with Energy Division Staff input and oversight) for service of advice letters, notices of meetings, and other necessary program purposes.

6. SCE should establish an interest-bearing balancing account to clearly and transparently record: (a) total \$50 million WNDRR Program funds collected and disbursed, (b) total funds spent and received for SCE to fulfill its duties as program administrator and contracting agent, and (c) total payment SCE makes for its share of the WNDRR \$50 million budget and revenues received via its PPP charges.

7. Each participating IOU, other than SCE, should establish an interest-bearing WNDRR Program balancing account to clearly and transparently record the payment each IOU transmits to SCE to pay each IOU's WNDRR Program funding obligation and the revenues received via its PPP charges.

8. Each participating electric IOU should be permitted to seek additional program funds in anticipation of emergencies reasonably foreseeable after the \$50 million initial funding has been spent or is projected to be spent.

9. The program administrator should submit advice letters as provided in the body of this order and in Appendix B.

#### Data Sharing

10. It is necessary to provide guidance on data sharing to ensure complete and timely access of information to the program implementers and evaluators, and

the consistency of data sharing across the BUILD Program, the TECH Initiative, and the WNDRR Program.

11. The Commission should adopt a policy directive to examine possible rate adjustments for residential customers who install electric heat pump water heaters. The three large electric IOUs should be directed to collect propane use information from their new customers to provide information to assist in future treatment of propane use with all-electric service.

12. It is necessary to share both participating and non-participating customers' data with the implementer and evaluators of the building decarbonization programs for the purposes of evaluations of these programs.

#### HPWH Rate Adjustments and Propane Usage

13. The three large IOUs should first study net energy bill impacts resulting from customers switching from a natural gas water heater to an electric HPWH as soon as feasible.

14. If an IOU's study show a net increase in customers' net energy bills resulting from fuel switching, it should propose a rate adjustment to eliminate the financial disincentive for HPWH adoption in a new RDW application to be filed within six months from the date of issuance of this decision.

15. The IOUs should collect information from their new customers regarding space and water heating, and propane usage.

16. Rulemaking 19-01-011 should remain open to address what other policies, rules, and procedures the Commission should adopt to facilitate building decarbonization.

17. This decision should be effective today to permit timely implementation of incentives and relief for participants of the WNDRR Program, rate adjustment

proposals for customers installing new HPWH, and other elements of this decision.

## **O R D E R**

**IT IS ORDERED** that:

1. The guiding principles and requirements for incentive layering of various building decarbonization programs in Appendix A of this decision are adopted.
2. The Wildfire and Natural Disaster Resilience Rebuild (WNDRR) Program in Appendix B of this decision is adopted.
  - (a) Participating electric investor-owned utilities (IOUs) are: Southern California Edison Company (SCE), Pacific Gas and Electric Company (PG&E), San Diego Gas & Electric Company (SDG&E), Liberty Utilities (CalPeco Electric) LLC, Bear Valley Electric Service, Inc. and PacifiCorp, dba Pacific Power.
  - (b) Participating community choice aggregators (CCAs): Each CCA within the service area of a participating electric IOU is included unless the CCA specifically by written Notice declines. Within 30 days of the date this decision is issued, each IOU shall provide notice of the WNDRR Program to each CCA in its service territory.
  - (c) The WNDRR Program shall be funded with a single payment made by each participating IOU within 60 days after the advice letter establishing the necessary balancing account is effective, in the amount stated in Appendix B, and each IOU shall recover the amount of its payment from the IOUs' residential customers through non-bypassable Public Purpose Program (PPP) charges amortized over one year.
  - (d) SCE shall be the program administrator and contracting agent and, as administrator and agent, shall have the roles and responsibilities stated in the body of this order and Appendix B.

- (e) The program implementer and program evaluator shall have the roles and responsibilities stated in the body of this order and Appendix B.
- (f) SCE shall submit a Tier 1 Advice Letter within 30 days from the issuance of this decision to establish an interest bearing balancing account that clearly and transparently records all necessary components including (a) Total WNDRR Program, (b) SCE as Contracting Agent, and (c) SCE's share of the WNDRR Program budget.
- (g) Each IOU, except SCE, shall submit a Tier 1 Advice Letter within 30 days from the issuance of this decision to establish a WNDRR Program balancing account to record its (1) payment to SCE to fund the WNDRR Program and (2) recovery of that payment from residential customers over one year via non-bypassable PPP charges.
- (h) SCE shall submit advice letters on behalf of itself, the program implementer, and the program evaluator as stated in the body of this order and Appendix B.
- (i) Eligibility for the program and program incentives shall be as stated in the body of this order and Appendix B.

3. The guidance on data sharing in Appendix C of this decision is adopted. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company shall comply with the data sharing guidance in Appendix C as directed by the Commission.

4. Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (utilities) shall address electric heat pump water heater (HPWH) barrier equitably, efficiently, and reasonably to avoid delay.

- (a) The utilities shall each study the net electric and gas bill impacts that result when a residential customer switches from a natural gas water heater to an electric HPWH (fuel switching). The utilities shall submit and file their

studies to the Commission through a Tier 3 Advice Letter within 90 days of the issuance of this decision.

- (b) If a utility's study show a net increase in customers' net energy bills resulting from fuel switching, the utilities shall propose a rate adjustment for their residential customers who install electric HPWH in a new Rate Design Window application within six months of the issuance of this decision. The utilities' proposals shall comply with the requirements as set forth in Appendix D.

5. Beginning July 1, 2022, Pacific Gas and Electric Company, Southern California Edison Company, and San Diego Gas & Electric Company (utilities) shall collect the information described in Appendix D regarding space heating, water heating, and propane usage from their new residential customers. The utilities shall report that information annually to the Energy Division beginning February 1, 2023.

6. Rulemaking 19-01-011 remains open.

This order is effective today.

Dated November 4, 2021, at San Francisco, California.

MARTHA GUZMAN ACEVES  
CLIFFORD RECHTSCHAFFEN  
GENEVIEVE SHIROMA  
DARCIE HOUCK  
Commissioners

President Marybel Batjer, being  
necessarily absent, did not participate.