



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

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Application of Southern California Edison  
Company (U 338-E) for Approval for Its Building  
Electrification Programs

Application 21-12-XXX

**APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR  
APPROVAL OF ITS BUILDING ELECTRIFICATION PROGRAMS**

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**APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY (U 338-E) FOR  
APPROVAL OF ITS BUILDING ELECTRIFICATION PROGRAMS**

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**I.**

**INTRODUCTION**

**A. California’s Climate Goals**

To combat climate change, California has set ambitious goals – a greenhouse gas (GHG) emissions target of 1990 levels by 2020,<sup>1</sup> emission reductions to 40% below 1990 levels by 2030,<sup>2</sup> and statewide carbon neutrality by 2045.<sup>3</sup> As a result of this focus, California has reduced GHG emissions by an average of 1% per year since 2006.<sup>4</sup> But to meet the 2030 goal, 1% reduction per year is not enough; California would have to reduce emissions by 4.1% on average

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<sup>1</sup> See California Assembly Bill (AB) 32 “Global Warming Solutions Act” (2006).

<sup>2</sup> See California Senate Bill (SB) 32 (2016).

<sup>3</sup> See California Executive Order B-55-18 (2018).

<sup>4</sup> See California Air Resources Board (CARB), California Greenhouse Gas Emissions for 2000 to 2019: Trends of Emissions and Other Indicators, ( July 2021), *available at* [https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000\\_2019/ghg\\_inventory\\_trends\\_00-19.pdf](https://ww3.arb.ca.gov/cc/inventory/pubs/reports/2000_2019/ghg_inventory_trends_00-19.pdf).

each year between 2019 and 2030 to meet its 2030 GHG reduction goal.<sup>5</sup> Current pilots and programs are not commensurate with the scale and timing of action needed to ramp up decarbonization. Based on the state’s current trajectory, there could be a 30 to 90 million metric ton (MMT) gap in reaching California’s 2030 decarbonization goals.<sup>6</sup> With only about eight years remaining to reach this goal, the state must launch market transformation initiatives to pursue carbon neutrality with unprecedented urgency and commitment.

**B. The Right Next Step – Building Electrification**

To achieve the state’s goals for emissions reduction, building electrification (BE) must play a vital role<sup>7</sup> across all sectors of the economy. BE eliminates carbon-emitting fossil fuel appliances by replacing gas appliances, such as space and water heating, with clean, efficient, all-electric heat pumps -- and in certain cases, induction cooktops and efficient electric dryers. BE is one of the most affordable and feasible options to decarbonize the economy.<sup>8</sup> Combined

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<sup>5</sup> *Id.*

<sup>6</sup> Edison International, Mind the Gap – Policies for California’s countdown to 2030, (Sep. 2021), at p.3, *available at* <https://www.edison.com/home/our-perspective/mind-the-gap.html> (hereinafter “Mind the Gap”). The 30 MMT calculation assumes emission reduction prescriptive policies in CARB’s 2017 Scoping Plan, 60% RPS and 5 million electric vehicles goal by 2030 and the 90 MMT calculation assumes the average annual historical reductions since 2006 using the CARB Emissions Inventory, 2021 Edition.

<sup>7</sup> The California Energy Commission (CEC) concluded that reducing direct emissions in buildings requires a shift toward electric end uses and that electrification must be a major component of any decarbonization plan. Residential and commercial buildings account for approximately 25% of California’s GHG emissions, and approximately 40% of buildings-related emissions — 10% of the state total — are due to onsite combustion, primarily of fossil gas. *See* CEC Report, California Building Decarbonization Assessment, (2021) at p. 33, *available at* <https://efiling.energy.ca.gov/GetDocument.aspx?tn=239311> (hereinafter “CEC Building Decarbonization Assessment”).

<sup>8</sup> SCE found that the marginal abatement cost for space and water heating electrification measures in 2030 to be some of the most affordable ways to help reach California’s 2030 decarbonization target. *See* SCE-02 GHG marginal abatement cost analyses at p. 6; SCE, Clean Power and Electrification Pathway, at Appendix p. 5, Table 3, *available at* <https://www.edison.com/home/our-perspective/clean-power-and-electrification-pathway.html>.

*See also* CEC Building Decarbonization Assessment, p. 4 (*infra* FN 7); CEC, Deep Decarbonization in a High Renewables Future, Energy and Environmental Economics, (June 2018), Figure 25, *available at* <https://www.ethree.com/wp->

Continued on the next page

with a cleaner electric supply and transportation electrification, building electrification is a key component of the cost-effective economy-wide solution needed to achieve state objectives. It also saves overall building energy usage, improves customers' health and safety by eliminating indoor and outdoor pollutants emitted by fossil fuel appliances,<sup>9</sup> enhances grid reliability by leveraging load management technology and existing demand-side flexibility program options for customers, and, over time, creates downward rate pressure.

Numerous studies analyzing the most feasible and cost-effective paths to achieving the state's GHG reduction goals include high levels of building electrification as a foundational pillar.<sup>10</sup> To achieve our state's carbon neutrality targets, one-third of building space and water heating will need to be electric by 2030 and almost three-quarters by 2045.<sup>11</sup> However, current penetration and forecasted adoption of electric water and space heating appliances, especially existing available, efficient heat pump technologies, are severely lagging behind the necessary adoption levels.<sup>12</sup> With existing state policies and the current rate of technology adoption,

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content/uploads/2018/06/Deep\_Decarbonization\_in\_a\_High\_Renewables\_Future\_CEC-500-2018-012-1.pdf.

See also Evolved Energy Research, Marginal Abatement Cost Curves for U.S. Net-Zero Energy Systems, (July 2021), Figure 12, *available at* <https://www.evolved.energy/post/mac2-0>.

<sup>9</sup> “One significant concern regarding appliance ventilation failure is pollutant backdraft and resulting spillage, which put residents at greater risk of CO poisoning. Backdraft refers to the backward movement of exhausted gases through the venting system, and spillage refers to the resulting leakage of exhausted gases from the appliance into the indoor environment, which leads to the buildup of pollutants inside the home.” University of Southern California (UCLA), Effects of Residential Gas Appliances and Indoor and Outdoor Air Quality and Public Health in CA, p. 14, *available at* <https://coeh.ph.ucla.edu/effects-of-residential-gas-appliances-on-indoor-and-outdoor-air-quality-and-public-health-in-california/>.

<sup>10</sup> Examples of these studies include:

1. CEC Building Decarbonization Assessment, p. 4 (*infra* FN 7).
2. The White House, United States Mid-Century Strategy for Deep Decarbonization, (Nov. 2016), p. 60, *available at* [https://unfccc.int/files/focus/long-term\\_strategies/application/pdf/mid\\_century\\_strategy\\_report-final\\_red.pdf](https://unfccc.int/files/focus/long-term_strategies/application/pdf/mid_century_strategy_report-final_red.pdf).

<sup>11</sup> SCE, Pathway 2045 (2019) at p. 11, *available at* <https://www.edison.com/home/our-perspective/pathway-2045.htm> (hereinafter “Pathway 2045”).

<sup>12</sup> See e.g., CEC Building Decarbonization Assessment (*infra* FN 7).

California is at substantial risk of not reaching sufficient building electrification adoption to reduce emissions to 40% below 1990 levels by 2030. Without additional actions and incentives now to replace gas-fueled equipment at (or near) end of life, the building electrification gap will continue to grow in the first half of this decade and the need to replace the gas equipment well before its end of useful life will become more pressing, which could ultimately result in significantly costlier initiatives. Ramping up building electrification as soon as possible will avoid unnecessary costs later.

The need for significant investment in BE is further demonstrated by the fact that current transportation electrification programs are only authorized through 2024, leaving approximately six years for additional and complementary policies and programs to close the gap by 2030. With inaction and delay, the climate crisis worsens and disproportionately burdens low-income and vulnerable communities.

**C. Acting Fast and in Concert to Close the Gap**

The rate of transition required to achieve a decarbonized economy is unprecedented, but also achievable<sup>13</sup> with clear commitment and prompt action.<sup>14</sup> SCE's Application is rooted in our perspective that the Commission and electric utilities can play a role in transforming the market to accelerate BE.<sup>15</sup> The Commission and investor-owned electric utilities have often played a critical role in facilitating nascent markets in California's electricity sector. For example, Commission-authorized utility participation in energy efficiency, demand response, solar, and transportation electrification programs created demand for new GHG reducing resources and

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<sup>13</sup> For example, the CARB emphasized the importance of integrating building and appliance electrification to reduce both GHG and air pollution, and acknowledged these targets can be achieved through utility incentives, rebates, and other programs. See CBRB California's 2017 Climate Change Scoping Plan, p. ES 11, *available at* [https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping\\_plan\\_2017.pdf](https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf).

<sup>14</sup> Mind the Gap (*supra* FN 6).

<sup>15</sup> Pathway 2045 (*supra* FN 11).

technologies and helped enable market participants to raise capital, innovate, and reach a sustainable scale.

To meet the state's goals, the market needs to deliver clean, efficient electric equipment as the default. Building codes can help drive this for new construction, and SCE's proposal here of a market transformation program for the retrofit market will help create the push needed to spur market readiness and adoption and can rapidly build the conditions for code adoption.

In addition to those considerations, SCE's proposed portfolio is not intended to be a long-term incentive program, but rather to help transform the market while assisting customers who are least able to pay for retrofits on their own. Nor is it intended to be the entire solution; it addresses about 15% of the gap for electric heat pump adoption in SCE's service territory by 2030. To further narrow the gap, we will need complementary support from the legislature, regulatory agencies, and private actors. Federal and state grant programs or projects, such as the Infrastructure Investment and Jobs Act passed in November 2021, could also provide supportive funding to help close the overall heat pump adoption gap that SCE is addressing in part through its proposal, though they would only address a portion of the need. SCE's BE portfolio will serve as a force multiplier for concurrent efforts to reduce GHG emissions associated with energy use in buildings.<sup>16</sup>

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<sup>16</sup> For example, SCE's BE programs enable electrification and will incorporate the following incentive layering guiding principles: (1) ease of participation, (2) complementary incentives, (3) non-duplicative attribution of program benefits, and (4) ongoing coordination between program administrators and implementers. *See* D.21-11-002, Ordering Paragraph 1 and Appendix A. The proposed BE programs will coordinate closely with programs authorized by D.20-03-027 [Technology and Equipment for Clean Heating (TECH) Initiative and Buildings Initiative for Low Emission Development (BUILD) Program], the Energy Savings Assistance (ESA) Program and building electrification pilots, energy efficiency fuel substitution measures and other related programs to increase operational efficiency and minimize duplication of efforts.



## II.

### **OVERVIEW OF SCE'S REQUEST**

Pursuant to Rule 2.1 of the Rules of Practice and Procedure of the California Public Utilities Commission (“CPUC” or “Commission”), and Public Utilities Code Section 850 et seq., SCE seeks the Commission’s approval for its BE programs for 2024-2027, emphasizing vulnerable customers most likely to otherwise be left behind in the clean energy transition.

To help maximize the GHG reduction from buildings and equitably accelerate the adoption of electric heat pumps, SCE requests that the Commission:

- i. Approve SCE to recover \$677 million through distribution rates for its BE programs for 2024-2027 as described in SCE-03, to support the installation of approximately 250,000 heat pumps and provide electrical upgrades for 65,000 households;
- ii. Approve proposed funding (about 88 percent) for residential customers that offers no- or low-cost retrofit assessments, electrification appliances, and panel/circuit upgrades with a strategic emphasis on low income customers and vulnerable communities:
  - a. BE Ready Home (for residential customers),
  - b. BE Ready Catalina (for residents of Santa Catalina Island);
- iii. Approve proposed funding (about 12 percent) for BE Business (for non-residential customers), with a strategic emphasis on targeting businesses that are located in Environmental and Social Justice (ESJ) and other vulnerable communities.
- iv. Allow SCE to adjust the BE portfolio at mid-cycle, if necessary, via a tier 2 advice letter process.

If the Commission approves SCE’s proposal, SCE anticipates starting implementation in 2023 and beginning operations in early 2024, continuing through the end of 2027, with a mid-cycle review in late 2025 or early 2026. SCE believes that this is the right program for right now, but the policy and market landscape could evolve, and with ongoing program evaluation, SCE hopes to be able to address program gaps or needed changes at a mid-cycle review.

**A. SCE's Application is Designed to Equitably Help Reach California's 2045 GHG Goals**

SCE's BE portfolio is designed to maximize GHG reduction by reducing the BE heat pump adoption gap through a market transformation approach. Decarbonizing California's economy will only be successful if the transition remains affordable and equitable to all Californians, and SCE developed its BE portfolio with a specific focus on low-income customers and ESJ communities. Thus, SCE developed programs for market segments where SCE is uniquely situated to address barriers to quickly accelerate the adoption of building electrification technologies.

SCE also balanced scale and affordability. SCE's BE portfolio needs to be impactful enough to address such a large GHG reduction target, and maximizing heat pump adoption also realizes long-term downward rate pressure as each new heat pump installed realizes many years of new efficient electricity usage that benefits all ratepayers relative to the fixed costs of the electric system. A corresponding consideration in the near-term is the upward rate pressure due to the cost of incentives and other operation & maintenance (O&M) expenses during the program years and the capital costs spread over many years.

This Application is expected to create downward rate pressure for residential customers by 2028, resulting in a ten-year average residential bill reduction after program close-out (2028 to 2037) of up to -\$3/year.<sup>17</sup> The system average rate is expected to result in reductions by 2031. To further help with affordability during program years, SCE is requesting regulatory asset treatment (i.e., capitalization) for incentives for customer-side infrastructure, such as electric panels.<sup>18</sup> Treating the customer-side infrastructure as a regulatory asset will benefit ratepayers as

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<sup>17</sup> Reductions in future rates presented herein consider only the incremental costs and benefits of SCE's BE Application and do not include other assumptions regarding future planned or potential revenue increases.

<sup>18</sup> The Commission has found it appropriate in the past to grant regulatory asset treatment for customer side infrastructure, as it did in its ten-year program to upgrade the electrical service to all residents within mobile home parks. *See* D.20-04-004, p. 117.

costs that would have been expensed during the program years are now spread over the life of the asset,<sup>19</sup> resulting in a reduction of the upfront spend and near-term rate increase. It also increases intertemporal equity as the customer rate impacts are aligned with the benefits of the program and therefore, current customers do not subsidize benefits enjoyed by future customers. Under this proposal, in the near-term, the average bill impact for 2024 – 2027 for a residential customer is an increase of only \$1.11/month.<sup>20</sup>

**B. Revenue Requirement and Cost Recovery**

SCE requests approval to recover the revenue requirements associated with no more than \$677.2 million (2021\$), without the need for reasonableness review for spend less than 110% of the approved budget. This budget request includes direct capital expenditures, regulatory asset-related expenses, and O&M expenses related to its BE Programs, including marketing, education, and outreach costs, as shown in the table below.<sup>21</sup> This request includes all aspects of SCE's proposed BE Ready Home, BE Ready Catalina, and BE Business for the period from 2024 to 2027. SCE requests to record the actual BE programs revenue requirement each month in a new one-way balancing account Building Electrification Programs Balancing Account (BEPBA).

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<sup>19</sup> Electric service panels have an expected life of about 50 years, while the circuit breakers within have an expected life of about 35 years; however, given the need to balance this expected useful life with the possibility of obsolescence due to reconstruction, redevelopment or other building improvements and renovation, or code changes and technology improvements, SCE is recommending recovery over 20 years. This period essentially balances the potential life of the asset with the potential for obsolescence unrelated to function.

<sup>20</sup> This bill impact is derived from a model that includes an estimate of the rate reductions from the additional sales (kWh) based on the appliances installed by the BE portfolio proposed in this Application. Further, the SCE's analysis utilizes a model developed specifically for the BE Application to capture these benefits. In comparison, the rate and bill impact of \$1.35 in SCE's notice of application (*supra*, Section III.G, p. 18) is from simpler model routinely used for compliance notices of rate impacts, but is overstated.

<sup>21</sup> For utility side infrastructure (Meter Services and Line Extension) capital expenditures for years beyond the 2024 to 2027 forecast requested in this application, SCE will incorporate these costs in a future General Rate Case (GRC) (likely SCE's 2029 GRC) assuming the program is matured.

<i>SM, 2021 dollars</i>	<b>BE Ready Home</b>	<b>BE Ready Catalina</b>	<b>BE Business</b>	<b>Total</b>	<b>Notes</b>
<b>Capital</b>	<b>67.1</b>	<b>2.1</b>	<b>-</b>	<b>69.2</b>	
Utility-Side Infrastructure	67.1	2.1	-	69.2	Meter, service, line extension, underground civil work
<b>Regulatory Asset</b>	<b>193.6</b>	<b>6.2</b>	<b>-</b>	<b>199.8</b>	
Customer-Side Infrastructure	193.6	6.2	-	199.8	Home electric panels, circuits, and wiring
<b>O&amp;M</b>	<b>318.0</b>	<b>7.2</b>	<b>83.0</b>	<b>408.2</b>	
Direct Implementation - Other	47.4	1.2	11.0	59.7	3rd party Program Implementer, Program Database, Engineering Support, Market Analysis/Assessment
Customer Appliance Incentives	219.9	3.6	56.0	279.5	% of customer equipment installation & equipment costs
Heat Pump HVAC	69.7	0.9	56.0	126.5	
Heat Pump Water Heaters	150.2	2.3	-	152.5	
Electric Cooktops	-	0.4	-	0.4	
Electric Clothes Dryers	-	0.1	-	0.1	
SCE Labor	20.9	1.6	10.0	32.5	Administrative and Direct Implementation labor; includes CCC, BCD, T&D, Marketing and Evaluation
Program Marketing & Evaluation	29.7	0.7	6.0	36.5	Events, Advertising, Campaigns, and Independent Evaluator
Marketing	20.6	0.5	5.0	26.0	Research, marketing labor, communication, education
Measurement & Evaluation	9.1	0.3	1.1	10.5	
<b>Total</b>	<b>578.6</b>	<b>15.6</b>	<b>83.0</b>	<b>677.2</b>	

**C. Building Electrification Supports the Public Interest and Provides Net Benefits to Customers.**

In addition to significantly reducing GHG emissions as described above, decarbonizing buildings provides health savings and societal benefits to California:

- **Equity to vulnerable populations** – Electrification provides low-income communities access to major benefits such as cleaner air, healthier homes, and good jobs. It also enables greater access to clean electricity and energy efficiency to reduce overall monthly energy bills, while helping the state meet its climate goals, including

a net-zero carbon economy and 100% clean electricity by 2045.<sup>22</sup> The programs proposed in this Application will prioritize vulnerable communities and customers by providing increased support for renters and owners through incentives/direct install offerings, minimization of procedural burdens, and long-term cost savings.

- **Ready the Market** – Incentivizing customers who wish to electrify will help to scale up the market and enable stronger codes and standards, which are based on market analysis and assessment of cost-effectiveness. An at-scale building electrification program will help to enable a mature regional market of technologies, designers, and installers to create market conditions that streamline building electrification for adoption in state and national codes.
- **Reduction in Air Pollution** - Nitrogen oxides (NO<sub>x</sub>), carbon monoxide, and other pollutants from fossil fuel combustion negatively affect Californians' health, and 93% of Californians live in ozone non-attainment areas.<sup>23</sup> In California, researchers have estimated that emissions reductions from increased building electrification will also have significant impacts on air quality, including a reduction in fine airborne particulate matter and ozone levels.<sup>24</sup>
- **Indoor air quality and health benefits** - Currently, the majority of homes rely on gas appliances for heating and cooking. In 2020, the Rocky Mountain Institute published a study demonstrating that gas stoves may be exposing people to levels of

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<sup>22</sup> The Greenlining Institute, Equitable Building Electrification: A Framework for Powering Resilient Communities, (Sept. 2019), *available at* [https://greenlining.org/wp-content/uploads/2019/10/Greenlining\\_EquitableElectrification\\_Report\\_2019\\_WEB.pdf](https://greenlining.org/wp-content/uploads/2019/10/Greenlining_EquitableElectrification_Report_2019_WEB.pdf).

<sup>23</sup> CEC, Exploring Economic Impacts in Long-Term California Energy Scenarios, (June 2018), *available at* <https://www.energy.ca.gov/2018publications/CEC-500-2018-013/CEC-500-2018-013.pdf>.

<sup>24</sup> Zapata, C. B., Yang, C., Yeh, S., Ogden, J., & Kleeman, M. J., Low-carbon energy generates public health savings in California. Atmospheric Chemistry and Physics, (April 2018), *available at* <https://www.atmos-chem-phys.net/18/4817/2018/acp-18-4817-2018.pdf>.

air pollution that would be illegal outdoors under national air quality standards.<sup>25</sup> Gas stoves can be a large source of toxic pollutants indoors, and they increase the risk of respiratory illnesses.<sup>26</sup> SCE's proposal prepares the home for electrification by incentivizing electric panel upgrades and circuits, where needed, in all the residential programs. As described in SCE-02, SCE's proposed BE Ready Catalina program also provides equipment incentives for induction cooking and efficient electric dryers.

- **Consumer cost savings** - In E3's 2019 study which evaluated the economic and GHG impacts of building electrification, 84% of customers in existing single family homes across representative climate zones throughout California could expect to see lifecycle cost savings from installing heat pump HVAC and water heater systems.<sup>27</sup> In addition to the overall energy expenditure savings customers may realize from adopting heat pump HVAC and water heating systems, building electrification has the potential to lower the cost of electric service for all electric customers by spreading fixed costs over a larger base of kWh sales.<sup>28</sup>
- **Economic development benefits** - The CEC estimates that its long-term low carbon energy scenarios, which include building electrification, would produce over 500,000 jobs by 2030, the majority of which would be in disadvantaged communities.<sup>29</sup> UCLA Luskin estimates building electrification in California could support an

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<sup>25</sup> Rocky Mountain Institute, Health Effects from Gas Stove Pollution (2020), p. 5, *available at* <https://rmi.org/insight/gas-stoves-pollution-health/>.

<sup>26</sup> *Id.*

<sup>27</sup> Energy and Environmental Economics, Inc., Residential Building Electrification in California, Energy + Environmental Economics, (April 2019), p. 79, *available at* [https://www.ethree.com/wp-content/uploads/2019/04/E3\\_Residential\\_Building\\_Electrification\\_in\\_California\\_April\\_2019.pdf](https://www.ethree.com/wp-content/uploads/2019/04/E3_Residential_Building_Electrification_in_California_April_2019.pdf).

<sup>28</sup> Details about estimated rate impacts and downward pressure on electric rates are discussed in SCE-03.

<sup>29</sup> CEC, Exploring Economic Impacts in Long-Term California Energy Scenarios, (June 2018), *available at* <https://ww2.energy.ca.gov/2018publications/CEC-500-2018-013/CEC-500-2018-013.pdf>.

average of 64,200–104,100 additional jobs annually, after accounting for losses in the gas industry.<sup>30</sup>

#### **D. Organization of Testimony**

Concurrent with the filing of this Application, SCE is serving supporting prepared testimony on Commission staff members and interested parties showing why its BE proposal is reasonable and should be approved. The testimony is preliminarily designated as follows:

- Exhibit SCE-01: Policy
  - Chapter I, Executive Summary, covers highlights of SCE’s plan and objectives.
  - Chapter II, Organization of SCE’s Testimony, describes the organization of SCE’s plan.
  - Chapter III, SCE’s Building Electrification Proposal Mitigates Climate Change and Benefits All Customers, provides SCE’s vision and policy overview.
- Exhibit SCE-02: Portfolio and Programs
  - Chapter I, SCE’s Building Electrification Portfolio, explains the overall goal that the building electrification portfolio aims to achieve, and the key principles that guide its strategy.
  - Chapter II, SCE’s Building Electrification Programs, describes each program in detail by description, project objective, equity or unique market focus, program rationale, other gaps and customer needs addressed by program, scope/program design, load management, metrics, program evaluation, and budget.
- Exhibit SCE-03: Cost Recovery
  - Chapter I, Description of SCE’s Cost Recovery Proposals, demonstrates cost recovery mechanisms to fund the building electrification programs.
- Exhibit SCE-04: Appendices, includes witness qualifications and the glossary.

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<sup>30</sup> UCLA Luskin Center for Innovation, California Building Decarbonization Workforce Needs and Recommendations, (Nov.2019), *available at* [https://innovation.luskin.ucla.edu/wp-content/uploads/2019/11/California\\_Building\\_Decarbonization.pdf](https://innovation.luskin.ucla.edu/wp-content/uploads/2019/11/California_Building_Decarbonization.pdf).

### III.

#### **STATUTORY AND PROCEDURAL REQUIREMENTS**

##### **A. Rule 2.1 (a) – (c)**

###### **1. Rule 2.1 (a) - Legal Name**

Rule 2.1(a) of the Commission's Rules of Practice and Procedure require all applications to state the exact legal name of each applicant and the location of principal place of business, and if an applicant is a corporation, trust, association, or other organized group, the State under the laws of which such applicant was created or organized.

The full legal name of the applicant herein is Southern California Edison Company. SCE is a corporation organized and existing under the laws of the State of California, and is primarily engaged in the business of generating, purchasing, transmitting, distributing, and selling electric energy for light, heat, and power in portions of central and southern California as a public utility subject to the jurisdiction of the Commission. SCE's properties, which are substantially within the State of California, primarily consist of hydroelectric and thermal electric generating plants, together with transmission and distribution lines and other property necessary in its business.

SCE's principal place of business is 2244 Walnut Grove Avenue, Rosemead, California, and its post office address and telephone number are:

Southern California Edison Company

Post Office Box 800

Rosemead, California 91770

Telephone: (626) 302-1212

###### **2. Rule 2.1 (b) – Correspondence**

Rule 2.1(b) of the Commission's Rules of Practice and Procedure require all applications to state the name, title, address, telephone number, facsimile transmission number, and e-mail address of the person to whom correspondence or communications regarding the application are to be addressed.



SCE's attorneys in this matter are Anna Valdborg and R. Olivia Samad.

Correspondence or communications regarding this application should be addressed to:

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Rosemead, CA 91770  
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**3. Rule 2.1 (c)**

a) Proposed Category of Proceeding

SCE proposes that this Application be categorized as a ratesetting proceeding pursuant to Commission Rule of Practice and Procedure 1.3(e) and 7.1(e)(2).

b) Need for Hearings

The need for hearings in this proceeding, and the issues to be considered in such hearings, will depend in large part on the degree to which other parties contest SCE's requests. The need for hearings will ultimately be determined by the assigned Administrative Law Judge(s). SCE proposes a sample schedule as if hearings are needed.

c) Issues to be Considered, including Relevant Safety Considerations<sup>31</sup>

The primary issue to be considered in this proceeding is the reasonableness of SCE's building electrification proposal as described in Section II (Overview of SCE's Application) above and in more detail in SCE's supporting testimony served concurrently with this Application. Relevant safety considerations are discussed in Exhibit SCE-02, in Section I.C.2.

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<sup>31</sup> Pursuant to D.16-01-017, the Commission has revised Rule 2.1(c) to include relevant safety considerations, effective as of July 1, 2016.

d) Proposed Schedule

SCE proposes a schedule to give us the best chance to close the growing gap in reaching California's 2030 decarbonization goals. To allow the Commission to issue a timely final decision in this proceeding, SCE requests the Commission to process the present application according to the following schedule:

<u>Date</u>	<u>Event</u>
Application filed:	December 20, 2021
Protests / Responses Due (30 days after Notice of Application appears in the Commission Daily Calendar)	January 21, 2022*
Reply to Protests (SCE files replies to protests and responses within 10 days of the last day for filing protests and responses)	January 31, 2022*
Pre-Hearing Conference (PHC)	February 7, 2022
Intervenor Testimony due: (12 weeks after SCE's testimony is served, or 4 weeks from PHC)	March 21, 2022
SCE Rebuttal Testimony due (8 weeks after intervenor testimony)	May 20, 2022
Hearings held (if needed): (2 weeks after rebuttal testimony)	June 3, 2022
Concurrent Opening Briefs:	July 2022
Concurrent Reply Briefs: (3 weeks after opening briefs)	August 2022
Proposed Decision:	September 2022
Comments on Proposed Decision: (20 days from the date of issuance)	October 2022
Replies to Comments: (5 days later)	October 2022
Final Commission Decision:	November 2022
* dates could change based on when things appear on the daily calendar	

**B. Rule 2.2 – Articles of Incorporation**

In compliance with Rule 2.2, a copy of SCE's Certificate of Restated Articles of Incorporation, effective on March 2, 2006, and presently in effect, certified by the California Secretary of State, was filed with the Commission on March 14, 2006, in connection with A.06-03-020, and is incorporated herein by this reference.

A copy of SCE's Certificate of Restated Articles of Incorporation, effective on March 2, 2006, and presently in effect, certified by the California Secretary of State, was filed with the Commission on March 14, 2006, in connection with Application No. 06-03-020, and is incorporated herein by this reference pursuant to Rule 2.2 of the Commission's Rules of Practice and Procedure.

A copy of SCE's Certificate of Determination of Preferences of the Series D Preference Stock filed with the California Secretary of State on March 7, 2011, and presently in effect, certified by the California Secretary of State, was filed with the Commission on April 1, 2011, in connection with Application No. 11-04-001, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series E Preference Stock filed with the California Secretary of State on January 12, 2012, and a copy of SCE's Certificate of Increase in Authorized Shares of the Series E Preference Stock filed with the California Secretary of State on January 31, 2012, and presently in effect, certified by the California Secretary of State, were filed with the Commission on March 5, 2012, in connection with Application No. 12-03-004, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series F Preference Stock filed with the California Secretary of State on May 14, 2012, and presently in effect, certified by the California Secretary of State, was filed with the Commission on June 29, 2012, in connection with Application No. 12-06-017, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series G Preference Stock filed with the California Secretary of State on January 24, 2013, and presently in effect, certified by the California Secretary of State, was filed with the Commission on January 31,

2013, in connection with Application No. 13-01-016, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series H Preference Stock filed with the California Secretary of State on February 28, 2014, and presently in effect, certified by the California Secretary of State, was filed with the Commission on March 24, 2014, in connection with Application No. 14-03-013, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series J Preference Stock filed with the California Secretary of State on August 19, 2015, and presently in effect, certified by the California Secretary of State was filed with the Commission on October 2, 2015, in connection with Application No. 15-10-001, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series K Preference Stock filed with the California Secretary of State on March 2, 2016, and presently in effect, certified by the California Secretary of State, was filed with the Commission on April 1, 2016, in connection with Application No. 16-04-001, and is incorporated herein by this reference.

A copy of SCE's Certificate of Determination of Preferences of the Series L Preference Stock filed with the California Secretary of State on June 20, 2017, and presently in effect, certified by the California Secretary of State, was filed with the Commission on June 30, 2017, in connection with Application No. 17-06-030, and is incorporated herein by this reference.

Copies of SCE's latest Annual Report to Shareholders and Edison International's latest proxy statement sent to its stockholders has been filed with the Commission with a letter of transmittal dated March 12, 2021, pursuant to General Order Nos. 65-A and 104-A of the Commission.

**C. Balance Sheet and Income Statement – Rule 3.2(a)(1)**

In compliance with Rule 3.2(a)(1), Appendix A to this Application contains copies of SCE's balance sheet as of September 30, 2021, and income statement for the period ending September 30, 2021, the most recent period available.

**D. Present and Proposed Rates – Rule 3.2(a)(2) And Rule 3.2(a)(3)**

The presently effective rates and the illustrative changes proposed to be made to those rates are discussed in this Application in Section III.D and reflect rates as of October 1, 2020. The proposed rates are illustrative and will be updated consistent with the Commission's decision(s) in this proceeding (including a decision on SCE's Motion for Partial Interim Rate Recovery) to reflect SCE's then-current authorized revenues when such rates are implemented.

SCE's current rates and charges for electric service are in its electric tariffs and schedules on file with the Commission. These tariffs and schedules are filed with and made effective by the Commission in its decisions, orders, resolutions, and approvals of advice letter filings pursuant to Commission General Order 96-B.

**E. Summary of Earnings – Rule 3.2(a)(5)**

In compliance with Rule 3.2(a)(5), Appendix B hereto contains a copy of SCE's summary of earnings, updated on August 31, 2021, the most recent period available.

**F. Statement Pursuant to Rule 3.2(a)(10)**

Rule 3.2(a)(10) requires that the "application of electrical ... corporations shall separately state whether or not the increase reflects and passes through to customers only increased costs to the corporation for the services or commodities furnished by it."

**G. Notice – California Public Utilities Code Section 454, Rule 3.2 (b), (c) and (d)**

As required by California Public Utilities Code Section 454, a notice stating in general terms the proposed change will be provided to customers in their monthly bills.<sup>32</sup> The Commission's Public Advisor has reviewed and approved SCE's proposed customer notice.

As required by Rule 3.2(b), a notice stating in general terms the proposed rate change will be mailed to the designated officials of the State of California, and the cities and counties affected by the rate increase proposed in this Application as listed in Appendix C hereto.

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<sup>32</sup> *Infra* FN 20 for more information.

Pursuant to Rule 3.2(c), notice will be published in a newspaper of general circulation in each county in SCE's service territory within which the rate changes would be effective. The cities and counties affected by the rate increase proposed in this Application are shown in Appendix C hereto.

Finally, pursuant to Rule 3.2(d), notice will be furnished to customers affected by the potential rate changes proposed in this Application by including such notice with the regular bills mailed to those customers and by electronically linking to such notice for customer that receive their bills electronically.

**H. Index of Appendices to Application if any**

SCE's submissions in support of this application include the following, which are incorporated herein by reference:

**Appendices to Application**

Appendix A	Balance Sheet and Income Statement
Appendix B	Summary of Earnings
Appendix C	List of Cities and Counties

**I. Service**

The official service list has not yet been established in this proceeding. SCE is serving this application and supporting testimony on the Commission's Public Advocates Office, as well as the service lists established by the Commission for the Rulemaking Regarding Building Decarbonization, Rulemaking (R.) 19-01-011, and for Energy Efficiency, R.13-11-005.

**IV.**

**CONCLUSION**

SCE respectfully requests that the Commission expeditiously approve this Application as filed.

Respectfully submitted,  
R. OLIVIA SAMAD

/s/ R. Olivia Samad  
By: R. Olivia Samad  
Attorney for  
SOUTHERN CALIFORNIA EDISON COMPANY

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December 20, 2021

### **VERIFICATION**

I, Katie Sloan, declare and state:

I am Vice President of Customer Programs and Customer Services for Southern California Edison Company. Pursuant to Rule 2.1 and Rule 1.11 of the Rules of Practice and Procedure of the CPUC, I am authorized to make this Verification on its behalf. I am informed and believe that the matters stated in the foregoing pleading are true.

I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed on December 16, 2021 at Rosemead, California.

/s/ Katie Sloan  
Kathleen “Katie” Sloan Moody  
Vice President of Customer Programs  
and Services  
Southern California Edison Company



**Appendix A**

**Balance Sheet and Income Statement**

SOUTHERN CALIFORNIA EDISON COMPANY

**(h) A balance sheet as of the latest available date, together with an income statement covering the period from close of last year for which an annual report has been filed with the Commission to the date of the balance sheet attached to the application.**

STATEMENT OF INCOME  
NINE MONTHS ENDED SEPTEMBER 30, 2021

(In millions)

OPERATING REVENUE	<u>\$ 11,552</u>
OPERATING EXPENSES:	
Purchase power and fuel	4,384
Operation and maintenance	2,759
Wildfire-related claims, net of insurance recoveries	1,276
Wildfire insurance fund expense	161
Depreciation and amortization	1,655
Property and other taxes	353
Impairment and other expense (income)	68
Total operating expenses	<u>10,656</u>
OPERATING INCOME	896
Interest expense	(593)
Other income	189
INCOME BEFORE TAXES	<u>492</u>
Income tax expense	41
NET INCOME	<u>451</u>
Less: Preferred and preference stock dividend requirements	<u>80</u>
NET INCOME AVAILABLE FOR COMMON STOCK	<u><u>\$ 371</u></u>

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET  
SEPTEMBER 30, 2021  
ASSETS  
(in millions)

UTILITY PLANT:

Utility plant, at original cost	\$ 56,554
Less- accumulated provision for depreciation and decommissioning	11,093
	<u>45,461</u>
Construction work in progress	3,975
Nuclear fuel - at amortized cost	125
	<u>49,561</u>

OTHER PROPERTY AND INVESTMENTS:

Nonutility property - less accumulated depreciation of \$88	187
Nuclear decommissioning trusts	4,769
Other investments	27
	<u>4,983</u>

CURRENT ASSETS:

Cash and equivalents	484
Receivables, less allowances of \$245 for uncollectible accounts	1,606
Accrued unbilled revenue	1,122
Inventory	412
Prepaid expenses	327
Regulatory assets	1,553
Wildfire insurance fund contributions	204
Other current assets	267
	<u>5,975</u>

DEFERRED CHARGES:

Receivables, less allowance of \$93 for uncollectible accounts	106
Regulatory assets (Includes \$328 related to VIEs)	7,386
Wildfire insurance fund contributions	2,410
Operating lease right-of-use assets	1,525
Long-term insurance receivable	76
Other long-term assets	883
	<u>12,386</u>
	<u>\$ 72,905</u>

SOUTHERN CALIFORNIA EDISON COMPANY

BALANCE SHEET  
SEPTEMBER 30, 2021  
CAPITALIZATION AND LIABILITIES  
(in millions)

CAPITALIZATION:

Common stock	2,168
Additional paid-in capital	6,704
Accumulated other comprehensive loss	(36)
Retained earnings	8,587
Common shareholder's equity	<u>17,423</u>
Long-term debt (Includes \$320 related to VIEs)	20,605
Preferred stock	1,945
Total capitalization	<u>39,973</u>

CURRENT LIABILITIES:

Short-term debt	2,622
Current portion of long-term debt	376
Accounts payable	2,046
Wildfire-related claims	84
Customer deposits	200
Regulatory liabilities	583
Current portion of operating lease liabilities	355
Other current liabilities	1,753
	<u>8,019</u>

DEFERRED CREDITS:

Deferred income taxes and credits	6,986
Pensions and benefits	125
Asset retirement obligations	2,739
Regulatory liabilities	8,584
Operating lease liabilities	1,170
Wildfire-related claims	2,308
Other deferred credits and other long-term liabilities	3,001
	<u>24,913</u>

\$ 72,905

**Appendix B**

**Summary of Earnings**

Southern California Edison  
2021 GRC Summary of Earnings  
Final Decision (RO Model 6.1)  
Thousands of Dollars

Southern California Edison Summary of Earnings 2021 GRC Adopted Revenue Requirement Thousands of Dollars		
Line No.	Item	Total
1.	<b>Base Revenues</b>	6,874,110
2.	<b>Expenses:</b>	
3.	Operation & Maintenance	2,391,587
4.	Depreciation	1,902,940
5.	Taxes	595,277
6.	Revenue Credits	(162,794)
7.	Total Expenses	4,727,010
8.	<b>Net Operating Revenue</b>	2,147,100
9.	<b>Rate Base</b>	27,982,268
10.	<b>Rate of Return</b>	7.67%

Southern California Edison Summary of Earnings 2022 GRC Adopted Revenue Requirement Thousands of Dollars		
Line No.	Item	Total
1.	<b>Base Revenues</b>	7,257,059
2.	<b>Expenses:</b>	
3.	Operation & Maintenance	2,445,365
4.	Depreciation	2,011,977
5.	Taxes	664,156
6.	Revenue Credits	(163,463)
7.	Total Expenses	4,958,036
8.	<b>Net Operating Revenue</b>	2,299,023
9.	<b>Rate Base</b>	29,956,578
10.	<b>Rate of Return</b>	7.67%

Southern California Edison Summary of Earnings 2023 GRC Adopted Revenue Requirement Thousands of Dollars		
Line No.	Item	Total
1.	<b>Base Revenues</b>	7,694,731
2.	<b>Expenses:</b>	
3.	Operation & Maintenance	2,503,319
4.	Depreciation	2,133,629
5.	Taxes	760,267
6.	Revenue Credits	(164,174)
7.	Total Expenses	5,233,040
8.	<b>Net Operating Revenue</b>	2,461,691
9.	<b>Rate Base</b>	32,070,817
10.	<b>Rate of Return</b>	7.68%

## **Appendix C**

### **List of Cities and Counties**

# INCORPORATED CITIES AND COUNTIES SERVED BY SCE

## COUNTIES

Fresno	Kern	Madera	Riverside	Tuolumne
Imperial	Kings	Mono	San Bernardino	Tulare
Inyo	Los Angeles	Orange	Santa Barbara	Ventura

## CITIES

Adelanto	Commerce	Hesperia	Lynwood	Porterville	Tehachapi
Agoura Hills	Compton	Hidden Hills	Malibu	Rancho Cucamonga	Temecula
Alhambra	Corona	Highland	Mammoth Lakes	Rancho Mirage	Temple City
Aliso Viejo	Costa Mesa	Huntington Beach	Manhattan Beach	Rancho Palos Verdes	Thousand Oaks
Apple Valley	Covina	Huntington Park	Maywood	Rancho Santa Margarita	Torrance
Arcadia	Cudahy	Indian Wells	McFarland	Redlands	Tulare
Artesia	Culver City	Industry	Menifee	Redondo Beach	Tustin
Avalon	Cypress	Inglewood	Mission Viejo	Rialto	Twentynine Palms
Baldwin Park	Delano	Irvine	Monrovia	Ridgecrest	Upland
Barstow	Desert Hot Springs	Irwindale	Montclair	Rolling Hills	Ventura
Beaumont	Diamond Bar	Jurupa Valley	Montebello	Rolling Hills Estates	Victorville
Bell	Downey	La Canada Flintridge	Monterey Park	Rosemead	Villa Park
Bell Gardens	Duarte	La Habra	Moorpark	San Bernardino	Visalia
Bellflower	Eastvale	La Habra Heights	Moreno Valley	San Dimas	Walnut
Beverly Hills	El Monte	La Mirada	Murrieta	San Fernando	West Covina
Bishop	El Segundo	La Palma	Newport Beach	San Gabriel	West Hollywood
Blythe	Exeter	La Puente	Norco	San Jacinto	Westlake Village
Bradbury	Farmersville	La Verne	Norwalk	San Marino	Westminster
Brea	Fillmore	Laguna Beach	Ojai	Santa Ana	Whittier
Buena Park	Fontana	Laguna Hills	Ontario	Santa Barbara	Wildomar
Calabasas	Fountain Valley	Laguna Niguel	Orange	Santa Clarita	Woodlake (Three Rivers)
California City	Fullerton	Laguna Woods	Oxnard	Santa Fe Springs	Ventura
Calimesa	Garden Grove	Lake Elsinore	Palm Desert	Santa Monica	Yorba Linda
Camarillo	Gardena	Lake Forest	Palm Springs	Santa Paula	Yucaipa
Canyon Lake	Glendora	Lakewood	Palmdale	Seal Beach	Yucca Valley
Carpinteria	Goleta	Lancaster	Palos Verdes Estates	Sierra Madre	
Carson	Grand Terrace	Lawndale	Paramount	Signal Hill	
Cathedral City	Hanford	Lindsay	Perris	Simi Valley	
Cerritos	Hawaiian Gardens	Loma Linda	Pico Rivera	South El Monte	
Chino	Hawthorne	Lomita	Placentia	South Gate	
Chino Hills	Hemet	Long Beach	Pomona	South Pasadena	
Claremont	Hermosa Beach	Los Alamitos	Port Hueneme	Stanton	