

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



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Application of Pacific Gas and Electric
Company (U 39 M) on Behalf of the California
Market Transformation Administrator (U-1399-
E) for the Approval of the Initial Tranche of
Statewide Energy Efficiency Market
Transformation Initiatives.

**CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE
OPENING BRIEF**

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*On Behalf of the California
Environmental Justice Alliance*

Dated: July 25, 2025

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SUMMARY OF RECOMMENDATIONS

As set forth in the following Opening Brief, CEJA respectfully recommends that the Commission approve both the Room Heat Pump and Induction Cooking Market Transformation Initiatives.

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(Filed December 20, 2024)

**CALIFORNIA ENVIRONMENTAL JUSTICE ALLIANCE
OPENING BRIEF**

Pursuant to Rule 13.12 of the California Public Utilities Commission (“Commission”) Rules of Practice and Procedure, California Environmental Justice Alliance (“CEJA”) respectfully submits this Opening Brief on the Application of Pacific Gas and Electric Company (U 39 M) on Behalf of the California Market Transformation Administrator (U-1399-E) for the Approval of the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives (“Application”).¹ This Opening Brief is timely submitted pursuant to the March 25, 2025, Assigned Commissioner’s Scoping Memo and Ruling.²

I. INTRODUCTION

The California Market Transformation Administrator’s (“CalMTA”) Application is the culmination of a decade of stakeholder-informed, collaborative processes to implement the California legislature’s mandate under Senate Bill (“SB”) 350 to unlock deep energy efficiency savings and equitable decarbonization through market transformation. In accordance with SB 350 and the Commission’s Environmental and Social Justice (“ESJ”) Action Plan, the technologies chosen for the initial tranche of Market Transformation Initiatives (“MTIs”)—room heat pumps (“RHPs”) and 120V, battery-equipped induction ranges and cooktops—address

¹ Application of Pacific Gas and Electric Company (U 39 M) on Behalf of the California Market Transformation Administrator (U-1399-E) for the Approval of the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives (Dec. 20, 2024) (“Application”), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M550/K500/550500737.PDF>.

² Assigned Commissioner’s Scoping Memo and Ruling, at 4 (Mar. 25, 2025), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M560/K138/560138216.PDF>.

important gaps in the State’s advancement of equitable electrification for low-income and renter households. The MTI Application meets the mandates of SB 350, demonstrates California’s continued commitment to innovation and equity at a time when these values are under attack by the Trump Administration, and should be promptly approved by the Commission.

RHPs and 120V induction ranges are technologies that offer significant benefits to ESJ communities. RHPs provide efficient, zero-emission cooling, heating, and air filtration without the structural or electrical upgrades that a central or mini-split heat pump can necessitate. Because they are portable, window-installed products that plug into a typical household outlet, they can enable renters to have greater control over their own spaces without depending on a landlord or resorting to three less efficient, single-function products (i.e., space heaters, window unit air conditioning (“AC”), and air purifiers). For households in ESJ Communities,³ both RHPs and 120V induction ranges are instrumental in reducing health-harming air pollution by decreasing exposure to ambient air pollution through filtration and by eliminating a major source of indoor air pollution from gas stoves. Moreover, because the RHPs developed under the MTI Application will be tailored to California-specific climate and building designs and the 120V induction ranges will be sized for smaller kitchens, their design is centered on meeting the needs of ESJ Communities. Accordingly, the MTIs will unlock substantial energy savings and increase the potential reach of utilities’ energy efficiency portfolios going forward, while also providing pathways for Californians of all income levels to electrify their homes without triggering costly electrical upgrades. These strategies are consistent with the Commission’s findings in the Building Decarbonization Rulemaking regarding the benefits of avoiding electrical upgrades triggered by electrification where possible, and will benefit ratepayers and the grid.⁴

³ The Commission defines ESJ Communities as “predominantly communities of color or low-income communities that are underrepresented in the policy setting or decision-making process, subject to a disproportionate impact from one or more environmental hazards, and are likely to experience disparate implementation of environmental regulations and socioeconomic investments in their communities,” and more specifically including Disadvantaged Communities (“DACs”), which are census tracts scoring in the top 25% of CalEnviroScreen or scoring in the highest 5% of CalEnviroScreen’s Pollution Burden but not receiving an overall CalEnviroScreen score; all Tribal lands; low-income households (defined as having household income below 80% of the area median income (“AMI”)); and low-income census tracts. CPUC, *Environmental and Social Justice Action Plan Version 2.0*, at 2 (Apr. 7, 2022) (“ESJ Action Plan”), <https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/news-and-outreach/documents/news-office/key-issues/esj/esj-action-plan-v2jw.pdf>.

⁴ See D.25-06-034, *Phase 4 Track A Decision Establishing New Electric Service Line Upsizing Rules, Modifying Electric Line Extension Rules and Reporting Requirements, and Implementing Assembly Bill*

Parties asking the Commission to deny this innovative and essential program wrongly claim the MTIs duplicate utilities' existing energy efficiency portfolios and seek to relitigate the Commission's findings in D.19-12-021.⁵ The MTIs are not duplicative of utility programs because they target measures that are not currently offered in the utilities' portfolios nor could be offered, as the MTIs will design RHPs and 120V induction stove models that are not available on the market. Further, because D.19-12-021 determined that a statewide, independent Market Transformation Administrator is necessary to achieve the objectives of SB 350, utility claims that their efficiency programs can purportedly match the market transformation provided through CalMTA's Application are untimely and fundamentally misplaced. CalMTA's Application reflects the comprehensive approach envisioned by the Commission, which no past, current, or planned utility energy efficiency program comes anywhere near achieving.

The MTIs center the needs of ESJ Communities at a time when federal policy is aggressively deprioritizing environmental justice and equity. Federal support for building decarbonization and energy efficiency has evaporated, and health- and climate-protective regulations on polluting industries are under attack. California's ESJ Communities will suffer the consequences of this federal administration's actions through worsening air and water pollution, extreme weather events increasing in frequency and severity, and lack of access to mitigation measures and healthcare for rural and low-income families. These impacts will be felt for years to come, and the MTIs offer a pathway toward accessible technologies that can mitigate some of those harms for the hardest-hit households. Because the MTIs fulfill the equitable decarbonization and deep energy savings mandates of SB 350, do not duplicate existing energy efficiency activities, and provide unique and critical benefits to ESJ Communities at a time when federal policy would leave them behind, the Commission should approve the Application.

II. PROCEDURAL BACKGROUND

Pacific Gas and Electric Company ("PG&E") filed this application on behalf of CalMTA on December 20, 2024. The Application represents the culmination of ten years of development of the market transformation programs since the passage of SB 350 in 2015, which directed the

157, at 46, 115, Finding of Fact 2 (June 20, 2025) ("D.25-06-034"), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M570/K302/570302781.PDF>.

⁵ See D.19-12-021, *Decision Regarding Frameworks for Energy Efficiency Regional Energy Networks and Market Transformation*, at 55 (Dec. 12, 2019) ("D.19-12-021"), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M321/K507/321507615.PDF>.

Commission to “authorize market transformation programs with appropriate levels of funding to achieve deeper energy efficiency savings.”⁶ In D.19-12-021, the Commission approved a market transformation framework to implement that provision of SB 350, which was developed through a working group process and commented upon by parties in R.13-11-005, the Commission’s general energy efficiency rulemaking docket.⁷ In adopting the framework, the Commission also designated PG&E as the contracting and fiscal agent “responsible for selection and administration of an independent, statewide, Market Transformation Administrator,” and set a startup administrative budget for the administrator at “a maximum of \$20 million per year,” with a “five-year budget for [market transformation initiatives, (“MTIs”)] of \$250 million” following the approval of the first tranche of MTIs.⁸ PG&E engaged in a competitive solicitation process overseen by Energy Division, which resulted in the selection of Resource Innovations, Inc. as the Market Transformation Administrator in late 2022.⁹

Since its selection, Resource Innovations, doing business as CalMTA, has engaged in its startup activities, including convening a Market Transformation Advisory Board (“MTAB”) and developing proposals for initial MTIs, guided by that Board, for approximately two years before PG&E filed the instant Application on its behalf in December 2024.¹⁰ As required by D.19-12-021, members of the MTAB have included representatives of ratepayer advocacy groups, workforce/labor groups, environmental groups, evaluation professionals, national or regional energy efficiency policy professionals, utility energy efficiency representatives, and Community Choice Aggregator energy efficiency professionals.¹¹ Between April 2023 and November 2024, the MTAB met 15 times, in publicly accessible meetings, and CalMTA’s detailed notes from these meetings reflect robust participation from board members, staff and consultants, and

⁶ Cal. Pub. Util. Code § 399.4(d)(1) (codifying S.B. 350, 2015–2016 Reg. Sess., Ch. 547 § 16 (Cal. 2015)).

⁷ D.19-12-021 at 82, Finding of Fact #14, 86, Conclusion of Law #17; D.19-12-021 at Attach. A, Adopted Market Transformation Framework.

⁸ *Id.* at 90, Ordering Paragraph #6–7.

⁹ PG&E Advice Letter 4674-G/6747-E, Advice Letter Submittal of Contract Resulting from the Statewide Market Transformation Administrator Solicitation and Executed Between Resource Innovations, Inc. and PG&E, (approved effective Nov. 23, 2022), https://www.pge.com/tariffs/assets/pdf/adviceletter/GAS_4674-G.pdf.

¹⁰ See D.19-12-021 at 90–91, Ordering Paragraph #8 (requiring establishment of the MTAB and explaining how it should be formed and operated); Application at 8–10.

¹¹ Ex. MTA-04, Prepared Testimony of Stacey Hobart: MTAB Recruitment, Conflict of Interest Rules, and Compensation, at 2:23–3:5 (Dec. 20, 2024), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8044/560241859.pdf>.

members of the public who joined the calls.¹²

III. DISCUSSION

A. The MTIs are Aligned with the Legislative Mandate of SB 350 and Provide Significant Value to ESJ Communities and Ratepayers as a Whole.

SB 350 sought to advance California’s climate and equity goals by increasing energy efficiency activity to cumulatively double existing energy savings by 2030, among other things.¹³ As one way to “achieve deeper energy efficiency savings,” the Legislature directed the Commission to “[a]uthorize market transformation programs with appropriate levels of funding.”¹⁴ At the same time, the Legislature expressed concern regarding the “barriers to access for low-income customers to energy efficiency investments.”¹⁵ CalMTA’s Application aligns with the goals of SB 350 both by implementing the market transformation provision and by addressing barriers to low-income access to energy efficiency investments and zero-emissions appliances. By focusing on market transformation for technologies that address those barriers, the MTIs will deepen the energy efficiency savings possible by unlocking savings for low-income and renter households, while also advancing the state’s energy justice and equity goals. Commission approval of the MTI Application is therefore both consistent with and necessary to advance the requirements of SB 350.

Further, Commission approval of the Application is consistent with its stated values in the ESJ Action Plan. As the Commission acknowledges there:

The CPUC is tasked with serving all Californians, and to do so equitably while reaching the state’s climate goals, it must acknowledge that some populations in California face higher barriers to access to clean, safe, and affordable utility services. To fulfill its mission, the CPUC acknowledges it must focus resources on communities that have been underserved¹⁶

Energy efficiency and building electrification programs are areas within the Commission’s

¹² Application, Appendix 4, Meeting Notes from MTAB Meetings, at PDF p. 1 (Dec. 20, 2024), <https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=813997>. The appendix contains 142 pages worth of detailed notes memorializing questions, comments, discussion, and conclusions from the wide range of meeting participants.

¹³ S.B. 350, 2015–2016 Reg. Sess., Ch. 547, Legislative Counsel’s Digest (Cal. 2015), https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB350.

¹⁴ Cal. Pub. Util. Code § 399.4(d)(1).

¹⁵ Cal. Pub. Res. Code § 25327(a)(3), (c).

¹⁶ ESJ Action Plan at 9.

jurisdiction where inequity has persisted. Low-income and renter households face complex barriers to adoption of the efficient, zero-emission technologies offered by current energy efficiency programs. To “focus resources on communities that have been underserved” and serve “all Californians . . . equitably while reaching the state’s climate goals,” the Commission must be willing to invest in programs that center the needs of ESJ Communities. The MTIs present a critical opportunity for the Commission to do so. Approving the MTIs will provide deep energy efficiency benefits that low-income households can actually access, fulfilling the dual mandates of SB 350 and ESJ Action Plan.

1. The MTIs Provide Targeted Action on Accessibility Barriers to Adoption of Zero-Emissions Appliances in ESJ Communities.

Both the RHP and Induction Cooking MTIs are designed to address accessibility barriers to adoption of zero-emissions, highly efficient appliances in ESJ communities. By right-sizing technologies for existing California building stock, reducing the need for costly electrical upgrades prior to installation, and paving the way for these products to be widely available and affordable in the market, the MTIs will open up feasible options for electrification and efficient home cooling and heating for households who currently face insurmountable barriers to adoption with existing market-ready products and energy efficiency offerings.

a) 120V RHPs Circumvent Barriers to Heat Pump Adoption for Low- and Moderate-Income Households, Residents of Multifamily Buildings, and Renters.

The RHP MTI will advance California’s climate goals by taking concrete steps toward making heat pumps accessible to a broad range of households whose HVAC options are currently limited to gas-fueled equipment; older, less efficient electric equipment; or single-function heating systems due to financial or structural constraints. California agencies have recognized that heat pumps will play a central role in the state achieving its climate goals, as electrification is “the best fit for decarbonizing homes and commercial buildings, where gas infrastructure can be fully electrified with technologies such as heat pumps for space and water heating and clothes drying and induction stoves.”¹⁷ However, many California households,

¹⁷ R.20-01-007, 2024 Joint Agency Staff Paper: Progress Towards a Gas Transition, A White Paper Supporting the CPUC’s Long-Term Gas Planning Rulemaking R.20-01-007, at 14 (Feb. 22, 2024) (“2024 Joint Agency Staff Paper”), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M525/K660/525660391.PDF>.

particularly those in ESJ Communities, face steep barriers to adoption of the types of heat pump technologies currently accessible in the market. The RHP MTI offers a pathway to heat pump adoption that circumvents those barriers by providing 120V heat pumps that do not require permanent installation or costly electrical work and can be owned, installed, and operated by the resident, regardless of whether they own or rent their home.

Currently, the two most common forms of heat pumps for electrification of home heating and cooling are central ducted systems and ductless mini-split heat pumps.¹⁸ However, both ducted and ductless systems can come with significant structural hurdles for older homes, many of which were not originally built to bear electric HVAC loads, because central and mini-split heat pumps typically require a dedicated 240V circuit.¹⁹ Over 75% of California’s existing residential and commercial buildings were built prior to the adoption of California’s Building Energy Efficiency Standards in 1978,²⁰ and a 2024 market assessment found that 52% of California homeowners surveyed used a fossil gas central forced-air furnace for space heating, meaning their homes were likely not built with electric HVAC loads in mind.²¹ Further, with regard to cooling loads, 2020 Census data reflects that approximately 20% of owner-occupied units and 29% of rental units in California do not have AC at all.²² Moreover, in lower- and moderate-income (“LMI”) households, a portion of those that do have AC rely upon 120V technologies like portable or window unit ACs, rather than central AC systems that would have the requisite circuit capacity to be replaced with a 240V heat pump.²³

As the Commission has recently recognized, upgrading a home’s electrical panel to accommodate new load from a heat pump carries substantial costs.²⁴ Panel upgrade costs in

¹⁸ Ex. CEJA-01, Prepared Testimony of Kjellen Belcher on Behalf of California Environmental Justice Alliance on the Application of the California Market Transformation Administrator for Approval of the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives, at 8:11–16 (June 4, 2025) (“Belcher Direct”), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8166/567537544.pdf>.

¹⁹ *Id.* at 8:27–9:2.

²⁰ *Id.* at 5:1–3.

²¹ *Id.* at 8:19–21 (citing 2024 market assessment for the TECH Initiative).

²² *Id.* at 9:7–9.

²³ *Id.* at 9:3–7.

²⁴ See R.19-01-011, Phase 4A Staff Proposal, at 7 (July 18, 2024) (“Building Decarbonization Phase 4A Staff Proposal”), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M536/K015/536015666.PDF> (finding that building owners seeking to replace or upsize main electrical panels would likely see costs “between \$1,000 and \$14,000”).

residential buildings can range from \$2,000 to \$4,500,²⁵ and require professional installation. These make-ready costs can be higher than the cost of the heat pump itself, and according to a TECH Initiative survey, concerns about upfront costs are among the greatest barriers to customers purchasing HVAC heat pumps.²⁶ For LMI households,²⁷ these costs can be prohibitive. And LMI customers “are more likely to live in housing that is difficult and costly to electrify” despite being least-equipped to bear the financial burden of upgrades.²⁸ Energy efficiency rebates or tax credits that help offset heat pump costs are not sufficient to cover these types of costs—even if the heat pump were free, it would still be thousands of dollars for the panel upgrade. In contrast, 120V RHPs will avoid the need for costly panel or wiring upgrades because they can plug into a standard outlet, and because they are ductless units that fit into a window, they also avoid costly ductwork.

120V RHPs would also address barriers to heat pump adoption faced by California’s six million renter households, approximately half of which are lower-income.²⁹ The Commission has repeatedly recognized the “split incentive” issue between landlords and tenants when it comes to energy efficiency or decarbonization upgrades to rental properties,³⁰ where “priorities and attitudes of landlords and tenants can diverge, especially because the landlord tends to bear the cost of electrification upgrades, while tenants experience the daily benefits of living in an electrified space.”³¹ The split incentive challenge is particularly strong with regard to heat pump adoption in multifamily buildings, which may have more complex barriers such as

²⁵ Ex. CEJA-01, Belcher Direct at 11:23–24 (citing a study prepared for PG&E and SDG&E looking at residential electrification retrofit costs associated with electrical upgrades.) This number does not include costs for service upsizing or structural changes to the home related to the heat pump outside of the electrical panel upgrade.

²⁶ *Id.* at 10:12–16, 11:11–15.

²⁷ *See Id.* at 2, n. 7 (defining lower- and moderate-income households as those earning up to 80% of area median income (“AMI”), and between 80% and 120% of AMI, respectively).

²⁸ *Id.* at 12:1–12–3.

²⁹ *Id.* at 12:4–6.

³⁰ *See* D.18-12-015, *Decision Approving San Joaquin Valley Disadvantaged Communities Pilot Projects*, at 85–87 (Dec. 19, 2018),

<https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M252/K052/252052725.PDF> (considering split incentive issues for the San Joaquin Valley pilot projects and directing the utilities to hold a workshop to address these challenges); Res. E-5043, *Authorization for Pacific Gas and Electric Company, Southern California Edison Company, and Southern California Gas Company to implement a split incentives agreement for San Joaquin Valley pilot participants pursuant to Decision 18-12-015*, (Apr. 16, 2020) <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M333/K595/333595009.PDF> (authorizing a split incentives agreement for the San Joaquin Valley pilot projects).

³¹ Ex. CEJA-01, Belcher Direct at 10:17–20.

“infrastructure challenges, extended decision-making timelines, tenant occupancy, and intricate project financing” that “require coordination among multiple stakeholders.”³² 120V RHPs completely sidestep these issues because they are in-unit solutions that can be installed and operated on their own without impacting the rest of the building.³³ Moreover, renters who purchase their own RHPs will retain the benefit of the technology without being dependent on a landlord to provide it.³⁴ Multifamily building owners can also benefit from RHPs if they want to electrify the whole building, as in-unit solutions can offer significant cost savings over more structural retrofits.³⁵

Finally, RHPs are more energy efficient than other 120V space conditioning technologies, such as window unit ACs and evaporative coolers (“swamp coolers”).³⁶ As CEJA Witness Brianda Castro explained, in addition to being energy-inefficient, “[s]wamp coolers also rely heavily on water, which adds another layer of cost and strain for families already struggling with high utility bills. For households with limited income, running a swamp cooler consistently throughout a heatwave can still be too expensive.”³⁷ Replacing inefficient, older ACs³⁸ and swamp coolers with RHPs would thus provide bill savings for these families.³⁹ And because

³² *Id.* at 6:3–7.

³³ *Id.* at 13:10–14.

³⁴ *Id.* at 13:5–10.

³⁵ *See id.* at 12:23–13:3 (providing example of New York City multifamily public housing pilot with RHPs that found that central heat pump electrification retrofits would “cost approximately \$38,000 per dwelling unit, including \$33,000 per dwelling unit for system install and \$5,000 per dwelling unit for electrical upgrades,” but that by using RHPs instead, overall costs were reduced by “two-thirds or more”).

³⁶ *See* Application, Appendix 1, RHP MTI Plan & Appendices: Appendix C, at 11, Figure 3 (Dec. 20, 2024) (“Application, Appendix 1, RHP MTI Plan & Appendices”), <https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=813993> (comparing HVAC energy use intensity of window heat pumps to window AC + electric resistance heating system scenario and window AC + gas heat scenario, showing significant energy savings over both window AC scenarios).

³⁷ Ex. CEJA-02, Prepared Testimony of Brianda Castro on Behalf of California Environmental Justice Alliance on the Application of the California Market Transformation Administrator for Approval of the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives, at 4:1–3 (June 4, 2025) (“Castro Direct”), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8166/567955404.pdf>.

³⁸ The RHP MTI Plan notes that “a 9,000 BTU/h existing window air conditioner manufactured between 2014 and 2025 meeting the minimum federal efficiency standards is 25% less efficient than one manufactured in 2026.” Application, Appendix 1, RHP MTI Plan & Appendices: Appendix C, at 53. (For purposes of assessing bill impacts, it is important to note that a customer replacing an existing window AC would likely be replacing an older unit, and not a still-functioning, new AC with the most up-to-date efficiency standards).

³⁹ *See* Application, Appendix 1, RHP MTI Plan & Appendices: Appendix C, at 53 (analyzing bill savings

RHPs are the most energy-efficient 120V cooling options, bill impacts for households installing them that did not have any cooling equipment before would still be less than the bill impacts of adopting these other, less efficient cooling products. Recent research has found that 45% of LMI households in California multifamily buildings use window, wall, or portable AC units, and swamp coolers are used in 12% of single-family homes, 7% of multifamily homes, and 27% of mobile homes in California.⁴⁰ By bringing efficient RHPs to the market, the MTI would deliver pathways to more efficient and affordable cooling for these homes.

b) 120V, Battery Equipped Induction Stoves Address Accessibility Issues for Electrifying Cooking in Households in ESJ Communities.

The Induction Cooking MTI is also designed to overcome barriers to adoption of electrified cooking that affect households in ESJ Communities. Similar to the 240V heat pumps discussed above, typical induction or electric ranges require a 240V outlet.⁴¹ Even if a panel upgrade is not triggered, the vast majority of California kitchens would require wiring upgrades to install a typical 240V electric or induction range because the circuit and 240V outlet would not have been run to the right location in the kitchen in the absence of existing electric cooking appliances. For “naturally occurring” (i.e., older) affordable housing stock, this may also mean costly lead or asbestos abatement or electrical code compliance expenses. 70% of California households have gas cooking appliances, meaning a resident seeking to electrify using existing options in the market would likely have to bear those wiring costs on top of the cost of the range itself.⁴² The 120V, battery-equipped ranges and cooktops that are the subject of the Induction Cooking MTI would allow households to electrify without incurring these extensive retrofit costs, because MTI-eligible models can charge from a standard outlet while still providing the same power for “the burst of energy necessary for cooking” with supplemental power from the battery.⁴³ This market innovation would make induction cooking accessible to a wide range of

and finding average annual bill savings of \$51–\$230 for replacement scenarios of Old AC + gas heat, New AC + resistance heat, and Old AC + resistance heat, with bill increases of \$14 annually for a scenario replacing a *new* AC + gas heat). *See also* Ex. TURN-01, Prepared Testimony of Hayley Goodson, at 16:6–15 (June 4, 2025) (“Goodson Direct”), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8168/568096587.pdf>.

⁴⁰ Ex. CEJA-01, Belcher Direct at 9:3–6, 9:13–16.

⁴¹ *Id.* at 15:5–9.

⁴² *Id.* at 13:28–14:1.

⁴³ *Id.* at 15:9–12.

households, including those in older housing stock, and would reduce upfront installation costs, making induction cooking more financially accessible to households with less disposable income seeking to replace cooking appliances on burnout.

The Induction Cooking MTI is also tailored to LMI and renter households' needs by focusing on an identified need for 24" models, which are "a common size in rental units" for ranges, as multifamily buildings tend to have smaller kitchens than single-family homes.⁴⁴ Currently, 120V ranges in the market "are limited to 30-inch, extremely expensive models," making them inaccessible to residents in homes with smaller kitchens in addition to being financially inaccessible.⁴⁵ Low-income residences in California are 20% smaller than the average residences of the general population.⁴⁶ Having market-ready 120V appliances that can fit in smaller kitchens and do not require upsized electric service will enable whole-building multifamily retrofits, and make induction cooking accessible to affordable housing developers.⁴⁷

The battery in these appliances would also provide residents with greater energy resilience and autonomy in the face of evolving grid conditions. For example, in the event of a power outage, one manufacturer of battery-equipped 120V ranges has stated that its ranges can "cook three to five meals before running out of power."⁴⁸ As CEJA Witness Kjellen Belcher noted, this would allow "families to boil water, heat food, or sterilize baby bottles for a longer period of time after a power outage begins."⁴⁹ And, as TURN has noted, using the battery for load-shifting purposes can be a way for users to access bill savings by charging during off-peak hours and using the battery for cooking during peak hours.⁵⁰ By transforming the market to make available induction cooking technologies that are right-sized, resilient, and put the power in the hands of residents to control associated energy costs, the Induction Cooking MTI will directly address current barriers to adoption of induction cooking. This transformation will benefit

⁴⁴ Ex. MTA-06, Chapter 3 Attachments, at PDF p. 161 (Dec. 20, 2024),

<https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8045/560829295.pdf>.

⁴⁵ Ex. CEJA-01, Belcher Direct at 15:18–21; Ex. CEJA-02, Castro Direct at 7:33–8:4 (explaining that "the smaller size and simpler installation of the 120V induction ranges that would be developed through the [MTI] make them a better fit for the compact kitchens often found in the homes we work in. These kitchens, especially in older or subdivided units, as well as in mobile homes, simply don't have the space to accommodate larger appliances.").

⁴⁶ Ex. CEJA-01, Belcher Direct at 6:17–20.

⁴⁷ *Id.* at 15:25–16:2.

⁴⁸ *Id.* at 16:12–14.

⁴⁹ *Id.* at 16:14–17.

⁵⁰ Ex. TURN-01, Goodson Direct at 15:5–13.

households across the market, while prioritizing the needs of households in ESJ communities who are least able to access induction technologies today.

2. The MTIs Will Advance California’s Public Health and Energy Justice Goals, Consistent with the ESJ Action Plan, by Providing Pathways to Improve Indoor Air Quality and Access to Cooling.

The ESJ Action Plan specifically lists among its goals increasing “investment in clean energy resources to benefit ESJ communities, especially to improve local air quality and public health.”⁵¹ The MTIs are aligned with this goal. Both the RHP and Induction Cooking MTIs are well positioned to deliver meaningful air quality benefits to households in ESJ Communities suffering the health impacts of air pollution, and the RHP MTI can also provide crucial access to cooling for households bearing the brunt of climate-induced extreme heat events. The Commission should approve the MTIs as a concrete step toward ESJ Action Plan Goal 2.

a) Both MTIs Will Deliver Air Quality Benefits to ESJ Communities, Consistent with California’s Public Health Goals and the ESJ Action Plan.

Both the RHP MTI and the Induction Cooking MTI would provide air quality and public health benefits by making zero-emission technologies widely available that would either affirmatively address air pollution or replace polluting gas equipment.

RHPs have the potential to improve air quality for users both by affirmatively filtering the air and by replacing counterpart technologies or cooling strategies that otherwise expose residents to air pollution. RHPs with air filtration capabilities would exceed the air filtration function of window AC units and provide residents who do not have central HVAC filtration for cooling purposes with cleaner air.⁵² This is a critical benefit for residents in ESJ Communities who live in areas with severe ambient air pollution, and residents of areas affected by wildfire smoke. Further, RHPs can replace existing technologies for cooling (or heating) that residents are currently forced to rely upon despite their negative indoor air quality implications, such as

⁵¹ ESJ Action Plan at 5, Goal 2.

⁵² See Application, Appendix 1, RHP MTI Plan & Appendices: Appendix C, at 61 (identifying a “key long-term priority” of “creating solutions to improve indoor air quality through options such as integrated high-efficiency air filtration,” and stating a plan to “engage early with manufacturers” to “[c]reat[e] cost effective and energy efficient solutions” that address the design challenges related to pressure drops, fan capacity, and filter life).

gas-burning wall furnaces and swamp coolers.⁵³ As Ms. Castro explained, swamp coolers are prevalent in the Central Valley because they are “cheaper to install than air conditioning,” but they “can make indoor air quality worse because they pull outdoor air directly into the home, bringing in dust, pesticides, and pollution, especially in communities surrounded by agriculture or oil and gas fields.”⁵⁴ Indeed, a study on swamp coolers in the San Joaquin Valley found that during wildfire season, “[c]ommunity members reported that they could not breathe well in their homes due to the smoke if the [swamp cooler] was operating, but that the heat was intolerable without the use of the cooler.”⁵⁵

Induction ranges and cooktops also offer indoor air quality benefits, particularly when they replace gas cooking equipment. Pollution from gas stoves is “directly linked to respiratory illness, cardiovascular disease, poor birth outcomes, and adverse childhood development, with low-income communities and people of color at higher risk.”⁵⁶ Researchers at Stanford University recently found that “high gas stove usage without proper ventilation greatly increased Incremental Lifetime Cancer Risks,” with that risk rising “1.85 times higher” for children compared to adults.⁵⁷ Switching to electric cooking equipment eliminates all air quality impacts from cooking other than particulates emitted by the food itself as it cooks, and since gas stove emissions are a major source of indoor air pollution, indoor air quality overall improves substantially with electric cooking.⁵⁸

Only Southern California Gas Company (“SoCalGas”) disputes the indoor air quality impacts of gas stove usage. As an initial matter, California agencies, including the Commission, have repeatedly found that electrification of gas cooking equipment has health benefits. For example, in its *2024 Joint Agency Staff Paper: Progress Towards a Gas Transition*, the Commission, California Energy Commission (“CEC”), and California Air Resources Board

⁵³ See Ex. CEJA-01, Belcher Direct at 17:17–20 (“Gas-fired space heating equipment (e.g., furnaces, wall furnaces, etc.) and stoves burn methane directly inside living spaces. This combustion of gas in our homes is a major health hazard, producing dangerous air pollution that includes nitrogen dioxide (“NO₂”), carbon monoxide, particulate matter, formaldehyde, and benzene.”).

⁵⁴ Ex. CEJA-02, Castro Direct at 3:29–35.

⁵⁵ Ex. CEJA-01, Belcher Direct at 9:20–10:4.

⁵⁶ *Id.* at 17:20–23.

⁵⁷ *Id.* at 18:19–23.

⁵⁸ *Id.* at 19:6–12 (explaining that a pilot program replacing gas stoves with induction stoves in low-income housing in New York City resulted in a 56% reduction in mean daily household NO₂ concentrations).

(“CARB”) jointly found that “[e]lectric appliances also improve indoor air quality by eliminating indoor fuel combustion, which is a major source of indoor nitrogen oxides (NO_x) and particular matter emissions” and that “gas stove combustion in California homes routinely exposes occupants to pollutant concentrations that are considered harmful outdoors.”⁵⁹ Indeed, SoCalGas’ claims that gas stoves do not pose risks to public health do not withstand even the most cursory scrutiny. For example, SoCalGas claims that emissions estimates are based on models of “atypical scenarios with lengthy cooking times, small spaces, and very poor building ventilation,” highlighting its findings that “[i]f exhaust fans are properly used, the effect of cooking on indoor air quality is very limited,” and its conclusions about “the ‘important role of vented kitchen range exhaust for reducing both kitchen and whole-house air concentrations’ of pollutants such as NO₂ and PM_{2.5}.”⁶⁰ But as Ms. Castro has explained, small kitchens with poor or no ventilation are not “atypical” in the ESJ Communities in which she works. In reality, the low-income asthma patients that she works with at Central California Asthma Collaborative (“CCAC”) generally “do not have access to formal air filtration systems in their homes,” and “many homes, particularly rental units, lack even basic ventilation infrastructure like vent hoods over stoves. As a result, both indoor and outdoor sources of pollution accumulate inside, creating unhealthy living conditions.”⁶¹ These conditions are also well-documented beyond the communities that Ms. Castro works with directly: lower-income households in general are more

⁵⁹ 2024 Joint Agency Staff Paper at 17; *See also* CARB, Res. 20-32, at 1–3 (Nov. 19, 2020), <https://ww2.arb.ca.gov/sites/default/files/barcu/board/res/2020/res20-32.pdf> (acknowledging that “studies have linked exposure to high levels of NO₂ and other nitrogen species (NO_x) emitted from gas appliances with asthma and exacerbation of other respiratory symptoms,” recognizing “the conclusion of recent studies that 100 percent electrification of natural gas appliances in California would result in significant health benefits and reduction of greenhouse gas (GHG) emissions from natural gas combustion in residential buildings,” and directing its staff to support codes and standards that result in “electrification of appliances, including stoves, ovens, furnaces, and space and water heaters” to “protect public health” and “improve indoor and outdoor air quality,” among other things); D.22-09-026, *Phase III Decision Eliminating Gas Line Extension Allowances, Ten-Year Refundable Payment Option, and Fifty Percent Discount Payment Option Under Gas Line Extension Rules*, at 28 (Sept. 20, 2022), <https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M496/K987/496987290.PDF> (finding that eliminating gas line extension allowances will result in “improved health conditions for customers via improved indoor and outdoor air quality, with particularly reduced health risks from the reduction of high GHG emitting appliances inside a home,” and noting that “[l]ow-income customers are most likely to face these health risks given they often have less effective stove ventilation systems.”).

⁶⁰ Ex. SCG-02, Prepared Rebuttal Testimony of Roy Christian on Behalf of Southern California Gas Company, at RC-3:4–6, RC-3:8–9, fn. 12 (June 20, 2025) (“Christian Rebuttal”), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8245/570424780.pdf>.

⁶¹ Ex. CEJA-02, Castro Direct at 4:17–21.

vulnerable to the indoor air quality impacts of gas combustion “due to factors that include smaller unit size, more residents per home, inadequate ventilation, and less control over appliance installation and maintenance.”⁶² Enabling improved air quality in California homes through the MTIs will provide tangible health benefits to ESJ Communities who are most at risk of adverse health outcomes due to air pollution.⁶³

Improving indoor air quality can also result in significant financial savings for households whose residents have asthma or other respiratory conditions. Chronic respiratory illness is expensive—one recent study estimated that “the value of cumulative lifetime healthcare costs and lost productivity for a new asthma case in the U.S.” is \$36,500.⁶⁴ And low-income households who are at the highest risk are least able to cover those costs.⁶⁵ As one parent put it, “‘you have to rob Peter to pay Paul so your kid can breathe.’”⁶⁶ At a societal level, UCLA researchers found that “if all residential gas appliances in California were immediately replaced with electric alternatives,” the resulting air pollution reductions would prevent hundreds of deaths and cases of bronchitis per year, “with an associated health benefit of \$3.5 billion annually from avoided mortality and morbidity.”⁶⁷

For residents of California’s ESJ Communities where outdoor air quality is poor, options to escape from these health impacts and their financial implications are limited. As Ms. Castro

⁶² Ex. CEJA-01, Belcher Direct at 17:23–26.

⁶³ SoCalGas’s attempt to refute the health benefits of electrification by citing a study that concluded gas could serve as a good bridge fuel for cooking in developing nations that lack electric infrastructure, and thus rely upon kerosene, wood, and charcoal for cooking, is also wholly inapposite. Ex. SCG-02, Christian Rebuttal at RC-1:19–RC-2:10 (citing The Lancet Respiratory Medicine, *Estimated health effects from domestic use of gaseous fuels for cooking and heating in high-income, middle-income, and low-income countries: a systematic review and meta-analyses* (April 2024), [https://www.thelancet.com/journals/lanres/article/PIIS2213-2600\(23\)00427-7/fulltext](https://www.thelancet.com/journals/lanres/article/PIIS2213-2600(23)00427-7/fulltext)). Even this study “identified a small or modest increase in risk from use of gas compared with electricity for acute lower respiratory infections or pneumonia and chronic obstructive pulmonary disease,” acknowledged that “further understanding the relationship between exposure to NO₂ and other pollutants emitted from gas combustion is necessary,” and concluded that gas could be a promising “transitional” cooking fuel option “in contexts without access to renewably-sourced electric cooking and heating.” The relevant question here is not whether burning gas inside a home is less harmful than burning wood or charcoal, but whether zero-emission solutions provide health benefits compared to continuing to burn gas.

⁶⁴ Ex. CEJA-01, Belcher Direct at 20:4–6.

⁶⁵ *Id.* at 20:9–14 (explaining that families have to “‘make sacrifices in asthma care to pay for food, housing, or other essentials,’ or ‘prioritize asthma care, even it meant going into debt or sustaining financial loss.’”).

⁶⁶ *Id.* at 20:7–9.

⁶⁷ *Id.* at 19:17–21.

explained, “families are forced to choose between opening a window to ventilate gas stove emissions or keeping it closed to avoid outdoor pollution from agriculture, oil, or nearby traffic.”⁶⁸ The Induction Cooking MTI would “bring enormous benefits” to these communities by bringing induction appliances to the market that “work[] within the constraint renters and lower-income families face, helping them protect their health now rather than waiting on broader building retrofits,”⁶⁹ and the RHP MTI could bring air filtration technology to households that are currently relying on “do-it-yourself solutions,” such as “attaching store-bought HVAC filters to swamp coolers or box fans,” to try to escape from health-harming air pollution.⁷⁰ The Commission should take seriously the potential for the MTIs to provide avenues for California to access clean air using “technologies that meet people where they are in the homes they live in now and empower renters and working families to make healthy choices without needing to wait for their landlord or utility to act.”⁷¹ Approving the MTIs would be a concrete step toward the ESJ Action Plan’s goals to “increase investments in clean energy resources to benefit ESJ communities,” to “improve local air quality and public health,” and to ensure that ESJ Communities “benefit from CPUC programs.”⁷²

b) The RHP MTI Can Address Critical Access to Cooling Issues in ESJ Communities.

In addition to addressing air quality concerns, the RHP MTI is well-positioned to address urgent access to cooling issues in ESJ Communities. The health burdens of extreme heat fall disproportionately on ESJ Communities and communities of color.⁷³ Families in areas like the Central Valley are particularly burdened by the impacts of climate change when it comes to extreme heat—while extreme heat events are projected to worsen across the state, the Central Valley “is projected to experience average heat waves that are two weeks longer” than other parts of California.⁷⁴ And while extreme heat contributes to hundreds of excess deaths in

⁶⁸ Ex. CEJA-02, Castro Direct at 5:25–27.

⁶⁹ *Id.* at 7:8–11, 7:30–32.

⁷⁰ *Id.* at 4:24–26.

⁷¹ *Id.* at 5:32–35.

⁷² ESJ Action Plan at 5, Goal 2 and Goal 5.

⁷³ Ex. CEJA-01, Belcher Direct at 22:14–23:18; Ex. CEJA-02, Castro Direct at 2:32–3:23 (describing impacts of extreme heat on rural communities in the Central Valley, including specific impacts on renters and agricultural workers).

⁷⁴ Ex. CEJA-01, Belcher Direct at 23:14–16.

California each year on a statewide level,⁷⁵ research has found that “the mortality risks of extreme heat and air pollution have an outsized impact when combined,” as on days with both extreme heat and high particulate levels “all-cause mortality risk increased by 21%, more than triple the risk of either stressor alone.”⁷⁶ Thus, in addition to the fact that extreme heat events are forecasted to last longer in the Central Valley, residents also face disproportionately higher health and safety risks from that heat because its impacts are amplified by the high air pollution burden in the area.

For many residents, the heat and its associated impacts are difficult or impossible to escape. As discussed above, a significant subset of California homes do not have AC and rely upon inefficient technologies for cooling that can worsen air pollution, if they are able to access any cooling equipment at all. Plus, as Ms. Castro explained, “[i]n agricultural towns, many people also work outdoors in the fields or in non-air-conditioned warehouses, where breaks and access to water may be limited. After spending hours in high heat on the job, they return home to living conditions that offer little relief. The combination of extreme outdoor temperatures and inadequate housing infrastructure turns heat exposure into a constant health risk both on and off the job.”⁷⁷ These households face insurmountable barriers to adoption of central or mini-split heat pump systems that cannot be solved by simple energy efficiency rebate programs. Thus, they are not “benefit[ing] from CPUC programs,” as the ESJ Action Plan envisions, but are instead being left behind by CPUC programs that focus on decarbonization technologies that are fundamentally inaccessible to them, despite the fact that they are the most burdened by a lack of access to efficient, zero-emission cooling equipment. As a result, Ms. Castro notes, “[r]oom heat pumps, like those described in the CalMTA Application, would offer a transformative benefit to the communities I work with,” which are “rural, low-income, and predominantly renter[.]” households.⁷⁸ For these communities, Ms. Castro finds, “room heat pumps represent one of the most practical and impactful decarbonization solutions because they meet people where they are, work within the realities of our existing housing, and can deliver meaningful health and financial benefits without waiting for full-scale building upgrades that may never come.”⁷⁹

⁷⁵ *Id.* at 23:5–8 (citing LA Times analysis of excess deaths during extreme heat events in California).

⁷⁶ *Id.* at 22:3–9.

⁷⁷ Ex. CEJA-02, Castro Direct at 3:10–14.

⁷⁸ *Id.* at 6:15–17.

⁷⁹ *Id.* at 7:2–5.

3. The MTIs Will Benefit Ratepayers as a Whole By Facilitating Whole-Home Electrification While Avoiding Excessive Grid Upgrade Costs.

In recent years, California regulators have increasingly grappled with high electric rates and the potential for substantial grid upgrade costs to accommodate anticipated load growth from building decarbonization and other sources. However, as CEJA Witness Ms. Belcher explained, “building-level solutions add up,” and reports from the South Coast Air Quality Management District and Energy Star “have highlighted how 120V equipment and load management can reduce overall electrification costs and alleviate stress on the grid.”⁸⁰ 240V heat pumps and induction cooking equipment can be “holdout” use cases that prevent a home from being fully decarbonized when barriers like those discussed above make adoption structurally infeasible or financially out of reach. However, the advent of 120V technologies across residential use cases will mean more households can fully depart from the gas system without upgrading their panels or electric service capacity.⁸¹

In the Building Decarbonization Rulemaking, the Commission has recognized the issue of potentially costly, widespread grid upgrades needed to support electrification,⁸² and has authorized the utilities to explore technologies like meter socket adapters that “can help customers add electrification loads without panel and service upsizing.”⁸³ As Ms. Belcher noted, stakeholders in that proceeding have found in the course of administering whole-home electrification programs that the “use of technologies sized to specifically meet the needs of customers can eliminate the need for service upsizing and avoid costly distribution upgrades,” a strategy that could “could save tens of billions of dollars for ratepayers” if pursued across the state.⁸⁴ This benefit is especially significant because the MTIs proposed here are right-sized and well suited for homes in DACs, where infrastructure disinvestment is most prevalent and grid upgrades from widespread electrification might be expected to commonly be needed. As a 2021 study looking at PG&E and Southern California Edison Company (“SCE”) service territories

⁸⁰ Ex. CEJA-01, Belcher Direct at 24:20–24.

⁸¹ See R.19-01-011, Building Decarbonization Phase 4A Staff Proposal at 7.

⁸² *Id.* at 11–13 (Commission Staff noting the significance of the “upstream costs for the distribution grid that will inevitably be needed as California continues to rapidly electrify,” and explaining how alternative strategies to panel and service upsizing should be pursued “wherever possible” to limit the extent to which grid upgrades supporting building electrification “burden[] ratepayers with significant additional capital costs in the next few decades.”).

⁸³ See D.25-06-034 at 46.

⁸⁴ Ex. CEJA-01, Belcher Direct at 24:24–25:2.

found, “[t]he most disadvantaged populations in the state[]face systematically lower circuit hosting capacity.”⁸⁵ Thus, approving the MTIs would be aligned with the Commission’s building decarbonization policy objectives, and consistent with its Phase 4 Track A Decision’s findings.

B. The MTIs Do Not Duplicate, But Rather Complement, Existing Utility Energy Efficiency Portfolios.

The MTIs are not duplicative of other ratepayer-funded energy efficiency programs, and in fact are well positioned to complement utilities’ energy efficiency programs going forward. Concerns about “duplication of existing efforts” raised by SCE, San Diego Gas & Electric Company (“SDG&E”), SoCalGas, and the Public Advocates Office (“Cal Advocates”) are unsupported and do not take into account the unique positioning of CalMTA as a statewide, third-party program administrator (“PA”), nor the specifics of the MTI plans.⁸⁶ The need for an independent MTA has been litigated and resolved in D.19-12-021, and opposing parties’ claims that their portfolio structures can generally achieve the same ends as CalMTA’s Application are meritless. Additionally, opposing parties cannot identify any actual duplicative activities that would undermine the value of the MTIs. Accordingly, the Commission should reject claims that the MTIs are duplicative.

1. In Claiming the MTIs are Duplicative of Their Portfolios, the Utilities Seek to Impermissibly Relitigate the Unique Role and Benefit of a Statewide MTA.

Rather than duplicate existing utility efforts, the MTIs would take a “truly statewide” approach, as envisioned by D.19-12-021,⁸⁷ to bring products to the market that utilities can then include in their energy efficiency offerings, unlocking energy efficiency and decarbonization

⁸⁵ *Id.* at 25:5–9.

⁸⁶ See Joint Protest of Southern California Edison Company (U 338-E) and San Diego Gas & Electric Company (U 902 M) of the Application of Pacific Gas and Electric Company (U 39 M) on Behalf of the California Market Transformation Administrator (U-1399-E) for the Approval of the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives, at 3–6 (Jan. 23, 2025) (“Joint Utility Protest”), <https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M555/K184/555184003.PDF>; Ex. SCG-01, Prepared Direct Testimony of Roy Christian and Anders Danryd on Behalf of Southern California Gas Company, at RC-AD-14:16–RC-AD-15:2 (June 4, 2025), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8167/567537547.pdf>; Ex. CA-01, Prepared Testimony on the Application for the Initial Tranche of Statewide Energy Efficiency Market Transformation Initiatives, at 5-1:1–5-4:6 (June 4, 2025), <https://docs.cpuc.ca.gov/PublishedDocs/SupDoc/A2412009/8169/567540366.pdf>.

⁸⁷ D.19-12-021 at 55.

benefits that are not possible without market transformation. As the Commission explained in D.19-12-021, a single, third-party entity with a singular, “mission-driven” focus on market transformation can and must “go beyond traditional approaches to energy efficiency that may have been constrained by the regulatory model inherent in Commission oversight of utility programs,” in order to “facilitate the long-term, truly transformative approaches that the state should be looking for in the next generation of energy efficiency market transformation.”⁸⁸ The utilities now seek to relitigate the Commission’s findings that CalMTA, as the PA chosen by robust stakeholder process to administer the market transformation program, can fulfill the goals of S.B. 350 in a way that the utilities cannot.⁸⁹ For example, to support its claim of duplication, SCE explained that its concerns relate to the structure of its energy efficiency portfolio, noting that “[a]t the start of a technology, emerging technologies programs evaluate new technologies and do market assessments to try to feed new measures into the portfolio As the technology matures, it can be incorporated into the EE incentive programs including statewide, local and third-party implemented programs in the resource acquisition, market support, and equity sectors,” and ultimately into codes and standards.⁹⁰ SCE does not explain why it needs to—or should—exercise exclusive control over the first stages of that process in contravention of the Commission’s clear finding that a “single, independent, statewide MTA” is best positioned to design and execute strategies to achieve widespread market transformation in coordination with the full range of energy efficiency PAs, stakeholders, and market participants.⁹¹ As the Commission noted, having an independent PA with broad reach is “very important in the market transformation sphere” because “most energy efficiency product markets are national or international.”⁹² And CalMTA has already demonstrated through its MTI Plans that it is leveraging knowledge and strategies from geographically diverse energy efficiency and market transformation efforts and adapting them for California’s unique context by working with the Northwest Energy Efficiency Alliance (“NEEA”), who the Commission identified as “an

⁸⁸ *Id.*

⁸⁹ *Id.* (explaining the Commission’s finding that a single, statewide, non-utility PA for the market transformation program is needed, and stating that “[i]n order to meet the goals of Senate Bill 350 for doubling of energy efficiency in buildings, approaches that are truly outside the box will be necessary.”).

⁹⁰ Ex. CEJA-01, Belcher Direct, Attach. 2, SCE Responses to Discovery Requests, SCE Response to Discovery Request CEJA-SCE-01, Q. 1.

⁹¹ D.19-12-021 at 55.

⁹² *Id.*

example of the type of organization we would like to see developed for California and with whom we hope the eventual California entity will partner in the future,”⁹³ and by incorporating learnings from other states’ market transformation and product development efforts.⁹⁴ Rather than discard a decade of progress toward SB 350’s mandate, which has been thoroughly litigated along the way, the Commission should reject arguments that utility programs do—or can—duplicate the MTIs.

2. The Induction Cooking MTI is Not Duplicative of Existing Induction Cooking Energy Efficiency Programs or Projects.

Existing utility energy efficiency programs that have focused on induction cooking equipment focus on small scale deployment efforts of 120V permanent products, or promotion of existing 240V or tabletop technologies, not market transformation.⁹⁵ For example, SCE identified the CalNEXT program, for which it serves as statewide PA, as potentially duplicative with the MTIs because it “has conducted a project to assess 120V induction stoves with battery backup for program implementation and product development.”⁹⁶ CalNEXT’s project on 120V, battery-equipped induction stoves, which deployed 36 “Charlie” stoves in the Cher-Ae Indian Community to replace propane stoves with a total project budget of under \$400,000, is not comparable to a multi-year, multi-strategy MTI whose results would make these products widely available and much more affordable than they are now.⁹⁷ Charlie stoves currently cost approximately \$6,000–\$7,000.⁹⁸ While the CalNEXT project’s deployment of 36 of them is commendable, the project has not made these products more accessible or affordable to Californians beyond the project participants. In contrast, the Induction Cooking MTI aims to scale the overall market for these products to drive down costs and increase availability, and will specifically build the market for 24” stoves that fit in smaller kitchens.⁹⁹ Beyond this one project,

⁹³ *Id.* at 56.

⁹⁴ *See, e.g.*, Application, Appendix 2: Induction Cooking MTI Plan & Appendices, at 18 (Dec. 20, 2024) (“Application, Appendix 2: Induction Cooking MTI Plan & Appendices”), <https://pgera.azurewebsites.net/Regulation/ValidateDocAccess?docID=813994> (identifying opportunities for market growth based on manufacturer feedback to other energy efficiency programs related to induction cooking equipment, including activities in New York).

⁹⁵ Ex. CEJA-01, Belcher Direct at 30:31–31:1.

⁹⁶ Ex. CEJA-01, Belcher Direct, Attach. 2, SCE Responses to Discovery Requests, SCE Response to Discovery Request CEJA-SCE-01, Q. 1, Q. 2.

⁹⁷ Ex. CEJA-01, Belcher Direct at 31:1–10.

⁹⁸ *Id.* at 15:21, n. 70.

⁹⁹ Application, Appendix 2, Induction Cooking MTI Plan & Appendices, at 8–10.

SCE asserts that the CalNEXT Program “may conduct research on 120V battery-equipped induction stoves in the future,” and that in its New Program Design Pilots Program, “[f]uture potential program designs might work for . . . 120v, battery-equipped induction cooking equipment.”¹⁰⁰ Given that these projects and programs do not currently exist, the potential for them to exist in the future is not a valid basis for the claim that the MTIs are duplicative.¹⁰¹

SCE’s other induction cooking-focused energy efficiency offerings similarly fill a different niche than the Induction Cooking MTI. For example, SCE identified that its “market transformation efforts include educational seminars and training on cooking induction technology,” as well as an “induction cooking lending program” where customers “can borrow induction equipment for up to 14 days to get hands on experience with the technology.”¹⁰² While these types of outreach programs are “critical for engaging early adopters” of induction cooking technologies, they are “insufficient for creating widespread awareness, acceptance, and adoption at the scale necessary to achieve Governor Newsom’s goal of 3 million climate-ready and climate-friendly homes by 2030, and 7 million by 2035,” they do not engage with upstream market participants the way the Induction Cooking MTI would, and they do not focus on the permanently-installed, 120V battery-equipped models that the MTI would.¹⁰³

3. The RHP MTI is not Duplicative of Existing Heat Pump or RHP-Focused Energy Efficiency Programs or Projects.

The RHP MTI is also not duplicative of existing energy efficiency programs. When asked to identify any energy efficiency programs in which RHPs are currently a measure, SCE stated that it “does not include room heat pumps in its Energy Efficiency (EE) programs because it is still considered an emerging technology. However, as the market for this technology develops, SCE sees the potential for future inclusion and will include it in the programs when it can cost-effectively be incorporated.”¹⁰⁴ This statement illustrates well why the RHP MTI complements utility programs—it will take RHPs from being an “emerging technology” to being market

¹⁰⁰ Ex. CEJA-01, Belcher Direct, Attach. 2, SCE Responses to Discovery Requests, SCE Response to Discovery Request CEJA-SCE-01, Q. 1(a).

¹⁰¹ See also *id.*, Attach. 3, SDG&E Responses to Discovery Requests, SDG&E Response to Discovery Request CEJA-SDGE-01, Q. 1(c) (“SDG&E does not have 120v, battery-equipped induction cooking equipment offerings in its portfolio.”).

¹⁰² Joint Utility Protest at 5.

¹⁰³ Ex. CEJA-01, Belcher Direct at 31:18–22.

¹⁰⁴ Ex. CEJA-01, Belcher Direct, Attach. 2, SCE Responses to Discovery Requests, SCE Response to Discovery Request CEJA-SCE-01, Q. 4.

mature, at which point the utilities can incorporate them as a measure in their energy efficiency programs. As the PA of the CalNEXT Program, SCE also identified two CalNEXT projects pertaining to RHPs.¹⁰⁵ Both of these projects generated useful information regarding market opportunities and product specifications for RHPs in California, which CalMTA has incorporated into its RHP MTI Plan,¹⁰⁶ but these two completed projects did not achieve market transformation for RHPs and do not constitute a comprehensive plan to do so.

Similarly, SDG&E stated that it does include RHPs in its statewide plug load and appliances program, but crucially, “[f]or Program Year 2024, there was 1 unit installed,” the program is “not currently undertaking market transformation initiatives specific to Room Heat Pumps,” and “there are no marketing efforts dedicated solely to RHPs.”¹⁰⁷ SDG&E’s successful installation of a single RHP is not grounds for finding the MTI duplicative. Similarly, for the Comfortably California program, which is the statewide HVAC program currently administered by SDG&E, “RHPs are not currently eligible products,” the program does not engage with manufacturers of RHPs because “RHP manufacturers traditionally offer their products through retail stores, which is a different delivery method as the Comfortably CA Statewide HVAC program,” and the program “does not engage in activities to support increased deployment of RHPs in ESJ Communities.”¹⁰⁸ Based on this data, any conclusion that the RHP MTI duplicates existing utility energy efficiency offerings would be unsupported by the record.

C. The Evolving Policy Landscape Weighs in Favor of Approving the MTIs.

Evolving federal policies since the adoption of D.19-12-021 highlight the critical need for California to maintain its commitments to state climate policy, support for ESJ communities, and equitable decarbonization, including the MTIs. The CalMTA Application is one impactful way California can continue to make progress on an equitable clean energy transition in the face of regressive and harmful federal attack.

Federal support for clean energy deployment through the Inflation Reduction Act

¹⁰⁵ *Id.*, SCE Response to Discovery Request CEJA-SCE-01, Q. 5.

¹⁰⁶ Application, Appendix 1, RHP MTI Plan & Appendices: Appendix E, at 6–7 (noting that CalMTA had biweekly coordination calls with CalNEXT, stating that the “coordination has yielded important insights into the market” from CalNEXT’s two projects, and explaining that CalMTA will continue to coordinate with CalNEXT going forward).

¹⁰⁷ Ex. CEJA-01, Belcher Direct, Attach. 3, SDG&E Responses to Discovery Requests, SDG&E Response to Discovery Request CEJA-SDGE-01, Q. 1(a), Q. 2.

¹⁰⁸ *Id.*, SDG&E Response to Q. 5(a), (c)–(d).

(“IRA”) and the Infrastructure Investment and Jobs Act (“IIJA”), including “provisions for consumer rebates for heat pumps and induction stoves, as well as programs . . . designed to benefit low-income communities” have been paused or repealed by the current administration.¹⁰⁹ On July 4, 2025, President Trump signed into law H.R. 1, which repealed and rescinded a number of these provisions relevant to California energy efficiency programs, such as the Home Electrification and Appliance Rebates (“HEEHRA”) program, the Home Efficiency Rebates (“HOMES”) program, and the California Training for Residential Energy Contractors (“CA-TREC”) program.¹¹⁰ Similarly, H.R. 1 terminated the “Section 25C” Energy Efficient Home Improvement Credit, which provided “a federal tax credit of up to \$3,200 annually for qualified heat pumps, water heaters, and other energy-efficient home improvements,”¹¹¹ as well as terminated the Section 25D(h) Residential Clean Energy Credit, the Energy Efficient Commercial Buildings Deduction, and the New Energy Efficient Home Credit.¹¹² Reporting this year also revealed internal communications at the Environmental Protection Agency (“EPA”) informing agency staff that EPA would be shutting down the Energy Star program, which is a highly efficient joint program of the EPA and Department of Energy (“DOE”) whose every dollar has resulted in “\$230 invested by American businesses and households in energy efficient infrastructure and services and [] nearly \$350 in energy cost savings for American businesses and households.”¹¹³ As federal support for zero-emission appliance adoption and energy efficiency evaporates, California must hold the line and maintain state-level support to have any hope of achieving its building decarbonization objectives.

This federal administration is also wantonly gutting policies that support the health and safety of ESJ Communities and low-income families through its deregulatory agenda. Since January 2025, the Trump administration has ended the “whole of government” approach to environmental justice, ended the Justice40 initiative, shut down the EPA’s Office of Environmental Justice and regional environmental justice offices, and terminated or reassigned

¹⁰⁹ Ex. CEJA-01, Belcher Direct at 33:22–34:4.

¹¹⁰ H.R. 1, 119th Cong. § 50402 (2025), <https://www.congress.gov/bill/119th-congress/house-bill/1/text>; See also Ex. CEJA-01, Belcher Direct at 34:4–20 (citing CEC, *Inflation Reduction Act Residential Energy Rebate Programs*, <https://www.energy.ca.gov/programs-and-topics/programs/inflation-reduction-act-residential-energy-rebate-programs>).

¹¹¹ Ex. CEJA-01, Belcher Direct at 34:21–35:2; see also H.R. 1, 119th Cong. § 70505 (2025).

¹¹² H.R. 1, 119th Cong. §§ 70506–70508 (2025).

¹¹³ Ex. CEJA-01, Belcher Direct at 35:3–10.

more than 450 EPA employees who worked on “environmental justice and diversity, equity, and inclusion.”¹¹⁴

On top of the federal deregulatory agenda that will increase air pollution in these communities, H.R. 1 delivered sweeping cuts to Medicaid that will impact millions of low-income Californians, like the Medi-Cal asthma patients who CEJA Witness Brianda Castro and her organization CCAC work with in the San Joaquin Valley.¹¹⁵ These communities are already overburdened with healthcare costs due to the disproportionate amounts of pollution they are exposed to due to decades of environmental racism, and are now at risk of losing access to their healthcare coverage or having their closest healthcare providers’ offices close as a result of this federal administration’s policies; damage from this legislation which cannot be undone for years.¹¹⁶ Asthma and other chronic respiratory illnesses require ongoing care and medication, like daily inhalers, which will be even harder for low-income and rural families to access now due to H.R. 1.¹¹⁷ But as Ms. Castro noted, “[a] key part of our asthma remediation work is helping families reduce indoor triggers,” for which “gas stoves are consistently among the top concerns,” as well as swamp coolers that pull “pesticides, dust, and emissions from surrounding agricultural fields, oil operations, and nearby truck traffic into people’s homes.”¹¹⁸ From her work, Ms. Castro reports that “we’ve seen how indoor air quality directly links to health outcomes, especially in children,” and research from CCAC and other pilots of induction cooking equipment in low-income homes reflects the immediate drop in health-harming indoor air pollution, such as NO_x, after zero-emission equipment is installed.¹¹⁹ As Ms. Castro explained, technologies like the RHPs and 120V induction appliances targeted by the MTIs can “empower renters and working families to make healthy choices” and would “give[] families

¹¹⁴ *Id.* at 35:14–21.

¹¹⁵ See Office of Governor Gavin Newsom, *Governor Newsom statement on passage of Trump’s “Big, Beautiful Betrayal,”* (July 3, 2025) (“Newsom Statement on H.R. 1”) <https://www.gov.ca.gov/2025/07/03/governor-newsom-statement-on-passage-of-trumps-big-beautiful-betrayal/> (noting that H.R. 1 includes “[m]ore than \$28.4 billion slashed in federal Medicaid funding to California,” which will result in loss of coverage for millions of individuals as well as likely closures of “[r]ural hospitals across the state.”); See also Ex. CEJA-02, Castro Direct at 1:27–2:3; Ex. CEJA-01, Belcher Direct at 20:16–23 (describing CCAC’s work with Medi-Cal asthma patients in the San Joaquin Valley).

¹¹⁶ Newsom Statement on H.R. 1.

¹¹⁷ See Ex. CEJA-01, Belcher Testimony at 20:1–14.

¹¹⁸ Ex. CEJA-02, Castro Direct at 6:22–24, 7:24–25.

¹¹⁹ *Id.* at 5:24–25, 7:19–23; Ex. CEJA-01, Belcher Direct at 19:4–12.

more control over their comfort, energy use, and health.”¹²⁰ Approving the MTIs will not reinstate health-protective federal air quality regulations or restore Medi-Cal funding to vulnerable, low-income Californians. But by standing strong in its commitments to deploying clean energy technologies in ESJ Communities, the Commission can help families in these communities improve indoor air quality and help address health impacts for which access to care will now be even more challenging.

IV. CONCLUSION

For the reasons set forth above, CEJA respectfully requests that the Commission approve the Application.

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Respectfully submitted,

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¹²⁰ Ex. CEJA-02, Castro Direct at 5:31–35, 6:32–33.