ORDINANCE NO.

AN ORDINANCE OF THE CITY OF MOUNTAIN VIEW:
(1) REPEALING LOCAL AMENDMENTS TO THE 2022 CALIFORNIA BUILDING STANDARDS CODE;
(2) ADOPTING LOCAL AMENDMENTS TO THE 2025 CALIFORNIA BUILDING STANDARDS CODE, INCLUDING THE 2025 CALIFORNIA ENERGY CODE; (3) AMENDING CHAPTER 8 (BUILDINGS) AND CHAPTER 14 (FIRE PREVENTION) OF THE MOUNTAIN VIEW CITY CODE TO COMPLY WITH CHANGES TO STATE LAW; (4) ADOPTING FINDINGS TO SUPPORT THE LOCAL AMENDMENTS; AND (5) FINDING THIS ORDINANCE IS EXEMPT FROM REVIEW UNDER THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

WHEREAS, the California Building Standards Commission (CBSC) is responsible for administering the proposal, review, adoption, and implementation of the codes and regulations that establish building standards throughout California contained in Title 24 of the California Code of Regulations, commonly referred to as the California Building Standards Code; and

WHEREAS, the 2025 California Building Standards Code was published July 1, 2025, and will go into effect on January 1, 2026; and

WHEREAS, local jurisdictions are required to adopt and enforce the triennial California Building Standards Code published by the CBSC with any local amendments by January 1 of their effective year, or be mandated to accept, by default, the version published by the State; and

WHEREAS, California Health and Safety Code Section 17958 requires cities to adopt building regulations that are substantially the same as those adopted by the CBSC and contained in the California Building Standards Code; and

WHEREAS, California Health and Safety Code Sections 17958.5, 17958.7, and 18941.5 allow cities to enact more stringent standards to the California Building Standards Code, including but not limited to green building standards, based on express findings that such standards are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, California Building Standards Code Section 101.7.1 provides that local climatic, geological or topographical conditions include environmental conditions established by a city, county, or city and county through findings; and

WHEREAS, following adoption of this Ordinance, the City will submit the local amendments to the 2025 California Building Standards Code and required findings to the CBSC for filing, in accordance with Public Resources Code Section 25402.1(h)(2) and Section 10-106 of the 2025 California Administrative Code (Cal. Code Regs. Title 24, Part 1); and

WHEREAS, additionally, the 2025 California Energy Code is Part 6 of the 2025 California Building Standards Code, which implements minimum energy efficiency standards in buildings through mandatory requirements, prescriptive standards, and performance standards; and

WHEREAS, the local amendments to CalGreen (Part 11 of the California Building Standards Code), in tandem with the 2025 California Energy Code, establish requirements for single-family, multifamily, and nonresidential structures which will reduce demands for local energy resources, reduce regional pollution, and promote a lower contribution to greenhouse gas emissions, supporting the City's efforts to reduce greenhouse gas emissions to 40 percent below 1990 levels by no later than December 31, 2030 per California Health and Safety Code Section 38566, as enacted in Senate Bill 32 on September 20, 2016; and

WHEREAS, the local amendments support the City's compliance with the Bay Area Air Quality Management District's amendments to Rule 9-4 and Rule 9-6, which limit the sale of nitrous oxide emitting water and space heating appliances in the near term; and

WHEREAS, scientific evidence has established that methane gas combustion, procurement and transportation produce significant greenhouse gas emissions that contribute to global warming and climate change; and, using electric appliances in buildings fueled by less greenhouse gas intensive electricity is linked to significantly lower greenhouse gas emissions and is cost competitive because of the cost savings associated with avoiding new gas infrastructure; and

WHEREAS, the most cost-effective times to integrate electrical infrastructure is: (1) in the design phase of a new construction building project because building systems and spaces can be designed to optimize the performance of electrical systems and avoid costs and space requirements from the mitigating of gas piping and venting, and/or (2) during a significant alteration and/or addition to an existing building project, allowing for electrical infrastructure that is installed alongside other significant improvements; and

WHEREAS, Public Resources Code Section 25402.1(h)2 and Section 10-106 of the 2025 California Administrative Code establish a process which allows local adoption of energy standards that are more stringent than the statewide Standards, provided that a determination that the standards are cost effective is adopted at a public meeting and subsequently filed with the California Energy Commission, and the California Energy Commission finds that the standards will require buildings to be designed to consume less energy than permitted by the 2025 California Energy Code; and

WHEREAS, the City Council held a duly noticed public hearing on August 26, 2025 on this Ordinance and received and considered all information, documents, and comments presented at said hearing, including the recommendation from the City Council report and project materials; now, therefore,

THE CITY COUNCIL OF THE CITY OF MOUNTAIN VIEW DOES HEREBY ORDAIN AS FOLLOWS:

Section 1. Findings for Local Amendments to California Building Standards Code. The City Council hereby finds that the local amendments to the California Building Standards Code in Title 24 of the California Code of Regulations are reasonably necessary because of local climatic, geological, topographical or environmental conditions in the area encompassed by the boundaries of the City of Mountain View and on that basis adopts the findings below in support of local necessity for the changes or modifications as enclosed in this Ordinance. The legislative findings for such modifications and changes are made pursuant to Sections 17958.5 and 17958.7 of the California Health and Safety Code, and CalGreen Section 101.7.1.

A. Administrative. Local amendments are necessary for administrative and procedural clarifications and do not modify a California Building Standard pursuant to California Health and Safety Code Sections 17958, 17958.5, and 17958.7. These amendments establish administrative standards for the effective enforcement of building and fire standards throughout the City of Mountain View.

B. Climatic. Local amendments are justified on the basis of local climatic conditions. The local climate is characterized by markedly delineated rainy and dry seasons, which tend to maximize the expansive characteristics of soil. The seasonal climatic conditions during the late summer and fall create severe fire hazards to the public health and welfare in the City. The hot, dry weather can result in fires on the brush-covered slopes west of Interstate 280. Due to decreases in annual rainfall, Mountain View experiences the effect of drought and water-saving more than other communities in California. Drought conditions tend to create more frequent and larger fire incidents. These local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity and high temperatures create extremely hazardous conditions. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in the City of Mountain View. Therefore, maintaining local requirements for fire sprinklers, emergency access and exiting, fire access roads, fire protection systems, and hazardous material storage and use aid the city in reducing fire risk.

C. Geological. Local amendments are justified on the basis of local geological conditions. Mountain View is located in the Santa Clara Valley, which is densely populated and located in the most severe seismic zone, Seismic Zone 4, capable of producing substantial seismic activity. Mountain View is situated on alluvial soils between San Francisco Bay and the San Andreas Fault zone. The City's location makes it particularly vulnerable to damage by seismic events. The relatively young geological processes that have created the San Francisco Bay Area are still active today. The City of Mountain View is subject to earthquake hazard caused by its proximity to San Andreas Fault and the Hayward Fault. Both of these faults are considered major Northern California earthquake faults which may experience rupture at any time. Thus, local amendments include requirements that are designed to better limit property damage as a result of seismic activity.

D. Topographical. Local amendments are justified due to topographical and geographic conditions. Mountain View is located in the southwestern section of the San Francisco Bay and is built atop the alluvial deposits that surround the margins of the Bay. The topography of Mountain View contains only modest variations in elevation above the water level of the San Francisco Bay. Mountain View is located in Santa Clara Valley and is one of the cities that make up Silicon Valley, having many notable Silicon Valley companies either headquartered or with a large presence within the city limits. Therefore, various local amendments are included to protect the health, safety, and welfare of the higher daytime population within the city limits with fire code requirements and green building requirements, as well as protect greater ecological safety of wildlife from the Baylands with bird safe glass requirements.

E. Environmental. Local amendments to encourage greater green building standards that benefit the public health and welfare of the Mountain View community by promoting the environmental and economic health of the City through the design, construction, maintenance, operation, and deconstruction of buildings and sites by incorporating green practices into development. The City's green provisions are designed to achieve the following:

1. An increase in energy efficiency in buildings;

2. Reduce reliance on natural gas in appliances and equipment and encourage use of electric alternatives, which can improve indoor environmental health and reduce fire risk;

3. Encourage dual plumbing and the use of recycled water, where available in the City;

4. Provide durable buildings that are efficient and economical to own and operate;

5. Encourage the installation of greater electrical vehicle parking infrastructure to support the growing number of electric vehicles in California;

6. Advance avian safety in the city, due to frontage along the San Francisco Bay, by incorporating bird-safe glass design standards; and

7. Promote the health and productivity of residents, workers, and visitors to the City.

Natural gas combustion and gas appliances emit a wide range of air pollutants, such as carbon monoxide (CO), nitrogen oxides (NOx, including nitrogen dioxide (NO2)), particulate matter (PM), and formaldehyde, which according to a UCLA Study, have been linked to various acute and chronic health effects, and additionally exceed levels set by national and California-based ambient air quality standards. Encouraging electric buildings and appliances benefit the health, safety, and welfare of Mountain View and its residents. Implementation of all-electric construction will reduce the amount of greenhouse gas produced in Mountain View and will contribute to reducing the impact of climate change and the associated risks.

Section 2. Findings for Local Amendments Related to Part 6, California Energy Code. Pursuant to the Public Resources Code section 25402.1(h)(2) and Section 10-106 of the 2025 California Administrative Code, the City Council finds and determines: (1) the locally adopted energy efficiency standards contained in this Ordinance are cost-effective, and (2) the efficiency standards in this Ordinance will require buildings to be designed to consume less energy compared to the 2025 California Energy Code, and (3) the proposed local amendment in Part 11 (California Green Building Standards Code) is cost-effective and consumes less energy than otherwise permitted by the CBSC, Part 6, based upon the following:

A. The standards imposed by this Ordinance are necessary because of local climatic, geological, or topographical conditions based on the findings above.

B. The 2025 Cost Effectiveness Study: Single Family AC to Heat Pump Replacement prepared by the California Energy Codes and Standards Statewide Utility Program and associated study data (attached as Exhibit A) are sufficient to illustrate that the standards contained in this Ordinance are cost effective. Specifically, that there is a cost-effective measure to installing or replacing an air condenser unit with a heat pump system that would save energy relative to the 2025 California Energy Code using the "Long-term System Cost" (LSC) metric.

C. The standards in this Ordinance are necessary because they align with the 2030 Mountain View General Plan Goal INC-15, policies INC 15.1 to 15.3, and INC-12, policy INC-12.2, as described below, that direct the City to advance green building innovations citywide, which includes reducing greenhouse gas emissions and improving building energy efficiencies beyond State code minimums.

Section 3. Additional Findings in Support of Local Amendments. Consistent with the provisions of recent State Legislation under Assembly Bill 130, codified as California Health and Safety Code Sections 17958, 17958.5 and 17958.7, the City has prepared local amendments to the 2025 California Building Standards Code to be submitted to and accepted for filing by the CBSC prior to the September 30, 2025 deadline in order for amendments to be effective starting January 1, 2026. And, pursuant to California Health and Safety Code Sections 17958.5 and 17958.7, the proposed amendments meet the following conditions to demonstrate local amendments are necessary as: (1) the majority of changes are substantially equivalent to local amendments adopted by the City for the 2022 California Building Standards Code, albeit for the 2025 edition, and (2) the local building code amendments to the 2025 California Building Standards Code are consistent with the following City-adopted general plan and greenhouse gas reduction program, while continuing to allow mixed-fuel residential construction and incentivizing electric construction.

A. The local amendments, which exceed minimum requirements in the State Building Standards Code, align with goals and policies in the **2030 Mountain View General Plan** (General Plan), adopted on July 10, 2012, including, but not limited to, the following:

I. *Goal INC-15:* A built environment that supports ecological and human health.

1) *Policy INC 15.1: Green building program.* Administer a forward-looking green building program that promotes best practices for green building in new and existing buildings.

2) *Policy INC 15.2: Green building education.* Raise community awareness regarding green building methods, incentives, and benefits.

3) *Policy INC 15.3: Citywide green building.* Support green building technologies and innovations throughout the city.

II. *Goal INC-12:* Environmental stewardship that recognizes the importance of addressing climate change and community commitment to sustainability.

1) *Policy INC 12.2: Emissions reduction strategies*. Develop cost-effective strategies for reducing greenhouse gas emissions.

B. The local amendments, which exceed minimum requirements in the State Building Standards Code, are necessary to advance the greenhouse gas reduction strategy measures in the **Mountain View Greenhouse Gas Reduction Program** (GGRP), adopted on July 10, 2012, including, but not limited to, the following:

I. *Measure E-1.5: Smart Grid* to update the Mountain View Green Building Code to require smart-grid energy management and compatible heating, ventilation, air conditioning, and lighting in new construction.

II. *Measure E-1.6: Exceed State Energy Standards in New Residential Development* by exceeding efficiency standards for all new residential construction, additions, and improvements.

III. *Measure E-1.7*: *Exceed State Energy Standards in New Non-Residential Development* by exceeding efficiency standards for all new nonresidential construction and tenant improvements; and

Section 4. Adoption of California Building Standards Code. The following codes, as approved by the California Building Standards Commission, are hereby adopted by reference for implementation on January 1, 2026 with local amendments enclosed in Exhibits B and C.

- 2025 California Administrative Code, Title 24, Part 1
- 2025 California Building Code (Volumes 1 and 2), Title 24, Part 2
- 2025 California Residential Code, Title 24, Part 2.5
- 2025 California Electrical Code, Title 24, Part 3
- 2025 California Mechanical Code, Title 24, Part 4

- 2025 California Plumbing Code, Title 24, Part 5
- 2025 California Energy Code, Title 24, Part 6
- 2025 California Historical Building Code, Title 24, Part 8
- 2025 California Fire Code, Title 24, Part 9
- 2025 California Existing Building Code, Title 24, Part 10
- 2025 California Green Building Standards Code, Title 24, Part 11

The City also adopts the following Uniform Code by reference, as adopted by the International Code Council, for implementation on January 1, 2026 with local amendments as enclosed in Exhibit B:

- 1997 Uniform Code for the Abatement of Dangerous Buildings

Section 5. Chapter 8 (Buildings) of the Mountain View City Code, the local amendments to the 2022 California Building Standards Code, is hereby repealed in its entirety.

Section 6. Chapter 8 (Buildings) of the Mountain View City Code, the local amendments to the 2025 California Building Standards Code, is hereby amended to add new text as set forth in Exhibit B hereto, incorporated by reference as though fully set forth herein (chapter and section titles are shown in **bold** font and local amendments to the 2025 California Building Standards Code are shown with deletions in ~~strikethrough~~ and additions in underline). Chapter 8 (Buildings) of the Mountain View City Code is based on the 2025 California Building Standards Code, including other international and uniform codes. The most current editions of the California Building Standards Code, as amended herein, shall be the governing building construction code for the City of Mountain View from and following January 1, 2026.

Section 7. Chapter 14 (Fire Prevention) of the Mountain View City Code, the local amendments to the 2022 California Fire Code, is hereby repealed in its entirety.

Section 8. Chapter 14 (Fire Prevention) of the Mountain View City Code, the local amendments to the 2025 California Fire Code, is hereby amended to add as new text as set forth in Exhibit C hereto, incorporated by reference as though fully set forth herein (chapter and section titles are shown in **bold** font and local amendments to the 2025 California Fire Code are shown with deletions in ~~strikethrough~~ and additions in underline). Chapter 14 (Fire Prevention) of the Mountain View City Code is based on the 2025 California Fire Code, including other international and uniform codes. The most current edition of the California Fire Code, as amended herein, shall be the governing fire construction, life safety, and emergency response code for the City of Mountain View from and following January 1, 2026.

Section 9. CEQA. Adoption of local amendments to the California Building Standards Code is not a project under the California Environmental Quality Act (Public Resources Code, § 21000 *et seq*., "CEQA") and the CEQA Guidelines (Cal. Code Regs. Tit. 14, § 15000 *et seq*.) pursuant to Public Resources Codes Section 21065 and CEQA Guidelines Section 15378 because it does not approve a project or result in a direct physical impact on the environment, or contemplate known future projects, and as such, there are no known environmental impacts at this time. As a

separate and independent basis, adoption of the local amendments is exempt from the requirements of CEQA pursuant to CEQA Guidelines Section 15061(b)(3), because it can be shown with certainty that there is no possibility that the activity in question will have a significant effect on the environment.

Section 10. Severability. If any section, subsection, sentence, clause, or phrase of this Ordinance is for any reason held to be unconstitutional, such decision shall not affect the validity of the other remaining portions of this Ordinance. The City Council hereby declares that it would have passed this Ordinance and each section, subsection, sentence, clause, or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses, or phrases be declared unconstitutional.

Section 11. Publication. Pursuant to Section 522 of the Mountain View City Charter, it is ordered that copies of the foregoing proposed ordinance be posted at least two (2) days prior to its adoption in three (3) prominent places in the City and that a single publication be made to the official newspaper of the City of a notice setting forth the title of the ordinance, the date of its introduction, and a list of the places where copies of the proposed ordinance are posted.

Section 12. Effective Date. The provisions of this Ordinance shall be effective on January 1, 2026, which is more than thirty (30) days from and after the date of this Ordinance adoption.

Exhibits:
- A. 2025 Cost-Effectiveness Study: Single Family AC to Heat Pump Replacement dated August 8, 2025
- B. Chapter 8 (Buildings)
- C. Chapter 14 (Fire Prevention)

EXHIBIT A

CALIFORNIA ENERGY CODES & STANDARDS
A STATEWIDE UTILITY PROGRAM

2025 Cost-Effectiveness Study: Single Family AC to Heat Pump Replacement

Prepared by:
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Last modified: 2025/08/08

SDGE
SOUTHERN CALIFORNIA EDISON Energy for What's Ahead
PG&E Pacific Gas and Electric Company

Legal Notice

This report was prepared by Pacific Gas and Electric Company and funded by the California utility customers under the auspices of the California Public Utilities Commission.

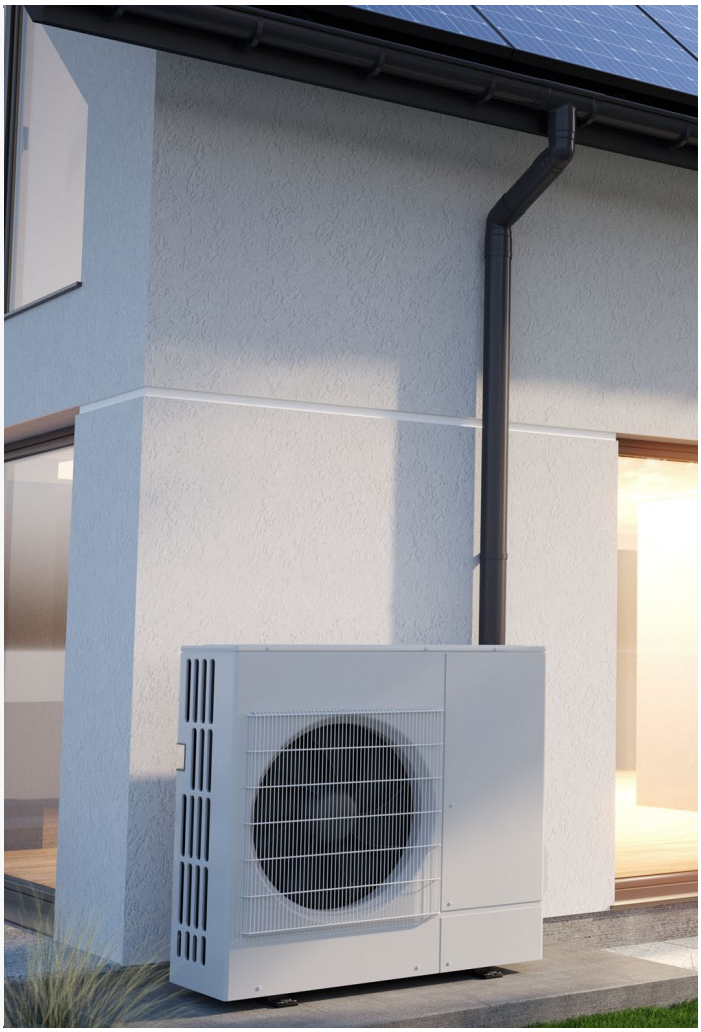

Table 1. Summary of Revisions

Date	Description	Reference (page or section)
6/09/2025	Original Release	N/A
8/08/2025	The following issues were corrected in this report. Note that none of the issues flipped cost-effectiveness results from cost-effective to not cost-effective or vice versa in any climate zone except for the DFHP in the 1978-1991 vintage in CZ 15 is now LSC cost-effective. 1. 30-year DFHP results for all sizes except the 3-ton system have been impacted. Increase in cost-effectiveness for Climate Zones 2,4,8-15, decrease in cost effectiveness in Climate Zone 3.	Table 7, Table 8, Table 9, Table 12, Table 15, Table 22, Table 25, Table 28, Table 31, Section 4: Recommendations and Discussion

	2. Incremental cost tables 7-9 had incorrect condensing furnace costs. 3. Zero NOx discussion in the recommendations and discussion section was based on the high gas escalation rates but were compared against the modest escalation standard results. The discussion has been corrected to compare against the high gas escalation standard results instead.	

Acronym List

AC – Air conditioner

ACH50 – Air Changes per Hour at 50 pascals pressure differential

AFUE – Annual Fuel Utilization Efficiency

B/C – Lifecycle Benefit-to-Cost Ratio

BSC – Building Standards Commission

CA IOUs – California Investor-Owned Utilities

CARE – California Alternate Rates for Energy

CASE – Codes and Standards Enhancement

CBECC-Res – Computer program developed by the California Energy Commission for demonstrating compliance with the California Residential Building Energy Efficiency Standards

CFM – Cubic Feet per Minute

CO_2 – Carbon Dioxide

CPAU – City of Palo Alto Utilities

CPUC – California Public Utilities Commission

CZ – California Climate Zone

DFHP – Dual Fuel Heat Pump

DHW – Domestic Hot Water

DOE – Department of Energy

EDR – Energy Design Rating

EER – Energy Efficiency Ratio

EF – Energy Factor

GHG – Greenhouse Gas

HPWH – Heat Pump Water Heater

HSPF – Heating Seasonal Performance Factor

HVAC – Heating, Ventilation, and Air Conditioning

IOU – Investor Owned Utility

kBtu – kilo-British thermal unit

kWh – Kilowatt Hour

LCC – Lifecycle Cost

LLAHU – Low Leakage Air Handler Unit

VLLDCS – Verified Low Leakage Ducts in Conditioned Space

NEEA – Northwest Energy Efficiency Alliance

NEM – Net Energy Metering

NPV – Net Present Value

PG&E – Pacific Gas and Electric Company

PV – Photovoltaic

SCE – Southern California Edison

SDG&E – San Diego Gas and Electric

SEER – Seasonal Energy Efficiency Ratio

SF – Single Family

SMUD – Sacramento Municipal Utility District

SoCalGas – Southern California Gas Company

TDV – Time Dependent Valuation

Therm – Unit for quantity of heat that equals 100,000 British thermal units

Title 24 – Title 24, Part 6

TOU – Time-Of-Use

UEF – Uniform Energy Factor

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Executive Summary

The California Codes and Standards (C&S) Reach Codes program, also known as the Local Energy Codes program, provides technical support to local governments considering adopting a local ordinance (reach code) intended to support meeting local and/or statewide energy efficiency and greenhouse gas (GHG) reduction goals. The program facilitates adoption and implementation of the code when requested by local jurisdictions by providing resources such as cost-effectiveness studies, model language, sample findings, and other supporting documentation.

It is important to note that there is a voluntary measure in the 2025 CALGreen for replacing an air conditioner with a heat pump at time of air conditioner replacement, which can be adopted as is. This report seeks to provide options to modify the heat pump measure and demonstrate the cost-effectiveness of these options.

This analysis used two different metrics to assess the cost-effectiveness of the proposed upgrades for a 1,665 square foot single family home prototype with an attached garage. Both methodologies require estimating and quantifying the incremental costs and energy savings associated with each energy efficiency measure over a 30-year analysis period. On-Bill cost-effectiveness is an occupant-based lifecycle cost (LCC) approach that values energy based upon estimated site energy usage and customer utility bill savings using today's electricity and natural gas utility tariffs. To reflect how natural gas prices fluctuate with seasonal supply and demand, a normalized curve was used to estimate the cost for the remaining months relative to today's rates. Long-term Systemwide Cost (LSC) is the California Energy Commission's metric for determining cost-effectiveness of efficiency measures in the 2025 Energy Code. This metric is intended to capture the long-term projected cost of energy including costs for providing energy during peak periods of demand, carbon emissions, grid transmission and distribution impacts.

Local jurisdictions may adopt ordinances that amend different parts of the California Building Standards Code or may elect to amend other state or municipal codes. The decision regarding which code to amend will determine the specific requirements that must be followed for an ordinance to be legally enforceable. For example, reach codes that amend Part 6 of the California Building Code (the Energy Code) and require energy performance beyond state code minimums must demonstrate the proposed changes are cost-effective and obtain approval from the Energy Commission as well as the Building Standards Commission (BSC). Amendments to Part 11, such as requirements for increased water efficiency or electric vehicle infrastructure only require BSC approval and do not require the Energy Commission approval. Although a cost-effectiveness study is only required to amend Part 6 of the California Building Code, this study provides valuable context for jurisdictions pursuing other ordinance paths to understand the economic impacts of the policy decision. This study documents the estimated costs, benefits, energy impacts and greenhouse gas emission reductions that may result from implementing an ordinance based on the results to help residents, local leadership, and other stakeholders make informed policy decisions.

The following summarizes key results:

1. Heat pumps are significantly more efficient than gas furnaces, requiring less than half the energy to meet the heating load. However, despite this reduction in heating energy use, the cost of heating a home using electricity (heat pump) could be higher than the cost to heat that same home with natural gas (furnace), depending on the electricity tariffs relative to the gas tariffs. Therefore, while a heat pump measure could be deemed as cost-effective over its lifecycle, installing a heat pump could result in a decrease *or* an increase in utility costs in the first years relative to a gas furnace and AC system.
2. The study assumes utility rates escalate over time. Because it is very difficult to predict how the rates will change, the analysis presents two escalation scenarios (modest and high gas escalation) to represent a range of outcomes.
3. The LSC metric most often produces more favorable cost-effectiveness results relative to the results produced using actual utility costs (On-Bill). When the analysis assumes a higher escalation rate for natural gas costs relative to electricity in future years (high gas escalation), the On-Bill results are more favorable in some cases.
    a. In the oldest (pre-1978) vintage, all three measures (dual fuel heat pump with existing furnace, standard heat pump space heater, and high efficiency heat pump space heater) are cost-effective using the LSC metric in all climate zones. When using the On-Bill metric, the measures remain cost-effective in most climate zones.
    b. In the newer (1978-1991 and 1992-2010) vintages, the dual fuel heat pump (DFHP Existing Furnace) and the standard efficiency HPSH are cost-effective based on LSC in all cases except for Climate Zone 15 when using both the standard and California Alternate Rates for Energy (CARE) tariff.
4. Using the CARE tariff results in higher cost savings and cost-effectiveness relative to standard rates, with almost all cases yielding first year utility cost savings. The DFHP Existing Furnace is On-Bill cost-effective based on the high gas escalation scenario in all cases in the pre-1978 vintage, and almost all cases in the 1978-1991 and 1992-2010 vintage. It is also On-Bill cost-effective in most climate zones for the modest gas escalation scenario across all vintages. In Climate Zones 5, 8, 9, 10, 14, and 15, cost-effectiveness declines relative to other areas, and in some cases is not cost-effective from an On-Bill perspective. This is the case for both the CARE tariff and the standard rate.
5. The analysis also modeled the cost impact of using a standard time-of-use electricity tariff versus switching to a newer electrification tariff, designed to reduce costs in homes with heat pumps and/or electric vehicles. Older homes tend to be the least efficient and achieve the most savings from improving equipment efficiency. In most of the state, because older homes tend to use more electricity than a similarly sized, newer vintage home, they realize more costs savings under the electrification tariff. Newer homes tend to use less electricity and therefore do not realize the same cost

savings from switching tariffs; they generally perform better under the standard tariff. This trend is different in milder climate zones in SCE territory (excluding CZ 15), where newer homes realize more cost savings. Both the standard and electrification tariffs in SCE territory include a daily allocation of lower-cost baseline electricity and a second, higher-priced tier when the baseline is exceeded. In many newer homes, a higher percentage of overall electricity use is within the baseline allocation, resulting in greater cost savings.

6. Higher efficiency equipment reduces utility costs in all cases and improves cost-effectiveness in many climate zones in the oldest vintage relative to standard efficiency equipment. However, in more efficient newer homes, where cost-effectiveness is generally lower, the savings are insufficient to offset the roughly $3,000 increase in incremental cost.
7. Given the adopted Bay Area Air Quality Management District (BAAD) Zero NOx rule, and the proposed California Air Resource Board or South Coast Air Quality Management District (SCAQMD) Zero-NOx rules, and gas furnaces are no longer available or less available to be installed in 2030, a sensitivity analysis was performed for the Zero NOx scenario and found that cost-effectiveness declines in many cases except in Climate Zones 8-10, some results improve enough to become cost-effective. The improved cost-effectiveness in Climate Zones 8-10 is due to the higher baseline cost when a HPSH must be installed at year 10 when the furnace must be replaced. However, the overall magnitude of 30-year On-Bill cost-effectiveness is lower because there are only 10 years of utility cost savings. After year 10 the base case and upgrade measures are both heat pumps.

This report documents the key results and conclusions from the Reach Codes Team analysis. A full dataset of all results can be downloaded at https://localenergycodes.com/content/resources. Results alongside policy options can also be explored using the Cost-effectiveness Explorer at https://explorer.localenergycodes.com/. Model ordinance language and other resources are posted on the C&S Reach Codes Program website at LocalEnergyCodes.com. Local jurisdictions that are considering adopting an ordinance may contact the program for further technical support at info@localenergycodes.com.

1 Introduction

The California Codes and Standards Reach Codes program, also known as the Local Energy Codes program, provides technical support to local governments considering adopting a local ordinance intended to support meeting local and/or statewide energy efficiency and greenhouse gas (GHG) reduction goals. The program facilitates adoption and implementation of the code when requested by local jurisdictions by providing resources such as cost-effectiveness studies, model language, sample findings, and other supporting documentation.

Local jurisdictions may adopt ordinances that amend different parts of the California Building Standards Code or may elect to amend other state or municipal codes. The decision regarding which code to amend will determine the specific requirements that must be followed for an ordinance to be legally enforceable. For example, reach codes that amend Part 6 of the California Building Code (the Energy Code) (CEC, 2025) and require energy performance beyond state code minimums must demonstrate the proposed changes are cost-effective and obtain approval from the Energy Commission as well as the Building Standards Commission (BSC). Amendments to Part 11, such as requirements for increased water efficiency or electric vehicle infrastructure only require BSC approval and do not require the Energy Commission approval. Although a cost-effectiveness study is only required to amend Part 6 of the California Building Code, this study provides valuable context for jurisdictions pursuing other ordinance paths to understand the economic impacts of the policy decision. This study documents the estimated costs, benefits, energy impacts and greenhouse gas emission reductions that may result from implementing an ordinance based on the results to help residents, local leadership, and other stakeholders make informed policy decisions.

This report is an update to the *2022 Single Family Retrofit Cost-effectiveness Study* (Statewide Reach Codes Team, 2024) focused on an ordinance structure that encourages air conditioner (AC) to heat pump replacement. The methodology, prototype characteristics, and relevant measure packages are retained from the main study referenced above. The study includes updated utility rates, revised costs based on the TECH Clean California[1] incremental cost study data, estimated costs for the AC path, updated and expanded AC path options, and a new cost-effectiveness scenario that considers upcoming proposed zero-NOx emission regulations (SCAQMD, 2025) (California Air Resources Board, 2022) (BAAD, 2025).

Local jurisdictions in California may consider adopting local energy ordinances to achieve energy savings beyond what will be accomplished by enforcing building efficiency requirements that apply statewide.

Local jurisdictions may also adopt ordinances that amend different parts of the California Building Standards Code or may elect to amend other state or municipal codes. The

[1] https://techcleanca.com/

decision regarding which code to amend will determine the specific requirements that must be followed for an ordinance to be legally enforceable. Although a cost-effectiveness study is only required to amend Part 6 of the CA Building Code, it is important to understand the economic impacts of any policy decision. This study documents the estimated costs, benefits, energy impacts and greenhouse gas emission reductions that may result from implementing an ordinance based on the results to help local leadership, residents, and other stakeholders make informed policy decisions.

This report was developed in coordination with the California Statewide Investor-Owned Utilities (IOUs) Codes and Standards Program, the California Energy Commission (CEC), key consultants, and engaged cities—collectively known as the Statewide Reach Codes Team. Model ordinance language and other resources are posted on the C&S Reach Codes Program website at LocalEnergyCodes.com. Local jurisdictions that are considering adopting an ordinance may contact the program for further technical support at info@localenergycodes.com.

2 Methodology and Assumptions

This study evaluates a potential reach code that encourages a heat pump or dual fuel system that includes a heat pump combined with a furnace when an air conditioner is replaced or installed new in existing single family homes. The ordinance structure and this analysis is based on the voluntary requirements adopted in 2025 Title 24, Part 11 California Green Building Standards Code (CALGreen), Section A4.204.1.1 for heat pump space conditioning alterations in single family homes (California Energy Commission, 2025). The proposed reach code also defines pathways for air conditioning equipment to be installed combined with additional efficiency measures. The heat pump path requires the heat pump as the primary heat source, with backup heating allowable either provided by electric resistance or natural gas. In cases where the existing furnace remains, the heat pump is installed alongside the existing furnace with integrated controls to allow for the furnace to provide backup heating. In alignment with the 2025 Energy Code requirements the heat pump must be sized to satisfy the heating load at the design heating temperature without the use of backup heat.

All methodology and assumptions are consistent with prior statewide analysis (Statewide Reach Codes Team, 2024) with the following exceptions:

1. Updated utility rates to January 2025
2. Equipment costs based on TECH data where available; the original report was based on Statewide contractor survey costs
3. Cost estimates were obtained for the AC path
4. Expanded AC path options
5. Cost-effectiveness results for the scenario if gas furnaces are no longer available for sale in California in 2030

2.1 Modeling

The Reach Codes Team performed energy simulations using the 2025 research version of the Residential California Building Energy Code Compliance software (CBECC). The 2025 version of CBECC includes updated weather files, metrics, and the weather stations were changed in Climate Zones 4 and 6 from San Jose to Paso Robles and Torrance to Los Angeles International Airport, respectively. Note that at the time of this report, the Energy Commission was working on integrating a new heat pump model into the CBECC-Res software to better reflect the actual energy use of heat pumps. The updated model results in lower heating energy use than is currently estimated. Once the revised software is released, the reach codes team plans to update this analysis.

Three unique building vintages are included: pre-1978, 1978-1991, and 1992-2010. The vintages were defined based on review of historic building code requirements and defining periods with distinguishing features. The proposed measures were modeled to determine the projected site energy (therm and kWh), source energy, GHG emissions, and long-term systemwide cost (LSC) impacts. Annual utility costs were calculated using hourly data

output from CBECC, and updated (as of 1/1/2025) electricity and natural gas tariffs for each of the investor-owned utilities (IOUs) as appropriate for that climate zone.

Site energy results are similar between CBECC-Res 2022 and 2025. The 2025 compliance metrics include assumptions that more appliances will be electric in the future. This is predicted to result in higher natural gas retail rates as a result of gas utilities continuing to maintain safe and reliable infrastructure amidst declining natural gas use.

Equivalent CO_2 emission reductions were calculated based on outputs from the CBECC-Res simulation software. Electricity emissions vary by region and by hour of the year. CBECC-Res applies two distinct hourly profiles, one for Climate Zones 1 through 5 and 11 through 13 and another for Climate Zones 6 through 10 and 14 through 16. Natural gas emissions do not vary hourly. To compare the mixed-fuel and all-electric cases side-by-side, GHG emissions are presented as pounds of CO_2-equivalent (CO_2e) emissions.

The Statewide Reach Codes Team designed the approach and selected measures for evaluation based on the 2019 existing building single family reach code analysis (Statewide Reach Codes Team, 2021) and supporting analysis used in the 2025 Energy Code development cycle as well as from outreach to architects, builders, and engineers.

2.2 Prototype Characteristics

The Energy Commission defines building prototypes which it uses to evaluate the cost-effectiveness of proposed changes to Energy Code requirements. Average home size has steadily increased over time, and the Energy Commission single family new construction prototypes are larger than many existing single family homes across California. For this analysis, a 1,665 square foot prototype was evaluated. Table 2 describes the basic characteristics of the single family prototype. Additions are not evaluated in this analysis as they are already addressed in Section 150.2 of the Energy Code. In the 2025 Energy Code heat pumps are prescriptively required for space and water heating for additions (California Energy Commission, 2023).

Table 2. Residential Prototype Characteristics

Climate Zone	Specification
Existing Conditioned Floor Area	1,665 ft^2
Num. of Stories	1
Num. of Bedrooms	3
Window-to-Floor Area Ratio	13%
Attached Garage	2-car garage

Three building vintages were evaluated to determine sensitivity of existing building performance on cost-effectiveness of upgrades. For example, it is widely recognized that adding attic insulation in an older home with no insulation is cost-effective, however, newer homes will likely have existing attic insulation reducing the cost-effectiveness of an incremental addition of insulation. The building characteristics for each vintage were

determined based on either prescriptive requirements from the building code that were in effect or standard construction practice during that time period. For example, homes built under 2001 Title 24 are subject to prescriptive envelope code requirements very similar to homes built under the 2005 code cycle, which was in effect until January 1, 2010.

Table 3 summarizes the assumptions for each of the three vintages. Additionally, the analysis assumed the following features when modeling the prototype buildings.

- Efficiencies were defined by year of the most recent equipment replacement based on standard equipment lifetimes.
- Individual space conditioning and water heating systems, one per single family building.
- Split-system air conditioner with natural gas furnace.
- Gas cooktop, oven, and clothes dryer.

The methodology applied in the analyses begins with a design that matches the specifications as described in Table 3 for each of the three vintages. Heat pump space conditioning measures were modeled to determine the projected energy performance and utility cost impacts relative to the baseline vintage.

Table 3. Efficiency Characteristics for Three Vintage Cases

Building Component Efficiency Feature	Pre-1978 Vintage	1978-1991 Vintage	1992-2010 Vintage
Envelope			
Exterior Walls	2x4, 16-inch on center wood frame, R-0[2]	2x4 16 inch on center wood frame, R-11	2x4 16 inch on center wood frame, R-13
Foundation Type & Insulation	Uninsulated slab (CZ 2-15) Raised floor, R-0 (CZ 1 & 16)	Uninsulated slab (CZ 2-15) Raised floor, R-0 (CZ 1 & 16)	Uninsulated slab (CZ 2-15) Raised floor, R-19 (CZ 1 & 16)
Ceiling Insulation & Attic Type	Vented attic, R-5 @ ceiling level for CZ 6 & 7, Vented attic, R-11 @ ceiling level (all other CZs)	Vented attic, R-19 @ ceiling level	Vented attic, R-30 @ ceiling level
Roofing Material & Color	Asphalt shingles, dark (0.10 reflectance, 0.85 emittance)	Asphalt shingles, dark (0.10 reflectance, 0.85 emittance)	Asphalt shingles, dark (0.10 reflectance, 0.85 emittance)
Radiant Barrier	No	No	No
Window Type: U-factor/SHGC[3]	Metal, single pane: 1.16/0.76	Metal, dual pane: 0.79/0.70	Vinyl, dual pane Low-E: 0.55/0.40
House Infiltration at 50 Pascals	15 ACH50	10 ACH50	7 ACH50
HVAC Equipment			
Heating Efficiency	78 AFUE (assumes 2 replacements)	78 AFUE (assumes 1 replacement)	78 AFUE
Cooling Efficiency	10 SEER (assumes 2 replacements)	10 SEER (assumes 1 replacement)	13 SEER, 11 EER
Duct Location & Details	Attic, R-2.1, 30% leakage at 25 Pa	Attic, R-2.1, 25% leakage at 25 Pa	Attic, R-4.2, 15% leakage at 25 Pa
Whole Building Mechanical Ventilation	None	None	None
Water Heating Equipment			
Water Heater Efficiency	0.575 Energy Factor (assumes 2 replacements)	0.575 Energy Factor (assumes 1 replacement)	0.575 Energy Factor
Water Heater Type	40-gallon gas storage	40-gallon gas storage	40-gallon gas storage
Pipe Insulation	None	None	None
Hot Water Fixtures	Standard, non-low flow	Standard, non-low flow	Standard, non-low flow

[2] Pre-1978 wall modeled with R-5 cavity insulation to better align wall system performance with monitored field data and not overestimate energy use.
[3] Window type selections were made based on conversations with window industry expert, Ken Nittler. If a technology was entering the market during the time period (e.g., Low-E during 1992-2010 or dual-pane during 1978-1991) that technology was included in the analysis. This provides a conservative assumption for overall building performance and additional measures may be cost-effective for buildings with lower performing windows, for example buildings with metal single pane windows in the 1978-1991 vintage

2.3 Cost-Effectiveness Approach

2.3.1 Benefits

This analysis used two different metrics to assess the cost-effectiveness of the proposed upgrades. Both methodologies require estimating and quantifying the incremental costs and energy savings associated with each energy efficiency measure. The main difference between the methodologies is the way they value energy impacts:

- **On-Bill:** Customer-based lifecycle cost approach that values energy based upon estimated site energy usage and customer On-Bill savings using electricity and natural gas utility rate schedules over a 30-year duration, accounting for a three percent discount rate and energy cost inflation per Appendix 6.3.7.
- **Long-term Systemwide Cost (LSC):** Formerly known as Time Dependent Valuation (TDV) energy cost savings, LSC reflects the Energy Commission's current lifecycle cost (LCC) methodology, which is intended to capture the total value or cost of energy use over 30 years. This method accounts for the hourly cost of marginal generation, transmission and distribution, fuel, capacity, losses, and cap-and-trade-based CO_2 emissions (California Energy Commission, 2023). This is the methodology used by the Energy Commission in evaluating cost-effectiveness for measures in the 2025 Energy Code.

Energy simulations were completed using the 2025 research version of the Residential California Building Energy Code Compliance software (CBECC).

2.3.2 Costs

The Reach Codes Team assessed the incremental costs and savings of the packages over the lifecycle of 30-years. Incremental costs represent the equipment, installation, replacement, and maintenance costs of the proposed measure relative to the 2025 Energy Code minimum requirements or standard industry practices.

In February 2024, the TECH Clean California statewide program completed an incremental cost study from cost data collected from 64 contractor participants (Opinion Dynamics, 2024). This report directly uses the TECH costs for all the scenarios for which there was TECH cost data available. These costs were supplemented with measure costs the Reach Codes Team obtained from a contractor survey conducted in the summer of 2023. Additional detail on the contractor cost survey is available in the prior existing building statewide study (Statewide Reach Codes Team, 2024). The following summarizes key assumptions in this costing approach.

- Average statewide costs from the TECH Study were used, no regional specific costs were applied.
- Costs for 3-ton and 4-ton units were scaled for smaller and larger systems based on linear interpolation between the 3-ton and 4-ton costs.

- The TECH study provided cost for a minimum efficiency 60,000 Btu/h gas furnace. However, beginning in 2028, newly installed residential gas furnaces must comply with updated federal efficiency standards requiring a minimum of 95% AFUE[4]. Because the TECH study did not include cost estimates for a 95% AFUE condensing furnace, an adjustment was made using data from the statewide contractor cost survey. For systems requiring larger furnace capacities, cost estimates were derived as follows:
    - **80,000 Btu/h furnaces** (serving systems sized 3 tons): The cost difference between the minimum efficiency and 95% AFUE versions of the 80,000 Btu/h furnace and the cost difference between the minimum efficiency 80,000 Btu/h furnace and the minimum efficiency 60,000 Btu/h furnace, as reported in the contractor survey, was added to the TECH cost for the 60,000 Btu/h unit.
    - **100,000 Btu/h furnaces** (serving systems 4 tons and larger): The same method was applied using the corresponding cost differential for 100,000 Btu/h units.
- At time of replacement for the heat pump, based on heating loads and contractor feedback it is assumed an electric resistance backup coil would be installed with the air handler for Climate Zones 1 and 16. The CBECC-Res software applies back up electric resistance heating for all climate zones whenever it is assumed that the heat pump cannot meet the heating load based on the performance of currently available products (Heinemeier, 2025).The TECH costs did not include this option. The $819 incremental cost from the statewide study was added in this case.
- At the time of replacement for a furnace when it fails, the statewide study assumed a fan motor replacement. The TECH costs did not include this option. A $1,200 incremental cost was added to the TECH cost.
- At time of replacement for high efficiency heat pump, the sum of the TECH cost for standard efficiency heat pump and the incremental cost difference from the statewide study for high efficiency and standard efficiency heat pump was applied.

Costs were applied based on the system capacity from heating and cooling load calculations in CBECC-Res as presented in Table 4. Air conditioner nominal capacity was calculated as the CBECC-Res cooling load, rounded up to the nearest half ton. Heat pump nominal capacity was calculated as the maximum of either the CBECC-Res heating or cooling load, rounded up to the nearest half ton. In both cases a minimum capacity of 1.5-ton was applied as this represents the typical smallest available split system heat pump equipment. Load calculations revealed that Climate Zones 2 through 15 were cooling-dominated, whereas Climate Zones 1 and 16 were heating-dominated. In these heating-

[4] https://www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-residential-furnaces-save-americans-15-billion#:~:text=These%20furnace%20efficiency%20standards%20were,heat%20for%20the%20living%20space.

dominated zones, the heat pump was upsized compared to an air conditioner designed solely for cooling to ensure adequate heating performance.

Table 4. System Sizing by Climate Zone

Climate Zone	Air Conditioner Capacity (tons)	Heat Pump Capacity (tons)
1	1.5	3.0
2	3.5	3.5
3	2.5	2.5
4	3.5	3.5
5	3.0	3.0
6	3.0	3.0
7	3.0	3.0
8	4.0	4.0
9	4.0	4.0
10	4.0	4.0
11	4.5	4.5
12	4.0	4.0
13	4.5	4.5
14	4.0	4.0
15	5.0	5.0
16	3.5	4.0

2.3.3 Metrics

Cost-effectiveness is presented using net present value (NPV).

- NPV: The Reach Codes Team uses net savings (NPV benefits minus NPV costs) as the cost-effectiveness metric. If the net savings of a measure or package is positive, it is considered cost effective. Negative net savings represent net costs to the consumer. A measure that has negative energy cost benefits (energy cost increase) can still be cost effective if the costs to implement the measure are even more negative (i.e., construction and maintenance cost savings).

Improving the energy performance of a building often requires an initial investment. In most cases the benefit is represented by annual On-Bill utility or LSC savings, and the cost by incremental first cost and replacement costs. However, some packages result in initial construction cost savings (negative incremental cost), and either energy cost savings (positive benefits), or increased energy costs (negative benefits). In cases where both construction costs and energy-related savings are negative, the construction cost savings are treated as the benefit while the increased energy costs are the cost. In cases where a measure or package is cost-effective immediately (i.e., upfront construction cost savings and lifetime energy cost savings).

2.3.4 Utility Rates

In coordination with the CA IOU rates team (comprised of representatives from Pacific Gas and Electric (PG&E), Southern California Edison (SCE) and San Diego Gas and Electric (SDG&E)) and two Publicly-Owned-Utilities (POUs) (Sacramento Municipal Utility District (SMUD) and City of Palo Alto Utilities (CPAU)), the Reach Codes Team determined appropriate utility rates for each climate zone to calculate utility costs and determine On-Bill cost-effectiveness for the proposed measures and packages. The utility tariffs, summarized in Table 5 and Table 6 with details in Section 6.2.26.2.2, were determined based on the appropriate rate for each. Utility rates were applied to each climate zone based on the predominant IOU serving the population of each zone, with a few climate zones evaluated multiple times under different utility scenarios. Climate Zones 10 and 14 were evaluated with both SCE for electricity and Southern California Gas Company (SoCalGas) for gas and SDG&E tariffs for both electricity and gas since each utility has customers within these climate zones. Climate Zone 5 is evaluated under both PG&E and SoCalGas natural gas rates. Two POU or municipal utility rates were also evaluated: SMUD in Climate Zone 12 and CPAU in Climate Zone 4.

First-year utility costs were calculated using hourly electricity and natural gas output from CBECC-Res and applying the utility tariffs summarized in Table 5 and Table 6. Homes with a heat pump in IOU territory are eligible for either the electrification or the standard tariff. Utility costs were calculated under both tariffs with results presented using the one that yielded the lower annual utility cost. The electrification tariff resulted in better utility costs savings when there was high kWh usage, typically in older, less efficient homes. Conversely, newer homes which are more efficient, tend to benefit more under the standard tariff. However, in SCE's milder climate zones, older homes benefit more under the standard tariff. Annual costs were also estimated for IOU customers eligible for the CARE tariff discounts on both electricity and natural gas bills.

Table 5. Investor-Owned Utility Tariffs Used Based on Climate Zone

Climate Zones	Electric / Gas Utility	Electricity Tariff: Standard Rate	Electricity Tariff: Electrification Rate	Natural Gas Tariff
1-5,11-13,16	PG&E / PG&E	E-TOU-C	E-ELEC	G1
5	PG&E / SoCalGas	E-TOU-C	E-ELEC	GR
6, 8-10, 14, 15	SCE / SoCalGas	TOU-D-4-9	TOU-D-PRIME	GR
7, 10, 14	SDG&E / SDG&E	TOU-DR-1	EV-TOU-5	GR

Table 6. Publicly Owned Utility Tariffs Used Based on Climate Zone

Climate Zones	Electric / Gas Utility Electricity Tariff: Standard Rate	Electricity Tariff: Electrification Rate	Natural Gas Tariff
4	CPAU / CPAU	E-1	G1
12	SMUD / PG&E	R-TOD	G1

Utility rates are assumed to escalate over time. Because it is very difficult to predict how rates will change, two escalation scenarios are presented in this study to represent a range of outcomes. See Appendix 6.3.7 Fuel Escalation Assumptions for details.

1) Modest Gas Escalation: This scenario is based on assumptions from the CPUC 2021 En Banc hearings on utility costs through 2030 (California Public Utilities Commission, 2021a). Escalation rates throughout the remainder of the 30-year evaluation period are based on the escalation rate assumptions within the 2022 Energy Code TDV factors developed by the Energy Commission (California Energy Commission. 2021b).
2) High Gas Escalation: This scenario is based on escalation rates developed by the Energy Commission and used within the 2025 Energy Code LSC factors (LSC replaces TDV in the 2025 Energy Code) which assumed steep increases in gas rates in the latter half of the analysis period.

Electricity tariff structures will evolve over time. Most recently, the CPUC approved an income-graduated fixed charge intended to benefit low-income customers and support electrification measures.[5] The IOUs are currently developing tariffs that meet the direction given by the CPUC in this proceeding. These tariffs were not available at the time of this study, but this analysis may be re-evaluated later in 2025 once the rates are finalized.

[5] https://www.cpuc.ca.gov/industries-and-topics/electrical-energy/electric-costs/demand-response-dr/demand-flexibility-rulemaking

2.4 Measure Details and Cost

This section describes the details of the measures and documents incremental costs. All measure costs were obtained from the TECH cost survey and contractor survey unless otherwise noted. These surveys reflect the cost to the customer and include equipment, labor, permit fees, and required HERS testing.

The following heat pump space heater (HPSH) measures were evaluated as described below. All included HERS verified refrigerant charge, 10% duct sealing, and 300 CFM/ton airflow, aligned with the proposed code requirements for the 2025 Title 24 code.

1) **Dual Fuel Heat Pump (DFHP Existing Furnace)**: Replace existing ducted AC with an electric heat pump and install controls to operate the heat pump as the primary space conditioning source and to use the existing gas furnace (78 AFUE) for backup heat when heating demands cannot be met by the heat pump. In this report, dual fuel heat pumps were modeled to disable furnace operation above an outdoor temperature of 35°F in compliance with Energy Code Section 150.0(h)7, which requires this lockout for any heat pump with supplemental heating. A minimum federal efficiency (14.3 SEER2, 11.7 EER2, 7.5 HSPF2) heat pump was evaluated. Savings are compared to a new AC (14.3 SEER2, 11.7 EER2) alongside the existing furnace (78 AFUE). A new evaporator coil is assumed to be installed with the AC system.
2) **HPSH**: Replace existing ducted AC and natural gas furnace with an electric heat pump and air handler. Minimum federal efficiency (14.3 SEER2, 11.7 EER2, 7.5 HSPF2) heat pumps were evaluated. Savings are compared to a new ducted natural gas furnace and AC (14.3 SEER2, 11.7 EER2, 80 AFUE).
3) **High Efficiency HPSH**: Replace existing ducted AC and natural gas furnace with an electric heat pump and air handler. Higher efficiency (17 SEER2, 12.48 EER2, 9.5 HSPF2) heat pumps were evaluated. Savings are compared to a new ducted natural gas furnace and AC (14.3 SEER2, 11.7 EER2, 80 AFUE).

Over the 30-year analysis period, certain changes are assumed when the equipment is replaced that impact both lifetime costs and energy use. Table 7 and Table 8 present the lifetime scenario for the DFHP Existing Furnace and HPSH measures, respectively. The analysis assumed a 20-year effective useful lifetime (EUL) for a furnace, a 15-year EUL for an air conditioner and a 15-year EUL for a heat pump. Lifetimes are based on the Database for Energy Efficient Resources (DEER) (California Public Utilities Commission, 2021b). The existing furnace is assumed to be halfway through its EUL at the beginning of the analysis period. After 10 years when the furnace reaches the end of its life and needs to be replaced, it will be subject to new federal efficiency standards for residential gas furnaces that go into effect in 2028 requiring 95 AFUE[6]. Five years later the air conditioner reaches the end of its life and is replaced with a new air conditioner.

[6] https://www.energy.gov/articles/doe-finalizes-energy-efficiency-standards-residential-furnaces-save-americans-15-billion#:~:text=These%20furnace%20efficiency%20standards%20were,heat%20for%20the%20living%20space.

For the DFHP upgrade case, after 10 years when the furnace fails it's expected that the furnace is abandoned in place since the heat pump serves primary heating and was sized to provide the full design heating load. In this case it is assumed that the fan motor is replaced with a new aftermarket unit and operates another five years until the heat pump fails and is replaced with a new heat pump and air handler. Table 7 through Table 8 present the lifecycle incremental cost breakdown for a 4-ton system. The heat pump is sized for each climate zone based on the heating and cooling load as shown in Table 4, and the 4-ton system was selected as an example to show the lifecycle cost breakdown.

Table 7. Lifecycle Incremental Cost Breakdown for a 4-Ton DFHP Existing Furnace

Calendar Year	Baseline AC Replacement Schedule	Baseline Future Cost	Baseline Present Value Cost	Heat Pump	Heat Pump Future Cost	Heat Pump Present Value Cost
2026	AC fails, install new AC, keep existing furnace	$10,431	$10,431	AC fails, install new HP, keep existing furnace	$12,347	$12,347
2036	Furnace fails, install new 95AFUE furnace	$7,879	$5,863	Furnace fails, replace fan motor	$1,200	$893
2041	AC fails, install new AC	$10,431	$6,695	HP fails, install new HP and air handler	$14,529	$9,326
Total			$22,989			$22,566
Incremental Cost						**-$424**

Table 8. Lifecycle Incremental Cost Breakdown for 4-Ton HPSH

Calendar Year	Baseline AC Replacement Schedule	Baseline Future Cost	Baseline Present Value Cost	Heat Pump	Heat Pump Future Cost	Heat Pump Present Value Cost
2026	AC fails, install new AC & furnace	$13,808	$13,808	AC fails, install new HP & AHU	$14,529	$14,529
2041	AC fails, install new AC	$10,431	$6,695	HP fails, install new HP & AHU	$13,529	$8,684
2046	Furnace fails, install new 95AFUE furnace	$7,879	$4,363	-	-	-
2056	Remaining useful life for furnace	-	-$1,623	-	-	-
Total			$23,243			$23,213
Incremental Cost						**-$30**

Table **9** presents estimated first and lifetime costs for the baseline and heat pump scenarios for 4-ton equipment. Costs include all material and installation labor including providing new 240 V electrical service to the air handler location for all new air handler installations and decommissioning of the furnace for the cases where the furnace is removed. DFHP costs incorporate controls installation and commissioning to ensure the heat pump and the furnace communicate properly and don't operate at the same time. Future replacement costs do not include any initial costs associated with 240V electrical service or furnace decommissioning.

Table 9. HVAC Measure Cost Assumptions – 4-Ton Electric Replacements

Measure Case	AC + Evaporator Coil	Gas Furnace /AC	DFHP Existing Furnace	HPSH	High Efficiency HPSH
Base Case	**-**	**-**	**AC + Evaporator Coil**	**Gas Furnace /AC**	**Gas Furnace /AC**
First Cost	$10,431	$13,808	$12,347	$14,529	$17,506
Replacement Cost (Future Value)	$18,310	$18,310	$15,729	$13,529	$16,506
Replacement Cost (Present Value)	$12,558	$11,058	$10,219	$8,684	$10,594
Remaining Value at Year 30	$0	-$1,623	$0	$0	$0
Total Lifecycle Cost	$22,989	$23,243	$22,566	$23,213	$28,100
Incremental Cost	-	-	**-$424**	**-$30**	**$4,857**

2.4.1 Lifecycle Cost Assuming Zero-NOx Standards for Space Heating After 2030

The California Air Resource Board proposed a strategy for reducing emissions in their 2022 Scoping Plan for Achieving Carbon Neutrality that includes a zero-emission standard for space and water heaters sold in California that would go into effect in 2030 (California Air Resources Board, 2022).

The South Coast Air Quality Management District (SCAQMD) proposed Rule 1111 for the Reduction of NOx Emissions from Natural Gas-Fired Furnaces. This rule applies to furnaces less than 175,000 Btu/hr and sets compliance goals for manufacturers with the proposed dates in Table 10. The sale of gas furnaces above the compliance target will incur a mitigation fee (SCAQMD, 2025).

Table 10. SCAQMD Rule 1111 Proposed Manufacturer Compliance Targets

Target Dates	2027-2028	2029-2032	2033-2035	2036 and after
NOx Emitting Units (e.g. gas)	70%	50%	25%	10%
Zero-Emission Units	30%	50%	75%	90%

The Bay Area Air Quality Management District (BAAD) adopted Rule 9-4 that similarly requires zero NOx standards for space heating systems sold in the Bay Area. Implementation for residential furnaces will begin January 2029 (BAAD, 2025).

The BAAD Rule 9-4 has been adopted, but both the California Air Resources Board and SCAQMD Rule 1111 are proposed rules that have not yet been adopted, but given the implications these rulings would have on the 30-year cost-effectiveness if gas furnaces were very limited or no longer available in 2030, a sensitivity analysis for this scenario is included in this study for the DFHP Existing Furnace scenario. The other heat pump measures would also be impacted by this ruling; however, for simplicity the team selected one measure to give a sense of the impact on the results. The following costs reflect the scenario where gas furnaces are not available in 2030. This 30-year lifecycle analysis assumes that in 10 years when the furnace reaches the end of its useful life and needs to be replaced, it will be subjected to the SCAQMD Rule 1111 or California Air Resources Board proposal and will be replaced with a heat pump.

Table 11. Lifecycle Incremental Cost Breakdown for 4-Ton System with no Gas Furnaces after 2030

Calendar Year	Baseline AC Replacement Schedule	Baseline Future Cost	Baseline Present Value Cost	Heat Pump	Heat Pump Future Cost	Heat Pump Present Value Cost
2026	AC fails, install new AC, keep existing furnace	$10,431	$10,431	AC fails, install new HP, keep existing furnace	$12,347	$12,347
2036	Furnace fails, install new HP	$14,529	$10,811	Furnace fails, replace fan motor	$1,200	$893
2041	-	-	-	HP fails, install new HP and air handler	$14,529	$9,326
2051	HP fails, install new HP	$13,529	$6,462	-	-	-
2056	Remaining useful life for HP	-	-$4,459	-	-	-
Total			$23,244			$22,566
Incremental Cost						-$679

3 Results

The primary objective of the evaluation is to identify cost-effective HPSH upgrade measures for existing single family buildings, to support the design of local ordinances encouraging installation of a heat pump when replacing an air conditioner. While this section focuses primarily on the results of the cost-effectiveness analysis, it is important to highlight that the associated greenhouse gas (GHG) emissions savings are significant – averaging a 25% annual reduction across the climate zones and vintages. A full dataset of all results, including site energy, source energy, LSC and GHG emissions, can be downloaded at https://localenergycodes.com/content/resources. Results alongside policy options can also be explored using the Cost-effectiveness Explorer at https://explorer.localenergycodes.com/.

3.1 Cost-Effectiveness Results

Table 12 through Table 14 present results across the 16 climate zones for the 1992-2010 vintage using standard tariffs and Table 15 through Table 17 present results across the 16 climate zones and three vintages using CARE tariffs. Results show the incremental cost and utility bill savings for the first year along with cost effectiveness results for LSC and On-Bill under both the modest and high gas escalation scenarios. Results for additional vintages using standard tariffs are in Appendix 6.2 Cost-Effectiveness Results.

3.1.1 Cost Effectiveness Results Using Standard Tariffs

Table 12. [1992-2010] DFHP Existing Furnace

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$60	$10,843	$5,471	$21,616
CZ02	PGE	$1,670	($86)	$8,462	$2,312	$12,767
CZ03	PGE	$1,178	$15	$8,302	$4,810	$13,877
CZ04	PGE	$1,670	($68)	$7,396	$1,955	$10,123
CZ04	CPAU	$1,670	($9)	$7,396	$2,207	$7,179
CZ05	PGE	$1,424	($12)	$6,848	$3,425	$11,150
CZ05	PGE/SCG	$1,424	($195)	$6,848	($1,864)	$2,099
CZ06	SCE/SCG	$1,424	($34)	$2,647	$675	$1,468
CZ07	SDGE	$1,424	($36)	$2,691	$599	$1,734
CZ08	SCE/SCG	$1,916	($65)	$2,028	($662)	$311
CZ09	SCE/SCG	$1,916	($90)	$2,749	($1,037)	$437
CZ10	SCE/SCG	$1,916	($79)	$2,444	($833)	$543
CZ10	SDGE	$1,916	$54	$2,444	$2,350	$4,857
CZ11	PGE	$2,162	$68	$7,672	$4,713	$14,750
CZ12	PGE	$1,916	$44	$8,466	$4,851	$15,371
CZ12	SMUD/PGE	$1,916	$353	$8,466	$11,771	$22,513
CZ13	PGE	$2,162	$76	$5,318	$3,972	$11,212
CZ14	SCE/SCG	$1,916	($179)	$4,803	($2,215)	$1,489
CZ14	SDGE	$1,916	($22)	$4,803	$1,431	$7,207
CZ15	SCE/SCG	$2,408	($133)	($122)	($3,289)	($3,060)
CZ16	PGE	$2,243	($66)	$8,842	$1,260	$11,982

Table 13. [1992-2010] Standard Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	($145)	$10,949	($34)	$17,899
CZ02	PGE	$652	($229)	$9,362	($702)	$11,825
CZ03	PGE	$514	($62)	$8,244	$2,373	$11,665
CZ04	PGE	$652	($205)	$8,680	($572)	$10,753
CZ04	CPAU	$652	($85)	$8,680	$556	$7,194
CZ05	PGE	$583	($113)	$6,957	$752	$9,206
CZ05	PGE/SCG	$583	($316)	$6,957	($5,101)	($811)
CZ06	SCE/SCG	$583	($37)	$2,134	($63)	$716
CZ07	SDGE	$583	($39)	$2,156	($149)	$981
CZ08	SCE/SCG	$721	($79)	$1,812	($1,356)	($371)
CZ09	SCE/SCG	$721	($118)	$2,589	($2,038)	($524)
CZ10	SCE/SCG	$721	($103)	$2,311	($1,723)	($259)
CZ10	SDGE	$721	$34	$2,311	$1,533	$4,218
CZ11	PGE	$790	($35)	$8,817	$2,833	$14,504
CZ12	PGE	$721	($94)	$9,199	$1,812	$13,563
CZ12	SMUD/PGE	$721	$363	$9,199	$12,027	$24,107
CZ13	PGE	$790	$6	$5,948	$2,558	$10,687
CZ14	SCE/SCG	$721	($412)	$6,635	($6,964)	($1,073)
CZ14	SDGE	$721	($107)	$6,635	$166	$10,249
CZ15	SCE/SCG	$859	($139)	($112)	($3,434)	($3,186)
CZ16	PGE	$2,095	($385)	$13,600	($2,842)	$19,424

Table 14. [1992-2010] High Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$56	$9,783	($350)	$17,727
CZ02	PGE	$3,606	($94)	$7,527	($2,544)	$10,080
CZ03	PGE	$3,422	$59	$5,701	$312	$9,692
CZ04	PGE	$3,606	($61)	$6,961	($2,193)	$9,235
CZ04	CPAU	$3,606	$0	$6,961	($2,389)	$4,310
CZ05	PGE	$3,514	$4	$4,176	($1,450)	$7,088
CZ05	PGE/SCG	$3,514	($199)	$4,176	($7,303)	($2,929)
CZ06	SCE/SCG	$3,514	($14)	($2,162)	($4,367)	($3,567)
CZ07	SDGE	$3,514	($12)	($2,090)	($4,312)	($3,191)
CZ08	SCE/SCG	$3,698	$13	($1,660)	($4,217)	($3,149)
CZ09	SCE/SCG	$3,698	($26)	($750)	($4,883)	($3,284)
CZ10	SCE/SCG	$3,698	($4)	($844)	($4,418)	($2,864)
CZ10	SDGE	$3,698	$132	($844)	($1,068)	$1,587
CZ11	PGE	$3,789	$186	$7,738	$2,845	$14,675
CZ12	PGE	$3,698	$88	$7,575	$996	$12,879
CZ12	SMUD/PGE	$3,698	$422	$7,575	$8,459	$20,580
CZ13	PGE	$3,789	$208	$4,419	$2,165	$10,439
CZ14	SCE/SCG	$3,698	($219)	$5,760	($7,575)	($1,506)
CZ14	SDGE	$3,698	$77	$5,760	($424)	$9,604
CZ15	SCE/SCG	$3,881	$50	($2,144)	($4,209)	($3,786)
CZ16	PGE	$5,071	($97)	$14,557	($1,291)	$21,181

3.1.2 Cost Effectiveness Results Using CARE Tariffs

Table 15. [1992-2010] DFHP Existing Furnace CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$153	$10,843	$6,436	$19,266
CZ02	PGE	$1,670	$18	$8,462	$3,916	$12,233
CZ03	PGE	$1,178	$73	$8,302	$5,493	$12,696
CZ04	PGE	$1,670	$14	$7,396	$3,217	$9,716
CZ04	CPAU	$1,670	$0	$7,396	$786	$786
CZ05	PGE	$1,424	$47	$6,848	$4,198	$10,337
CZ05	PGE/SCG	$1,424	($98)	$6,848	$23	$3,191
CZ06	SCE/SCG	$1,424	($18)	$2,647	$967	$1,600
CZ07	SDGE	$1,424	($16)	$2,691	$1,000	$1,887
CZ08	SCE/SCG	$1,916	($38)	$2,028	($136)	$644
CZ09	SCE/SCG	$1,916	($52)	$2,749	($301)	$879
CZ10	SCE/SCG	$1,916	($45)	$2,444	($182)	$920
CZ10	SDGE	$1,916	$51	$2,444	$2,147	$4,112
CZ11	PGE	$2,162	$115	$7,672	$5,068	$13,039
CZ12	PGE	$1,916	$103	$8,466	$5,436	$13,792
CZ12	SMUD/PGE	$1,916	$418	$8,466	$12,488	$21,071
CZ13	PGE	$2,162	$100	$5,318	$4,013	$9,760
CZ14	SCE/SCG	$1,916	($98)	$4,803	($700)	$2,268
CZ14	SDGE	$1,916	$23	$4,803	$2,156	$6,677
CZ15	SCE/SCG	$2,408	($88)	($122)	($2,307)	($2,111)
CZ16	PGE	$2,243	$33	$8,842	$2,737	$11,267

Table 16. [1992-2010] Standard Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	$33	$10,949	$2,703	$16,973
CZ02	PGE	$652	($59)	$9,362	$2,211	$12,188
CZ03	PGE	$514	$25	$8,244	$3,685	$11,074
CZ04	PGE	$652	($53)	$8,680	$2,048	$11,067
CZ04	CPAU	$652	$0	$8,680	$255	$255
CZ05	PGE	$583	($13)	$6,957	$2,389	$9,117
CZ05	PGE/SCG	$583	($173)	$6,957	($2,232)	$1,208
CZ06	SCE/SCG	$583	($20)	$2,134	$249	$872
CZ07	SDGE	$583	($18)	$2,156	$279	$1,161
CZ08	SCE/SCG	$721	($47)	$1,812	($728)	$62
CZ09	SCE/SCG	$721	($70)	$2,589	($1,094)	$122
CZ10	SCE/SCG	$721	($61)	$2,311	($892)	$281
CZ10	SDGE	$721	$39	$2,311	$1,509	$3,612
CZ11	PGE	$790	$60	$8,817	$4,141	$13,421
CZ12	PGE	$721	$22	$9,199	$3,592	$12,940
CZ12	SMUD/PGE	$721	$471	$9,199	$13,622	$23,292
CZ13	PGE	$790	$61	$5,948	$3,234	$9,693
CZ14	SCE/SCG	$721	($241)	$6,635	($3,632)	$1,098
CZ14	SDGE	$721	($5)	$6,635	$1,996	$9,885
CZ15	SCE/SCG	$859	($91)	($112)	($2,414)	($2,201)
CZ16	PGE	$2,095	($92)	$13,600	$2,163	$19,892

Table 17. [1992-2010] High Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$164	$9,783	$813	$15,177
CZ02	PGE	$3,606	$28	$7,527	($683)	$9,357
CZ03	PGE	$3,422	$104	$5,701	$674	$8,120
CZ04	PGE	$3,606	$41	$6,961	($703)	$8,383
CZ04	CPAU	$3,606	$0	$6,961	($4,595)	($4,595)
CZ05	PGE	$3,514	$62	$4,176	($727)	$6,056
CZ05	PGE/SCG	$3,514	($98)	$4,176	($5,348)	($1,853)
CZ06	SCE/SCG	$3,514	($5)	($2,162)	($4,219)	($3,583)
CZ07	SDGE	$3,514	($0)	($2,090)	($4,112)	($3,235)
CZ08	SCE/SCG	$3,698	$15	($1,660)	($4,248)	($3,401)
CZ09	SCE/SCG	$3,698	($8)	($750)	($4,603)	($3,330)
CZ10	SCE/SCG	$3,698	$6	($844)	($4,300)	($3,065)
CZ10	SDGE	$3,698	$103	($844)	($1,892)	$191
CZ11	PGE	$3,789	$203	$7,738	$2,425	$11,808
CZ12	PGE	$3,698	$141	$7,575	$1,351	$10,784
CZ12	SMUD/PGE	$3,698	$471	$7,575	$8,735	$18,405
CZ13	PGE	$3,789	$192	$4,419	$1,255	$7,809
CZ14	SCE/SCG	$3,698	($111)	$5,760	($5,632)	($783)
CZ14	SDGE	$3,698	$115	$5,760	($98)	$7,755
CZ15	SCE/SCG	$3,881	$36	($2,144)	($4,549)	($4,220)
CZ16	PGE	$5,071	$95	$14,557	$1,460	$19,324

3.2 Zero-NOx Scenario Results

This section presents cost-effectiveness results for the DFHP Existing Furnace under the scenario where proposed air quality district zero-NOx rules go into effect over the next 10 years. In the base case, at time of replacement of the gas furnace at year 10 a heat pump is installed. The energy profile between the base case and the heat pump upgrade case are subsequently identical for the remaining 20 years of the 30-year analysis period. As a result, energy and cost savings only persist for the first 10 years.

Table 18 shows the On-Bill NPV cost-effectiveness results assuming high gas escalation. The high gas escalation was used for the zero-NOx analysis because the high gas escalation is built on the assumption that gas furnaces are no longer available to be installed due to zero-NOx regulations or similar policies. Table 19 shows the LSC cost-effectiveness results for all three vintages. 2025 LSC savings were calculated using individual year multipliers for the first 10 years, 2026 through 2035.

Table 18. DFHP Existing Furnace On-Bill NPV with High Gas Escalation (Zero-NOx Rule)

Climate Zone	Electric/ Gas Utility	On-Bill NPV		
		Pre-1978	1978-1991	1992-2010
CZ01	PGE	$5,473	$4,136	$2,349
CZ02	PGE	$1,785	$1,031	$1,101
CZ03	PGE	$2,863	$2,097	$2,052
CZ04	PGE	$2,133	$1,162	$1,019
CZ04	CPAU	$2,340	$1,599	$1,213
CZ05	PGE	$1,918	$1,486	$1,576
CZ05	PGE/SCG	($1,308)	($834)	($491)
CZ06	SCE/SCG	$401	$605	$635
CZ07	SDGE	$1,473	$999	$641
CZ08	SCE/SCG	($125)	$99	$195
CZ09	SCE/SCG	($563)	($183)	$22
CZ10	SCE/SCG	($259)	$53	$110
CZ10	SDGE	$2,985	$2,261	$1,430
CZ11	PGE	$3,287	$2,866	$2,279
CZ12	PGE	$2,935	$2,578	$2,202
CZ12	SMUD/PGE	$7,877	$5,978	$5,040
CZ13	PGE	$2,927	$2,556	$2,053
CZ14	SCE/SCG	($864)	($943)	($543)
CZ14	SDGE	$2,204	$1,655	$1,064
CZ15	SCE/SCG	$1,338	$396	($688)
CZ16	PGE	$1,192	$1,071	$1,096

Table 19. DFHP Existing Furnace LSC Savings (Zero-NOx Rule)

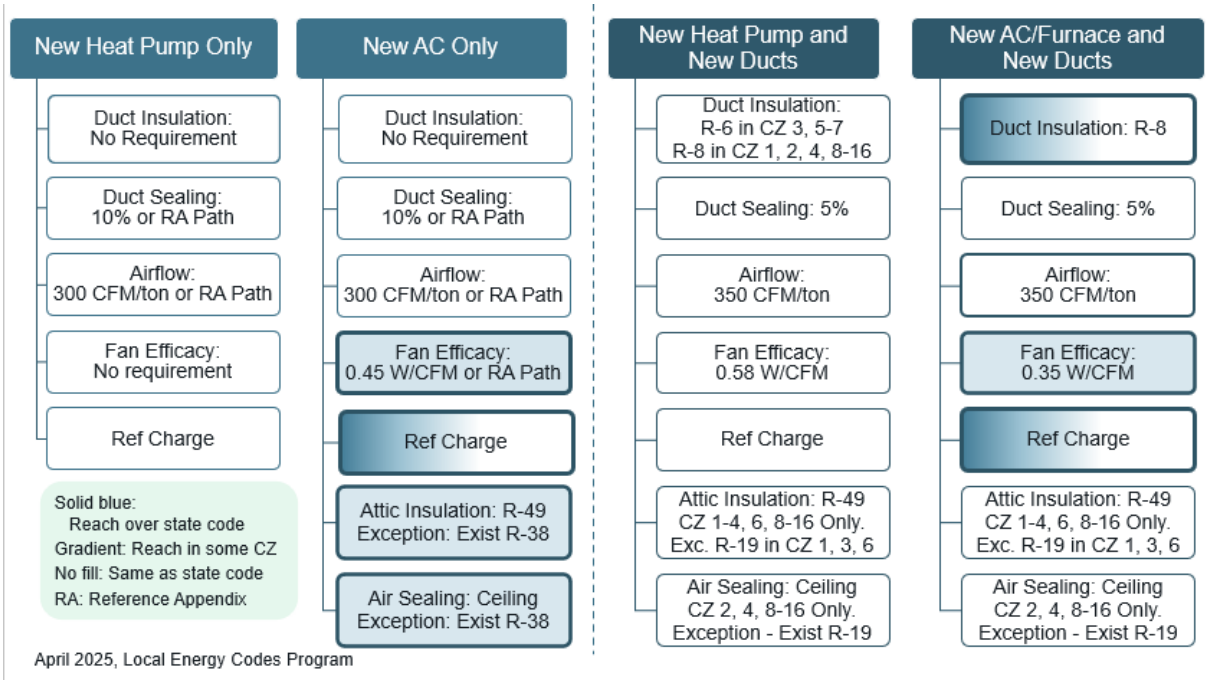
Climate Zone	Electric/ Gas Utility	LSC NPV		
		Pre-1978	1978-1991	1992-2010
CZ01	PGE	$3,019	$2,510	$1,558
CZ02	PGE	$1,256	$1,025	$1,006
CZ03	PGE	$1,460	$1,120	$1,036
CZ04	PGE	$1,242	$949	$887
CZ04	CPAU	$1,242	$949	$887
CZ05	PGE	$1,127	$816	$820
CZ05	PGE/SCG	$1,127	$816	$820
CZ06	SCE/SCG	$545	$318	$251
CZ07	SDGE	$639	$403	$314
CZ08	SCE/SCG	$428	$279	$244
CZ09	SCE/SCG	$608	$424	$372
CZ10	SCE/SCG	$469	$320	$293
CZ10	SDGE	$469	$320	$293
CZ11	PGE	$1,871	$1,475	$1,263
CZ12	PGE	$1,924	$1,539	$1,356
CZ12	SMUD/PGE	$1,375	$1,090	$939
CZ13	PGE	($206)	($186)	$50
CZ14	SCE/SCG	($206)	($186)	$50
CZ14	SDGE	$127	$60	$38
CZ15	SCE/SCG	($185)	($12)	$77
CZ16	PGE	$3,019	$2,510	$1,558

3.3 AC Pathways for Heat Pump Replacements

Many jurisdictions are interested in seeing alternative pathways for residents who may prefer to replace an air conditioner with similar equipment, rather than migrating to a heat pump system. Alternative packages analyzed to support this request include air conditioning equipment combined with additional efficiency measures resulting in options that are reasonably energy or LSC cost equivalent to a heat pump system, to the extent feasible.

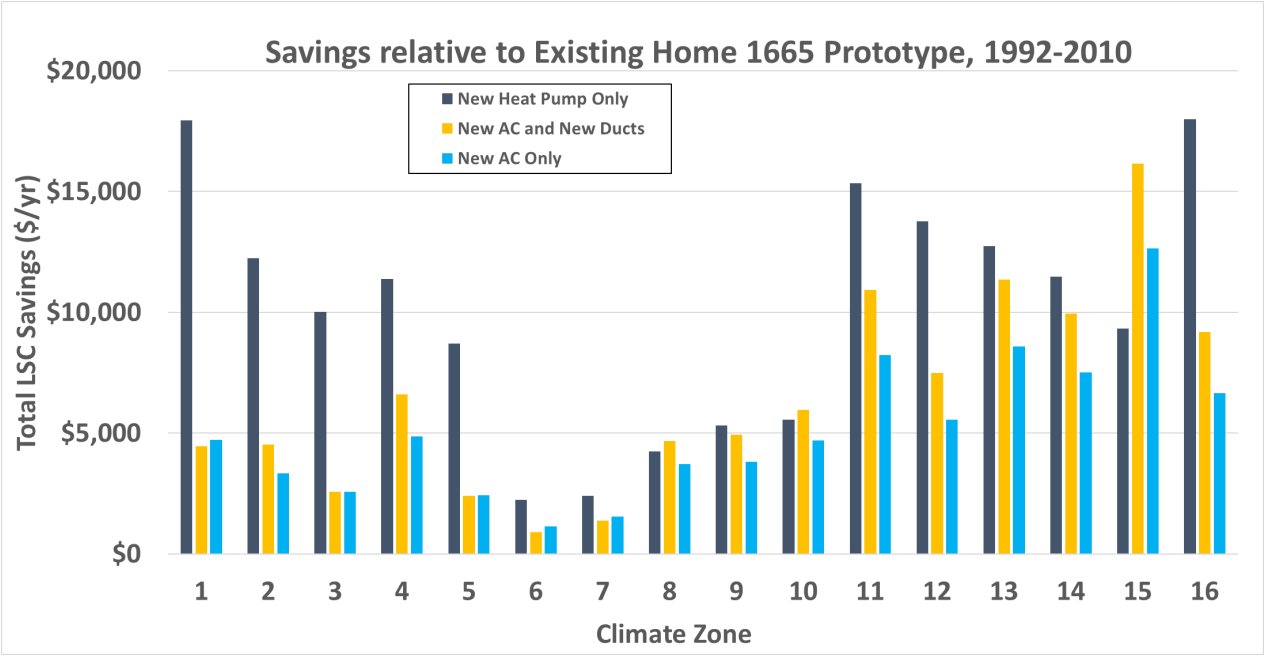
Figure 1 shows two AC pathways, one with an existing duct system and another path with a new duct system, alongside the heat pump pathways. The figure presents the proposed efficiency upgrade measures that would be part of a reach code (solid blue) along with the relevant requirements from Title 24, Part 6 that are triggered as part of equipment replacements (white or gradient blue). A reach code that establishes requirements when an air conditioner is replaced or installed new could allow for either a heat pump to be installed or an AC as long as the performance measures listed below are met.

Figure 1. AC vs. Heat Pump Pathway Requirements



The heat pump only and two AC pathways are presented in Figure 2 comparing total LSC energy use relative to the existing home for the 1992-2010 vintage. The heat pump path is represented by the DFHP Existing Furnace scenario. In most climate zones, the heat pump path results in higher energy savings, in the milder climates the AC and new ducts and New AC Only paths save marginally more energy.

Figure 2. AC vs. Heat Pump Energy Comparison



Though the AC path does not need to meet cost-effectiveness criteria to be adopted as a reach code since it's an alternative path, in order to understand the implications of the AC path on the customer, Table 20 and Table 21 present estimated costs for the new AC only and the new AC + new ducts paths respectively.

Table 20. New AC Only Path Cost Estimates

New AC Only Path	Pre-1978	1978-1991	1992-2010
Fan Efficacy: 0.45 W/CFM	-	-	-
Refrigerant Charge Verification	$100	$100	$100[7]
R-49 Attic Insulation	$5,483	$3,612	$1,827
Air Sealing	$1,963	$1,963	$1,963
Total	**$7,546**	**$5,675**	**$3,790**

Table 21. New AC/Furnace and New Ducts Path Cost Estimates

New AC and New Ducts Path	Pre-1978	1978-1991	1992-2010
New R-8 Ducts	$6,311	$6,311	$6,311
Furnace	$5,951	$5,951	$5,951
Fan Efficacy: 0.35 W/CFM	$500	$500	$500
Refrigerant Charge Verification	$100	$100	$100
Total	**$12,862**	**$12,862**	**$12,862**

[7] *This is an incremental cost and in some climate zones, refrigerant charge verification is required so there is no incremental cost added.*

4 Recommendations and Discussion

This analysis evaluated the feasibility and cost-effectiveness of AC to heat pump measures in California existing homes built before 2010. To meet the needs of jurisdictions evaluating this option, Statewide Reach Codes Team used both On-Bill and LSC-based lifecycle cost approaches to evaluate cost-effectiveness and quantify the energy cost savings associated with energy efficiency measures compared to the incremental costs associated with the measures.

Conclusions and Discussion:

1. Heat pumps are significantly more efficient than gas furnaces, requiring less than half the energy to meet the heating load. However, despite this reduction in heating energy use, the cost of heating a home using electricity (heat pump) could be higher than the cost to heat that same home with natural gas (furnace), depending on the electricity tariffs relative to the gas tariffs. Therefore, while a heat pump measure could be deemed as cost-effective over its lifecycle, installing a heat pump could result in a decrease *or* an increase in utility costs in the first years relative to a gas furnace and AC system. For example, the heat pump space heater measure in climate zone 12 in the newest vintage results in the customer saving money on their utility bill in SMUD territory but paying more on their utility bill in PG&E territory. Both PG&E and SMUD territory use PG&E gas rates, but SMUD has lower electricity rates than PG&E. With fuel switching measures like the AC to HP measure, the electricity to gas ratio has a significant impact on the savings or costs the customer will see by switching from gas to an electric heat pump space heater.
2. The LSC metric most often produces more favorable cost-effectiveness results relative to the results produced using actual utility costs (On-Bill). When the analysis assumes a higher escalation rate for natural gas costs relative to electricity in future years (high gas escalation), the On-Bill results are more favorable in some cases.
    a. In the oldest (pre-1978) vintage, all three measures (dual fuel heat pump with existing furnace, standard heat pump space heater, and high efficiency heat pump space heater) are cost-effective using the LSC metric in all climate zones. When using the On-Bill metric, the measures remain cost-effective in most climate zones.
    b. In the newer (1978-1991 and 1992-2010) vintages, the dual fuel heat pump (DFHP Existing Furnace) and the standard efficiency HPSH are cost-effective based on LSC in all cases except for Climate Zone 15 when using both the standard and California Alternative Rates for Energy (CARE) tariff.
3. Using the CARE tariff results in higher cost savings and cost-effectiveness relative to standard rates, with almost all cases yielding first year utility cost savings. The DFHP Existing Furnace is On-Bill cost-effective based on the high gas escalation scenario in all cases in the pre-1978 vintage, and almost all cases in the 1978-1991 and 1992-2010 vintage. It is also On-Bill cost-effective in most climate zones for the

modest gas escalation scenario across all vintages. In Climate Zones 5, 8, 9, 10, 14, and 15, cost-effectiveness declines relative to other areas, and in some cases is not cost-effective from an On-Bill perspective. This is the case for both the CARE tariff and the standard rate.

4. The analysis also modeled the cost impact of using a standard time-of-use electricity tariff versus switching to a newer electrification tariff, designed to reduce costs in homes with heat pumps and/or electric vehicles. Older homes tend to be the least efficient and achieve the most savings from improving equipment efficiency. In most of the state, because older homes tend to use more electricity than a similarly sized, newer vintage home, they realize more costs savings under the electrification tariff. Newer homes tend to use less electricity and therefore do not realize the same cost savings from switching tariffs; they generally perform better under the standard tariff. This trend is different in milder climate zones in SCE territory (excluding CZ 15), where newer homes realize more cost savings than older homes. Both the standard and electrification tariffs in SCE territory include a daily allocation of lower-cost baseline electricity and a second, higher-priced tier when the baseline is exceeded. In many newer homes, a higher percentage of overall electricity use is within the baseline allocation, resulting in greater cost savings.
5. Higher efficiency equipment reduces utility costs in all cases and improves cost-effectiveness in many climate zones in the oldest vintage relative to standard efficiency equipment. However, in more efficient newer homes, where cost-effectiveness is generally lower, the savings are insufficient to offset the roughly $3,000 increase in incremental cost.
6. Given the adopted Bay Area Air Quality Management District Zero NOx rule, and the proposed California Air Resource Board or South Coast Air Quality Management District (SCAQMD) Zero-NOx rules, and gas furnaces may not be available to be installed in 2030, a sensitivity analysis was performed for the Zero NOx scenario and found that cost-effectiveness decreases in many cases except in Climate Zone 15. The improved cost-effectiveness is due to the higher baseline cost when HPSH must be installed at year 10 when the furnace must be replaced. It is also important to note that Climate Zone 15 is the only climate zone that utilizes a 5-ton HPSH, which has a much higher cost than the smaller sized systems, resulting in cost-effectiveness improvements under the Zero-Nox rules.
7. While not evaluated in this report, the *2022 Single Family Retrofit Cost-effectiveness Study* (Statewide Reach Codes Team, 2024) shows it is beneficial to combine a heat pump space conditioning system with photovoltaics (PV) because the additional electricity required by the heat pump can be met by the PV system and result in reduced utility bills.
8. In this study the dual fuel heat pump is evaluated with an existing furnace, however the homeowner could choose to replace the existing furnace with a new furnace at this time as well. This measure (DFHP New Furnace) was evaluated in the *2022*

Single Family Retrofit Cost-effectiveness Study (Statewide Reach Codes Team, 2024) but found to be less cost-effective than the DFHP Existing Furnace case.

5 References

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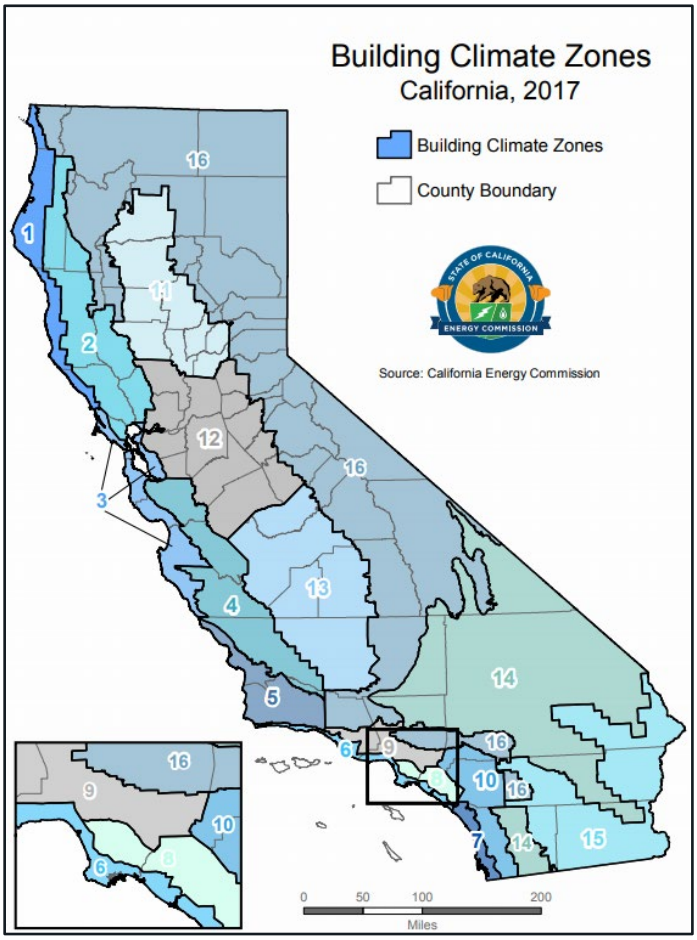
6 Appendices

6.1 Map of California Climate Zones

Climate zone geographical boundaries are depicted in Figure 3. The map in Figure 3 along with a zip-code search directory is available at:
https://ww2.energy.ca.gov/maps/renewable/building_climate_zones.html

Figure 3. Map of California climate zones.



6.2 Cost-Effectiveness Results

6.2.1 Standard Rates

The following tables present results across the 16 climate zones for the pre-1978 (Table 22 through Table 24) and the 1978-1991 (Table 25 through Table 27) vintages supplementing the results in Section 3.

Table 22. [Pre-1978] DFHP Existing Furnace

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$155	$25,223	$14,524	$51,831
CZ02	PGE	$1,670	($81)	$11,625	$4,391	$20,880
CZ03	PGE	$1,178	$39	$11,599	$7,167	$21,825
CZ04	PGE	$1,670	($7)	$10,648	$5,023	$18,395
CZ04	CPAU	$1,670	$63	$10,648	$5,251	$14,605
CZ05	PGE	$1,424	($29)	$9,462	$4,574	$16,955
CZ05	PGE/SCG	$1,424	($314)	$9,462	($3,674)	$2,838
CZ06	SCE/SCG	$1,424	($70)	$4,223	$179	$1,795
CZ07	SDGE	$1,424	$41	$4,278	$2,725	$5,055
CZ08	SCE/SCG	$1,916	($111)	$3,365	($1,358)	$524
CZ09	SCE/SCG	$1,916	($168)	$4,387	($2,351)	$274
CZ10	SCE/SCG	$1,916	($133)	$3,904	($1,625)	$923
CZ10	SDGE	$1,916	$201	$3,904	$6,324	$10,832
CZ11	PGE	$2,162	$93	$12,045	$7,668	$25,025
CZ12	PGE	$1,916	$46	$12,451	$7,097	$24,339
CZ12	SMUD/PGE	$1,916	$584	$12,451	$19,146	$36,775
CZ13	PGE	$2,162	$112	$8,254	$6,448	$18,815
CZ14	SCE/SCG	$1,916	($244)	$6,795	($2,777)	$3,481
CZ14	SDGE	$1,916	$65	$6,795	$4,352	$13,446
CZ15	SCE/SCG	$2,408	$80	$550	$1,655	$2,681
CZ16	PGE	$2,243	($199)	$17,538	$2,333	$25,276

Table 23. [Pre-1978] Standard Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	($127)	$27,155	$7,800	$48,445
CZ02	PGE	$652	($242)	$13,342	$1,420	$21,282
CZ03	PGE	$514	($46)	$11,946	$4,614	$19,670
CZ04	PGE	$652	($139)	$13,059	$3,274	$21,888
CZ04	CPAU	$652	($48)	$13,059	$3,194	$15,372
CZ05	PGE	$583	($131)	$9,998	$2,045	$15,648
CZ05	PGE/SCG	$583	($449)	$9,998	($7,152)	($94)
CZ06	SCE/SCG	$583	($76)	$3,860	($652)	$931
CZ07	SDGE	$583	$35	$3,876	$1,901	$4,218
CZ08	SCE/SCG	$721	($128)	$3,305	($2,112)	($199)
CZ09	SCE/SCG	$721	($219)	$4,415	($3,839)	($1,141)
CZ10	SCE/SCG	$721	($188)	$3,982	($3,168)	($483)
CZ10	SDGE	$721	$166	$3,982	$5,200	$10,049
CZ11	PGE	$790	($74)	$14,045	$4,727	$24,836
CZ12	PGE	$721	($179)	$13,850	$2,374	$21,622
CZ12	SMUD/PGE	$721	$601	$13,850	$19,845	$39,654
CZ13	PGE	$790	($14)	$9,394	$3,998	$17,858
CZ14	SCE/SCG	$721	($450)	$10,103	($6,294)	$4,015
CZ14	SDGE	$721	($66)	$10,103	$2,757	$18,994
CZ15	SCE/SCG	$859	$68	$643	$1,364	$2,430
CZ16	PGE	$2,095	($484)	$27,492	$2,918	$49,419

Table 24. [Pre-1978] High Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$249	$30,518	$11,401	$52,316
CZ02	PGE	$3,606	($24)	$13,354	$1,431	$21,449
CZ03	PGE	$3,422	$100	$10,768	$3,122	$18,282
CZ04	PGE	$3,606	$118	$13,537	$4,185	$22,984
CZ04	CPAU	$3,606	$101	$13,537	$1,665	$13,950
CZ05	PGE	$3,514	$10	$8,416	$384	$14,087
CZ05	PGE/SCG	$3,514	($308)	$8,416	($8,814)	($1,654)
CZ06	SCE/SCG	$3,514	$3	$380	($3,709)	($2,052)
CZ07	SDGE	$3,514	$114	$430	($1,063)	$1,230
CZ08	SCE/SCG	$3,698	$31	$1,065	($3,478)	($1,420)
CZ09	SCE/SCG	$3,698	($40)	$2,358	($4,759)	($1,897)
CZ10	SCE/SCG	$3,698	$6	$2,191	($3,746)	($882)
CZ10	SDGE	$3,698	$344	$2,191	$4,481	$9,276
CZ11	PGE	$3,789	$283	$15,614	$7,801	$28,167
CZ12	PGE	$3,698	$152	$14,490	$4,899	$24,385
CZ12	SMUD/PGE	$3,698	$708	$14,490	$17,350	$37,236
CZ13	PGE	$3,789	$326	$10,164	$6,697	$20,802
CZ14	SCE/SCG	$3,698	($173)	$11,876	($5,041)	$5,522
CZ14	SDGE	$3,698	$244	$11,876	$5,111	$21,254
CZ15	SCE/SCG	$3,881	$335	$393	$2,323	$3,635
CZ16	PGE	$5,071	$45	$34,043	$9,856	$56,737

Table 25. [1978-1991] DFHP Existing Furnace

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$99	$20,184	$10,746	$40,368
CZ02	PGE	$1,670	($114)	$9,216	$2,259	$14,435
CZ03	PGE	$1,178	$3	$8,952	$5,020	$15,543
CZ04	PGE	$1,670	($68)	$8,234	$2,394	$11,893
CZ04	CPAU	$1,670	$18	$8,234	$3,236	$9,492
CZ05	PGE	$1,424	($32)	$7,070	$3,268	$11,902
CZ05	PGE/SCG	$1,424	($238)	$7,070	($2,666)	$1,747
CZ06	SCE/SCG	$1,424	($39)	$2,941	$614	$1,557
CZ07	SDGE	$1,424	$1	$3,046	$1,512	$2,837
CZ08	SCE/SCG	$1,916	($78)	$2,294	($877)	$294
CZ09	SCE/SCG	$1,916	($116)	$3,127	($1,506)	$271
CZ10	SCE/SCG	$1,916	($89)	$2,755	($947)	$720
CZ10	SDGE	$1,916	$139	$2,755	$4,470	$7,469
CZ11	PGE	$2,162	$103	$9,192	$6,313	$18,851
CZ12	PGE	$1,916	$60	$9,753	$5,919	$18,655
CZ12	SMUD/PGE	$1,916	$430	$9,753	$14,208	$27,211
CZ13	PGE	$2,162	$111	$6,312	$5,317	$14,322
CZ14	SCE/SCG	$1,916	($230)	$5,080	($3,128)	$1,188
CZ14	SDGE	$1,916	$35	$5,080	$2,942	$9,420
CZ15	SCE/SCG	$2,408	($17)	$50	($658)	($161)
CZ16	PGE	$2,243	($161)	$14,397	$1,740	$20,318

Table 26. [1978-1991] Standard Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	($128)	$21,427	$5,043	$37,346
CZ02	PGE	$652	($235)	$10,428	($90)	$14,711
CZ03	PGE	$514	($67)	$8,999	$2,767	$13,608
CZ04	PGE	$652	($164)	$9,984	$1,062	$14,605
CZ04	CPAU	$652	($66)	$9,984	$1,535	$9,914
CZ05	PGE	$583	($132)	$7,290	$703	$10,264
CZ05	PGE/SCG	$583	($361)	$7,290	($5,939)	($1,104)
CZ06	SCE/SCG	$583	($43)	$2,450	($151)	$775
CZ07	SDGE	$583	($3)	$2,539	$747	$2,065
CZ08	SCE/SCG	$721	($96)	$2,111	($1,658)	($472)
CZ09	SCE/SCG	$721	($152)	$3,022	($2,659)	($831)
CZ10	SCE/SCG	$721	($121)	$2,672	($2,017)	($239)
CZ10	SDGE	$721	$114	$2,672	$3,568	$6,801
CZ11	PGE	$790	($46)	$10,682	$3,545	$18,156
CZ12	PGE	$721	($110)	$10,747	$2,278	$16,574
CZ12	SMUD/PGE	$721	$445	$10,747	$14,697	$29,392
CZ13	PGE	$790	$1	$7,141	$3,112	$13,232
CZ14	SCE/SCG	$721	($398)	$7,556	($6,191)	$1,058
CZ14	SDGE	$721	($53)	$7,556	$1,909	$13,834
CZ15	SCE/SCG	$859	($25)	$71	($848)	($322)
CZ16	PGE	$2,095	($445)	$22,236	$708	$37,873

Table 27. [1978-1991] High Efficiency HPSH

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$169	$23,092	$6,895	$39,412
CZ02	PGE	$3,606	($75)	$9,242	($1,370)	$13,547
CZ03	PGE	$3,422	$53	$6,872	$675	$11,602
CZ04	PGE	$3,606	$26	$9,114	$463	$14,143
CZ04	CPAU	$3,606	$43	$9,114	($868)	$7,590
CZ05	PGE	$3,514	($16)	$4,859	($1,522)	$8,122
CZ05	PGE/SCG	$3,514	($246)	$4,859	($8,164)	($3,246)
CZ06	SCE/SCG	$3,514	($1)	($1,546)	($4,024)	($3,059)
CZ07	SDGE	$3,514	$47	($1,407)	($2,879)	($1,576)
CZ08	SCE/SCG	$3,698	$37	($828)	($3,608)	($2,300)
CZ09	SCE/SCG	$3,698	($17)	$232	($4,573)	($2,623)
CZ10	SCE/SCG	$3,698	$20	$82	($3,764)	($1,856)
CZ10	SDGE	$3,698	$251	$82	$1,869	$5,060
CZ11	PGE	$3,789	$259	$10,685	$5,452	$20,283
CZ12	PGE	$3,698	$138	$10,023	$2,954	$17,430
CZ12	SMUD/PGE	$3,698	$525	$10,023	$11,609	$26,363
CZ13	PGE	$3,789	$289	$6,612	$4,624	$14,951
CZ14	SCE/SCG	$3,698	($188)	$7,697	($6,429)	$1,012
CZ14	SDGE	$3,698	$182	$7,697	$2,525	$14,378
CZ15	SCE/SCG	$3,881	$193	($1,111)	($992)	($267)
CZ16	PGE	$5,071	($30)	$26,407	$5,118	$42,581

6.2.2 CARE tariffs

Table 28. [Pre-1978] DFHP Existing Furnace CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$364	$25,223	$16,641	$46,300
CZ02	PGE	$1,670	$64	$11,625	$6,507	$19,628
CZ03	PGE	$1,178	$128	$11,599	$8,167	$19,817
CZ04	PGE	$1,670	$90	$10,648	$6,273	$16,909
CZ04	CPAU	$1,670	$0	$10,648	$786	$786
CZ05	PGE	$1,424	$69	$9,462	$5,901	$15,746
CZ05	PGE/SCG	$1,424	($157)	$9,462	($613)	$4,598
CZ06	SCE/SCG	$1,424	($37)	$4,223	$776	$2,067
CZ07	SDGE	$1,424	$42	$4,278	$2,609	$4,434
CZ08	SCE/SCG	$1,916	($63)	$3,365	($446)	$1,060
CZ09	SCE/SCG	$1,916	($97)	$4,387	($983)	$1,121
CZ10	SCE/SCG	$1,916	($75)	$3,904	($511)	$1,528
CZ10	SDGE	$1,916	$160	$3,904	$5,112	$8,649
CZ11	PGE	$2,162	$183	$12,119	$8,564	$22,361
CZ12	PGE	$1,916	$152	$12,451	$8,275	$21,982
CZ12	SMUD/PGE	$1,916	$686	$12,451	$20,229	$34,321
CZ13	PGE	$2,162	$160	$8,329	$6,744	$16,567
CZ14	SCE/SCG	$1,916	($126)	$6,795	($630)	$4,382
CZ14	SDGE	$1,916	$101	$6,795	$4,679	$11,801
CZ15	SCE/SCG	$2,408	$60	$550	$1,131	$1,937
CZ16	PGE	$2,243	$34	$17,538	$5,963	$24,236

Table 29. [Pre-1978] Standard Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	$205	$27,155	$12,440	$44,777
CZ02	PGE	$652	($16)	$13,342	$5,095	$20,910
CZ03	PGE	$514	$76	$11,946	$6,319	$18,293
CZ04	PGE	$652	$41	$13,059	$6,031	$20,843
CZ04	CPAU	$652	$0	$13,059	$255	$255
CZ05	PGE	$583	$12	$9,998	$4,285	$15,110
CZ05	PGE/SCG	$583	($240)	$9,998	($2,978)	$2,679
CZ06	SCE/SCG	$583	($42)	$3,860	($7)	$1,259
CZ07	SDGE	$583	$37	$3,876	$1,837	$3,652
CZ08	SCE/SCG	$721	($75)	$3,305	($1,076)	$457
CZ09	SCE/SCG	$721	($131)	$4,415	($2,095)	$72
CZ10	SCE/SCG	$721	($110)	$3,982	($1,649)	$504
CZ10	SDGE	$721	$139	$3,982	$4,305	$8,106
CZ11	PGE	$790	$94	$14,045	$7,108	$23,108
CZ12	PGE	$721	$20	$13,850	$5,506	$20,829
CZ12	SMUD/PGE	$721	$772	$13,850	$22,326	$38,189
CZ13	PGE	$790	$89	$9,394	$5,347	$16,369
CZ14	SCE/SCG	$721	($241)	$10,103	($2,418)	$5,836
CZ14	SDGE	$721	$62	$10,103	$4,832	$17,541
CZ15	SCE/SCG	$859	$52	$643	$930	$1,769
CZ16	PGE	$2,095	$16	$27,492	$10,883	$47,907

Table 30. [Pre-1978] High Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$450	$30,518	$13,096	$45,609
CZ02	PGE	$3,606	$126	$13,354	$3,405	$19,322
CZ03	PGE	$3,422	$172	$10,768	$3,678	$15,720
CZ04	PGE	$3,606	$209	$13,537	$4,926	$19,859
CZ04	CPAU	$3,606	$0	$13,537	($4,595)	($4,595)
CZ05	PGE	$3,514	$103	$8,416	$1,521	$12,412
CZ05	PGE/SCG	$3,514	($148)	$8,416	($5,742)	($19)
CZ06	SCE/SCG	$3,514	$11	$380	($3,634)	($2,319)
CZ07	SDGE	$3,514	$89	$430	($1,774)	$25
CZ08	SCE/SCG	$3,698	$33	$1,065	($3,586)	($1,955)
CZ09	SCE/SCG	$3,698	($10)	$2,358	($4,304)	($2,027)
CZ10	SCE/SCG	$3,698	$21	$2,191	($3,628)	($1,354)
CZ10	SDGE	$3,698	$255	$2,191	$2,127	$5,893
CZ11	PGE	$3,789	$327	$15,614	$7,382	$23,549
CZ12	PGE	$3,698	$236	$14,490	$5,437	$20,914
CZ12	SMUD/PGE	$3,698	$772	$14,490	$17,439	$33,302
CZ13	PGE	$3,789	$310	$10,164	$5,378	$16,558
CZ14	SCE/SCG	$3,698	($54)	$11,876	($3,161)	$5,265
CZ14	SDGE	$3,698	$263	$11,876	$4,651	$17,300
CZ15	SCE/SCG	$3,881	$232	$393	($35)	$970
CZ16	PGE	$5,071	$360	$34,043	$13,682	$50,953

Table 31. [1978-1991] DFHP Existing Furnace CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$2,405	$273	$20,184	$12,619	$36,168
CZ02	PGE	$1,670	$12	$9,216	$4,240	$13,931
CZ03	PGE	$1,178	$76	$8,952	$5,930	$14,293
CZ04	PGE	$1,670	$23	$8,234	$3,777	$11,336
CZ04	CPAU	$1,670	$0	$8,234	$786	$786
CZ05	PGE	$1,424	$40	$7,070	$4,285	$11,150
CZ05	PGE/SCG	$1,424	($122)	$7,070	($400)	$3,130
CZ06	SCE/SCG	$1,424	($21)	$2,941	$952	$1,705
CZ07	SDGE	$1,424	$9	$3,046	$1,631	$2,667
CZ08	SCE/SCG	$1,916	($45)	$2,294	($246)	$693
CZ09	SCE/SCG	$1,916	($67)	$3,127	($563)	$861
CZ10	SCE/SCG	$1,916	($50)	$2,755	($208)	$1,125
CZ10	SDGE	$1,916	$110	$2,755	$3,621	$5,975
CZ11	PGE	$2,162	$155	$9,192	$6,617	$16,577
CZ12	PGE	$1,916	$128	$9,753	$6,583	$16,702
CZ12	SMUD/PGE	$1,916	$506	$9,753	$15,028	$25,418
CZ13	PGE	$2,162	$135	$6,312	$5,245	$12,393
CZ14	SCE/SCG	$1,916	($128)	$5,080	($1,202)	$2,261
CZ14	SDGE	$1,916	$65	$5,080	$3,272	$8,344
CZ15	SCE/SCG	$2,408	($9)	$50	($504)	($107)
CZ16	PGE	$2,243	$28	$14,397	$4,676	$19,471

Table 32. [1978-1991] Standard Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$3,067	$146	$21,427	$8,941	$34,641
CZ02	PGE	$652	($47)	$10,428	$3,076	$14,864
CZ03	PGE	$514	$33	$8,999	$4,259	$12,882
CZ04	PGE	$652	($10)	$9,984	$3,558	$14,338
CZ04	CPAU	$652	$0	$9,984	$255	$255
CZ05	PGE	$583	($18)	$7,290	$2,586	$10,196
CZ05	PGE/SCG	$583	($199)	$7,290	($2,659)	$1,219
CZ06	SCE/SCG	$583	($24)	$2,450	$215	$956
CZ07	SDGE	$583	$6	$2,539	$898	$1,929
CZ08	SCE/SCG	$721	($57)	$2,111	($896)	$57
CZ09	SCE/SCG	$721	($91)	$3,022	($1,455)	$13
CZ10	SCE/SCG	$721	($71)	$2,672	($1,035)	$390
CZ10	SDGE	$721	$96	$2,672	$2,939	$5,474
CZ11	PGE	$790	$74	$10,682	$5,209	$16,830
CZ12	PGE	$721	$30	$10,747	$4,418	$15,794
CZ12	SMUD/PGE	$721	$573	$10,747	$16,567	$28,332
CZ13	PGE	$790	$72	$7,141	$4,003	$12,047
CZ14	SCE/SCG	$721	($224)	$7,556	($2,880)	$2,930
CZ14	SDGE	$721	$42	$7,556	$3,476	$12,809
CZ15	SCE/SCG	$859	($13)	$71	($639)	($219)
CZ16	PGE	$2,095	($25)	$22,236	$7,529	$37,120

Table 33. [1978-1991] High Efficiency HPSH CARE

Climate Zone	Electric/ Gas Utility	First Incremental Cost	First-year Utility Savings	Lifecycle NPV Savings		
				2025 LSC NPV	On-Bill NPV Modest Gas Escalation	On-Bill NPV High Gas Escalation
CZ01	PGE	$5,998	$339	$23,092	$8,460	$34,300
CZ02	PGE	$3,606	$57	$9,242	$547	$12,409
CZ03	PGE	$3,422	$111	$6,872	$1,228	$9,907
CZ04	PGE	$3,606	$113	$9,114	$1,472	$12,340
CZ04	CPAU	$3,606	$0	$9,114	($4,595)	($4,595)
CZ05	PGE	$3,514	$58	$4,859	($544)	$7,120
CZ05	PGE/SCG	$3,514	($124)	$4,859	($5,789)	($1,857)
CZ06	SCE/SCG	$3,514	$5	($1,546)	($3,963)	($3,196)
CZ07	SDGE	$3,514	$39	($1,407)	($3,143)	($2,122)
CZ08	SCE/SCG	$3,698	$32	($828)	($3,800)	($2,766)
CZ09	SCE/SCG	$3,698	($0)	$232	($4,336)	($2,784)
CZ10	SCE/SCG	$3,698	$25	$82	($3,803)	($2,290)
CZ10	SDGE	$3,698	$184	$82	$124	$2,631
CZ11	PGE	$3,789	$272	$10,685	$4,725	$16,488
CZ12	PGE	$3,698	$191	$10,023	$3,148	$14,639
CZ12	SMUD/PGE	$3,698	$573	$10,023	$11,680	$23,445
CZ13	PGE	$3,789	$259	$6,612	$3,262	$11,441
CZ14	SCE/SCG	$3,698	($82)	$7,697	($4,629)	$1,311
CZ14	SDGE	$3,698	$195	$7,697	$2,166	$11,452
CZ15	SCE/SCG	$3,881	$133	($1,111)	($2,349)	($1,794)
CZ16	PGE	$5,071	$245	$26,407	$8,685	$38,470

6.3 Utility Rate Schedules

6.3.1 Pacific Gas & Electric

The following pages provide details on the PG&E electricity and natural gas tariffs applied in this study. Table 34 describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of $ 0.03396/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between February 2024 and January 2025.

Table 34. PG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ01	V
CZ02	X
CZ03	T
CZ04	X
CZ05	T
CZ11	R
CZ12	S
CZ13	R
CZ16	Y

The PG&E monthly gas rate in $/therm was applied on a monthly basis according to the rates shown in Table 35. The gas rates were developed based on the latest available gas rate for January 2025 and a curve to reflect how natural gas prices fluctuate with seasonal supply and demand. The seasonal curve was estimated from PG&E's monthly residential tariffs between 2015 and 2024. 12-month curves were created from monthly gas rates for each of the ten years. The ten annual curves were then averaged to arrive at an average normalized annual curve. The baseline and excess transmission charges were found to be consistent over the course of a year and applied for the entire year based on January 2025 rates. The costs presented in Table 35 were then derived by establishing the baseline and excess rates from the latest January 2025 tariff as a reference point, and then using the normalized curve to estimate the cost for the remaining months relative to the January rates. Corresponding CARE tariffs reflect the 20 percent discount per the GL-1 tariff.

Table 35. PG&E Monthly Gas Rate ($/therm)

Month	Total Charge	
	Baseline	Excess
January	$2.63	$3.15
February	$2.64	$3.16
March	$2.41	$2.94
April	$2.24	$2.77
May	$2.21	$2.74
June	$2.23	$2.77
July	$2.26	$2.80
August	$2.36	$2.90
September	$2.42	$2.98
October	$2.52	$3.07
November	$2.63	$3.17
December	$2.70	$3.23

Residential
GAS
Baseline Territories and Quantities [1/]

Effective April 1, 2022 - Present

BASELINE QUANTITIES (Therms **Per Day** Per Dwelling Unit)

Individually Metered

Baseline Territories	Summer (April-October) Effective Apr. 1, 2022	Winter Off-Peak (Nov, Feb, Mar) Effective Nov. 1, 2022	Winter On-Peak (Dec, Jan) Effective Dec. 1, 2022
P	0.39	1.88	2.19
Q	0.56	1.48	2.00
R	0.36	1.24	1.81
S	0.39	1.38	1.94
T	0.56	1.31	1.68
V	0.59	1.51	1.71
W	0.39	1.14	1.68
X	0.49	1.48	2.00
Y	0.72	2.22	2.58

Master Metered

Baseline Territories	Summer (April-October) Effective Apr. 1, 2022	Winter Off-Peak (Nov, Feb, Mar) Effective Nov. 1, 2022	Winter On-Peak (Dec, Jan) Effective Dec. 1, 2022
P	0.29	1.01	1.13
Q	0.56	0.67	0.77
R	0.33	0.87	1.16
S	0.29	0.61	0.65
T	0.56	1.01	1.10
V	0.59	1.28	1.32
W	0.26	0.71	0.87
X	0.33	0.67	0.77
Y	0.52	1.01	1.13

Summer Season: Apr-Oct
Winter Off-Peak: Nov, Feb, Mar
Winter On-Peak: Dec, Jan

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Pacific Gas and Electric Company
U 39 Oakland, California

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ELECTRIC SCHEDULE E-TOU-C Sheet 2
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

RATES: (Cont'd.)

E-TOU-C TOTAL BUNDLED RATES

Total Energy Rates ($ per kWh)	PEAK		OFF-PEAK	
Summer				
Total Usage	$0.60729	(R)	$0.50429	(R)
Baseline Credit (Applied to Baseline Usage Only)	($0.10135)	(R)	($0.10135)	(R)
Winter				
Total Usage	$0.49312	(R)	$0.46312	(R)
Baseline Credit (Applied to Baseline Usage Only)	($0.10135)	(R)	($0.10135)	(R)
Delivery Minimum Bill Amount ($ per meter per day)	$0.39167			
California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles)	($58.23)	(R)		

Total bundled service charges shown on customer's bills are unbundled according to the component rates shown below. Where the delivery minimum bill amount applies, the customer's bill will equal the sum of (1) the delivery minimum bill amount plus (2) for bundled service, the generation rate times the number of kWh used. For revenue accounting purposes, the revenues from the delivery minimum bill amount will be assigned to the Transmission, Transmission Rate Adjustments, Reliability Services, Public Purpose Programs, Nuclear Decommissioning, Competition Transition Charges, Energy Cost Recovery Amount, Wildfire Fund Charge, and New System Generation Charges based on kWh usage times the corresponding unbundled rate component per kWh, with any residual revenue assigned to Distribution.

(Continued)

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ELECTRIC SCHEDULE E-TOU-C Sheet 3
RESIDENTIAL TIME-OF-USE (PEAK PRICING 4 - 9 p.m. EVERY DAY)

RATES: (Cont'd.)

UNBUNDLING OF E-TOU-C TOTAL RATES

Energy Rates by Component ($ per kWh)	PEAK		OFF-PEAK	
Generation:				
Summer (all usage)	$0.24730	(I)	$0.16430	(I)
Winter (all usage)	$0.18725	(I)	$0.16057	(I)
Distribution:**				
Summer (all usage)	$0.24056	(I)	$0.22056	(I)
Winter (all usage)	$0.18645	(I)	$0.18313	(I)

Conservation Incentive Adjustment (Baseline Usage)	($0.03733)	(I)
Conservation Incentive Adjustment (Over Baseline Usage)	$0.06402	(I)
Transmission* (all usage)	$0.05122	(I)
Transmission Rate Adjustments* (all usage)	($0.01509)	(R)
Reliability Services* (all usage)	$0.00032	(I)
Public Purpose Programs (all usage)	$0.02644	(R)
Nuclear Decommissioning (all usage)	($0.00013)	(I)
Competition Transition Charges (all usage)	($0.00072)	(R)
Energy Cost Recovery Amount (all usage)	$0.00001	(I)
Wildfire Fund Charge (all usage)	$0.00595	(I)
New System Generation Charge (all usage)**	$0.00574	(R)
Wildfire Hardening Charge (all usage)	$0.00494	
Recovery Bond Charge (all usage)	$0.00650	
Recovery Bond Credit (all usage)	($0.00650)	
Bundled Power Charge Indifference Adjustment (all usage)***	($0.02327)	(R)

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.
** Distribution and New System Generation Charges are combined for presentation on customer bills.
*** Direct Access, Community Choice Aggregation and Transitional Bundled Service Customers pay the applicable Vintaged Power Charge Indifference Adjustment. Generation and Bundled PCIA are combined for presentation on bundled customer bills.

(Continued)

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ELECTRIC SCHEDULE E-ELEC Sheet 2
RESIDENTIAL TIME-OF-USE (ELECTRIC HOME)
SERVICE FOR CUSTOMERS WITH QUALIFYING ELECTRIC TECHNOLOGIES

RATES:(Cont'd.)

Direct Access (DA) and Community Choice Aggregation (CCA) charges shall be calculated in accordance with the paragraph in this rate schedule titled Billing.

TOTAL BUNDLED RATES

Base Services Charge ($ per meter per day)	$0.49281						
Total Energy Rates ($ per kWh)	PEAK		PART-PEAK		OFF-PEAK		
Summer Usage	$0.60728	(R)	$0.44540	(R)	$0.38872	(R)	
Winter Usage	$0.37577	(R)	$0.35368	(R)	$0.33982	(R)	
California Climate Credit (per household, per semi-annual payment occurring in the April and October bill cycles)	($58.23)	(R)					

Total bundled service charges shown on a customer's bills are unbundled according to the component rates shown below.

UNBUNDLING OF TOTAL RATES

Energy Rates by Component ($ per kWh)	PEAK		PART-PEAK		OFF-PEAK	
Generation:						
Summer Usage	$0.31659	(I)	$0.21748	(I)	$0.17238	(I)
Winter Usage	$0.15446	(I)	$0.13449	(I)	$0.12114	(I)
Distribution:**						
Summer Usage	$0.23528	(I)	$0.17251	(I)	$0.16093	(I)
Winter Usage	$0.16590	(I)	$0.16378	(I)	$0.16327	(I)
Transmission* (all usage)	$0.05122	(I)	$0.05122	(I)	$0.05122	(I)
Transmission Rate Adjustments* (all usage)	($0.01509)	(R)	($0.01509)	(R)	($0.01509)	(R)
Reliability Services* (all usage)	$0.00032	(I)	$0.00032	(I)	$0.00032	(I)
Public Purpose Programs (all usage)	$0.02644	(R)	$0.02644	(R)	$0.02644	(R)
Nuclear Decommissioning (all usage)	($0.00013)	(I)	($0.00013)	(I)	($0.00013)	(I)
Competition Transition Charges (all usage)	($0.00072)	(R)	($0.00072)	(R)	($0.00072)	(R)
Energy Cost Recovery Amount (all usage)	$0.00001	(I)	$0.00001	(I)	$0.00001	(I)
Wildfire Fund Charge (all usage)	$0.00595	(I)	$0.00595	(I)	$0.00595	(I)
New System Generation Charge (all usage)**	$0.00574	(R)	$0.00574	(R)	$0.00574	(R)
Wildfire Hardening Charge (all usage)	$0.00494		$0.00494		$0.00494	
Recovery Bond Charge (all usage)	$0.00650		$0.00650		$0.00650	
Recovery Bond Credit (all usage)	($0.00650)		($0.00650)		($0.00650)	
Bundled Power Charge Indifference Adjustment (all usage)***	($0.02327)	(R)	($0.02327)	(R)	($0.02327)	(R)

* Transmission, Transmission Rate Adjustments and Reliability Service charges are combined for presentation on customer bills.
** Distribution and New System Generation Charges are combined for presentation on customer bills.
*** Direct Access, Community Choice Aggregation and Transitional Bundled Service Customers pay the applicable Vintaged Power Charge Indifference Adjustment. Generation and Bundled PCIA are combined for presentation on bundled customer bills.

(Continued)

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Pacific Gas and Electric Company
U 39 San Francisco, California

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ELECTRIC SCHEDULE E-ELEC Sheet 3 (N)
RESIDENTIAL TIME-OF-USE (ELECTRIC HOME) (N)
SERVICE FOR CUSTOMERS WITH QUALIFYING ELECTRIC TECHNOLOGIES

SPECIAL CONDITIONS:

1. TIME PERIODS: Times of the year and times of the day are defined as follows: (N)

   All Year:

   Peak: 4:00 p.m. to 9:00 p.m. every day including weekends and holidays.

   Partial-Peak: 3:00 p.m. to 4:00 p.m. and 9:00 p.m. to 12:00 a.m. every day including weekends and holidays.

   Off-Peak: All other hours.

2. SEASONAL CHANGES: The summer season is June 1 through September 30 and the winter season is October 1 through May 31. When billing includes use in both the summer and winter periods, charges will be prorated based upon the number of days in each period.

3. ADDITIONAL METERS: If a residential dwelling unit is served by more than one electric meter, the customer must designate which meter is the primary meter and which is (are) the additional meter(s).

4. BILLING: A customer's bill is calculated based on the option applicable to the customer.

   Bundled Service Customers receive generation and delivery services solely from PG&E. The customer's bill is based on the Unbundling of Total Rates set forth above.

   Transitional Bundled Service (TBS) Customers take TBS as prescribed in Rules 22.1 and 23.1, or take PG&E bundled service prior to the end of the six (6) month advance notice period required to elect PG&E bundled service as prescribed in Rules 22.1 and 23.1. TBS customers shall pay all charges shown in the Unbundling of Total Rates except for the Bundled Power Charge Indifference Adjustment and the generation charge. TBS customers shall also pay for their applicable Vintaged Power Charge Indifference Adjustment provided in the table below, and the short-term commodity prices as set forth in Schedule TBCC. (N)

(Continued)

Pacific Gas and Electric Company
U 39 Oakland, California

Revised Cal. P.U.C. Sheet No. 59329-E
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ELECTRIC SCHEDULE D-CARE Sheet 1
LINE-ITEM DISCOUNT FOR CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE) CUSTOMERS

APPLICABILITY: This schedule is applicable to single-phase and polyphase residential service in single-family dwellings and in flats and apartments separately metered by PG&E and domestic submetered tenants residing in multifamily accommodations, mobilehome parks and to qualifying recreational vehicle parks and marinas and to farm service on the premises operated by the person whose residence is supplied through the same meter, where the applicant qualifies for California Alternate Rates for Energy (CARE) under the eligibility and certification criteria set forth in Electric Rule 19.1. CARE service is available on Schedules E-1, E-TOU-B, E-TOU-C, E-TOU-D, EV2, E-ELEC, EM, ES, ESR, ET and EM-TOU.

TERRITORY: This rate schedule applies everywhere PG&E provides electric service.

RATES: Customers taking service on this rate schedule whose otherwise applicable rate schedule has no Delivery Minimum Bill Amount (Schedule E-ELEC) will receive a CARE percentage discount of 38.351% (R) on their total bundled charges (except for the California Climate Credit, which will not be discounted). Customers taking service on this rate schedule whose otherwise applicable rate schedule has a Delivery Minimum Bill Amount (all other schedules) will receive a CARE percentage discount ("A" or "C" below) on their total bundled charges less charges from which they are exempt (Wildfire Fund Charge, Recovery Bond Charge, Recovery Bond Credit, and the CARE surcharge portion of the public purpose program charge used to fund the CARE discount) on their otherwise applicable rate schedule (except for the California Climate Credit, which will not be discounted) and also will receive a percentage discount ("B" or "D" below) on the delivery minimum bill amount, if applicable. The CARE discount will be calculated for direct access and community choice aggregation customers based on the total charges as if they were subject to bundled service rates. Discounts will be applied as a reduction to distribution charges. These conditions also apply to master-metered customers and to qualified sub-metered tenants where the master-meter customer is jointly served under PG&E's Rate Schedule D-CARE and either Schedule EM, ES, ESR, ET, or EM-TOU.

For master-metered customers where one or more of the submetered tenants qualifies for CARE rates under the eligibility and certification criteria set forth in Rule 19.1, 19.2, or 19.3, the CARE discount is equal to a percentage ("C" below) of the total bundled charges, multiplied by the number of CARE units divided by the total number of units. In addition, master-metered customers eligible for D-CARE will receive a percentage discount ("D" below) on the delivery minimum bill amount, if applicable.

It is the responsibility of the master-metered customer to advise PG&E within 15 days following any change in the number of dwelling units and/or any decrease in the number of qualifying CARE applicants that results when such applicants move out of their submetered or non-submetered dwelling unit, or submetered permanent-residence RV or permanent-residence boat.

(Continued)

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ELECTRIC SCHEDULE D-CARE Sheet 2
LINE-ITEM DISCOUNT FOR CALIFORNIA ALTERNATE RATES FOR ENERGY (CARE) CUSTOMERS

RATES: (Cont'd)

A.	D-CARE Discount:	35.000	% (Percent)	(I)
B.	Delivery Minimum Bill Discount:	50.000	% (Percent)	
C.	Master-Meter D-CARE Discount:	35.000	% (Percent)	(I)
D.	Master-Meter Delivery Minimum Bill Discount:	50.000	% (Percent)	

SPECIAL CONDITIONS:

1. OTHERWISE APPLICABLE SCHEDULE: The Special Conditions of the Customer's otherwise applicable rate schedule will apply to this schedule.

2. ELIGIBILITY: To be eligible to receive D-CARE the applicant must qualify under the criteria set forth in PG&E's Electric Rules 19.1, 19.2, and 19.3 and meet the certification requirements thereof to the satisfaction of PG&E. Qualifying Direct Access, Community Choice Aggregation Service, and Transitional Bundled Service customers are also eligible to take service on Schedule D-CARE. Applicants may qualify for D-CARE at their primary residence only. Customers or sub-metered tenants participating in the Family Electric Rate Assistance (FERA) program cannot concurrently participate in the CARE program.

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6.3.2 Southern California Edison

The following pages provide details on the SCE electricity tariffs applied in this study. Table describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of $ 0.01532/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between February 2024 and January 2025.

Table 36. SCE Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ06	6
CZ08	8
CZ09	9
CZ10	10
CZ14	14
CZ15	15

Summer Daily Allocations (June through September)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	17.2	17.9
6	11.4	8.8
8	12.6	9.8
9	16.5	12.4
10	18.9	15.8
13	22.0	24.6
14	18.7	18.3
15	46.4	24.1
16	14.4	13.5

Winter Daily Allocations (October through May)

Baseline Region Number	Daily kWh Allocation	All-Electric Allocation
5	18.7	29.1
6	11.3	13.0
8	10.6	12.7
9	12.3	14.3
10	12.5	17.0
13	12.6	24.3
14	12.0	21.3
15	9.9	18.2
16	12.6	23.1

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 12 (T)

SPECIAL CONDITIONS

1. Applicable rate time periods are defined as follows:

Option 4-9 PM, Option 4-9 PM-CPP, Option PRIME, Option PRIME-CPP : (T)

TOU Period	Weekdays		Weekends and Holidays	
	Summer	Winter	Summer	Winter
On-Peak	4 p.m. - 9 p.m.	N/A	N/A	N/A
Mid-Peak	N/A	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.
Off-Peak	All other hours	9 p.m. - 8 a.m.	All other hours	9 p.m. - 8 a.m.
Super-Off-Peak	N/A	8 a.m. - 4 p.m.	N/A	8 a.m. - 4 p.m.
CPP Event Period	4 p.m. - 9 p.m.	4 p.m. - 9 p.m.	N/A	N/A

SOUTHERN CALIFORNIA EDISON
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Southern California Edison — Revised Cal. PUC Sheet No. 89278-E
Rosemead, California (U 338-E) — Cancelling Revised Cal. PUC Sheet No. 88856-E

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 2

RATES

Customers receiving service under this Schedule will be charged the applicable rates under Option 4-9 PM, Option 4-9 PM-CPP, Option 5-8 PM, Option 5-8 PM-CPP, Option PRIME, Option PRIME-CPP Option A, Option A-CPP, Option B, or Option B-CPP, as listed below. CPP Event Charges will apply to all energy usage during CPP Event Energy Charge periods and CPP Non-Event Energy Credits will apply as a reduction on CPP Non-Event Energy Credit Periods during Summer Season days, 4:00 p.m. to 9:00 p.m., as described in Special Conditions 1 and 3, below:

		Delivery Service Total[1]	Generation[2] UG***	Generation[2] DWREC[3]
Option 4-9 PM / Option 4-9 PM-CPP				
Energy Charge - $/kWh				
	Summer Season - On-Peak	0.35546 (I)	0.24264 (R)	0.00000
	Mid-Peak	0.35546 (I)	0.12948 (R)	0.00000
	Off-Peak	0.30374 (I)	0.06976 (R)	0.00000
	Winter Season - Mid-Peak	0.35546 (I)	0.17237 (R)	0.00000
	Off-Peak	0.30374 (I)	0.09602 (R)	0.00000
	Super-Off-Peak	0.28513 (I)	0.07779 (R)	0.00000
Baseline Credit**** - $/kWh		(0.09514) (I)	0.00000	
Fixed Recovery Charge - $/kWh		0.00198 (I)		
MCAM Charge[5] - $/kWh		0.00160 (I)		
Basic Charge - $/day				
	Single-Family Residence	0.031		
	Multi-Family Residence	0.024		
Minimum Charge** - $/day				
	Single Family Residence	0.346		
	Multi-Family Residence	0.346		
Minimum Charge (Medical Baseline)** - $/day				
	Single Family Residence	0.173		
	Multi-Family Residence	0.173		
California Climate Credit[4]		(56.00) (R)		
California Alternate Rates for Energy Discount - %		100.00*		
Family Electric Rate Assistance Discount - %		100.00		
Option 4-9 PM-CPP				
CPP Event Energy Charge - $/kWh			0.80000	
Summer CPP Non-Event Credit On-Peak Energy Credit - $/kWh			(0.15170)	
Maximum Available Credit - $/kWh*****				
	Summer Season		(0.54821) (R)	

* Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.
** The Minimum Charge is applicable when the Delivery Service Energy Charge, plus the applicable Basic Charge is less than the Minimum Charge.
*** The ongoing Competition Transition Charge CTC of ($0.00058) per kWh is recovered in the UG component of Generation. (R)
**** The Baseline Credit applies up to 100% of the Baseline Allocation, regardless of Time-of-Use time period. Additional Baseline Allocations apply for Customers with Heat Pump Water Heaters served under this Option. The Baseline Allocations are set forth in Preliminary Statement, Part H.
*****The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.
1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.
2 Generation = The Gen rates are applicable only to Bundled Service Customers. See Special Condition below for PCIA recovery.
3 DWREC = Department of Water Resources (DWR) Energy Credit – For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.
4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.
5 The Modified Cost Allocation Mechanism (MCAM) charge recovers the net cost associated with system reliability procurement ordered by the CPUC that SCE has procured on behalf of customers whose generation services are provided by certain Electric Service Providers or Community Choice Aggregators.

(Continued)

(To be inserted by utility)
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Vice President

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2C7

Southern California Edison
Rosemead, California (U 338-E)

Revised Cal. PUC Sheet No. 89282-E
Cancelling Revised Cal. PUC Sheet No. 88860-E

Schedule TOU-D
TIME-OF-USE
DOMESTIC
(Continued)

Sheet 6

RATES (Continued)

		Delivery Service Total[1]	Generation[2] UG**	Generation[2] DWREC[3]
Option PRIME / Option PRIME-CPP				
Energy Charge - $/kWh/Meter/Day				
Summer Season				
	On-Peak	0.28716 (I)	0.28317 (R)	0.00000
	Mid-Peak	0.28716 (I)	0.10077 (R)	0.00000
	Off-Peak	0.20039 (I)	0.06728 (R)	0.00000
Winter Season				
	Mid-Peak	0.29246 (I)	0.24759 (R)	0.00000
	Off-Peak	0.19215 (I)	0.05686 (R)	0.00000
	Super-Off-Peak	0.19215 (I)	0.05686 (R)	0.00000
Fixed Recovery Charge - $/kWh		0.00198 (I)		
MCAM Charge[5] - $/kWh		0.00160 (I)		
Basic Charge - $/Meter/Day		0.539 (R)		
EV Meter Credit (Separately Metered EV Option) - $/Meter/Day		(0.408) (I)		
EV Submeter Credit - $/Meter/Day		(0.139) (I)		
California Climate Credit[4]		(56.00) (R)		
California Alternate Rates for Energy Discount - %		100.00*		
Family Electric Rate Assistance Discount - %		100.00		
Medical Line Item Discount - %		100.000		
Option PRIME-CPP				
CPP Event Energy Charge - $/kWh			0.80000	
Summer CPP Non-Event Credit				
On-Peak Energy Credit - $/kWh			(0.15170)	
Maximum Available Credit - $/kWh****				
	Summer Season		(0.54821) (R)	

* Represents 100% of the discount percentage as shown in the applicable Special Condition of this Schedule.
** The ongoing Competition Transition Charge (CTC) of ($0.00058) per kWh is recovered in the UG component of Generation. (R)
**** The Maximum Available Credit is the capped credit amount for CPP Customers dual participating in other demand response programs.
1 Total = Total Delivery Service rates are applicable to Bundled Service, Direct Access (DA) and Community Choice Aggregation Service (CCA Service) Customers, except DA and CCA Service Customers are not subject to the DWRBC rate component of this Schedule but instead pay the DWRBC as provided by Schedule DA-CRS or Schedule CCA-CRS.
2 Generation = The Gen rates are applicable only to Bundled Service Customers. See Special Condition below for PCIA recovery.
3 DWREC = Department of Water Resources (DWR) Energy Credit – For more information on the DWR Energy Credit, see the Billing Calculation Special Condition of this Schedule.
4 Applied on an equal basis, per household, semi-annually. See the Special Conditions of this Schedule for more information.
5 The Modified Cost Allocation Mechanism (MCAM) charge recovers the net cost associated with system reliability procurement ordered by the CPUC that SCE has procured on behalf of customers whose generation services are provided by certain Electric Service Providers or Community Choice Aggregators.

(Continued)

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6C9

Southern California Edison
Rosemead, California (U 338-E)

Revised Cal. PUC Sheet No. 89277-E
Cancelling Revised Cal. PUC Sheet No. 88502-E

Schedule D-CARE Sheet 1
CALIFORNIA ALTERNATE RATES FOR ENERGY
DOMESTIC SERVICE

APPLICABILITY

Applicable to domestic service to California Alternate Rates for Energy (CARE) households residing in a permanent Single-Family Accommodation or Multifamily Accommodation where the customer meets all the Special Conditions of this Schedule. Customers enrolled in the CARE program are not eligible for the Family Electric Rate Assistance (FERA) program.

Pursuant to Special Condition 12 herein, customers receiving service under this Schedule are eligible to receive the California Climate Credit as shown in the Rates section below.

TERRITORY

Within the entire territory served.

RATES

The applicable charges set forth in Schedule D shall apply to Customers served under this Schedule.

CARE Discount:

A 32.5 percent discount is applied to a CARE Customer's bill prior to the application of the Public Utilities Commission Reimbursement Fee (PUCRF) and any applicable user fees, taxes, and late payment charges. CARE Customers are required to pay the PUCRF and any applicable user fees, taxes, and late payment charges in full. In addition, CARE Customers are exempt from paying the CARE Surcharge of $0.01435 per kWh, the Wildfire Fund Non-Bypassable Charge of $0.00595 per kWh, and the Fixed Recovery Charge of $0.00198 per kWh.. (I) (I) (I)

(Continued)

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6.3.3 Southern California Gas

Following are the SoCalGas natural gas tariffs applied in this study. Table 37 describes the baseline territories that were assumed for each climate zone.

Table 37. SoCalGas Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ05	2
CZ06	1
CZ08	1
CZ09	1
CZ10	1
CZ14	2
CZ15	1

The SoCalGas monthly gas rate in $/therm applied in this analysis is shown in Table 38. The gas rates were developed based on the latest available gas rate for January 2025 and a curve to reflect how natural gas prices fluctuate with seasonal supply and demand. The seasonal curve was estimated from SoCalGas's monthly residential tariffs between 2015 and 2024. 12-month curves were created from monthly gas rates for each of the ten years. The ten annual curves were then averaged to arrive at an average normalized annual curve. Long-term historical natural gas rate data was only available for SoCalGas' procurement charges.[8] The baseline and excess transmission charges were found to be consistent over the course of a year and applied for the entire year based on January 2025 rates. The costs presented in Table 38 were then derived by establishing the baseline and excess rates from the latest January 2025 tariff as a reference point, and then using the normalized curve to estimate the cost for the remaining months relative to the January rates. CARE tariffs reflect the 20 percent discount per the GR tariff.

[8] The SoCalGas procurement and transmission charges were obtained from the following site: https://www.socalgas.com/for-your-business/energy-market-services/gas-prices RES2023.xlsx (live.com)

Table 38. SoCalGas Monthly Gas Rate ($/therm)

Month	Procurement Charge	Transportation Charge		Total Charge	
		Baseline	Excess	Baseline	Excess
January	$0.45	$0.98	$1.40	$1.43	$1.85
February	$0.31	$0.98	$1.40	$1.29	$1.71
March	$0.26	$0.98	$1.40	$1.24	$1.66
April	$0.21	$0.98	$1.40	$1.19	$1.62
May	$0.22	$0.98	$1.40	$1.20	$1.62
June	$0.25	$0.98	$1.40	$1.23	$1.65
July	$0.26	$0.98	$1.40	$1.24	$1.66
August	$0.29	$0.98	$1.40	$1.27	$1.70
September	$0.27	$0.98	$1.40	$1.25	$1.67
October	$0.26	$0.98	$1.40	$1.24	$1.66
November	$0.29	$0.98	$1.40	$1.27	$1.69
December	$0.33	$0.98	$1.40	$1.31	$1.73

6.3.4 San Diego Gas & Electric

Following are the SDG&E electricity and natural gas tariffs applied in this study. Table 39 describes the baseline territories that were assumed for each climate zone. A net surplus compensation rate of $ 0.01837/ kWh was applied to any net annual electricity generation based on a one-year average of the rates between February 2024 and January 2025.

Table 39. SDG&E Baseline Territory by Climate Zone

Climate Zone	Baseline Territory
CZ07	Coastal
CZ10	Inland
CZ14	Mountain

The SDG&E monthly gas rate in $/therm was applied on a monthly basis according to the rates shown in Table 40. The gas rates were developed based on the latest available gas rate for January 2025 and a curve to reflect how natural gas prices fluctuate with seasonal supply and demand. The seasonal curve was estimated from SDG&E's monthly residential tariffs between 2015 and 2024. 12-month curves were created from monthly gas rates for each of the ten years. The ten annual curves were then averaged to arrive at an average normalized annual curve. The baseline and excess transmission charges were found to be consistent over the course of a year and applied for the entire year based on January 2025 rates. The costs presented in Table 40 were then derived by establishing the baseline and excess rates from the latest January 2025 tariff as a reference point, and then using the normalized curve to estimate the cost for the remaining months relative to the January rates. CARE tariffs reflect the 20 percent discount per the G-CARE tariff.

Table 40. SDG&E Monthly Gas Rate ($/therm)

Month	Total Charge	
	Baseline	Excess
January	$2.07	$2.36
February	$2.01	$2.30
March	$1.93	$2.22
April	$1.86	$2.16
May	$1.88	$2.18
June	$1.94	$2.24
July	$1.95	$2.25
August	$2.02	$2.32
September	$1.97	$2.27
October	$1.94	$2.24
November	$1.97	$2.27
December	$2.07	$2.37

Baseline Usage: The following quantities of gas used in individually metered residences are to be billed at the baseline rates:

All Customers:	Daily Therm Allowance
Summer (May to Oct)	0.359
Winter On-Peak (Dec, Jan & Feb)	1.233
Winter Off-Peak (Nov, Mar, & Apr)	0.692

San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 62556-E
Canceling Revised Cal. P.U.C. Sheet No. 62360-E

Sheet 2

SCHEDULE TOU-DR1
RESIDENTIAL TIME-OF-USE

RATES

Total Rates:

Description – TOU DR1	UDC Total Rate	DWR BC + WF-NBC	EECC Rate	Total Rate
Summer:				
On-Peak	0.28222	0.00561	0.41736	0.70519
Off-Peak	0.28222	0.00561	0.18792	0.47575
Super Off-Peak	0.28222	0.00561	0.06741	0.35524
Winter:				
On-Peak	0.41439	0.00561	0.14115	0.56115
Off-Peak	0.41439	0.00561	0.07928	0.49928
Super Off-Peak	0.41439	0.00561	0.06133	0.48133
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.10543)			(0.10543)
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.10543)			(0.10543)
Minimum Bill ($/day)	0.392			0.392

Description – TOU DR1-CARE	UDC Total Rate	DWR BC + WF-NBC	EECC Rate	Total Rate	Total Effective Care Rate	
Summer – CARE Rates:						
On-Peak	0.28222	0.00000	0.41736	0.69958	0.46249	R
Off-Peak	0.28222	0.00000	0.18792	0.47014	0.30762	R
Super Off-Peak	0.28222	0.00000	0.06741	0.34963	0.22627	R
Winter – CARE Rates:						
On-Peak	0.41439	0.00000	0.14115	0.55554	0.36526	R
Off-Peak	0.41439	0.00000	0.07928	0.49367	0.32350	R
Super Off-Peak	0.41439	0.00000	0.06133	0.47572	0.31138	R
Summer Baseline Adjustment Credit up to 130% of Baseline	(0.10543)			(0.10543)	(0.07117)	I
Winter Baseline Adjustment Credit up to 130% of Baseline	(0.10543)			(0.10543)	(0.07117)	I
Minimum Bill ($/day)	0.196			0.196	0.196	

Note:
(1) Total Rates consist of UDC, Schedule DWR-BC (Department of Water Resources Bond Charge), Schedule WF-NBC (CA Wildfire Fund charge) and Schedule EECC (Electric Energy Commodity Cost) rates. EECC rates are applicable to bundled customers only. See Special Condition 16 for PCIA (Power Charge Indifference Adjustment) recovery.
(2) Total Rates presented are for customers that receive commodity supply and delivery service from Utility.
(3) DWR-BC and WF-NBC charges do not apply to CARE customers.
(4) As identified in the rates tables, customer bills will also include line-item summer and winter credits for usage up to 130% of baseline to provide the rate capping benefits adopted by Assembly Bill 1X and Senate Bill 695.
(5) WF-NBC rate is 0.00561 + DWR-BC Bond Charge is 0.00000 .

(Continued)

2H10
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Dan Skopec
Senior Vice President
Regulatory Affairs
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Resolution No.

SCHEDULE TOU-DR1

Sheet 5

RESIDENTIAL TIME-OF-USE

Minimum Bill

The minimum bill to recover Distribution and TRAC costs is calculated as the minimum bill charge of $0.402 per day times the number of days in the billing cycle with a 50% discount applied for CARE or Family Electric Rate Assistance Program (FERA) customers resulting in a minimum bill charge of $0.201 per day.

Rate Components

The Utility Distribution Company Total Rates (UDC Total) shown above are comprised of the following components (if applicable): (1) Transmission (Trans) Charges, (2) Distribution (Distr) Charges, (3) Public Purpose Program (PPP) Charges, (4) Nuclear Decommissioning (ND) Charge, (5) Ongoing Competition Transition Charges (CTC), (6) Local Generation Charge (LGC), (7) Reliability Services (RS), and (8) the Total Rate Adjustment Component (TRAC).

Customers taking service under this Schedule may be eligible for a California Alternate Rates for Energy (CARE) discount on their bill, if they qualify to receive service under the terms and conditions of Schedule E-CARE. In addition, qualified CARE customers are exempt from paying the CARE surcharge of $0.01230 Per kWh. Customers that are eligible and receive both CARE and medical baseline will be given the additional medical baseline allotment for which they qualify and will receive the total effective CARE and medical baseline discounts identified in Schedule E-CARE.

Franchise Fee Differential

A Franchise Fee Differential of 5.78% will be applied to the monthly billings calculated under this Schedule for all customers within the corporate limits of the City of San Diego. Such Franchise Fee Differential shall be so indicated and added as a separate item to bills rendered to such customers.

Time Periods

All time periods listed are applicable to local time. The definition of time will be based upon the date service is rendered.

TOU Periods – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. - midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m. – 2:00 p.m. in March and April; 9:00 p.m. - midnight
Super Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April
TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. - midnight	2:00 p.m. – 4:00 p.m.; 9:00 p.m. - midnight
Super Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons: Summer June 1 – October 31
Winter November 1 – May 31

Schedule EV-TOU-5 - DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES provides domestic residential service for customers who own qualifying electric vehicles. Effective 10/1/2024

SCHEDULE EV-TOU-5										Schedule WF-NBC + DWR-BC Rate	Schedule EECC Rate	Total Electric Rate
Energy Charges ($/kWh)		Transm	Distr	PPP	ND	CTC	LGC	RS	TRAC	UDC Total			
Summer													
On-Peak		0.05840	0.18330	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.28402	0.00561	0.38826	0.67789
Off-Peak		0.05840	0.18330	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.28402	0.00561	0.14305	0.43268
Super Off-Peak		0.00000	0.01496	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.05728	0.00561	0.06741	0.13030
Winter													
On-Peak		0.05840	0.18330	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.28402	0.00561	0.16516	0.45479
Off-Peak		0.05840	0.18330	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.28402	0.00561	0.11850	0.40813
Super Off-Peak		0.00000	0.01496	0.01654	0.00007	0.00054	0.02516	0.00001	0.00000	0.05728	0.00561	0.06133	0.12422
Other Charges/Discounts													
Basic Service Fee	($/month)	0.00	16.00	0.00	0.00	0.00	0.00	0.00	0.00	16.00			16.00

Notes:
1) The total rates presented reflect the UDC rates associated with service under Schedule EV-TOU-5 and the generation rates associated with Schedule EECC, in addition to the rates associated with Schedules DWR-BC and WF-NBC. The UDC rate-by-rate components presented are associated with service under Schedule EV-TOU-5 as presented in the utility's tariff book.
2) Unbundled customers are those who take generation from other providers, such as Direct Access (DA) or Community Choice Aggregation (CCA). Unbundled customers do not pay SDG&E's commodity rates. The Total Energy Charge for an unbundled customer includes UDC, WF-NBC, DWR-BC and Power Charge Indifference Adjustment (PCIA) rates. PCIA rates by vintage are included below. Please see Schedules DA-CRS or CCA-CRS for more information regarding PCIA rates.

SCHEDULE EV-TOU-5

Sheet 4

COST-BASED DOMESTIC TIME-OF-USE FOR HOUSEHOLDS WITH ELECTRIC VEHICLES

Notes: Transmission Energy charges include the Transmission Revenue Balancing Account Adjustment (TRBAA) of $(0.00289) per kWh and the Transmission Access Charge Balancing Account Adjustment (TACBAA) of $(0.01656) per kWh. PPP Energy charges includes Low Income PPP rate (LI-PPP) $0.01515/kWh, Non-low Income PPP rate (Non-LI-PPP) $0.00031/kWh (pursuant to PU Code Section 399.8, the Non-LI-PPP rate may not exceed January 1, 2000 levels), and California Solar Initiative rate (CSI) of $(0.00075)/kWh and Self-Generation Incentive Program rate (SGIP) $0.00149/kWh. The basic service fee of $16 per month is applied to a customer's bill and a 50% discount is applied for CARE, Medical Baseline, or Family Electric Rate Assistance Program (FERA) customers resulting in their basic service fees to be $8 per month.

Rate Components

The Utility Distribution Company Total Rates (UDC Total) shown above are comprised of the following components (if applicable): (1) Transmission (Trans) Charges, (2) Distribution (Distr) Charges, (3) Public Purpose Program (PPP) Charges, (4) Nuclear Decommissioning (ND) Charge, (5) Ongoing Competition Transition Charges (CTC), (6) Local Generation Charge (LGC), (7) Reliability Services (RS), and (8) the Total Rate Adjustment Component (TRAC).

Certain Direct Access customers are exempt from the TRAC, as defined in Rule 1 – Definitions.

Franchise Fee Differential

A Franchise Fee Differential of 5.78% will be applied to the monthly billings calculated under this schedule for all customers within the corporate limits of the City of San Diego. Such Franchise Fee Differential shall be so indicated and added as a separate item to bills rendered to such customers.

Time Periods:

All time periods listed are applicable to actual "clock" time)

TOU Period – Weekdays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	6:00 a.m. – 4:00 p.m.; 9:00 p.m. – midnight	6:00 a.m. – 4:00 p.m. Excluding 10:00 a.m.–2:00 p.m.in March and April; 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 6:00 a.m.	Midnight – 6:00 a.m. 10:00 a.m. – 2:00 p.m. in March and April

TOU Period – Weekends and Holidays	Summer	Winter
On-Peak	4:00 p.m. – 9:00 p.m.	4:00 p.m. – 9:00 p.m.
Off-Peak	2:00 p.m. – 4:00 p.m.; 9:00 p.m. – midnight	2:00 p.m. – 4:00 p.m. 9:00 p.m. - midnight
Super-Off-Peak	Midnight – 2:00 p.m.	Midnight – 2:00 p.m.

Seasons:

Summer June 1 – October 31

Winter November 1 – May 31

San Diego Gas & Electric Company
San Diego, California

Revised Cal. P.U.C. Sheet No. 62755-E
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SCHEDULE E-CARE Sheet 1

CALIFORNIA ALTERNATE RATES FOR ENERGY

APPLICABILITY

This schedule provides a California Alternate Rates for Energy (CARE) discount to each of the following types of customers listed below that meet the requirements for CARE eligibility as defined in Rule 1, Definitions, and herein, and is taken in conjunction with the customer's otherwise applicable service schedule.

1) Customers residing in a permanent single-family accommodation, separately metered by the Utility.

2) Multi-family dwelling units and mobile home parks supplied through one meter on a single premises where the individual unit is submetered.

3) Non-profit group living facilities.

4) Agricultural employee housing facilities.

TERRITORY

Within the entire territory served by the Utility.

DISCOUNT

1) Residential CARE:

Pursuant to D.24-05-028, the applicable CARE discount rate is to be between 30% and 35%, with the intended CARE discount rate to be 35% for SDG&E, specifically, applied as a fixed CARE line-item discount. T N N

In addition to the CARE line-item discount, the total effective CARE discount consists of: (a) exemptions from paying the CARE Surcharge, Department of Water Resources Bond Charge (DWR-BC), California Wildfire Fund Charge (WF-NBC), Vehicle-Grid Integration (VGI) costs, and California Solar Initiative (CSI) and (b) a 50% minimum bill relative to Non-CARE.

(Continued)

1H6
Advice Ltr. No. 4572-E-A
Decision No. D.24-05-028

Issued by
Dan Skopec
Senior Vice President
Regulatory Affairs

Submitted Jan 24, 2025
Effective Jan 1, 2025
Resolution No.

6.3.5 City of Palo Alto Utilities

Following are the CPAU electricity and natural gas tariffs applied in this study. The CPAU monthly gas rate in $/therm was applied on a monthly basis according to the rates shown in Table 41. The gas rates were developed based on the latest available gas rate for January 2025 and a curve to reflect how natural gas prices fluctuate with seasonal supply and demand. The seasonal curve was estimated from CPAU's monthly residential tariffs between 2018 and 2024. 12-month curves were created from monthly gas rates for each of the seven years. The seven annual curves were then averaged to arrive at an average normalized annual curve. The baseline and excess transmission charges were found to be consistent over the course of a year and applied for the entire year based on January 2025 rates. The costs presented in Table 41 were then derived by establishing the baseline and excess rates from the latest January 2025 tariff as a reference point and then using the normalized curve to estimate the cost for the remaining months relative to the January rates. The monthly service charge applied was $16.93 per month per the January 2025 G-1 tariff.

Table 41. CPAU Monthly Gas Rate ($/therm)

Month	G1 Volumetric Total Baseline	G1 Volumetric Total Excess
January	$1.74	$3.02
February	$1.33	$2.53
March	$1.24	$2.43
April	$1.21	$2.39
May	$1.21	$2.39
June	$1.23	$2.42
July	$1.31	$2.64
August	$1.37	$2.71
September	$1.36	$2.71
October	$1.38	$2.72
November	$1.45	$2.80
December	$1.57	$2.96

RESIDENTIAL ELECTRIC SERVICE

UTILITY RATE SCHEDULE E-1

A. APPLICABILITY:

This Rate Schedule applies to separately metered single-family residential dwellings receiving Electric Service from the City of Palo Alto Utilities.

B. TERRITORY:

This rate schedule applies everywhere the City of Palo Alto provides Electric Service.

C. UNBUNDLED RATES:

Per kilowatt-hour (kWh)	Commodity	Distribution	Public Benefits	Total
Tier 1 usage	$ 0.10270	$ 0.08642	$ 0.00549	$ 0.19461
Tier 2 usage Any usage over Tier 1	0.13240	0.08079	0.00549	0.21868
Customer Charge ($/month)				4.64

D. SPECIAL NOTES:

1. Calculation of Cost Components

The actual bill amount is calculated based on the applicable rates in Section C above and adjusted for any applicable discounts, surcharges and/or taxes. On a Customer's bill statement, the bill amount may be broken down into appropriate components as calculated under Section C.

2. Calculation of Usage Tiers

Tier 1 Electricity usage shall be calculated and billed based upon a level of 15 kWh per day, prorated by Meter reading days of Service. As an example, for a 30-day bill, the Tier 1 level would be 450 kWh. For further discussion of bill calculation and proration, refer to Rule and Regulation 11.

{End}

CITY OF PALO ALTO UTILITIES
Issued by the City Council

CITY OF PALO ALTO UTILITIES

Supersedes Sheet No E-1-1 dated 7-1-2023

Sheet No **E-1-1**
Effective 7-1-2024

6.3.6 Sacramento Municipal Utilities District (Electric Only)

Following are the SMUD electricity tariffs applied in this study. The rates effective January 2025 were used.

Residential Time-of-Day Service
Rate Schedule R-TOD

II. Firm Service Rates

A. Time-of-Day (5-8 p.m.) Rate

	Effective as of January 1, 2023	Effective as of January 1, 2024	Effective as of May 1, 2024	Effective as of January 1, 2025	Effective as of May 1, 2025
Time-of-Day (5-8 p.m.) Rate (RT02)					
Non-Summer Season (October - May)					
System Infrastructure Fixed Charge *per month per meter*	$23.50	$24.15	$24.80	$25.50	$26.20
Electricity Usage Charge					
Peak *$/kWh*	$0.1547	$0.1590	$0.1633	$0.1678	$0.1724
Off-Peak *$/kWh*	$0.1120	$0.1151	$0.1183	$0.1215	$0.1248
Summer Season (June - September)					
System Infrastructure Fixed Charge *per month per meter*	$23.50	$24.15	$24.80	$25.50	$26.20
Electricity Usage Charge					
Peak *$/kWh*	$0.3279	$0.3369	$0.3462	$0.3557	$0.3655
Mid-Peak *$/kWh*	$0.1864	$0.1914	$0.1967	$0.2021	$0.2077
Off-Peak *$/kWh*	$0.1350	$0.1387	$0.1425	$0.1464	$0.1505

B. Optional Critical Peak Pricing Rate

1. The CPP Rate base prices per time-of-day period are the same as the prices per time-of-day period for TOD (5-8 p.m.).
2. The CPP Rate provides a discount per kWh on the Mid-Peak and Off-Peak prices during summer months.
3. During CPP Events, customers will be charged for energy used at the applicable time-of-day period rate plus the CPP Rate Event Price per kWh as shown on www.smud.org.
4. During CPP Events, energy exported to the grid will be compensated at the CPP Rate Event Price per kWh as shown on www.smud.org.
5. The CPP Rate Event Price and discount will be updated annually at SMUD's discretion and posted on www.smud.org.

C. Plug-In Electric Vehicle Credit (rate categories RT02 and RTC1)

This credit is for residential customers who have a licensed passenger battery electric plug-in or plug-in hybrid electric vehicle. Credit applies to all electricity usage charges from midnight to 6:00 a.m. daily.

Electric Vehicle Credit..... -$0.0150/kWh

III. Electricity Usage Surcharges

Refer to the following rate schedules for details on these surcharges.

A. Hydro Generation Adjustment (HGA). Refer to Rate Schedule HGA.

IV. Rate Option Menu

A. Energy Assistance Program Rate. Refer to Rate Schedule EAPR.

B. Medical Equipment Discount Program. Refer to Rate Schedule MED.

C. Joint Participation in Medical Equipment Discount and Energy Assistance Program Rate. Refer to Rate Schedule MED.

SACRAMENTO MUNICIPAL UTILITY DISTRICT Sheet No. **R-TOD-2**
Resolution No. 23-09-09 adopted September 21, 2023 Effective: **September 22, 2023**

V. Conditions of Service

A. Time-of-Day Billing Periods

Summer (Jun 1 - Sept 30)	**Peak**	Weekdays between 5:00 p.m. and 8:00 p.m.
	Mid-Peak	Weekdays between noon and midnight except during the Peak hours.
	Off-Peak	All other hours, including weekends and holidays[1].
Non-Summer (Oct 1 - May 31)	**Peak**	Weekdays between 5:00 p.m. and 8:00 p.m.
	Off-Peak	All other hours, including weekends and holidays[1].

[1] See Section V. Conditions of Service

6.3.7 Fuel Escalation Assumptions

The average annual escalation rates in Table 42 and Table 43 were used in this study. Table 42 rates are based on assumptions from the CPUC 2021 En Banc hearings on utility costs through 2030 (California Public Utilities Commission, 2021a). Escalation rates through the remainder of the 30-year evaluation period are based on the escalation rate assumptions within the 2022 TDV factors. No data was available to estimate electricity escalation rates for CPAU and SMUD, therefore electricity escalation rates for PG&E and statewide natural gas escalation rates were applied. Table 43 rates are based on the escalation rate assumptions within the 2025 LSC factors from 2026 through 2055.[9] These rates were developed for electricity use statewide (not utility-specific) and assume steep increases in gas rates in the latter half of the analysis period. Data was not available for the year 2026 and so the CPUC En Banc assumptions were applied for those years using the average rate across the three IOUs for statewide electricity escalation.

[9] https://www.energy.ca.gov/files/2025-energy-code-hourly-factors. (California Energy Commission, 2023). Actual escalation factors were provided by consultants E3.

Table 42. Real Utility Rate Escalation Rate Assumptions, CPUC En Banc and 2022 TDV Basis

	Statewide Natural Gas Residential Average Rate (%/year, real)	Electric Residential Average Rate (%/year, real)		
		PG&E	SCE	SDG&E
2026	4.6%	1.8%	1.6%	2.8%
2027	4.6%	1.8%	1.6%	2.8%
2028	4.6%	1.8%	1.6%	2.8%
2029	4.6%	1.8%	1.6%	2.8%
2030	4.6%	1.8%	1.6%	2.8%
2031	2.0%	0.6%	0.6%	0.6%
2032	2.4%	0.6%	0.6%	0.6%
2033	2.1%	0.6%	0.6%	0.6%
2034	1.9%	0.6%	0.6%	0.6%
2035	1.9%	0.6%	0.6%	0.6%
2036	1.8%	0.6%	0.6%	0.6%
2037	1.7%	0.6%	0.6%	0.6%
2038	1.6%	0.6%	0.6%	0.6%
2039	2.1%	0.6%	0.6%	0.6%
2040	1.6%	0.6%	0.6%	0.6%
2041	2.2%	0.6%	0.6%	0.6%
2042	2.2%	0.6%	0.6%	0.6%
2043	2.3%	0.6%	0.6%	0.6%
2044	2.4%	0.6%	0.6%	0.6%
2045	2.5%	0.6%	0.6%	0.6%
2046	1.5%	0.6%	0.6%	0.6%
2047	1.3%	0.6%	0.6%	0.6%
2048	1.6%	0.6%	0.6%	0.6%
2049	1.3%	0.6%	0.6%	0.6%
2050	1.5%	0.6%	0.6%	0.6%
2051	1.8%	0.6%	0.6%	0.6%
2052	1.8%	0.6%	0.6%	0.6%
2053	1.8%	0.6%	0.6%	0.6%
2054	1.8%	0.6%	0.6%	0.6%
2055	1.8%	0.6%	0.6%	0.6%

Table 43. Real Utility Rate Escalation Rate Assumptions, 2025 LSC Basis

Year	Statewide Natural Gas Residential Average Rate (%/year, real)	Statewide Electricity Residential Average Rate (%/year, real)
2026	4.6%	2.1%
2027	4.2%	0.6%
2028	3.2%	1.9%
2029	3.6%	1.6%
2030	6.6%	1.3%
2031	6.7%	1.0%
2032	7.7%	1.2%
2033	8.2%	1.1%
2034	8.2%	1.1%
2035	8.2%	0.9%
2036	8.2%	1.1%
2037	8.2%	1.1%
2038	8.2%	1.0%
2039	8.2%	1.1%
2040	8.2%	1.1%
2041	8.2%	1.1%
2042	8.2%	1.1%
2043	8.2%	1.1%
2044	8.2%	1.1%
2045	8.2%	1.1%
2046	8.2%	1.1%
2047	3.1%	1.1%
2048	-0.5%	1.1%
2049	-0.6%	1.1%
2050	-0.5%	1.1%
2051	-0.6%	1.1%
2052	-0.6%	1.1%
2053	-0.6%	1.1%
2054	-0.6%	1.1%
2055	-0.6%	1.1%

Get In Touch

The adoption of reach codes can differentiate jurisdictions as efficiency leaders and help accelerate the adoption of new equipment, technologies, code compliance, and energy savings strategies.

As part of the Statewide Codes & Standards Program, the Reach Codes Subprogram is a resource available to any local jurisdiction located throughout the state of California.

Our experts develop robust toolkits as well as provide specific technical assistance to local jurisdictions (cities and counties) considering adopting energy reach codes. These include cost-effectiveness research and analysis, model ordinance language and other code development and implementation tools, and specific technical assistance throughout the code adoption process.

If you are interested in finding out more about local energy reach codes, the Reach Codes Team stands ready to assist jurisdictions at any stage of a reach code project.

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Explore

The Cost-Effectiveness Explorer is a free resource to help California local governments and stakeholders develop energy policies for buildings.

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Revision: 1.0
Last modified: 2025/06/09

EXHIBIT B

Note to Publisher: All text is new.

CHAPTER 8

BUILDINGS

ARTICLE I. ADMINISTRATION

SEC. 8.02.05. - Purpose.

The purpose of this Chapter is to establish minimum requirements to safeguard public health, safety, and general welfare by regulating and controlling the design, construction, quality of materials, use and occupancy, location, access compliance, and advance green building features of all buildings and structures and certain equipment, and safety of life and property from fire and other hazards attributed to the built environment. The Chapter also provides provisions and procedures for the processing and administration of permits issued by the building division of the community development department.

SEC. 8.02.10. - Title.

This Chapter, which is comprised of the adoption of multiple state, international or uniform codes, including local amendments, is collectively referred to as the "Mountain View Building Code" or "this code."

DIVISION 1. FEES

SEC. 8.04.05. - Fees.

a. The council shall, by resolution, establish fees for permits and other matters pertaining to the administration of this Chapter, which may be modified from time to time by the council. The city's processing fees are cumulative. For example, if an application to construct a new building requires a building permit, an electrical permit, and a mechanical permit, then all three (3) fees will be charged. Review shall not commence on any application until all applicable fees have been paid at the requested time.

b. Permit fees may be collected by the city at more than one time during application review – prior to initial plan check review, subsequent plan check reviews, and prior to permit issuance. For instantaneous permits issued online, the city may collect all fees prior to permit issuance.

c. For purposes of fee calculations, any construction valuation must align, at least, with the minimum construction value per square foot in the adopted International Code Council (ICC) Building Valuation Data published each year for the region where the city of mountain view is

located.

SEC. 8.04.10. - Strong-motion instrumentation program.

a. **Imposition of fee.** In addition to all other fees imposed, each applicant for a building permit of any kind shall pay a fee delineated by the State of California Department of Conservation. Said fee shall be due and payable prior to, but not later than, the time of issuance of the permit applied for.

b. **Allocation of fee.** All fees collected pursuant to this Section shall be allocated as follows:

1. Ninety-five (95) percent to the State of California—Strong-Motion Instrumentation Special Fund.

2. Five (5) percent to the city of mountain view for seismic educational and training purposes.

DIVISION 2. CONSTRUCTION HOURS AND BARRIERS

SEC. 8.06.05. - Construction hours.

a. **Hours of construction.** No construction activity shall commence prior to 7:00 a.m. nor continue later than 6:00 p.m., Monday through Friday. No work is permitted on Saturday, Sunday, recognized holidays, or outside of these hours unless prior written approval is granted by the chief building official. The term "construction activity" shall include any physical activity on the construction site or in the staging area, including the delivery of materials. In approving modified hours, the chief building official may specifically designate and/or limit the activities permitted during the modified hours.

b. **Modification.** At any time before commencement of or during construction activity, the chief building official may modify the permitted hours of construction upon twenty-four (24) hours written notice to the contractor, applicant, developer or owner. The chief building official can reduce the hours of construction activity below the 7:00 a.m. to 6:00 p.m. time frame or increase the allowable hours or permit activity on any day of the week. The contractor, owner or applicant shall immediately produce, upon request, any written order or permit from the chief building official pursuant to this Section upon the request of any member of the public, public safety personnel or city staff.

c. **Emergencies.** Where emergency conditions exist, construction activity may be permitted at any hour or day of the week. Such emergencies shall be completed as rapidly as possible to limit, to the greatest extent feasible, disruption to other properties. If the emergency occurs outside of business hours, the contractor, owner, or applicant shall report the incident to

the mountain view police department and the building division of the community development department by no later than the next business day.

d. **Posted sign(s) required.** The general contractor, applicant, developer or owner shall erect a sign at a prominent location(s), including each vehicle entrance, on the construction site to advise contractors, subcontractors and material suppliers of the working hours. The sign(s) needs to include the following:

1. Project manager contact information;

2. Contractor company name, State license number, and phone number; and

3. An after-hour emergency contact for life-safety response.

e. **Violation.** Violation of the allowed hours of construction activity, required signage, or this Section shall be a violation of this code.

SEC. 8.06.10. - Secured barrier in construction areas.

To maintain public safety, all areas of construction activity, including areas used for staging and/or storage, must be secured to prevent general public access. The secured barrier shall be continuous, well-kept, and uniform in nature. Any fencing installed as the secured barrier shall be consistent with adopted state or federal guidelines, standards, or requirements.

DIVISION 3. APPEAL PROCEDURES

SEC. 8.08.05. - Appeal procedures.

Any applicant for a fire or building permit issued by the building division of the community development department who is in disagreement with the chief building official on the interpretation of any provision of this Chapter, or for which said fire or building permit was refused for issuance, may appeal the chief building official's interpretation or refusal to issue said permit to the city council of the city.

a. All such appeals shall be filed within ten (10) business days after the date the decision renders an interpretation of any provision of this Chapter or refusal to issue said permit. All appeals shall be in writing, shall be filed with the city clerk, shall state the ground or grounds of appeal and shall be accompanied by a nonrefundable fee as adopted by council resolution in the city's master fee schedule.

b. Within sixty (60) calendar days after an appeal is filed, or as soon thereafter as possible, the appeal shall be heard by the city council. The city clerk shall give at least five (5) calendar days prior written notice to the applicant of the date, time, and place for the hearing on said appeal.

c. The applicant shall be entitled to present any oral and/or written evidence at said hearing. Any hearing held pursuant to this Section may be continued from time to time by the city council. The hearing shall be informal and shall not require compliance with the rules of evidence. At the hearing, the city council shall hear and consider all relevant evidence.

d. Within twenty-one (21) calendar days after the hearing is closed, the city council shall announce its decision. All decisions of the city council on any appeal shall be final.

e. Failure of any person to file an appeal in accordance with the provisions of this Section shall constitute a waiver of the right to an administrative hearing and a failure to exhaust administrative remedies.

ARTICLE II. GENERAL REGULATIONS

DIVISION 1. SAFETY ASSESSMENT AND PLACARDS

SEC. 8.10.05. - Purpose.

This Division establishes standard placards to be used to indicate the condition of a structure for continued occupancy. The chief building official, or their designee, is authorized to post the appropriate placard at each entry point to a building or structure upon completion of a safety assessment.

SEC. 8.10.10. - Applicability.

The provisions of this Division are applicable to all buildings and structures of all occupancies regulated by the city of mountain view. The city council, or a declaration of an emergency, may extend these provisions as necessary.

SEC. 8.10.15. Definitions.

For the purpose of this Division, the following definitions shall have the meaning set forth herein:

“Authorized safety evaluator” means an authorized city representative who is a certified post-disaster safety assessment program (SAP) evaluator by the State of California.

“Chief building official” means the chief building official of the city of mountain view and/or their authorized designee.

“City” means the city of mountain view.

"Person" means and includes any individual, partnership, corporation, limited liability company, association or other organization or entity.

"Safety assessment" is a visual, nondestructive examination of a building or structure for the purpose of determining the condition for continued occupancy.

SEC. 8.10.20. - Safety assessment.

The chief building official and/or an authorized safety evaluator are hereby authorized to enter any building or structure within the city at reasonable times to conduct a safety assessment pursuant to this Division and Chapter. If such building or structure is occupied, the chief building official and/or authorized safety evaluator shall present their credentials to the occupant and request entry. If such building or structure is unoccupied, the chief building official and/or authorized safety evaluator shall first make a reasonable effort to locate the owner or other persons having charge or control of the building or structure and request entry. If entry is not authorized, the chief building official and/or authorized safety evaluator shall have recourse to the remedies provided by law to secure entry.

SEC. 8.10.25. - Placards.

a. After conduction a safety assessment of a building or structure, the chief building official and/or authorized safety evaluator shall make a determination as to whether the building or structure is safe for occupancy, safe for restricted use, or unsafe for occupancy. Once the chief building official and/or authorized safety evaluator makes such determination, they shall place, or cause to be placed, at each entry point of the building or structure a placard indicating its conditions for continued occupancy.

b. Based upon the chief building official's and/or authorized safety evaluator's determination, one (1) of three (3) placards shall be placed at each entry point of a building or structure. The following are descriptions of the three (3) types of placards to be used to designate the condition and permissible continued occupancy of buildings or structures as follows:

1. **"INSPECTED—Lawful Occupancy Permitted"** is to be posted on any building or structure wherein no apparent structural hazard has been found. This placard is not intended to mean that there is no damage to the building or structure.

2. **"RESTRICTED USE"** is to be posted on each building or structure that has been damaged wherein the damage has resulted in some form of restriction to the continued occupancy. The individual who posts this placard will note in general terms the type of damage encountered and will clearly and concisely note the restrictions on continued occupancy.

3. **"UNSAFE—Do Not Enter or Occupy"** is to be posted on each building or structure that has been damaged such that continued occupancy poses a threat to life safety. Buildings or structures posted with this placard shall not be entered under any circumstance except as

authorized in writing by the chief building official, or their designee, and/or authorized safety evaluator. Safety assessment teams shall be authorized to enter these buildings at any time. This placard is not to be used or considered as a demolition order. The individual who posts this placard will note in general terms the type of damage encountered.

c. The city code number, and the address, phone number, and email of the city's building division shall be permanently affixed to each placard.

SEC. 8.10.30. - Enforcement.

City building inspectors, code enforcement officers, and the city's police department are authorized to enforce the restrictions identified on a placard in any manner authorized by law, including, but not limited to, the authorities allotted in Chapter 2, Article X of the city code and the abatement provisions set forth in Article XIII of this Chapter, to cause the premises to be vacated and secured to ensure conformance with the placard restrictions.

SEC. 8.10.35. - Violation.

a. It is unlawful for any person to enter, occupy or use a building or structure, or portion thereof, at a time or in a manner that does not conform to the restrictions identified on a placard, except a person may enter a building or structure, or portion thereof, with the prior written authorization of the chief building official and/or authorized safety evaluator. Such entry must be in full conformance with the restrictions set forth in the written authorization.

b. It is unlawful for any person, other than the chief building official and/or authorized safety evaluator, to remove, alter, deface or cover a placard that has been posted on a building or structure.

c. Any person, firm or corporation violating any of the provisions of this code shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day, or portion thereof, during which any violation of any of the provisions of this code is committed, continued or permitted, and upon conviction of any such violation such person shall be punishable as set forth in the city charter and the city code.

DIVISION 2. WOOD-BURNING APPLIANCES

SEC. 8.12.05. - Definitions.

For the purpose of this section, the following definitions shall have the meaning set forth herein:

"Bay Area Air Quality Management District," or BAAQMD, means the air quality agency for the San Francisco Bay Area established pursuant to California Health and Safety Code Section 40200.

"EPA" means the United States Environmental Protection Agency.

"EPA-certified" means any wood-burning device that meets the standards in Title 40, Part 60, Subpart AAA, of the Code of Federal Regulations, or such successor regulation, in effect at the time of installation, and is certified and labeled pursuant to those regulations or as amended.

"Fireplace" means any permanently installed masonry or factory-built wood-burning appliance, except a pellet-fueled wood heater, designed to be used with an air-to-fuel ratio greater than or equal to thirty-five (35) to one (1).

"Gas fireplace" means any device designed to burn natural gas exclusively in a manner that cannot burn solid fuel at any point during its construction or simulates the appearance of a wood-burning fireplace.

"Pellet-fueled wood heater" means any wood-burning appliance that operates exclusively on wood pellets.

"Solid fuel" means wood or any other nongaseous or nonliquid fuel.

"Wood-burning appliance" means fireplace, wood heater or pellet-fired wood heater or any similar device burning any solid fuel used for aesthetic or space-heating purposes.

SEC. 8.12.10. - Residential installations.

All wood-burning appliances installed in existing or new residential units or wood-burning appliances being added to or replacing wood-burning appliances in existing residential units after April 1, 2002 shall comply with the provisions of this Division.

SEC. 8.12.15. - Commercial installations.

All wood-burning appliances installed in existing or new commercial buildings or wood-burning appliances being added to or replacing wood-burning appliance in existing commercial buildings after April 1, 2002 shall comply with this Division. Commercial buildings shall include, but not be limited to, live-work units, offices, hotels, motels and restaurants.

SEC. 8.12.20. - Compliance requirements.

A wood-burning appliance shall comply with this Division if:

a. The wood-burning appliance is reconstructed;

b. There are any additions, alterations or repairs to the wood-burning appliance exceeding two thousand dollars ($2,000.00);

The chief building official shall have the final authority to determine whether an addition, repair or alteration must comply with this Division.

SEC. 8.12.25. - Gas fireplaces.

Gas fireplaces shall be exempt from this Division. However, the conversion of a gas fireplace to burn wood shall constitute the installation of a wood-burning appliance and shall be subject to the requirements of Article XII, Division 2 of this Chapter.

SEC. 8.12.30. - Exemptions.

a. No person shall install a wood-burning appliance unless it is one (1) of the following:

1. A pellet-fueled wood heater;

2. An EPA-certified wood heater; or

3. A fireplace or emission reduction device certified by the EPA or a fireplace or emission reduction device certified by an EPA-accredited laboratory as being compliant with the Northern Sonoma County Air Pollution Control District standards for fireplaces, using that district's testing protocol for fireplaces.

b. The following additions, alterations and repairs shall be exempt from complying with this section:

1. Minor repairs such as damper repairs, firebox repairs, seismic bracing and/or flue liner replacement.

2. All repairs to a masonry fireplace that do not include repair or replacement of the fireplace footing.

3. Wood-burning appliances installed in restaurants and commercial kitchens for cooking purposes.

SEC. 8.12.35. - Certification.

Any person who plans to install a wood-burning appliance must submit documentation to the community development department with a building permit application demonstrating that the appliance is a pellet-fueled wood heater, EPA-certified wood heater, or certified by an EPA-accredited laboratory in compliance with the Northern Sonoma County Air Pollution Control District standards for fireplaces.

DIVISION 3. PERMIT PROCEDURES FOR ELECTRIC VEHICLE CHARGING STATIONS

SEC. 8.14.05. - Purpose.

The purpose of this Division is to adopt an electric vehicle charging system expediated permitting process that complies with Government Code Sections 65850.7 (AB 1236, 2015) and 65850.71 (AB 970, 2021) supports the timely and cost-effective installations of electric vehicle charging station systems.

SEC. 8.14.10. - Definitions.

The following words and phrases used in this Division are defined as follows:

"A feasible method to satisfactorily mitigate or avoid the specific, adverse impact" includes, but is not limited to, any cost-effective method, condition, or mitigation imposed by a city on another similarly situated application in a prior successful application for a permit.

"Electronic submittal" means the utilization of an online permit program or email.

"Electric vehicle charging station" or "charging station" means any level of electric vehicle supply equipment station that is designed and built in compliance with Article 625 of the California Electrical Code, as it reads on the effective date of this Section, and delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle.

"Expediated review" means the time allotted by State law for the city's review of an electric vehicle charging station permit application from initial submission to issuance.

"Specific, adverse impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.

SEC. 8.14.15. - Permit review procedures and requirements.

a. The chief building official, or their designee, is authorized and directed to develop and adopt a checklist, which shall be published on the city website, of all requirements with which electric vehicle charging stations shall comply to be eligible for expedited review. The applicant shall submit the permit application and associated documentation to the building division of the community development department together with any required permit fees.

b. The chief building official, or their designee, shall determine whether the application is complete. Review of the application to install an electric vehicle charging station shall be limited to the review of whether it meets all health and safety requirements of local, state, and federal law. The requirements of local law shall be limited to those standards and regulations

necessary to ensure that the electric vehicle charging station will not have a specific, adverse impact upon the public health or safety.

c. Upon confirmation of the application being complete and meeting the applicable building code requirements, the application shall be approved and all required permits or authorizations issued. If an application is deemed incomplete, the chief building official, or their designee, shall provide written notice detailing all deficiencies in the application and any required missing information to be eligible for expedited permit issuance.

d. The chief building official, or their designee, can only deny a permit to install an electric vehicle charging station if they make written findings, based upon substantial evidence in the record, that the proposed installation would have a specific, adverse impact upon the public health or safety, and there is no feasible method to satisfactorily mitigate or avoid the specific, adverse impact. The findings shall include the basis for the rejection of potential feasible alternatives of preventing the adverse impact.

e. The city cannot condition approval for any electric vehicle charging station permit on the approval of an electric vehicle charging station by an owners association, as that term is defined in Section 4080 of the Civil Code.

f. If an electric vehicle charging station and any associated equipment interfere with, reduce, eliminate, or in any way impact the required number of parking spaces for an existing use(s) on-site, the chief building official, or their designee, is authorized to reduce the number of required parking spaces for the existing use(s), as required by the adopted California Building Code in place at time of application and Chapter 36 of the city code, by the amount necessary to accommodate the electric vehicle charging station and any associated equipment.

SEC. 8.14.20. - Inspections.

For electric vehicle charging stations eligible for expedited review, only one (1) building inspection shall be required, which shall be done in a timely manner. If an electric vehicle charging station fails an inspection, a subsequent building inspection is authorized.

DIVISION 4. PERMIT PROCEDURES FOR SMALL RESIDENTIAL ROOFTOP SOLLAR ENERGY SYSTEMS

SEC. 8.16.05. - Purpose.

The purpose of this Division is to establish an expedited permitting process for small residential rooftop solar energy systems that complies with Civil Code Section 714 and Government Code Section 65850.5 (AB 2188, 2014).

SEC. 8.16.10. - Applicability.

This Division applies to the streamlined permitting of small residential rooftop solar energy systems in the city.

SEC. 8.16.15. - Definitions.

The following words and phrases used in this Division are defined as follows:

"Electronic submittal" means the utilization of an online permit program or email.

"Small residential rooftop solar energy system" means all of the following:

1. A solar energy system that is no larger than ten (10) kilowatts alternating current nameplate rating or thirty (30) kilowatts thermal;

2. A solar energy system that conforms to all applicable state fire, structural, electrical and other building codes as adopted or amended by the city and (paragraph (iii) of subdivision (c) of Section 714 of the California Civil Code, as such section or subdivision may be amended, renumbered or redesignated from time to time);

3. A solar energy system that is installed on a single-family or duplex dwelling; and

4. A solar panel or module array that does not exceed the maximum legal building height as set forth in the City Code Sec. 36.10.25 or Sec. 36.10.50.

"Solar energy system" has the same meaning set forth in paragraphs (1) and (2) of subdivision (a) of California Civil Code Sec. 801.5, as such section or subdivision may be amended, renumbered or redesignated from time to time.

"Specific, adverse impact" means a significant, quantifiable, direct and unavoidable impact, based on objective, identified and written public health or safety standards, policies or conditions as they existed on the date the application was deemed complete.

SEC. 8.16.20. - Solar energy system requirements.

a. All solar energy systems shall meet applicable health and safety standards and requirements imposed by the state and city.

b. Solar energy systems for heating water in single-family residences and for heating water in commercial or swimming pool applications shall be certified by an accredited listing agency as defined by the California Plumbing and Mechanical Codes.

c. Solar energy systems for producing electricity shall meet all applicable safety and performance standards established by the California Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules of the Public Utilities Commission regarding safety and reliability.

d. The installation of equipment and all associated wiring and interconnections shall be performed only by qualified persons as defined by the applicable California Code.

SEC. 8.16.25. - Applications and required documents.

a. The chief building official, or designee, shall develop a checklist of all requirements with which small rooftop solar energy systems shall comply to be eligible for expedited review. The small residential rooftop solar system permit process, standard plans and checklist shall substantially conform to recommendations for expedited permitting contained in the most current version of the California Solar Permitting Guidebook adopted by the Governor's Office of Planning and Research.

b. The checklist and all documents required for the submission of an expedited solar energy system application shall be published on the city's website.

c. The applicant must submit the permit application and associated documentation to the building division of the community development department by electronic submittal, together with any required fees.

SEC. 8.16.30. - Fees.

Permit fees shall be set forth in the city's master fee schedule as adopted by the city council.

SEC. 8.16.35. - Permit review and inspection requirements.

a. An application that satisfies the information requirements in the checklist shall be deemed complete by the chief building official, or their designee. Upon receipt of an incomplete application, the chief building official, or their designee, shall provide a written response detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance.

b. Upon confirmation of the application being complete and meeting the requirements of the applicable codes, the application shall be approved and issuance of all required permits or authorizations within three (3) business days of receipt of a complete application submission pursuant to this Division.

c. The city's review of the application shall be limited to whether the application meets local, state and federal health and safety requirements. Such approval does not authorize an applicant to connect the small residential rooftop energy system to the local utility provider's

electricity grid. The applicant is responsible for obtaining such approval or permission from the local utility provider.

d. The city shall not condition approval of an application on the approval of an owners association as defined in California Civil Code Section 4080.

e. For a small residential rooftop solar energy system eligible for expedited review, only one (1) building inspection shall be required, which shall be done in a timely manner and may include a consolidated inspection by the chief building official and fire chief, or their designees. If a small residential rooftop solar energy system fails inspection, a subsequent building inspection shall be performed; however, the subsequent inspection need not conform to the requirements of this Section.

f. The chief building official may deny an application for a permit if they make written findings based upon substantive evidence in the record that the proposed installation would have a specific, adverse impact upon public health or safety and there is no feasible method to satisfactorily mitigate or avoid, as defined, the adverse impact. Such findings shall include the basis for the rejection of the potential feasible alternative for preventing the adverse impact. Such decisions may be appealed to the city council.

g. Any condition imposed on an application shall be designed to mitigate the specific, adverse impact upon health and safety at the lowest possible cost.

h. "A feasible method to satisfactorily mitigate or avoid the specific, adverse impact" includes, but is not limited to, any cost-effective method, condition, or mitigation imposed by the city on another similarly situated application in a prior successful application for a permit. The city shall use its best efforts to ensure that the selected method, condition, or mitigation meets the conditions of subparagraphs (A) and (B) of paragraph (1) of subdivision (d) of section 714 of the California Civil Code defining restrictions that do not significantly increase the cost of the system or decrease its efficiency or specified performance.

DIVISION 5. PERMIT PROCEDURES FOR ACCESSORY DWELLING UNITS

SEC. 8.18.05. - Review process.

Development of an accessory dwelling unit or a junior accessory dwelling unit, as defined in Division 10 of Chapter 36 of the city code, that meets and complies with all applicable development requirements shall be reviewed ministerially and approved or denied through the building permit process within sixty (60) days of submittal of a complete application and payment of all required permit fees as adopted in the city's master fee schedule.

a. If the permit application for an accessory dwelling unit or junior accessory dwelling unit is submitted with a permit application to create a new single-family dwelling on a lot, the chief building official, or their designee, shall not take final action on the application for the accessory

dwelling unit or junior accessory dwelling unit until the application for the new single-family dwelling is approved.

b. Occupancy of the accessory dwelling unit or junior accessory dwelling unit shall not be allowed until the chief building official, or their designee, approves occupancy of the primary dwelling.

c. If a single-family accessory dwelling unit is proposed to be constructed to replace an existing detached garage or accessory structure, then a demolition permit for the detached garage or accessory structure must be issued at the same time as the building permit for the new accessory dwelling unit.

DIVISION 6. MOVING BUILDINGS

SEC. 8.20.05. - Definitions.

For the purpose of this Division, the following words and phrases shall have the meanings respectively ascribed to them:

"Administrative authority" is the chief building official or their designee.

"Building" is a structure designed, built or occupied as a shelter or roofed enclosure for persons, animals or property and used for residential, business, mercantile, storage, commercial, industrial, institutional, assembly, educational or recreational purposes. A structure containing one hundred (100) square feet or less of floor space shall not fall within this definition.

"Community development director" is the community development director for the city or their designee.

"Public works director" is the public works director for the city or their designee.

"Zoning administrator" is the zoning administrator for the city or their designee.

SEC. 8.20.10. - Compliance with zoning and building codes.

In addition to the permits provided for in this Division, any building or structure moved to any location within the city shall comply with the provisions of Chapter 36 and the building code, including provisions of the California Historical Building Code, Part 8 of Title 24, and the 1997 Uniform Code for Building Conservation, as published by the International Conference of Building Officials, for appropriate structures. These provisions shall not apply to buildings or structures moved to a location within the city for the purpose of temporary storage so long as the provisions of Section 8.20.75 are complied with.

No permits shall be issued to move a building to any location inside the city unless: (1) a zoning permit has been obtained from the zoning administrator; (2) the building has been

inspected by the chief building official and approved; (3) the route to be followed has been approved by the public works director; (4) building and moving permits have been obtained; and (5) zoning permit fees, building inspection fees and moving fees have been paid by the applicant as set forth in the city's adopted master fee schedule.

SEC. 8.20.15. - Zoning permit.

A zoning permit shall be obtained in accordance with Article III, Division 7 of Chapter 36 prior to receiving approval from the administrative authority and the public works director that the structure and route are approved for moving.

SEC. 8.20.20. - Premove inspection.

A person seeking to move a building or structure onto a parcel within the city shall, concurrently with applying for a zoning permit, file an application for a pre-move inspection with the administrative authority.

The administrative authority shall perform a pre-move inspection of the building or structure and the proposed location of the same, and the administrative authority shall submit to the zoning administrator a report describing the improvements which must be made to the building or structure to conform to the current building codes.

SEC. 8.20.25. - Application for pre-move inspection.

The application for pre-move inspection shall be made in writing and shall be filed in the office of the administrative authority. Said application shall include:

a. The present location of the structure, a minimum of two (2) sets of photographs, and two (2) sets of building plans, and a set of keys for access to the structure. The building plans shall include a description of the proposed buildings to be moved, including the construction materials, dimensions, number of rooms, condition of the exterior and interior, the proposed improvements to be made, and any other information which the chief building official may require to make an accurate evaluation;

b. A dimensioned plot plan showing the portion of the lot to be occupied by the building when moved and the location and disposition of all existing structures, if the lot is within the city.

SEC. 8.20.30. - Denial of moving permit.

If the inspection of the structure reveals any unlawful, dangerous or defective condition of the building or structure proposed to be moved, such that remedy or correction cannot effectively be made, the administrative authority shall deny the moving permit in writing.

SEC. 8.20.35. - Required building and moving permits.

Subsequent to obtaining a zoning permit and prior to moving any building or structure over, along or across any highway, street, or alley in the city and under its jurisdiction, the owner or their agent shall obtain a building permit and a moving permit, and satisfy all conditions under which such permits are granted. The application shall include:

a. A description of the highways, streets, and alleys of the city over, along, or across which the building is proposed to be moved;

b. Proposed moving date and hours;

c. A statement that the applicant shall indemnify and save the city harmless from any and all claims, actions, demands, damages or expenses which may result from the operations of the applicant under the moving permit, if granted, or from the exercise of privileges conferred upon them by the permit;

d. Any additional information which the administrative authority shall find necessary to make a fair determination of whether or not a permit should be issued.

SEC. 8.20.40. - Conditions of approval.

Any building and moving permit issued under this Division shall be subject to the following conditions:

a. Any applicant for such permits shall be responsible for the payment to the city of any unusual costs incurred by the city which may result from the granting of such permits.

b. No permit shall be issued to move a building within or through the city from a location either inside or outside the city to another location outside the city unless the proposed route to be followed within the city has been approved by the public works director and the police chief.

c. No permit shall be issued to move a structure along city streets unless said application specifies the type of moving equipment to be used, and the public works director determines that such moving equipment is not of a type which will be detrimental to the streets or other property of the city.

SEC. 8.20.45. - Fees.

No moving or building permits shall be issued until all applicable fees have been paid as follows:

a. A fee for a zoning permit(s) shall be paid to the planning division of the community development department at the time of application for said permit, based on the city's adopted

master fee schedule.

b. A fee for the pre-move inspection shall be paid to the administrative authority at the time of application for a moving permit and plan submittal, based on the hourly rate for a building inspector, with a minimum of two (2) hours, in the adopted city master fee schedule.

c. Building permit fees shall be paid to the administrative authority, after approval of the structure for moving, calculated at the structural value of the existing structure based on the current square footage construction valuation as adopted in the city's master fee schedule. Plan check fees shall also be calculated based on the valuation for the structure, as adopted in the city master fee schedule.

d. All new additions or structural changes shall pay permit fees based on the current square footage construction valuation contained in the adopted city master fee schedule.

e. All electrical, plumbing and mechanical fees shall be full value and paid based on the city's master fee schedule.

f. For moving a building or buildings from a location inside or outside the city to another location either inside or outside the city, there shall be a fee as specified in the city's master fee schedule, except an accessory building not over four hundred (400) square feet in area may be moved in conjunction with the moving of a residence from the same location to the same location, without paying an additional fee therefor.

SEC. 8.20.50. - Insurance.

No building or moving permit shall be issued unless the permittee shall have first taken out and agreed to maintain at all times, workers' compensation insurance; and public liability insurance in an amount not less than one million dollars ($1,000,000.00) for injuries, including wrongful death, to any one (1) person, and in an amount not less than two million dollars ($2,000,000.00) on account of any one (1) accident, and unless also he shall take out and agree to maintain at all times property damage insurance in an amount not less than five hundred thousand dollars ($500,000.00). A certificate of insurance shall be presented to the satisfaction of the administrative authority, in consultation with the city's finance director and public works director, prior to the issuance of such permit.

SEC. 8.20.55. - Deposit or bond.

Every building or moving permit issued shall require the applicant to post a surety bond or cash with the city and placed in a non-interest bearing account, in an amount sufficient to secure the faithful performance by the applicant of all repairs and improvements as required by the City Code and the faithful performance of such other conditions as are imposed on the granting of such permit(s). Any surety bonds accepted by the administrative authority shall be valid for a period of not less than one hundred eighty (180) calendar days.

SEC. 8.20.60. - Period of validity.

Unless otherwise specified in a moving permit issued pursuant to this Division, such permit shall be valid for a period of thirty (30) calendar days from the date of issuance thereof. For good cause, the administrative authority, within their discretion, may issue a permit for a longer period, and may renew any permit issued by the building division, without additional fee therefor, when requested in writing by the applicant, except that no permit shall be valid or renewable for a period longer than one hundred twenty (120) calendar days from the date of issuance thereof.

SEC. 8.20.65. - Time allowed for completion.

Every moving permit issued pursuant to this Division shall state a time limit within which any improvements and repairs provided for in Sec. 8.20.60 shall be completed.

SEC. 8.20.70. - Duties of persons in charge of moving buildings.

Every person in charge of the moving of any building or structure on or over the streets of the city shall:

a. A minimum twenty-four (24) hours prior to the move, receive written approval from the city's fire department and police department of the time and route over which the building/structure will be moved;

b. Give twenty-four (24) hours written notice to any person responsible for trimming trees, removing wires, or the doing of other things necessary to permit the moving of the building over the route designated;

c. Maintain red lights at each corner of the building from one-half (½) hour after sunset until one-half (½) hour before sunrise.

SEC. 8.20.75. - Exceptions.

The provisions set forth in this Division shall apply to all buildings or structures moved in or into the incorporated limits of the city, except that the following provisions may apply where applicable, as determined by the administrative authority:

a. **Temporary storage in transit.** Buildings or structures may be moved to a location within the city for the purpose of temporary storage thereof, under the following terms and conditions, and subject to the following provisions:

1. Permittee must have obtained a business license from the city to engage in the business of moving buildings or structures.

2. No such buildings or structures shall be stored at any location, or in any manner, in violation of any other laws or ordinances of the state or the city.

3. Any permit issued for the purposes herein provided shall have endorsed thereon, in writing, in addition to the matters otherwise provided for in this Division, the location, and the duration of such storage, and any other conditions specified by the administrative authority, and under which such permit is granted.

4. A permit for such purpose shall be valid for a period of sixty (60) calendar days, and may be renewed for additional periods within the discretion of the administrative authority. The limitation of one hundred twenty (120) calendar days imposed under Sec. 8.20.60 shall not be applicable to a permit issued for the purposes herein specified.

5. The fee for such permit shall be the same as is provided for a permit to move buildings or structures to a location outside the city. Provided, however, that if the buildings or structures are removed from a temporary storage place to a location inside the city a new permit shall be obtained on the same terms and conditions as are applicable to the moving of a building from one location inside the city to another location inside the city, including the payment of a fee as specified in the city's adopted master fee schedule.

6. Except insofar as they are inconsistent with the provisions of this Section all of the other provisions of this Division shall be applicable to any permit issued under the provisions of this Section.

b. **Temporary buildings.** Whenever an application is filed for a permit to move a building or structure specified in such application to be for use as a temporary construction office or tool storage building, agricultural building, or other temporary use inside or outside the city, the administrative authority may, within their discretion, waive any or all of the provisions of this Division as they shall deem reasonable under the circumstances. All other laws and ordinances of the state and city, including the laws pertaining to zoning, health, safety or general welfare of the public, shall remain applicable thereto.

c. **New buildings.** If the building or structure to be moved has been built under a lawful permit of the city within ninety (90) calendar days preceding the filing of the application, the administrative authority may waive such provisions of this Division, except the requirement for a zoning permit, as they shall deem reasonable under the circumstances.

SEC. 8.20.80. - Appeals.

Any person who is aggrieved by the decision of the administrative authority made pursuant to this Division may appeal to the city council pursuant to Article I, Division 2 of this Chapter.

DIVISION 7. LIGHTING STANDARDS

SEC. 8.22.05. - Multiple-family residential buildings and properties.

All exterior lighting shall be installed to comply with the following:

a. Exterior passageways and recesses related to and located within a building complex, shall be illuminated with an intensity of at least 1.0 footcandle at the ground level during the hours of darkness. Lighting devices shall be protected by weather- and vandalism-resistant covers and shall be designed to turn on automatically at night. Perimeter lighting shall be designed and shielded so as not to cause off-site glare or nuisance.

b. Open exterior parking lots shall be lit in accordance with a detailed plot plan which must be submitted at building permit application that shows the light levels on the entire parking lot and which is further supported by certification that the lighting equipment will not cause inappropriate off-site glare. Lighting devices shall be protected by weather- and vandalism-resistant covers.

c. Exterior carports shall be provided with lighting for nighttime security which shall be illuminated with an intensity of a minimum of 1.0 footcandle at ground level. The lighting shall be designed and shielded so as not to cause off-site glare or nuisance. Lighting devices shall be protected by weather- and vandalism-resistant covers.

SEC. 8.22.10. - Nonresidential buildings and properties.

All exterior lighting shall be installed to comply with the following:

a. All exterior doors of a nonresidential building shall be illuminated with a minimum of one (1) footcandle of light.

b. Any nonresidential building with an open parking lot providing more than ten (10) parking spaces shall be lit in accordance with a detailed plot plan which must be submitted at time of building permit application that shows the light levels on the entire parking lot and which is further supported by certification will not cause inappropriate off-site glare.

c. All required exterior lighting shall be designed to turn on automatically. In addition, lighting shall be designed and installed on the premises in such a manner so as to avoid causing off-site glare or nuisance.

ARTICLE III. CALIFORNIA ADMINISTRATIVE CODE

SEC. 8.24.05. - Purpose.

The purpose of this Article is to provide administrative regulations, requirements and procedures of the California Code of Regulations, Title 24, as published by the California Building Standards Commission and other state agencies that implement or enforce Title 24.

SEC. 8.24.10. - Adoption of the California Administrative Code.

The "2025 California Administrative Code" adopted by the State Building Standards Commission in California Code of Regulations (CCR) Title 24, Part 1 is hereby adopted by reference as the administrative code for all California Codes adopted by the city of mountain view and shall be cited and referred to as the "*Administrative Code for California Codes Adopted by the City of Mountain View*."

One (1) copy of the California Administrative Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

ARTICLE IV. BUILDING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.26.05. - Purpose.

The purpose of this Article is to establish minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, access to persons with disabilities, sanitation, adequate lighting and ventilation and energy conservation; safety to life and property from fire and other hazards attributed to the built environment; and to provide safety to fire fighters and emergency responders during emergency operations.

SEC. 8.26.10. - Adoption of the International Building Code and the California Building Code.

The "International Building Code, 2024 Edition" in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 2, known as the "California Building Code Volumes 1 and 2, 2025 Edition," along with Appendices I, J, and Q, is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Building Code Section 1.1.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Building Code of the City of Mountain View*."

One (1) copy of the California Building Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. ADMINISTRATION

SEC. 8.28.05. - Title.

Subsection 101.1 of the 2025 California Building Code is amended to read as follows:

101.1 Title. These regulations shall be known as the *Building Code of* ~~[NAME OF JURSIDICTION]~~ *the City of Mountain View*, hereinafter referred to as "this code."

SEC. 8.28.10. - Referenced codes.

Subsection 101.4 of the 2025 California Building Code is amended to read as follows:

101.4 Referenced codes. The other codes specific in Sections 101.4.1 through 101.4.7 and referenced elsewhere in this code shall be considered to be part of the requirements of this code to the prescribed extent of each such reference, inclusive of local amendments adopted by the city and located in the City Code.

SEC. 8.28.15. - Responsible agency.

Subsection 103.1 of the 2025 California Building Code is amended to read as follows:

103.1 ~~Creation of enforcement~~ Responsible agency. The ~~[INSERT NAME OF DEPARTMENT]~~ building division in the community development department of the city of mountain view is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code. Where there is any reference to the "building department" in the local jurisdiction or enforcing agency, it shall mean the responsible agency as referenced herein.

SEC. 8.28.20. - Conditions of approval.

Add a new subsection 105.1.3 (Required Conditions of Approval) of Section 105.1 (Required) of the 2025 California Building Code to read as follows:

105.1.3 Required conditions of approval. Any application for a building permit on any building and/or lot which is subject to an approved zoning permit or any entitlement set forth in the City Code with conditions of approval shall not be issued by the building official unless all conditions of approval of the approved permit or entitlement have been satisfied, fulfilled, or sufficient guarantees have been provided to the city to the satisfaction of the director of the associated city department with which said condition of approval is applicable.

SEC. 8.28.25. - Flood hazard documentation.

Subsection 110.3.12.1 of the 2025 California Building Code is amended to read as follows:

110.3.12.1 Flood hazard documentation. If located in a flood hazard area, documentation of the elevation of the lowest floor or the elevation of dry floodproofing, if applicable, ~~as required in Section 1612.4~~ shall be submitted ~~to the building official prior to the final inspection~~ pursuant to Chapter 48 of the City Code.

SEC. 8.28.30. - Fees.

Subsections 109.1 and 109.2 of the 2025 California Building Code are amended to read as follows:

109.1 Payment of fees. A permit shall not be valid until the fees prescribed by law, city code, or the city master fee schedule have been paid, nor shall an amendment to a permit be released until the additional fee, if any has been paid.

109.2 Schedule of permit fees. Where a permit is required, a fee for each permit shall be paid as required, in accordance with the city code and the city's master fee schedule as ~~established by the applicable governing authority~~ adopted by the city council, which may be amended from time to time.

SEC. 8.28.35. - Other fees.

Subsection 109.5 of the 2025 California Building Code is amended to read as follows:

109.5 Related fees. The payment of the fee for the construction, alteration, removal, or demolition for work done in connection to or concurrently with the work authorized by a building permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law, the city code, or the city master fee schedule as adopted by the city council.

SEC. 8.28.40. - Fee waivers or reductions.

Add a new subsection 109.6 (Fee waivers) to Section 109 (Fees) of the 2025 California Building Code to read as follows:

109.6 Fee waivers or reductions. Applicable permit fees may be waived or reduced by the building official as prescribed in the City Code, the city's adopted master fee schedule, by law, or for building permits related to accessibility improvements in a home to accommodate a person with a qualifying disability.

SEC. 8.28.45. - Footing and foundation inspection.

Subsection 110.3.1 of the 2025 California Building Code is amended to read as follows:

110.3.1 Footing and foundation inspection. Footing and foundation inspections shall be made after excavations for footings are complete and any required reinforcing steel is in place. For concrete foundations, any required forms shall be in place prior to inspection. Materials for the foundation shall be on the job, except where concrete is ready mixed in accordance with ASTM C94, the concrete need not be on the job. A wet-stamped and signed survey shall be produced for any new footing and/or foundation placement outside of the original building footprint prior to release of concrete pour and provided to the city building inspector.

SEC. 8.28.50. - Certificate of occupancy.

Subsections 111.2 and 111.3 of the 2025 California Building Code are amended to read as follows:

111.2 Certificate issued. After the building official conducts a final ~~inspects~~ inspection of the structure and does not find violations of the provisions of this code, any conditions of approval, or other laws that are enforced by the ~~department~~ the building division, the building official shall sign the permit job card associated with the work, which, when properly signed, shall serve as the ~~issue~~ issuance of a certificate of occupancy. ~~that contains the following:~~

~~1. The permit number.~~
~~2. The address of the structure.~~
~~3. The name and address of the owner or the owner's authorized agent.~~
~~4. A description of that portion of the structure for which the certificate is issued.~~
~~5. A statement that the described portion of the structure has been inspected for compliance with the requirements of this code for the occupancy and division of occupancy and the use for which the proposed occupancy is classified.~~
~~6. The name of the building official.~~
~~7. The edition of the code under which the permit was issued.~~
~~8. The use and occupancy in accordance with the provisions of the California Building Code.~~
~~9. The type of construction as defined in the California Building Code.~~
~~10. The design occupancy load and any impact the alteration has on the design occupant load of the area not with the scope of the work.~~
~~11. Where an automatic sprinkler system is provided, and whether an automatic sprinkler system is required.~~
~~12. Any special stipulations and conditions of the building permit.~~

111.3 Temporary occupancy. The building official is authorized to issue a temporary certificate of occupancy before the completion of the entire work covered by the permit, provided that such a portion or portions shall be occupied safely in accordance with minimum

life safety requirements and payment of a surety deposit is provided. The building official shall set a time period during which the temporary certificate of occupancy is valid.

The surety deposit shall be in the form of a letter from the project contractor on file, located on company letterhead, that includes all remaining improvements to be completed or conditions of approval to be satisfied with a deposit of funds made to the city of mountain view and placed in a non-interest bearing account in the amount equivalent to the cost to construct the remaining portion of improvements that have yet to be completed and any unsatisfied conditions of approval. Any costs incurred by the city in enforcing the terms of the temporary occupancy or removing occupants from the premises, if required, shall be deducted from the surety deposit. If the costs to the city exceeds the amount of the surety deposit, the applicant shall be responsible for immediately paying the city any cost deficiency. Upon completion of the remaining improvements that are required for permanent occupancy, and following the conclusion of a final inspection authorizing a final certificate of occupancy by the city, the city will refund the surety deposit, deducting any costs incurred as described in this Section, to the original payee.

SEC. 8.28.55. - Disconnect service utilities.

Subsection 112.3 of the 2025 California Building Code is amended to read as follows:

112.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to ~~the~~ a building, structure or system regulated by this code and the referenced codes and standards in the following cases:

a. ~~of i~~In response to an emergency where it is necessary to eliminate an immediate hazard to life or property;

b. ~~or w~~Where such utility connection has been made without the approval required by Section 112.1 or 112.2~~.~~;

c. The owner or their authorized representative have failed to secure or fully comply with conditions of the required permit(s);

d. There is a hazard to life and property due to improper installation, or maintenance or lack thereof of devices, appliances or equipment;

e. Work was performed, with or without a permit, which has been connected to a source of supply without approval by the building official; or

f. Electrical or gas services are serving a building which has been vacant for a period exceeding sixty (60) calendar days.

The building official shall notify the serving utility, and wherever possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnecting, the owner or the owner's authorized agent or occupancy of the building, structure or service system shall be notified in writing, as soon as practical thereafter.

SEC. 8.28.60. - Appeals.

Subsection 113.1 of the 2025 California Building Code is amended to read as follows:

113.1 General. ~~In order to hear and decide appeals of orders, d~~Decisions or determinations made by the code official relative to the application and interpretation of this code, ~~there shall be and is hereby created a board of appeals. The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.~~ are subject to the appeal procedures pursuant to Article II, Division 1 of this Chapter. Where this code refers to "appeal board" it shall mean the appeal procedures pursuant to Article II, Division 1 of this Chapter.

SEC. 8.28.65. - Unlawful acts.

Subsection 114.1 of the 2025 California Building Code is amended to read as follows:

114.1 Unlawful acts. It shall be unlawful for any person, firm or corporation to erect, construct, enlarge, alter, extend, repair, move, improve, remove, convert, demolish, equip, use, maintain or occupy any building, structure or equipment regulated by this code, or cause same to be done, in conflict with or in violation of any of the provisions of this code.

Any person, firm or corporation violating any of the provisions of this code shall be deemed guilty of a misdemeanor, and each such person shall be deemed guilty of a separate offense for each and every day or portion thereof during which any violation of any of the provisions of this code is committed, continued or permitted, and upon conviction of any such violation such person shall be punishable as set forth in the City Code.

SEC. 8.28.70. - Violation penalties.

Subsection 114.4 of the 2025 California Building Code is amended to read as follows:

114.4 Violation penalties. Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who repairs or alters or changes the occupancy of a building or structure in violation of the approved construction documents or directive of the code official or of a permit or certificate issued under the provisions of this code shall be subject

to penalties as prescribed by law, or who shall fail to comply with such an order as affirmed or modified by the city council or by a court of competent jurisdiction, shall severally for each and every such violation and noncompliance respectively be guilty of a misdemeanor, punishable as set forth in the City Charter. The imposition of one (1) penalty for any violation shall not excuse the violation or permit to continue; and all such persons shall be required to correct or remedy such violations or defects within a reasonable time; and when not otherwise specified, each day that a violation continues after due notice has been served shall be deemed a separate offense.

DIVISION 3. DEFINITIONS

SEC. 8.30.05. - Definitions.

Section 202 (Definitions) of the 2025 California Building Code is amended to read as follows:

BUILDING OFFICIAL. The ~~officer~~ chief building official or other designated authority charged with the administration, interpretation, and enforcement of this code, or a duly authorized representative. The chief building official or duly authorized representative is empowered to enforce the provisions of this code as a law enforcement officer pursuant to Chapter 2, Article X of the City Code.

CONSTRUCTION TRAILER(S). A temporary mobile trailer intended to house construction personnel in order to coordinate on-site construction activities on an active construction site.

FIRE CODE OFFICIAL. The fire chief or other designated authority of the city of mountain view who is charged with the administration and enforcement of the adopted California Fire Code, or a duly authorized representative as defined in Chapter 14 of the city code.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). ~~A building that has never been used or occupied for any purpose.~~ A newly constructed building (or new construction) ~~does not~~ includes either:

1. a new structure, or

2. any additions, alterations, or ~~repairs~~ improvements to existing structures where greater than fifty (50) percent of the sum total of the following structural elements are added, removed, replaced or relocated within a 3-year period: (1) footings and foundation; (2) roof-framing; and (3) exterior walls.

TOWNHOUSE. ~~A building that contains~~ A single-family dwelling unit constructed in a group of three or more attached ~~townhouse~~ units in which each unit extends from the foundation to the roof and with open space on a least two (2) sides. To be defined as Group R-3 occupancy per the California Building Code Section 310.4, the townhouse must reside on its own separate parcel of land and shall meet the requirements of Tables 705.5 or 706.4 of the 2025 California Residential Code.

DIVISION 4. OTHER LOCAL AMENDMENTS

SEC. 8.32.05. - Vehicle clearance height.

Subsection 406.2.2 of the 2025 California Building Code is amended to read as follows:

406.2.2 Clear height. ~~The clear height of each floor level in vehicle and pedestrian traffic areas shall be not less than 7 feet (2134 mm).~~ In private garages and carports, the clear height in vehicle and pedestrian traffic areas shall be not less than seven (7) feet six (6) inches (2286 mm). Canopies under which fuels are dispensed shall have a clear height in accordance with Section 406.7.2. [DSA-AC, HCD 1-AC] The clear height of vehicle and pedestrian areas required to be accessible shall comply with Chapter 11A and 11B, as applicable.

> ~~**Exception:** A lower clear height is permitted for a parking tier in mechanical-access open parking garages where approved by the building official.~~
> Exception deleted in its entirey.

SEC. 8.32.10. - Premises or address identification.

Subsection 502.1 of the 2025 California Building Code is amended to read as follows:

502.1 Address identification. New and existing buildings shall be provided with approved address numbers, building numbers, or building identification. The address identification shall be legible and placed in a position that is plainly visible from the street or road fronting the property. Address identification characters (numbers and letters) shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. ~~Numbers shall not be spelled out.~~ Each character, including numbers, shall be not less than ~~4~~ 6 inches (~~102~~ 152.4 mm) high with a minimum stroke width of ½ inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

> **Exception:** For R-3 occupancies, address characters, including numbers, shall be a minimum of four (4) inches high with a minimum strike width of one-half (0.5) inch.

SEC. 8.32.15. - Fire-resistance rating.

Subsection 706.4, including Table 706.4, of the 2025 California Building Code is amended to read as follows:

706.4 Fire-resistance rating. Fire walls shall have a fire-resistance rating of not less than that required by Table 706.4.

Table 706.4 – Fire Wall Fire-Resistance Ratings

Group	Fire-Resistance Rating (hours)
A, B, E, H-4, I, R-1, R-2, *R-2.1*, U, L	3[a]
F-1, H-3[b], H-5, M, S-1	3
H-1, H-2,	4[b]
F-2, S-2, R-3[c],R-4	2
a. In Type II or V construction, walls shall be permitted to have a 2-hour fire-resistance rating. b. For Group H-1, H-2 or H-3 buildings, also see Sections 415.7 and 415.8. c. In Occupancy Group R-3, the construction separation at the lot line shall be with 2 separate one (1) hour rated fire barrier per Section 707.	

SEC. 8.32.20. - Automatic fire sprinkler system.

Subsections 903.2, 903.3.1, and 903.3.1.1.4 of Section 903 (Automatic Sprinkler Systems) in the 2025 California Building Code are hereby replaced by the applicable provisions of Chapter 14, Division 10 of the City Code.

SEC. 8.32.25. - Standpipe systems.

Subsections 905.3, 905.3.1, 905.3.4, and 905.4 of Section 905 (Standpipe Systems) of the 2025 California Building Code are hereby replaced by the applicable provisions of Chapter 14, Division 10 of the City Code.

SEC. 8.32.30. - Fire alarm and detection systems.

Subsections 907.2 and 907.6 of Section 907 (Fire Alarm and Detection Systems) of the 2025 California Building Code are hereby replaced by the applicable provisions of Chapter 14, Division 10 of the City Code.

SEC. 8.32.35. - Means of egress – stairway doors.

Subsection 1010.2.6 of Section 1010 (Doors, Gates and Turnstiles) of the 2025 California Building Code is hereby replaced with the applicable provision in Chapter 14, Division 10 of the City Code.

SEC. 8.32.40. - Conventional light-frame construction - braced wall panels.

Subsection 2308.10.3, including Table 2308.10.3(1), of the 2025 California Building Code are amended to read as follows:

2308.10.3 Braced wall panel methods. ~~Construction of braced wall panels shall be by one or a combination of the methods in Table 2308.10.3(1). Braced wall panel length shall be in accordance with Section 2308.10.4 or 2308.10.5.~~ Braced wall panels shall be placed along braced wall lines in accordance with Table 2308.10.1 and Figure 2308.10.1 and as specified in Table 2308.10.3(1). A braced wall panel shall be located at each end of the braced wall line and at the corners of intersecting braced wall lines, or shall begin within the maximum distance from the end of the braced wall line in accordance with Table 2308.10.1. Braced wall panels shall start not more than twelve and one-half (12½) feet (3,810 mm) from each end of a braced wall line, regardless of material. Braced wall panels in a braced wall line shall not be offset from each other by more than 4 feet (1219 mm). Braced wall panels shall be clearly indicated on the plans. Construction of braced wall panels shall be per Table 2308.10.3(1).

Table 2308.10.3(1) is amended to delete the following bracing systems in the "Methods, Material" column: "LIB Let-in-bracing," "DWB Diagonal wood boards," GB Gypsum board (Double sided)," PBS Particleboard sheathing," and "PCP Portland cement plaster".

SEC. 8.32.45. - Hoistway enclosures – stretchers in elevators.

Subsection 3002.4 of the 2025 California Building Code is amended to read as follows:

3002.4 Elevator car to accommodate ambulance stretcher. Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, not fewer than one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate an ambulance gurney or stretcher 24 inches by 84 inches (610 mm by 2134 mm) with not less than 5-inch (127 mm) radius corners, in the horizontal, open position, and shall be provided with a minimum clear distance between walls or between walls and doors excluding return panels not less than eighty (80) inches by fifty-four (54) inches (2,032 mm by 1,372 mm), and a minimum distance from a wall to return panel not less than fifty-one (51) inches (1,295 mm) with a forty-two (42) inch (1,067 mm) side slide door. ~~and~~ The elevator that can accommodate the ambulance stretcher shall be identified by the international symbol for emergency medical services (star of life). The symbol shall be not less than 3 inches (76 mm) in height and shall be placed on both sides of the hoistway door frame.

SEC. 8.32.50. - Temporary structures.

Subsection 3103.1.3 of the 2025 California Building Code is amended to read as follows:

3103.1.3 Permit required. Temporary structures that cover an area greater than 120 square feet (11.16 m^2), including connecting areas or spaces with a common means of egress or entrance that are used or intended to be used for the gathering together of 10 or more persons, shall not be erected, operated, or maintained for any purpose without obtaining a permit from the building official.

Exception: Construction trailers residing (placed/installed) on an active construction site are exempt from obtaining a separate building permit. Accessibility requirements shall be enforced for any trailer intended to be utilized for meetings with non-construction staff or if trailers are connected by decking materials.

SEC. 8.32.55. - Means of egress during construction – stairways.

Subsection 3310.1 of the 2025 California Building Code is amended to read as follows:

3310.1 Stairways required. Where building construction exceeds 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided. Each level above the first story in new multi-story buildings that require two (2) exit stairways shall be provided with at least two (2) usable exit stairways after the floor decking is installed. As construction progresses, such stairway shall be extended to within one floor of the highest point of construction having secured decking or flooring. The stairways shall be continuous and discharge to grade level. Exit stairs in new and in existing, occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception: For multi-story buildings, one of the required exit stairs may be obstructed on not more than two (2) contiguous floor levels for the purpose of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

ARTICLE V. RESIDENTIAL CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.34.05. - Purpose.

The purpose of this Article is to regulate the erection, construction, enlargement, alteration, repair, moving, removal, conversion, demolition, occupancy, equipment, use, height, area, and maintenance of residential buildings and other structures used for residential purposes.

SEC. 8.34.10. - Adoption of the International Residential Code and the California Residential Code.

The "International Residential Code, 2024 Edition" in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 2.5, known as the "California Residential Code, 2025 Edition," is hereby adopted, along with appendices BB, BF and CJ, by reference, with changes and modifications as hereinafter set forth, as defined in California Residential Code Section 1.1.8, and incorporated fully and from the date on which this Chapter

shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Residential Code of the City of Mountain View*."

One (1) copy of the California Residential Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. ADMINISTRATION

SEC. 8.36.05. - Administration.

Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Residential Code is deleted in its entirety and replaced with Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Building Code as amended per Article IV of this Chapter.

DIVISION 3. DEFINITIONS

SEC. 8.38.05. - Definitions.

Section R202 (Definitions) of the 2025 California Residential Code is amended to read as follows:

BUILDING OFFICIAL. The ~~officer~~ chief building official of the city of mountain view or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. The chief building official or duly authorized representative is empowered to enforce the provisions of this code as a law enforcement officer pursuant to Chapter 2, Article X of the City Code.

ENFORCING AGENCY. The designated department or agency as specific by statute or regulation, which, within the city limits of the city of mountain view, is the building division in the community development department of the city of mountain view.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) includes either:

1. a new structure, or

2. any additions, alterations, or improvements to existing structures where greater than fifty (50) percent of the sum total of the following structural elements are added, removed, replaced or relocated within a 3-year period: (1) footings and foundation; (2) roof-framing; and (3) exterior walls.

TOWNHOUSE. ~~A building that contains three or more attached townhouse units.~~ A single-family dwelling unit constructed in a group of three (3) or more attached units in which each unit

extends from the foundation to the roof and with open space on a least two (2) sides. To be defined as an R-3 occupancy, the townhouse must reside on its own separate parcel of land and shall meet the requirements of Table 706.4 of this code.

DIVISION 4. OTHER LOCAL AMENDMENTS

SEC. 8.40.05. - Climatic and geographic design criteria.

Table R301.2 of the 2025 California Residential Code is amended to read as follows:

TABLE R301.2 – CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

GROUND SNOW LOAD[o]	WIND DESIGN				SEISMIC DESIGN CATEGORY[f]	SUBJECT TO DAMAGE FROM			Winter Design Temp[e]	ICE BARRIER UNDERLAYMENT REQUIRED[h]	FLOOD HAZARDS[g]	AIR FREEZING INDEX[l]	MEAN ANNUAL TEMP[j]
	Speed[d] (mph)	Topographic effects[k]	~~Special wind region[l]~~	~~Windborne debris zone[m]~~		Weathering[a]	Frost line depth[b]	Termite[c]					
0	110	NO	-	-	D 2	Negligible	0	Very heavy	32[e]	NO	Per FEMA Maps	0	55

Manual J Design Criteria are replaced with the requirements of the 2025 California Energy Code – Climate Zone 4.

SEC. 8.40.10. - Automatic fire sprinkler systems for townhomes.

Subsection R309.1 of the 2025 California Residential Code is amended to read as follows:

R309.1 Townhouse automatic fire sprinkler systems. An automatic fire sprinkler system shall be installed in new townhouses.

Exceptions:

1. An automatic fire sprinkler system shall not be required where additions or alterations are made to existing townhouses that do not have an automatic fire sprinkler system installed, unless Exceptions 2 or 3 below apply.

2. For existing non-sprinklered townhouses, an approved automatic residential fire sprinkler system shall be required when additions meet one of the following criteria:

    a. The building addition(s) are equal to or greater than one hundred percent (100%) of the existing building square footage; or

    b. The building addition(s) increase the total building area to be cummulatively over 4,100 square feet.

3. Group S-2 or U occupancies used exclusively for vehicle parking and meeting all of the following conditions:

    a. Are noncombustible construction;

    b. The maximum building area does not exceed a cummulative of 5,000 square feet;

    c. The building structure is open on three (3) or more sides; and

    d. There is a minimum of ten (10) feet of separation from existing buildings unless the area is separated by fire walls complying with California Building Code Section 706.

SEC. 8.40.15. - Automatic fire sprinkler systems for one and two-family dwellings.

Subsection R309.2 of the 2025 California Residential Code is amended to read as follows:

R309.2 One- and two-family dwellings automatic fire sprinkler systems. An automatic fire sprinkler system shall be installed in one- and two-family dwellings.

Exceptions:

1. An automatic fire sprinkler system shall not be required for ~~additions or~~ alterations to existing buildings that are not already provided with a sprinkler system.

2. An accessory dwelling unit (ADU), provided that all of the following are met:

   ~~2.1.~~ a. The unit meets the definition of an accessory dwelling unit as defined in the Government Code Section 65852.2.

   ~~2.2.~~ b. The existing primary residence does not have automatic fire sprinklers.

   ~~2.3.~~ c. The accessory detached dwelling unit does not exceed 1,200 square feet in size.

   ~~2.4.~~ d. The unit is on the same lot as the primary residence.

3. ADUs shall not be required to provide fire sprinklers if they are not required for the primary residence. The construction of an accessory dwelling unit shall not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

4. For existing non-sprinklered one- and two-family dwellings, an approved automatic fire sprinkler system shall be required when additions meet one of the following criteria:

   a. Building additions that are equal to or greater than one hundred percent (100%) of the existing building square footage;

   b. Building additions that increase the total building area to be cummulatively over 4,100 square feet.

5. Group S-2 or U occupancies used exclusively for vehicle parking and meeting all of the following conditions:

   a. Are noncombustible construction;

   b. The maximum building area does not exceed a cummulative 5,000 square feet;

   c. The building structure is open on three (3) or more sides;

   d. A minimum of ten (10) feet of separation from existing buildings unless the area is separated by fire walls complying with California Building Code Section 706.

SEC. 8.40.20. - Seismic reinforcing – footings and stem walls.

Subsections R403.1.3 through R403.1.3.4, including the title of Figure R403.1.3, of the 2025 California Residential Code are amended to read as follows:

R403.1.3 Footing and stem wall reinforcing in Seismic Design Categories ~~D0~~, D_1 and D_2. Concrete footings located in Seismic Design Categories ~~D0,~~ D_1, and D_2, as established in Table R301.2, shall have minimum reinforcement in accordance with this section and Figure R403.1.3. Reinforcement shall be installed with support and cover in accordance with Section R403.1.3.5. Minimum reinforcement shall consist of at least two (2) contiguous longitudinal reinforcing bars not smaller than No. 4 bars. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

FIGURE R403.1.3 – REINFORCED CONCRETE FOOTINGS AND MASONRY AND CONCRETE STEM WALLS IN SDC ~~D0,~~ D_1, and D_2[a,b,c,d,e,f]

R403.1.3.1 Concrete stem walls with concrete footings. In Seismic Design Categories ~~D0,~~ D_1, and D_2 where a construction joint is created between a concrete footing and a concrete stem wall, not fewer than one No. 4 vertical bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall have a standard hook at the footing end and extend to 3 inches (76 mm) clear of the bottom of the footing and shall have support and cover as specific in Section R403.1.3.5.3 and extend not less than 14 inches (357 mm) into the stem wall. Standard hooks shall comply with Section R608.5.4.5. Not fewer than one No. 4 horizontal bar shall be installed within 12 inches (305 mm) of the top of the stem wall and one No. 4 horizontal bar shall be located 3 to 4 inches (76 mm to 102 mm) from the bottom of the footing.

R403.1.3.2 Masonry stem walls with concrete footings. In Seismic Design Categories ~~D0,~~ D_1 and D_2 where a masonry stem wall is supported on a concrete footing, not fewer than one No. 4 vertical bar shall be installed at not more than 4 feet (1219 mm) on center. The vertical bar shall have a standard hook at the footing end and extend to 3 inches (76 mm) clear of the bottom of the footing and shall have support and cover as specified in Section R403.1.3.5.3 and extend not less than 14 inches (357 mm) into the stem wall. Standard hooks shall comply with Section R608.5.4.5. Not fewer than one No. 4 horizontal bar shall be installed within 12 inches (305 mm) of the top of the stem wall and one No. 4 horizontal bar shall be located 3 to 4 inches (76 mm to 102 mm) from the bottom of the footing. Masonry stem walls shall be solid grouted.

R403.1.3.3 Slabs-on-grade with turned-down footings. In Seismic Design Categories ~~D0,~~ D_1, and D_2, slabs-on-ground cast monolithically with turned-down footings shall have not fewer than one No. 4 bar at the top and the bottom of the footing or one No. 5 bar or two No. 4 bars in the middle third of the footing depth.

Where the slab is not cast monolithically with the footing, No. 3 or larger vertical dowels with standards hooks on each end shall be installed at no more than 4 feet (1219 mm) on center

in accordance with Figure R403.1.3, Detail 2. Standard hooks shall comply with Section R608.5.4.5.

R403.1.3.4 Interior bearing and braced wall panel footings in Seismic Design Categories ~~D_0~~, D_1, and D_2. In Seismic Design Categories ~~D_0~~, D_1, and D_2, interior footings supporting bearing walls or braced wall panels, and cast monolithically with a slab on grade, shall extend to a depth of not less than 12 inches (305 mm) below the top of the slab.

SEC. 8.40.25. - Reinforcement – support and cover.

Subsection R403.1.3.5.3 of the 2025 California Residential Code is amended to read as follows:

R403.1.3.5.3 Support and cover. Reinforcement shall be secured in the proper location in the forms with tie wire or other bar support system to prevent displacement during the concrete placement operation. Steel reinforcement in concrete cast against the earth shall have a minimum clear cover of 3 inches (75 mm). Minimum clear cover for reinforcement in concrete cast in removable forms that will be exposed to the earth or weather shall be 1 ½ inches (38 mm) for No. 5 bars and smaller, and 2 inches (50 mm) for No. 6 bars and larger. For concrete cast in removable forms that will not be exposed to the earth or weather, and for concrete cast in stay-in-place forms, minimum clear cover shall be ¾ inch (19 mm).

SEC. 8.40.30. - Reinforcement – lap splices.

Subsection R403.1.3.5.4 of the 2025 California Residential Code is amended to read as follows:

R403.1.3.5.4 Lap splices. Vertical and horizontal reinforcement shall be the longest continuous lengths practical. Where splices are necessary in reinforcement, the length of lap splice shall be in accordance with Table R608.5.4(1) and Figure R608.5.4(1). The maximum gap between noncontact parallel bars at a lap splice shall not exceed the smaller of one-fifth the required lap length and 6 inches (152 mm) [see Figure R608.5.4(1)].

SEC. 8.40.35. - Footing and stem wall design – isolated concrete footings.

Subsection R403.1.3.6 of the 2025 California Residential Code is amended to read as follows:

R403.1.3.6 Isolated concrete footings. In detached one- and two-family dwellings that are three stories or less in height and constructed with stud bearing walls, isolated plain concrete footings supporting ~~columns or~~ pedestals are permitted when pedestals support no more than a portion of one floor.

SEC. 8.40.40. - Bracing requirements based on seismic design.

Table R602.10.3(3) of the 2025 California Residential Code is amended to add a new footnote "i", as noted in the table header, to read as follows:

MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE[a,g,i]

i. In Seismic Design Categories D0, D1, and D2, Method GB (gypsum board) and BV-WSP (Wood Structural Panels with Stone Masonry) is not permitted; and use of Method PCP (Portland Cement Plaster) is limited to one-story, single-family dwellings and accessory structures.

ARTICLE VI. ELECTRICAL CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.42.05. - Purpose.

The purpose of this Article is to establish minimum standards for governing the design, construction, reconstruction, installation, quality of materials, location, operation, and maintenance or use of electrical equipment, wiring and systems in buildings and on properties for the protection of the public health, safety and welfare.

SEC. 8.42.10. - Adoption of the National Electrical Code and the California Electrical Code.

The "National Electrical Code, 2023 Edition" in its entirety, as published by the National Fire Protection Association (NPFA), with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 3, known as the "California Electrical Code, 2025 Edition," is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Electrical Code Section 89.101.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Electrical Code of the City of Mountain View*."

One (1) copy of the California Electrical Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. LOCAL AMENDMENTS

SEC. 8.44.05. - Administration.

The general code provisions code in Article 89 of the 2025 California Electrical Code shall be deleted in its entirety and replaced with the provisions and procedures pursuant to Chapter 1 (Administration), Division II (Scope and Administration) of the California Building Code as amended per Article IV of this Chapter.

SEC. 8.44.10. - Minimum size of electrical service panel.

Subsection 230.79 of the 2025 California Electrical Code is amended to read as follows:

230.79 Rating of Service Disconnecting Means. The service disconnecting means shall have a rating not less than the calculated load to be carried, determined in accordance with Part III, IV, or V of Article 220, as applicable. In no case shall the rating be lower than specified in 230.79(A), (B), (C) or (D).

(A) One-Circuit Installations. For installations to supply only limited loads of a single branch circuit, the service disconnecting means shall have a rating of not less than 15 amperes.

(B) Two-Circuit Installations. For installations consisting of not more than two 2-wire branch circuits, the service disconnecting means shall have a rating of not less than 30 amperes.

(C) One-Family Dwellings. For a one-family dwelling, the service disconnecting means shall have a rating of not less than 100 amperes, 3-wire <u>accommodated on a minimum electric service panel size of 200 amperes. For 10 or more one-family dwellings as part of a subdivision, the service disconnect shall have a rating pursuant to California Energy Code Sec. 110.10(e).</u>

(D) All Others. For all other installations, the service disconnecting means shall have a rating of not less than 60 amperes <u>accommodated on a minimum service electric panel size of 100 amperes.</u>

<u>The building or unit with the service disconnect may be supplied with less electrical power than the service panel size installed per the requirements of this Section, so long as it is supplied with the minimum service disconnect rating as required by this code and any applicable California Building Code.</u>

ARTICLE VII. MECHANICAL CODE

SEC. 8.46.05. - Purpose.

The purpose of this Article is to regulate and provide minimum requirements and standards for the installation and maintenance of heating, ventilating, comfort cooling, and refrigeration systems in buildings for the protection of the public health, safety and welfare.

SEC. 8.46.10. - Adoption of the Uniform Mechanical Code and the California Mechanical Code.

The "Uniform Mechanical Code, 2024 Edition" in its entirety, as published by the International Association of Plumbing and Mechanical Officials, with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 4, known as the "California Mechanical Code, 2025 Edition," including Appendices A through J, is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Mechanical Code Section 1.1.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Mechanical Code of the City of Mountain View*."

One (1) copy of the California Mechanical Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

SEC. 8.46.15. - Administration.

Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Mechanical Code is deleted in its entirety and replaced with Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Building Code as amended per Article IV of this Chapter.

ARTICLE VIII. PLUMBING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.48.05. - Purpose.

The purpose of this Article is to regulate the erection, installation, alteration, repair, relocation, removal, replacement, conversion, use and maintenance of plumbing, gas, drainage systems, and other similar work in order to provide minimum requirements and standards for the protection of the public health, safety and welfare.

SEC. 8.48.10. - Adoption of the Uniform Plumbing Code and the California Plumbing Code.

The "Uniform Plumbing Code, 2024 Edition" in its entirety, as published by the International Association of Plumbing and Mechanical Officials, with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 5, known as the "California Plumbing Code, 2025 Edition," including Appendices A, D and I, is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Plumbing Code Section 1.1.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Plumbing Code of the City of Mountain View*."

One (1) copy of the California Plumbing Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. LOCAL AMENDMENTS

SEC. 8.50.05. - Administration.

Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Plumbing Code is deleted in its entirety and replaced with Chapter 1 (Administration), Division II (Scope and Administration) of the 2025 California Building Code as amended per Article IV of this Chapter.

SEC. 8.50.10. - Definitions.

Subsections 206.0, 207.0, 216.0, and 222.0 of the 2025 California Plumbing Code are amended to add, or modify, the following definitions to read as follows:

206.0 – D –

Dual plumbing system or dual plumbed. A system that utilizes separate piping systems for recycled water and potable water within a building, as defined by California Code of Regulations, Title 22, Division 4.

207.0 – E –

Enforcing Agency. [BSC, BSC-CG, HCD 1, HCD 2 & HCD 1-AC]. "Enforcing Agency" is the designated department or agency as specified by statute or regulation, which, within the city limits of the city of mountain view is the building division of the community development department. The code official responsible for the application, interpretation and enforcement of this code is the chief building official of the city of mountain view, who may also be referred to as the "plumbing official" in this code.

216.0 – N –

Nonresidential building. A building used for commercial purposes that is not used for residential or sleeping purposes, such as hotels, motels, apartments, condominums or similar buildings.

222.0 – T –

Trap primer, floor. The practice of adding water to traps beneath floor drains to ensure a barrier from sewer gas.

SEC. 8.50.15. - Dual-plumbing requirements.

Add a new subsection 1505.1.3 to the 2025 California Plumbing Code to read as follows:

1505.1.3 Structures required to dual-plumb. All new nonresidential buildings or groups of new nonresidential buildings where the total square footage of the building(s) is greater than twenty-five thousand (25,000) square feet, shall incorporate dual plumbing in the design and construction of the building(s) to allow the use of recycled water, when it becomes available, for flushing toilets and urinals and priming floor traps.

ARTICLE IX. ENERGY CODE

SEC. 8.52.05. - Purpose.

The purpose of this Article is to conserve resources by reducing unnecessary energy consumption, extend the use of renewable energy, and lower energy costs for consumers in newly constructed buildings, building additions, and alterations to existing buildings.

SEC. 8.52.10. - Adoption of the California Energy Code.

The "California Energy Code, 2025 Edition" in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 6, known as the "California Energy Code, 2025 Edition," is hereby adopted by reference and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Energy Code of the City of Mountain View*."

One (1) copy of the California Energy Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

ARTICLE X. HISTORICAL BUILDING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.54.05. - Purpose.

The purpose of this Article is provide alternative building regulations that allow for the preservation, restoration, rehabilitation, relocation, reconstruction and continued use of qualified historical buildings or properties while ensuring reasonable safety and accessibility of the occupants or users.

SEC. 8.54.10. - Adoption of the California Historical Building Code.

The "2025 California Historical Building Code" in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 8, known as the "2025 California Historical Building Code," is hereby adopted by reference, with changes and modifications as hereinafter set forth, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Historic Building Code of the City of Mountain View*."

One (1) copy of the California Historical Building Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. LOCAL AMENDMENTS

SEC. 8.56.05. - Title.

Subsection 8-101.1 of the 2025 California Historical Building Code is amended to read as follows:

8-101.1 Title. These regulations shall be known as the ~~*California Historical*~~ *Mountain View Historic Building Code* and will be referred to herein as "this code." Where the code uses the term "California Historical Building Code" or "the CHBC~~.~~", it shall be replaced with the "Mountain View Historic Building Code."

SEC. 8.56.10. - Definitions.

Subsection 8-201 of the 2025 California Historical Building Code to amend the following definitions to read as follows:

Section 8-201 – Definitions

ENFORCING AGENCY. Authority Having Jurisdiction, Local Agency with Jurisdiction. ~~An entity with~~ The building division in the community development department of the city of mountain view has the responsibility for regulating, enforcing, reviewing or otherwise ~~that~~ exerts control of or administration over the process of granting permits, approvals, decisions, variances, appeals for qualified historical buildings or properties. The chief building official, or a duly authorized representative, shall act as the code official in charge of the application, interpretation, and enforcement of this code.

REGULAR CODE. The adopted regulations that govern the design and construction or alteration of nonhistorical buildings and properties within the ~~jurisdiction of the enforcing agency~~ the city of mountain view, which includes the currently adopted California Building Codes (Title 24) in effect, inclusive of local amendments as adopted in the City Code.

RELOCATION. The act or process of moving any qualified historical building or property or a portion of a qualified historical building or property to a new site, or a different location on the same site, in accordance with the procedures of Article II, Division 6 of this Chapter.

ARTICLE XI. EXISTING BUILDING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.58.05. - Purpose.

The purpose of this Article is to establish minimum requirements for the repair, alteration, change of occupancy, and additions to existing buildings to meet current safety standards, allowing the use of alternative approaches to achieve compliance with minimum requirements to provide a reasonable level of safety, health, and property protection and general welfare, and promote the expeditious repair or reconstruction of structures damaged during a declared emergency.

SEC. 8.58.10. - Adoption of the International Existing Building Code and the California Existing Building Code.

The "International Existing Building Code, 2024 Edition" in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 10, known as the "California Existing Building Code, 2025 Edition," is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Existing Building Code Section 1.1.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Existing Building Code of the City of Mountain View*."

One (1) copy of the California Existing Building Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. LOCAL AMENDMENTS

SEC. 8.60.05. - Title.

Subsection 101.1 of the 2025 California Existing Building Code is amended to read as follows:

101.1 Title. These regulations shall be known as the *Existing Building Code of* ~~[NAME OF JURSIDICTION]~~ *the City of Mountain View*, herein-after referred to as "this code."

SEC. 8.60.10. - Administration.

Chapter 1 (Administration), Division II (Scope and Administration), Part 2 (Administration and Enforcement) of the 2025 California Existing Building Code is deleted in its entirety and replaced with Chapter 1 (Administration), Division II (Scope and Administration), Part 2 (Administration and Enforcement) of the 2025 California Building Code as amended per Article IV of this Chapter.

SEC. 8.60.15. - Definitions.

Section 202 (General Definitions) of the 2025 California Existing Building Code is amended to modify, or add, the following definitions to read as follows:

Section 202 – General Definitions.

BUILDING OFFICIAL [BSC, DSA-SS, DSA-SS/CC]. The ~~individual within the agency or organization~~ chief building official of the city of mountain view, or a duly authorized representative, charged with responsibility for compliance with the requirements of this code. For some agencies this person is termed the "enforcement agent." The chief building official or duly authorized representative is empowered to enforce the provisions of this code as a law enforcement officer pursuant to Chapter 2, Article X of the City Code.

BUILDING OFFICIAL [HCD 1, HCD 2] [OSHPD 1, 1R, 2, 4 & 5]. The ~~officer~~ chief building official of the city of mountain view or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative. The chief building official or duly authorized representative is empowered to enforce the provisions of this code as a law enforcement officer pursuant to Chapter 2, Article X of the City Code.

CODE OFFICIAL. The ~~officer~~ chief building official of the city of mountain view or other designated authority charged with the administration and enforcement of this code. The chief

building official or duly authorized representative is empowered to enforce the provisions of this code as a law enforcement officer pursuant to Chapter 2, Article X of the City Code.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) includes either:

1. a new structure, or

2. any additions, alterations, or improvements to existing structures where greater than fifty (50) percent of the sum total of the following structural elements are added, removed, replaced or relocated within a 3-year period: (1) footings and foundation; (2) roof-framing; and (3) exterior walls.

ARTICLE XII. GREEN BUILDING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.62.05. - Purpose.

The purpose of this Article is to improve public health, safety, and general welfare by enhancing building design and construction to reduce negative environmental impacts and promote sustainable practices for all development.

SEC. 8.62.10. - Adoption of the California Green Building Standards Code.

The "California Green Building Standards Code, 2025 Edition," also referred to as "CALGreen," in its entirety, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 11, inclusive of Appendix A4 Sections A4.106.8.1 and A4.204.1 through A4.204.1.1, and Appendix A5 Section A5.107, is hereby adopted by reference with changes and modifications as hereinafter set forth, as defined in California Green Building Standards Code Section 101.7, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Mountain View Green Building Code*."

One (1) copy of the California Green Building Standards Code is on file and open to public inspection in the building division of the community development department of the city of mountain view.

SEC. 8.62.15. - Title.

Subsection 101.1 of the 2025 California Green Building Standards Code is amended to read as follows:

101.1 Title. These regulations shall be known as the ~~*California*~~ *Mountain View Green Building ~~Standards~~ Code*, may be citied as such, and will be referred to herein as "this code." ~~It is intended that it shall be known as the CALGreen Code.~~ The ~~California~~ *Mountain View Green Building Standards Code* is ~~Part 11 of thirteen~~ part~~s~~ of the official compilation and publication of the adoption, amendment, and repeal of building regulations to the California Code of Regulations, Title 24, also referred to as the *California Building Standards Code*.

DIVISION 2. MANDATORY GREEN BUILDING REQUIREMENTS

SEC. 8.64.05. - Scope.

Subsection 101.3 of the 2025 California Green Building Standards Code is amended to read as follows:

101.3 Scope. The provisions of this code shall apply to the planning, design, operation, construction, use and occupancy of every newly constructed privately-owned building or structure, ~~unless otherwise indicated in this code, throughout the State of California.~~ building addition, building alteration, or improvement as regulated in this code.

It is not the intent that this code substitute or be identified as meeting the certification requirements of any green building program.

SEC. 8.64.10. – Exempted projects.

Add a new subsection 101.3.2 to subsection 101.3 (Scope) of the 2025 California Green Building Standards Code to read as follows:

101.3.2 Exempted projects. Projects that are exempted from complying with Sec. 8.64.25 of this code are:

a. Nonhabitable accessory structures.

b. Registered or eligible to be registered local, state, or federal historic structures.

c. Natural disaster repairs.

d. Temporary structures.

SEC. 8.64.15. - Referenced codes and standards.

Subsection 101.5 of the 2025 California Green Building Standards Code is amended to read as follows:

101.5 Referenced codes and standards. The codes and standards referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference as adopted by the city of mountain view within this City Code.

SEC. 8.64.20. - Modifications to mandatory requirements.

A new subsection 101.8.1 is added to subsection 101.8 (Alternate Materials, Designs and Methods of Construction) of the 2025 California Green Building Standards Code to read as follows:

101.8.1. Modification(s). Where there are practical difficulties involved in carrying out the provisions of this code which have been locally amended by the city, the applicant shall file a written request for a modification(s). Upon receipt of the written request, the building official shall have the authority to grant one or more modifications for individual cases, provided that the building official shall find that:

a. One or more special individual reasons make the strict letter of this code impractical;

b. The modification is in compliance with the intent and purpose of this code but may be to a lesser extent than required by the city code; and

c. Such modification(s) does not lessen health, accessibility, life and fire safety or structural requirements.

The details of the written request for and action granting modifications shall be entered in the project file with the building division of the community development department.

SEC. 8.64.25. - Mandatory requirements.

Subsection 101.10 of the 2025 California Green Building Standards Code is amended, including the addition of a new Table 101.10 and new subsections 101.10.1 through 101.10.3.2, to read as follows:

101.10 Mandatory requirements. This code contains ~~both~~ the minimum mandatory ~~and voluntary~~ green building measures required per Table 101.10 (Mandatory Green Building Requirements). ~~Mandatory and voluntary measures are identified in the appropriate application checklist contained in this code.~~ All construction in the city must comply with the mandatory measures of the 2025 California Building Standards Code as adopted and in effect, in addition to the local amendments in this Chapter, including:

a. All residential and nonresidential new construction regardless of building height, number of stories, or number of units; and

b. Residential and nonresidential building additions and alterations in existing buildings as described in this Article.

Table 101.10 Mandatory Green Building Requirements

Project Type	Green Building Standards	Energy	Electric readiness	Electric Vehicle Parking[1]	Bird-Safe Glass For Exterior Structure[2]
New Construction: Single-Family Homes, Duplexes, and ADUs[3]	Meet the mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article.	1. Meet the adopted California Energy Code (Title 24, Part 6); 2. Install a heat pump space conditioning system per California Energy Code Sec. 150.1(c)6; 3. Install a heat pump water heater system per California Energy code Sec. 150.1(c)8.A; 4. Install photovoltaic (PV) per California Energy Code Sec. 150.1(c)14; and 5. Must be battery energy storage system (BESS) ready per California Energy Code Sec. 150.0(s).	Electric readiness improvements are required for any gas or propane appliance installed per Sec. 8.74.05.	1. Install one (1) EVCS Level 2 (208/240 Volt) rated at a minimum of 40 amperes per Sec. 8.72.05; and 2. Any additional parking space shall be EV Ready Level 1.	Not Required.
New Construction: Multifamily Residential[4]	1. Meet the mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article; and 2. Meet the intent of LEED® Gold certification or the minimum requirements of the applicable zoning, whichever is more stringent.	1. Meet the adopted California Energy Code (Title 24, Part 6); 2. Install individual unit and central heat pump water heater systems per California Energy Code Sec. 170.2(d); 3. Install photovoltaic (PV) per California Energy Code Sec. 170.2(f) or 170.2(g), depending on building stories; and 4. Install a battery energy storage system (BESS) per California Energy Code Sec. 170.2(h), if more than three stories.	Electric readiness improvements are required for any gas or propane appliance installed per Sec. 8.74.05.	Per Sec. 8.72.20: 1. Install EVCS Level 2 as a percentage of the total number of parking spaces (assigned, unassigned or common area), of which a min. of 25% of the EVCS spaces must be located in the unassigned or common use parking area(s): i. 20 units or less: 40% of total ii. 21 units or more: 15% of total 2. Each parking space serving a dwelling unit must be EV Ready Level 2 (min. 1 per unit); 3. Install (1) EVCS Level 3/DC Fast Charger per 100 spaces, or portion thereof; and 4. All remaining parking spaces shall be EV Ready Level 1.	If required by zoning (e.g. Precise Plan) and a building of 10,000 square feet or more in size, then must comply with California Green Building Standards Code (Title 24, Part 11), Appendix A5, Section A5.107 (Bird-Friendly Building Design).

Table 101.10 Mandatory Green Building Requirements

Project Type	Green Building Standards	Energy	Electric readiness	Electric Vehicle Parking[1]	Bird-Safe Glass For Exterior Structure[2]
New Construction: Nonresidential[5] and Mixed-Use	1. Meet the mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article; and 2. Meet the intent of LEED® Gold certification or the minimum requirements of the applicable zoning, whichever is more stringent.	1. Meet the adopted California Energy Code (Title 24, Part 6); 2. Install photovoltaic (PV) per California Energy Code Sec. 140.10(a); and 3. Install a battery energy storage system (BESS) per California Energy Code Sec. 140.10(b).	**For Nonresidential:** Electric readiness improvements are required for any gas or propane appliance installed per Sec. 8.84.05. **For Mixed-Use:** Electric readiness improvements are required per Nonresidential and Multifamily Residential standards for each applicable portion of the project as indicated in this Table and Article.	**For Nonresidential:** Install EV parking per Sec. 8.82.05; and **For Mixed-Use:** Install EV parking per the Nonresidential and Multifamily Residential standards as noted for each applicable portion of the project in this Table and Article.	Building(s) of 10,000 sq. ft. or greater in size must comply with California Green Building Standards Code (Title 24, Part 11), Appendix A5, Section A5.107 (Bird-Friendly Building Design).
New Construction: Hotel/Motel	1. Meet the mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article; and 2. Meet the intent of LEED® Gold certification or the minimum requirements of the applicable zoning, whichever is more stringent.	1. Meet the adopted California Energy Code (Title 24, Part 6); 2. Install photovoltaic (PV) per California Energy Code Sec. 140.10(a); and 3. Install a battery energy storage system (BESS) per California Energy Code Sec. 140.10(b).	Electric readiness improvements are required for any gas or propane appliance installed per Sec. 8.74.05.	Per Sec. 8.72.15: 1. Install EVCS Level 2 for 25% of total spaces available for employee, guest and visitor use; 2. EV Ready Level 2 required for 40% of total spaces; 3. Install (1) EV Level 3/DC Charger per 100 spaces, or portion thereof; 4. All remaining spaces shall be EV Ready Level 1.	Building(s) of 10,000 sq. ft. or greater in size must comply with California Green Building Standards Code (Title 24, Part II), Appendix A5, Section A5.107 (Bird-Friendly Building Design)
Additions & Alterations: Single-Family, Duplexes, ADUs[3]	Meet the applicable mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article.	1. Meet the adopted California Energy Code (Title 24, Part 6); 2. When an additional water heater is installed, must be heat pump per California Energy Code Sec. 150.2(a)1.D.	1. Electric readiness improvements are required for any gas or propane appliance installed or replaced per Sec. 8.74.05. 2. If project includes installing or replacing space	Any additional new parking space or electrical panel upgrade installed must meet Sec. 8.72.10.	Not Required.

Table 101.10 Mandatory Green Building Requirements

Project Type	Green Building Standards	Energy	Electric readiness	Electric Vehicle Parking[1]	Bird-Safe Glass For Exterior Structure[2]
			conditioning (cooling), must be heat pump or heat pump ready per Sec. 8.92.05.		
Additions & Alterations: Multifamily Residential[4]	Meet the applicable mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article.	Meet the adopted California Energy Code (Title 24, Part 6).	Electric readiness improvements are required for any gas or propane appliance installed or replaced per Sec. 8.74.05.	When parking facilities are altered or new parking added and the work requires a permit, each parking space added or altered shall have access to a EV Level 2 receptacle or charger per California Green Building Standards Code (Title 24, Part 11) Sec. 4.106.4.3.	If required by zoning (e.g. Precise Plan) and an addition or replacement of 50% or more of exterior glazing on building(s) of 10,000 sq. ft. or greater in size, then must comply with California Green Building Standards Code (Title 24, Part II), Appendix A5, Section A5.107 (Bird-Friendly Building Design)
Additions & Alterations: Nonresidential[5] and Mixed-Use	Meet the applicable mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Article.	Meet the adopted California Energy Code (Title 24, Part 6).	Electric readiness improvements are required for any gas or propane appliance installed or replaced per Sec. 8.74.05 and Sec. 8.84.05, as applicable.	Existing buildings or parking facilities being modified consistent with California Green Building Standards Code (Title 24, Part 11) Sec. 5.106.5.4, must install EV parking according to this Section.	Addition or replacement of 50% or more of exterior glazing on building(s) of 10,000 sq. ft. or greater in size must comply with California Green Building Standards Code (Title 24, Part II), Appendix A5, Section A5.107 (Bird-Friendly Building Design)
Additions & Alterations: Hotel/Motel	Meet the applicable mandatory measures of the adopted California Green Building Standards Code (Title 24, Part 11), inclusive of local amendments in this Chapter	Meet the adopted California Energy Code (Title 24, Part 6)	Electric readiness improvements are required for any gas or propane appliance installed or replaced per Sec. 8.74.05.	When parking facilities are altered or new parking added and the work requires a permit, each parking space added or altered shall have access to a EV Level 2 receptacle or charger per California Green Building Standards Code (Title 24, Part 11) Sec. 4.106.4.3.	Addition or replacement of 50% or more of exterior glazing on building(s) of 10,000 sq. ft. or greater in size must comply with California Green Building Standards Code (Title 24, Part II), Appendix A5,

Table 101.10 Mandatory Green Building Requirements

Project Type	Green Building Standards	Energy	Electric readiness	Electric Vehicle Parking[1]	Bird-Safe Glass For Exterior Structure[2]
					Section A5.107 (Bird-Friendly Building Design)

Notes:
[1] Calculation for spaces shall be rounded up to the nearest whole number.
[2] If there is conflict between Appendix A5.107 and bird safe regulations in the applicable zoning (e.g. Precise Plan), then the more stringent regulation will govern.
[3] Exceptions may apply per State law.
[4] Multifamily includes three (3) or more residential units.
[5] Nonresidential includes Commercial, Industrial, Restaurants, Retail & Warehouse.

101.10.1 Alternate green building requirements. If an applicant proposes to use an alternate green building standard not included in this code, the applicant must demonstrate that the alternate standard is, at minimum, equivalent to the referenced standard in terms of criteria, scope, and certification process. The building official must approve the alternate standard prior to permit issuance.

101.10.2 Certification. The city does not require projects to be certified by a third-party green building organization unless certification is required per zoning regulations (e.g. Precise Plan) or a condition of approval for a zoning permit. Applicants must demonstrate the project meets the intent of the required standard through documentation and verification consistent with the criteria and documentation process of the respective green building rating system. This includes meeting all mandatory prerequisites and minimum point of totals of each category, if required by the rating system.

101.10.3 Hardship or infeasibility exemption. If a circumstance exists that make it a hardship or infeasible to meet the requirements of this code, the applicant may request an exemption. The applicant must still comply with the mandatory measures of the California Green Building Standards Code and can only receive an exemption from local city amendments. In applying for an exemption, the burden is on the applicant to show hardship or infeasibility, where no reasonable alternative that meets the intent of the code requirement can be met. An exemption will only be granted in unusual circumstances where, due to exceptional characteristics of the structure or property involved, a literal enforcement of this code will result in practical difficulties or unnecessary hardships, provided that no such exception will be contrary to the intent of this code.

101.10.3.1 Proof of hardship or infeasibility. The applicant shall submit a letter indicating the maximum threshold of compliance that is feasible for the project and the circumstances that create a hardship or make it infeasible to comply fully with this code, including any alternatives considered but not feasible.

101.10.3.2 Approval or denial of exemption. The building official will review the materials submitted per Section 101.10.3.1 and determine if it is infeasible for the project to comply fully with this code and approve an alternative requirement. This alternative requirement can be the amount of green building measures required. For all approved exemptions, the project must continue to comply with the minimum requirements of the adopted California Green Building Standards Code (Title 24, Part 11) and the California Energy Code (Title 24, Part 6).

SEC. 8.64.30. - Submittal documents.

Subsection 102.1 of the 2025 California Green Building Standards Code is amended to read as follows:

102.1 Submittal documents. Construction documents, plans, and other data shall be submitted ~~in one or more sets~~ with each application for a permit. Where special conditions exist,

the enforcing agency is authorized to require additional construction documents to be prepared by a licensed design professional and may be submitted separately.

When submitting for a permit for a project regulated by this code, the applicant shall submit the following materials:

a. The appropriate completed green building checklist;

b. Project construction documentation (plans and specifications) that verifies incorporation of the design and construction-related credits;

c. A letter of acknowledgement from the applicant, licensed professional, or qualified green building professional indicating the project has been designed to achieve the sustainability standards defined in this code and in accordance with the approved green building checklist. The letter shall indicate the number of points the project has been designed to achieve;

d. Any additional documentation such as maps, calculations, or product information that would be required by the U.S. Green Building Council's Green Building Certification Institute for LEED™ certification or by Build It Green for GreenPoint Rated certification or the applicable green building system; and

e. Any additional information relevant to determine a good-faith effort has been made to comply with this code.

Exception: The enforcing agency is authorized to waive the submission of construction documents and other data not required to be prepared by a licensed design professional.

SEC. 8.64.35. - Certification and verification.

Add new subsections 102.3.1 through 102.3.3 to subsection 102.3 (Verification) of the 2025 California Green Building Standards Code to read as follows:

102.3.1 Self-verification. The burden of proving compliance with this code is on the applicant. The verification professional must provide evidence of adequate green building compliance or documentation to the city to satisfy the requirements of this code.

102.3.2 Verification professional. The applicant or industry professional filing on behalf of the applicant must be the individual who verifies the project complies with the requirements of this code.

a. For residential additions and nonresidential tenant improvements, including mixed-use, regulated by this code, this individual can be a licensed industry professional, an authorized tenant, or the property owner.

b. For all nonresidential and residential new construction projects regulated by this code, this individual must be a qualified green building professional with an industry license, such as an architect or contractor, or a professional with similar qualifications acceptable to the building official.

101.3.3 Noncompliance. If, as a result of any inspection, the city determines the project does not or is unlikely to comply with the approved plans or green building program, a stop work order shall be issued if the building inspector determines that continuation of construction activities will lessen the project's ability to meet the required compliance threshold. The stop work order shall remain in effect until the building official determines the project will be brought into compliance with the approved plans and/or verification documents.

DIVISION 3. DEFINITIONS

SEC. 8.66.05. - Definitions.

Section 202 of the 2025 California Green Building Standards Code is amended to add, or modify, the following definitions to read as follows:

Section 202 – Definitions.

ALTERNATE GREEN BUILDING STANDARD. A private, third-party green building rating system not explicitly referenced in this code that achieves green building goals through a comprehensive checklist of requirements. To use an alternate standard, the applicant must prove it is at least equivalent to the referenced green building standard.

APPLICANT. Any entity or any subsequent owner of the site that applies to the city for the applicable permits to undertake any project types regulated by this code.

AREA OF IMPROVEMENT. The area (in square feet) where interior building improvements are proposed. Such improvements can include, but are not limited to, painting, installing carpet or flooring, and replacing or upgrading mechanical, electrical, or plumbing systems.

AUTOMATIC LOAD MANAGEMENT SYSTEM (ALMS). [BSC-CG, DSA-SS and HCD] A system designed to manage load across one or more electric vehicle supply equipment (EVSE) to share electrical capacity and/or automatically manage power at each connection point.

BUILDING OFFICIAL. Means the chief building official, or duly authorized representative, in the city of mountain view.

CITY. City means the City of Mountain View.

DC FAST CHARGER. A DC Fast Charger (DCFC) is equivalent to an EV Level 3 charging station.

ELECTRIC VEHICLE (EV) CAPABLE SPACE. [BSC-CG, DSA-SS and HCD] A vehicle space with electrical panel space and load capacity to support a branch circuit and necessary raceways, both underground and/or surface mounted, to support EV charging.

ELECTRICAL VEHICLE CHARGING SPACE (EV SPACE). [HCD] A space intended for future installation of EV charging equipment and charging of electric vehicles.

ELECTRICAL VEHICLE CHARGING STATION (EVCS). [BSC-CG, DSA-SS, HCD] One or more electric vehicle charging spaces served by EVSE or receptacle(s).

ELECTRIC VEHICLE (EV) READY SPACE. [HCD] A vehicle space which is provided with a branch circuit; any necessary raceways, both underground and/or surface mounted; to accommodate EV charging, terminating in a receptacle or a charger.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). [BSC-CG, DSA-SS, HCD] The conductors, including the ungrounded, grounded and equipment grounding conductors and the electric vehicle connectors, attachment plugs, personnel protection system, and all other fittings, devices, power outlets or apparatus installed specifically for the purpose of transferring energy between the premises wiring and the electric vehicle.

ENFORCING AGENCY. The designated department or agency as specified by statute or regulations, which, when referring to the local jurisdiction, is the building division of the community development department in the city of mountain view.

FOR-PROFIT KITCHEN. A commercial kitchen in a restaurant, not established to provide goods to an office building or campus, and that is open to the general public during all business hours of operation.

GREEN BUILDING CERTIFICATION INSTITUTE (GBCI™). Oversees and administers the building certifications and professional designations for the U.S. Green Building Council's LEED® Green Building Rating Systems.™

GREEN BUILDING CERTIFICATION INSTITUTE (GBCI™). Oversees and administers the building certifications and professional designations for the U.S. Green Building Council's LEED® Green Building Rating Systems.™

GREEN POINT RATED (GPR). Refers to a residential green building rating system developed by Build It Green. Projects can use any of the adopted GPR checklists that most appropriately apply to the project type proposed.

KITCHEN, INSTITUTIONAL COMMERCIAL. Refers to a kitchen dedicated to a food-service establishment that provides meals at institutions, including schools, colleges and universities, hospitals, correctional facilities, private cafeterias, nursing homes and other buildings or structures in which care or supervision is provided to occupants.

KITCHEN, QUICK-SERVICE COMMERCIAL. Refers to a kitchen dedicated to an establishment primarily engaged in providing fast food, fast casual, or limited services. Food and drink may be consumed on premises, taken out, or delivered to the customer's location.

LEADERSHIP IN ENERGY AND ENVIRONMENTAL DESIGN (LEED®). Refers to a green building rating system developed by the U.S. Green Building Council for residential and nonresidential projects. Projects can use any of the adopted LEED® checklists that most appropriately apply to the project type proposed.

LEVEL 1 ELECTRIC VEHICLE (EV) CHARGING RECEPTACLE. [DSA-SS] A 120-volt 20-ampere minimum branch circuit and a receptacle.

LEVEL 2 ELECTRIC VEHICLE (EV) CHARGER. [BSC-CG, HCD] A 208/240-volt 30-ampere minimum electric vehicle charger connected to the premises electrical system capable of charging electric vehicles.

LEVEL 2 ELECTRIC VEHICLE SUPPLY EQUIPMENT. [BSC-CG, DSA-SS, HCD] The 208/240-volt 40-ampere branch circuit, and the electric vehicle charging connectors, attachment plugs and all other fittings, devices, power outlets or apparatus installed specifically for the purposes of transferring energy between the premises wiring and the electric vehicle.

MEET THE INTENT. To demonstrate compliance with the green building requirements of LEED® or GPR without formally submitting documentation to the U.S. Green Building Council's Green Building Certification Institute or Build It Green for verification and certification. The applicant must follow the approaches and procedures in the guidebook or reference guides for respective rating systems and submit the required documentation and verification materials as outlined in Section 102 of this code to the building division of the community development department. This includes meeting all mandatory prerequisites and minimum point totals of each category, if required per the rating system.

MIXED-USE. The construction of a building or buildings that include both nonresidential and residential uses.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) ~~does not~~ includes either:

1. a new structure, or

2. any additions, alterations, or ~~repairs~~ improvements to existing structures where greater than fifty (50) percent of the sum total of the following structural elements are added, removed, replaced or relocated within a 3-year period: (1) footings and foundation; (2) roof-framing; and (3) exterior walls.

NONRESIDENTIAL BUILDING. Any building constructed or occupied for a use other than residential, which may include, but is not limited to, commercial or hotel/motel uses.

PROJECT. Any proposed development that is regulated by this code.

QUALIFIED GREEN BUILDING PROFESSIONAL. A licensed professional, such as an architect or contractor, trained through the Green Building Certification Institute as a LEED® AP; or through Build It Green as a certified green building professional, or similar qualifications if acceptable to the chief building official.

SELF-VERIFICATION. Verification by the applicant or a qualified green building professional that the project has met the standards as indicated for the project type set forth in this code.

SQUARE FEET (GROSS). The gross square footage of a structure includes all floor area enclosed within the walls of the structure (measured from the outside perimeter of the wall).

TENANT IMPROVEMENTS. Any owner or authorized agent who intends to enlarge, alter or change the occupancy of a building or structure, or to erect, enlarge, alter or convert any electrical, gas, mechanical, or plumbing system, the installation of which is regulated by the California Building Codes, Title 24, or to cause any such work to be done, shall obtain the required permit and must comply with the requirements included in this code.

ZONING PERMIT. Any discretionary permit approval from the planning division of the community development department that includes conditions of approval.

DIVISION 4. PHASED PROJECTS - TENANT IMPROVEMENTS

SEC. 8.68.05. - Phased Projects – Tenant Improvements.

Subsection 303.1.1 of the 2025 California Green Building Standards Code is amended to read as follows:

303.1.1 ~~Initial t~~Tenant improvements. The provisions of this code shall apply to ~~the initial~~ all applicable tenant improvements ~~to~~ in a project. ~~Subsequent tenant improvements shall comply with the scoping provisions in Section 301.3 nonresidential additions and alterations.~~

DIVISION 5. RESIDENTIAL STORMWATER DRAINAGE AND RETENTION REQUIREMENTS

SEC. 8.70.05. - Storm water drainage and retention during construction – residential projects less than 1 acre.

Subsection 4.106.2 of the 2025 California Green Building Standards Code is amended to read as follows:

4.106.2 Storm water drainage and retention during construction. Projects which disturb less than one acre of soil and are not part of a larger plan of development which in total disturbs one acre or more, shall manage storm water drainage during construction. In order to manage storm water drainage during construction, one or more of the following measures shall be implemented to prevent flooding of adjacent property, prevent erosion, and retain soil runoff on the site.

1. Retention basins of sufficient size shall be utilized to retain storm water on the site.

2. Where stormwater is conveyed to a public drainage system, collection point, gutter or similar disposal method, water shall be filtered by use of a barrier system, wattle or other method approved by the enforcing agency.

3. ~~Compliance with a lawfully enacted storm water management ordinance.~~ Stormwater pollutant control measures must be installed at construction sites year round in compliance with Chapter 35 Sec. 35.33.11.1(t) of the City Code. The storm water pollutant control measures listed in the ordinance include erosion control, run-on and runoff control, sediment control, active treatment (as appropriate), good site management, and nonstormwater management through all phases of construction until the site is fully stabilized by landscaping or the installation of permanent erosion control measures.

DIVISION 6. RESIDENTIAL ELECTRIC VEHICLE CHARGING REQUIREMENTS

SEC. 8.72.05. - Electrical vehicle charging for one- and two-family dwellings, accessory dwelling units, and townhouses with attached private garages – new construction.

Subsection 4.106.4.1 of the 2025 California Green Building Standards Code is deleted and replaced with subsection A4.106.8.1 in Appendix A4, as a mandatory measure, amended to read as follows:

4.106.4.1. New construction one- and two-family dwellings, accessory dwelling units, and townhouses with attached private garages. For each dwelling unit, a dedicated 208/240-volt branch circuit shall be installed in the raceway ~~required by Section 4.106.4.1~~. The raceway shall not be less than trade size 1 (nominal 1-inch inside diameter). The raceway shall originate at the main service panel or subpanel and shall terminate into a listed cabinet, box, or other enclosure in close proximity to the proposed location of an EV charger. Raceways are required to be continuous at enclosed, inaccessible or concealed areas and spaces. The branch circuit and associated overcurrent protective device shall be rated at 40 amperes minimum (Level 2 EVSE). Other electrical components, including a receptacle or blank cover, related to this section shall be installed in accordance with the California Electrical Code. All other parking shall be Level 1 EV-ready.

SEC. 8.72.10. - Electric vehicle charging for existing one- and two-family dwellings, accessory dwelling units, and townhouses with attached private garages – additions and alterations.

Add a new subsection 4.106.4.1.2 to subsection 4.106.4.1 (New One- and Two-Family Dwellings and Townhouses with Attached Private Garages) in the 2025 California Green Building Standards Code to read as follows:

4.106.4.1.2 Additions and alterations to existing single-family dwellings, duplexes, accessory dwelling units and townhomes with private garages. Any of the following work that requires a building permit must have reserved breaker space(s) and electrical capacity to accommodate a future dedicated 208/240-volt branch circuit, including the raceway requirements in accordance with Section 8.72.05 of this Chapter:

a. An addition of new covered parking to an existing covered parking structure (e.g. carport or garage);

b. A new, reconstructed or expanded covered parking structure; or

c. An electrical panel upgrade as part of an alteration or addition to an existing dwelling.

SEC. 8.72.15. - Electric vehicle charging for new multifamily residential, hotels, and motels – new construction.

Subsection 4.106.4.2 of the 2025 California Green Building Standards Code is amended to read as follows:

4.106.4.2 New construction multifamily dwellings, hotels and motels and new residential parking facilities. When parking is provided, parking spaces for new multifamily dwellings~~, hotels and motels~~ shall meet the requirements of Section 4.106.4.2.2, as amended per Sec. 8.72.20, and hotels and motels shall meet the requirements of Section 4.106.4.2.6. Calculations for spaces shall be rounded up to the nearest whole number. A parking space served by electric vehicle supply equipment or designed as an EV charging space shall count as at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements established by a local jurisdiction. See Vehicle Code Section 22511.2 for further details.

SEC. 8.72.20. - Electric vehicle charging requirements for multifamily residential dwellings – new construction.

Subsection 4.106.4.2.2 of the 2025 California Green Building Standards Code is amended to read as follows:

4.106.4.2.2 Multifamily dwellings.

1. **Required EV ready parking spaces with receptacles:~~.~~**

a. **~~Multifamily p~~Parking facilities with assigned parking**. Where dwelling units are provided with assigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an assigned parking space for each dwelling unit.

1. Where the total number of dwelling units exceeds the number of assigned parking spaces, all assigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

~~**Exception:** Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.~~

b. **~~Multifamily p~~Parking facilities with unassigned parking.** Where dwelling units are provided with unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle shall be provided at an unassigned parking space for each dwelling unit.

1. Where the total number of dwelling units exceeds the number of unassigned parking spaces, all unassigned parking spaces shall be provided with one low power Level 2 EV charging receptacle.

~~**Exception:** Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.~~

c. **~~Multifamily p~~Parking facilities with assigned and unassigned parking.** Where multifamily buildings are provided with both assigned and unassigned parking spaces equal to or greater than the number of dwelling units, at least one low power Level 2 EV charging receptacle charger shall be provided for each dwelling unit at either the assigned or unassigned parking space, ~~but not both~~ such that the total number of EV charging receptacles installed is not less than the total number of dwelling units and that each unit has access to an EV charging space.

d. **Receptacle power source.** EV charging receptacles in multifamily parking facilities at assigned parking spaces shall be provided with a dedicated branch circuit connected to the dwelling unit's electrical panel, unless determined as infeasible by the project builder or designer and subject to concurrence ~~of the local enforcing agency~~ by the building official.

~~**Exception:** Areas of parking facilities served by parking lifts including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.~~

e. **Receptacle configurations.** 208/240 EV charging receptacles shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R

2. For 30-ampere receptacles, NEMA 12-30R

3. For 50-ampere receptacles, NEMA 14-50 R

Exception for 1, subsections a, b, and d: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

2. **Required EVCS ~~ready~~ parking spaces to be installed with EV chargers.**

a. **~~Multifamily p~~Parking facilities with unassigned or common use parking.** In addition to the low power Level 2 EV charging receptacle requirements of Section 4.106.4.2.2(1), the following EVCS shall be installed:

i. For properties with 20 units or less, forty (40) percent of total parking spaces must have an EVCS Level 2 EV charger installed, with a minimum of twenty five (25) percent of unassigned or common use parking spaces being installed with EVCS Level 2 and made available for use by all residents or guests.

ii. For properties with 21 or more units, fifteen (15) percent of total parking spaces must have EVCS Level 2 charger installed, with a minimum of twenty five (25) percent of unassigned or common use parking spaces ~~not already provided with low power Level 2 EV charging receptacles, pursuant to Section 4.106.4.2.2(1), shall be equipped with~~ being installed with EVCS Level 2 EV chargers made available for use by all residents or guests.

b. **EV charger connectors.** EV chargers shall be equipped with J1772 or J3400 connectors.

c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

3. **Required EV Level 3/DC Fast Charger.** One (1) Level 3 EV DC Fast Charger is required to be installed for every 100 parking spaces, or fraction of 100 parking spaces thereof, and located in a common use (unassigned) parking area for residents and/or guests for their use.

4. **All remaining parking spaces to be EV Ready.** Any remaining parking spaces not served by EV charging receptacles or chargers, after fulfilling the requirements of subsections 1, 2 and ~~2~~ 3 above, shall be made Level 1 EV Ready.

Exception for 4.106.4.2.2: In accordance with Government Code Section 65863.2(f), for new multi-family residential and nonresidential development on properties located within one-half (1/2) mile of a major transit stop as defined in Section 21155 of the Public Resources Code, the "total number of actual parking spaces" for purposes of this table and determination of the number of EV-capable spaces is based on the minimum number of parking spaces that, absent Government Code Section 658363.2, would otherwise be required for the development per Chapter 36 of this Code.

SEC. 8.72.25. - Electric vehicle charging requirements for hotels and motels – new construction.

Subsection 4.106.4.2.6 of the 2025 California Green Building Standards Code is amended to read as follows:

4.106.4.2.6 Hotels and motels.

1. Required EV ready parking spaces with receptacles~~.~~:

a. **Hotels and motels.** Forty (40) percent of the total number of parking spaces shall ~~be equipped with~~ install low power Level 2 EV charging receptables made available for use by hotel employees, guests, and visitors.

Exception: Areas of parking facilities served by parking lifts, including but not limited to automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

b. **Receptacle configurations.** 208/240V EV charging receptables shall comply with one of the following configurations:

1. For 20-ampere receptacles, NEMA 6-20R
2. For 30-ampere receptacles, NEMA 14-30R
3. For 50-ampere receptacles, NEMA 14-50R

2. Required EVCS ~~Ready~~ parking spaces to be installed with EV chargers.

a. **Hotels and motels.** Twenty-five (25) percent of the total number of parking spaces shall ~~be equipped with~~ install Level 2 EV chargers made available to hotel employees, guests, and visitors.

b. **EV charger connectors.** EV chargers shall be equipped with J1772 or J3400 connectors.

Exception: Areas of parking facilities served by parking lifts, including but not limited to, automated mechanical-access open parking garages as defined in the California Building Code; or parking facilities otherwise incapable of supporting electric vehicle charging.

c. An automatic load management system (ALMS) may be used to reduce the maximum required electrical capacity to each space served by the ALMS. The electrical system and any on-site distribution transformers shall have sufficient capacity to deliver at least 3.3 kW simultaneously to each EV charging station (EVCS) served by the ALMS. The branch circuit shall have a minimum capacity of 40 amperes, and installed EV chargers shall have a capacity of not less than 30 amperes.

3. Required EV Level 3/DC Fast Charger. One (1) Level 3 EV/DC Fast Charger is required to be installed for every 100 parking spaces, or fraction of 100 parking spaces thereof, and located in a common parking area for hotel employee, guest or visitor use.

4. All remaining parking spaces to be EV Ready. Any remaining parking spaces not served by EV charging receptacles or chargers, after fulfilling the requirements of subsections 1, 2 and 3 above, shall be made Level 1 EV Ready.

Exception for 4.106.4.2.6: In accordance with Government Code Section 65863.2(f), for new multi-family residential and nonresidential development on properties located within one-half (1/2) mile of a major transit stop as defined in Section 21155 of the Public Resources Code, the "total number of actual parking spaces" for purposes of this table and determination of the number of EV-capable spaces is based on the minimum number of parking spaces that, absent Government Code Section 658363.2, would otherwise be required for the development per Chapter 36 of this Code.

DIVISION 7. ELECTRIC READINESS REQUIREMENTS – RESIDENTIAL AND HOTELS/MOTELS

SEC. 8.74.05. - Electric readiness for residential construction.

Add new subsections 4.106.5 through 4.106.6.2 to Section 4.106 (Site Development) of the 2025 California Green Building Standards Code to read as follows:

4.106.5 Electric readiness for single-family homes, duplexes, accessory dwelling units, and townhouses with attached garages.

4.106.5.1 Electric ready for one- and two-family dwellings, accessory dwelling units, and townhouses with attached garages – new construction. New construction one- and two-family residential dwellings and townhouse buildings with attached garages shall comply with the following and in accordance with Table 4.106.5.1:

1. **Heat pump space heater ready.** A system(s) using a gas or propane furnace to serve an individual dwelling unit(s) shall meet the requirements of Section 150.0(t) of Title 24, Part 6 and, in addition, include on construction drawings a designated location for a future heat pump compressor unit of a size that can serve the size of the dwelling unit(s) with either a drain installed or natural drainage provided for condensate.

2. **Electric readiness requirements for any system(s) using gas or propane.** Where any system(s) using gas or propane is (are) installed in a dwelling unit or common area, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance that serves the same function, which must be certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

a. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryer, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

b. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance with the same function in accordance with the minimum in Table 4.106.5.1, unless an otherwise specified future electric appliance is proposed in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage and, in all cases, an electrical receptacle or junction box must be located within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

c. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

d. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace"), and positioned on the opposite end of the panel supply conductor connection; and

e. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electrical Code; and

f. Physical space for the future electric appliance(s), including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for the future electric appliance(s) may overlap with non-structural partitions and with the location of currently designed combustion equipment.

Table 4.106.5.1 Minimum Requirements for Electric Ready Appliance

Type of Appliance	Minimum Required Branch Circuit Conductor[2]	Minimum Dedicated Branch Circuit Wiring[3]
Cooking appliances	50 amps	240 volt
Clothes Drver	30 amps	
Fireplace	20 amps	
Fire pit	20 amps	
Heat pump space heater	50 amps	
Water Heater	30 amps	
Pools, Spas, Saunas	Based on manufacturer specifications	
1. An alternative minimum can be proposed in accordance with manufacturer specifications and the California Energy Code. Documentation demonstrating compliance must be submitted with construction drawings at time of building permit application. 2. The branch circuit must comply with all requirements of Section 4.106.5.2. 3. Shall be installed within three (3) feet of the appliance with no obstructions.		

4.106.5.2 Electric readiness for existing one- and two-family dwellings, accessory dwelling units, and townhouses with attached garages – additions and alterations. Existing one- and two-family dwellings, accessory dwelling units, and townhouse buildings where additions or alterations are required to obtain a permit (e.g. building, plumbing, electrical, mechanical) and where a system(s) using gas or propane is being installed (new or replacement), the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, as certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements for an equivalent electric appliance to the gas or propane appliance proposed, but at minimum no less than 120 volt, and per the California Electrical Code, including the appropriate voltage, phase, minimum amperage and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

4. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace") and positioned on the opposite end of the panel supply conductor connection; and

5. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

Exception: Electric ready improvement results in the upsizing of the electrical service panel that would not otherwise be required by the permit scope.

4.106.6 Electric ready for multifamily dwellings, hotels, and motels.

4.106.6.1 Electric ready for multifamily dwellings, hotels, and motels – new construction. All multi-family residential new construction with three (3) units or more and any new construction hotels and motels shall comply with Section 4.106.6.1.1.

4.106.6.1.1 Electric readiness requirements for any system(s) using gas or propane. Where any system(s) using gas or propane is (are) installed in a dwelling unit, hotel or motel room, or common area, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, as certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

4. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace") and positioned on the opposite end of the panel supply conductor connection; and

5. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electrical Code; and

6. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

4.106.6.2 Electric ready for existing multifamily dwellings, hotels, and motels – additions and alterations. Existing multi-family residential buildings with three (3) units or more and any hotels and motels where building additions or alterations are required to obtain a permit (e.g. building, plumbing, electrical, mechanical) and where any system(s) using gas or propane is being installed (new or replacement) in a dwelling unit, hotel or motel room, or common area, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, as certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements for an equivalent electric appliance to the gas or propane appliance proposed, but at minimum no less than 120 volt, and per the California Electrical Code, including the appropriate voltage, phase, minimum amperage and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

4. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace") and positioned on the opposite end of the panel supply conductor connection; and

5. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

Exception: Electric ready improvement results in the upsizing of the electrical service panel that would not otherwise be required by the permit scope.

DIVISION 8. MULTIFAMILY RESIDENTIAL RECYCLING REQUIREMENTS

SEC. 8.76.05. - Recycling by Occupants Requirements.

Subsection 4.410.2 of the 2025 California Green Building Standards Code is amended to read as follows:

4.410.2 Recycling by occupants. When 5 or more multifamily dwelling units are constructed on a building site, provide a readily accessible area(s) that serves all buildings on the site and are identified for the depositing, storage, and collection of nonhazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. This area(s) must be in the same location as the area(s) for depositing trash.

DIVISION 9. RESIDENTIAL FIREPLACE REQUIREMENTS

SEC. 8.78.05. - Gas fireplace requirements.

Subsection 4.503.1 of the 2025 California Green Building Standards Code is amended to read as follows:

4.503.1 General. Any installed gas fireplace shall be a direct-vent sealed-combustion type. Any installed woodstove or pellet stove shall comply with US EPA New Source Performance Standards (NSPS) emissions limits as applicable, and shall have a permanent label indicating they are certified to meet the emission limits. Woodstoves, pellet stoves, and fireplaces shall also comply with applicable local ordinances. See Article II, Division 2 of this Chapter for requirements associated with wood-burning appliances.

DIVISION 10. NONRESIDENTIAL STORMWATER POLLUTION PREVENTION REQUIREMENTS

SEC. 8.80.05. - Stormwater sediment and erosion control plan – less than one acre.

Subsections 5.106.1 through 5.106.1.2 of the 2025 California Building Standards Codes are amended and a new subsection 5.106.1.3 is added to read as follows:

5.106.1 Stormwater pollution prevention for projects that disturb less than one acre of land. Newly constructed projects and additions which disturb less than one acre of land and are not part of a larger common plan of development or sale shall ~~prevent the pollution of stormwater runoff from the construction activities~~ implement a stormwater sediment and erosion control plan that has been designed specific to the project site through ~~one or more of~~ the following measures:

5.106.1.1 ~~Local ordinance~~ Stormwater sediment and erosion control plan. ~~Comply with a lawfully enacted stormwater management and/or erosion control ordinance.~~ The stormwater sediment and erosion control plan shall be developed to provide equivalent protection to projects regulated by California's National Pollutant Discharge Elimination System (NPDES) construction permit (for greater than 1 acre of disturbed land) and Chapter 35 Sec. 35.32.10.1(T) of the City Code. The stormwater pollutant control measures that shall be included in the plan are erosion control, run-on and run-off control, sediment control, advanced treatment (as appropriate), good site management and nonstormwater management through all phases of construction until it is fully stabilized by landscaping or the installation of permanent erosion control measures.

No state permit is required, but construction best management practices, as approved by the city, shall be followed per Sec. 5.106.1.2.

5.106.1.2 Best management practices (BMP's). Prevent the loss of soil through wind or water erosion by implementing an effective combination of erosion and sediment control and good housekeeping BMP's. BMP's include, but are not limited to the following:

1. ~~Soil loss~~ Erosion and sediment control BMP's ~~that should be considered for implementation as appropriate for each project~~ include, but are not limited to, the following:

    a. Scheduling construction activity ~~during dry weather, when possible~~.

    b. Preservation of natural features, vegetation, soil ~~and buggers around surface waters~~.

    c. Drainage swales or lined ditches to control stormwater flow.

    d. Mulching or hydroseeding to stabilize disturbed soils.

    e. Erosion control to protect slopes.

    f. Protection of storm drain inlets (gravel bags or catch basin inserts).

    g. Perimeter sediment control (perimeter silt fence, fiber rolls).

    h. Sediment trap or sediment basin to retain sediment on site.

    i. Stabilized construction exits.

    j. Wind erosion control.

    k. Other soil loss BMP's acceptable to the enforcing agency.

2. Good housekeeping BMP's to manage construction equipment, materials, non-stormwater discharges and wastes ~~that should be considered for implementation as appropriate for each project~~ include, but are not limited to, the following:

~~a. Dewatering activities.~~

~~b~~a. Material handling and waste management.

~~c~~b. Building materials stockpile management.

~~d~~c. Management of washout areas (concrete, paints, stucco, etc.).

~~e~~d. Control of vehicle/equipment fueling to contractor's staging area.

~~f~~e. Vehicle and equipment cleaning performed off site.

~~g~~f. Spill prevention and control.

~~h. Other housekeeping BMP's acceptable to the enforcing agency.~~

5.106.1.3 Postconstruction stormwater control requirements. Postconstruction stormwater controls are required for certain projects as defined and described in Provision C.3 of the Municipal Regional Stormwater NPDES Permit, and Chapter 35 Sec. 35.32.3 of the City Code.

SEC. 8.80.10. - Stormwater sediment and erosion control plan – less than one acre.

Subsection 5.106.2 of the 2025 California Building Standards Codes is amended and a new subsection 5.106.2.1 is added to read as follows:

5.106.2 Stormwater pollution prevention for projects that disturb one or more acres of land. ~~Comply with all lawfully enacted stormwater discharge regulations for p~~Projects that ~~(1)~~ disturb one acre or more of land, or ~~(2)~~ disturb less than one acre of land but are part of a larger common plan of development or sale~~.~~ are required to obtain coverage under the State of California Construction General Permit prior to issuance of a demolition permit or a grading permit from the city. A "Notice of Intent" (NOI) and "Stormwater Pollution Prevention Plan" (SWPPP) shall be prepared and submitted to the state, and proof of coverage under the Construction General Permit shall be submitted to the city.

The NPDES permits require post construction runoff (post-project hydrology) to match the preconstruction runoff (pre-project hydrology) with the installation of postconstruction stormwater management measures. The NPDES permits emphasize runoff reduction through on-site stormwater use, interception, evapotranspiration and infiltration through nonstructural

controls, such as Low Impact Development (LID) practices and conservation design measures. Stormwater volume that cannot be addressed using nonstructural practices is required to be captured in structural practices and be approved by the enforcing agency.

Refer to the current applicable permits on the State Water Resources Control Board website at: www.waterboards.ca.gov/constructionstormwater. Consideration to the stormwater runoff management measures should be given during the initial design process for appropriate integration into site development.

5.106.2.1 Postconstruction stormwater control requirements. Postconstruction stormwater controls are required for certain projects as defined and described in Provision C.3 of the Municipal Regional Stormwater NPDES Permit, and Sec. 35.32.3 of the City Code.

DIVISION 11. ELECTRIC VEHICLE CHARGING - NONRESIDENTIAL

SEC. 8.82.05. - Electric vehicle charging requirements for non-residential development.

Subsection 5.106.5.3.1 of the 2025 California Green Building Standards Code is amended and Table 5.106.5.3.1 – EV Capable Spaces and EVCS is deleted and replaced, to read as follows:

5.106.5.3.1 EV capable spaces. EV capable spaces shall be provided in accordance with Table 5.106.5.3.1 and the following requirements:

1. Raceways complying with the California Electrical Code and no less than 1-inch (25 mm) diameter shall be provided and shall originate at a service panel or a subpanel(s) serving the area, and shall terminate in close proximity to the proposed location of the EV capable space and into a suitable listed cabinet, box, enclosure, or equivalent. A common raceway may be used to serve multiple EV capable spaces.

2. A service panel or subpanel(s) shall be provided with panel space and electrical load capacity for a dedicated 208/240 volt, 40-ampere minimum branch circuit for each EV capable space, with delivery of 30-ampere minimum to an installed EVSE at each EVCS.

3. The electrical system and any on-site distribution transformers shall have sufficient capacity to supply fully rated amperage at each EV capable space.

4. The service panel or subpanel circuit directory shall identify the reserved overcurrent protective device space(s) as “EV CAPABLE.” The raceway termination location shall be permanently and visibly marked as “EV CAPABLE.”

Note: A parking space served by electric vehicle supply equipment or designed as a future EV charging space shall count at least one standard automobile parking space only for the purpose of complying with any applicable minimum parking space requirements

established by ~~an enforcement agency~~ the city. See Vehicle Code Section 22511.2 for further details.

5. **Required EV Fast Charger.** One (1) Level 3 EV DC Fast Charger is required to be installed for every 100 parking spaces, or fraction of 100 parking spaces thereof, and located in a common parking area for employee, guest or visitor use.

6. **All remaining parking spaces to be EV Ready.** Any remaining parking spaces not served by EV charging receptacles or chargers, after fulfilling the requirements of subsections 1 through 5 above, shall be made Level 1 EV Ready.

TABLE 5.105.5.3.1 – REQUIRED NONRESIDENTIAL EVCS, EV CAPABLE, AND EV READY SPACES

TOTAL NUMBER OF ACTUAL PARKING SPACES[1]	NUMBER OF REQUIRED EVCS LEVEL 2[2]	NUMBER OF REQUIRED EV-CAPABLE LEVEL 2 SPACES	NUMBER OF REQUIRED EVCS LEVEL 3 SPACES	NUMBER OF REQUIRED EV READY LEVEL 1 SPACES
1–9	0	3	Not Required.[3]	All remaining spaces must be EV Ready Level 1.
10–25	3	8		
26–50	6	17		
51–75	9	28		
76–100	13	40		
101–150	19	57	Install (1) Level 3 EV/DC Fast Charger for every 100 spaces, or fraction thereof.[4]	
151–200	26	79		
201 and over	Install EVCS at the following percentage of EV capable spaces, based on use[4]: • **Office/Retail Uses:** 75% • **All Other Uses:** 50%	45 percent of total parking spaces[4]		

1. In accordance with Government Code Section 65863.2(f), for new multi-family residential and nonresidential development on properties located within one-half (1/2) mile of a major transit stop as defined in Section 21155 of the Public Resources Code, the "total number of actual parking spaces" for purposes of this table and determination of the number of EV-capable spaces is based on the minimum number of parking spaces that, absent Government Code Section 658363.2, would otherwise be required for the development per Chapter 36 of this Code.
2. At least one Level 2 EVSE shall be provided.
3. Except projects with 100 spaces must install one Level 3/DC Fast Charger.
4. Calculation for spaces shall be rounded up to the nearest whole number.

DIVISION 12. ELECTRIC READINESS REQUIREMENTS – NONRESIDENTIAL

SEC. 8.84.05. - Electric-ready for nonresidential buildings.

Add new subsections 5.106.13 through 5.106.13.2 to Section 5.106 (Site Development) of the 2025 California Green Building Standards Code to read as follows:

5.106.13 Electric-ready for nonresidential buildings.

5.106.13.1 Electric-ready for new nonresidential construction for any system(s) using gas or propane – new construction. Where any system(s) using gas or propane is (are) installed in a nonresidential building, the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, which must be certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

a. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, firepits, fireplaces, and heating equipment for pools, spas, saunas: and

b. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements and the California Electrical Code, including the appropriate voltage, phase, minimum amperage, and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors: and

c. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

d. Reserve circuit breakers in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Water Heater"), and positioned on the opposite end of the panel supply conductor connection; and

e. Any connected subpanels, panelboards, switchboards, busbars and transformers shall be sized to serve the future electric appliance. The electrical capacity requirements shall be adjusted for demand factors in accordance with the California Electrical Code; and

f. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

5.106.13.2 Electric-ready for existing nonresidential buildings – additions and alterations. An existing nonresidential building where a building addition, alteration, or tenant improvement requires a permit (e.g. building, plumbing, electrical, or mechanical) and where any system(s) using gas or propane is being installed (new or replacement), the construction drawings shall indicate electrical infrastructure and physical space accommodating the future installation of an electric equivalent of that appliance, as certified by a registered design professional or licensed electrical contractor, and be installed to comply with:

1. "Appliance" refers to, but is not limited to, indoor or outdoor installations of space-conditioning (heating/cooling) equipment, water-heating equipment, clothes dryers, cooking appliances, fire pits, fireplaces, and heating equipment for pools, spas, saunas; and

2. Branch circuit wiring to be electrically isolated and designed to serve a future electric appliance in accordance with manufacturer requirements for an equivalent electric appliance to the gas or propane appliance proposed, but at minimum no less than 120 volt, and per the California Electrical Code, including the appropriate voltage, phase, minimum amperage and an electrical receptacle or junction box within three (3) feet of the appliance that is accessible with no obstructions. Appropriately sized conduit may be installed in lieu of conductors; and

3. Label both ends of the unused conductors or conduit with "For Future Electrical Appliance"; and

4. Reserve a circuit breaker(s) in the electrical panel for each branch circuit, appropriately labeled for the appliance (e.g., "Reserved for Future Electric Fireplace") and positioned on the opposite end of the panel supply conductor connection; and

5. Physical space for future electric appliances, including equipment footprint, shall be depicted on the construction drawings. The footprint necessary for future electric appliances may overlap with nonstructural partitions and with the location of currently designed combustion equipment.

Exception: Electric ready improvement results in the upsizing of the electrical service panel that would not otherwise be required by the permit scope.

DIVISION 13. RECYCLED WATER REQUIREMENTS

SEC. 8.86.05. - Recycled Water Supply Systems.

Add a new subsection 5.301.1 to Section 5.305 (Water Reuse Systems) of the 2025 California Green Building Standards Code to read as follows:

5.305.1 Recycled water supply systems. Recycled water supply systems shall be installed in accordance with the California Plumbing Code, inclusive of any local amendments as adopted by the city, and Chapter 35, Article V of the City Code.

DIVISION 14. NONRESIDENTIAL RECYCLING REQUIREMENTS

SEC. 8.88.05. - Recycling by Occupants - Nonresidential.

Subsection 5.410.1 of the 2025 California Green Building Standards Code is amended to read as follows:

5.410.1 Recycling by occupants. Provide readily accessible areas that serve the entire building and are identified for the depositing, storage, and collection of non-hazardous materials for recycling, including (at a minimum) paper, corrugated cardboard, glass, plastics, organic waste and metals, or meet a lawfully enacted local recycling ordinance, if more restrictive. This area(s) must be in the same location as the area(s) for depositing trash.

DIVISION 15. NONRESIDENTIAL FIREPLACE REQUIREMENTS

SEC. 8.90.05. - Gas fireplace requirements - nonresidential.

Subsection 5.503.1 of the 2025 California Green Building Standards Code is amended to read as follows:

5.503.1 Fireplaces. Install only a direct-vent sealed-combustion gas or sealed wood-burning fireplace, or a sealed wood stove or pellet stove, and refer to residential requirements in the California Energy Code, Title 24, Part 6, Subchapter 7, Section 150. Woodstoves, pellet stoves and fireplaces shall comply with applicable local ordinances. See Article II, Division 2 of this Chapter for wood-burning appliance requirements.

DIVISION 16. ELECTRIC VEHICLE CHARGING FOR SINGLE-FAMILY DWELLINGS, DUPLEXES, TOWNHOUSES WITH ATTACHED GARAGES, AND ACCESSORY DWELLING UNITS – NEW CONSTRUCTION

SEC. 8.92.05. - Electric vehicle charging for new construction one- and two-family dwellings, townhouses with attached garages, and accessory dwelling units.

Add subsection A4.106.8 in Appendix A4 as a mandatory measure, including subsections A4.106.8.1 (as amended per Sec. 8.72.05 of this Chapter) and A4.106.8.1.1.

DIVISION 17. SPACE CONDITIONING REQUIREMENTS FOR SINGLE-FAMILY DWELLINGS, DUPLEXES, AND ACCESSORY DWELLING UNITS

SEC. 8.94.05. – Space conditioning requirements for one- and two-dwellings and accessory dwelling units – alterations to existing buildings.

Subsections A4.204.1 and A4.204.1.1 in Appendix A4 of the 2025 California Green Building Standards Code are adopted as mandatory measures and amended to read as follows:

A4.204.1 Energy efficiency. Alterations to existing residential buildings shall comply with Section~~s~~ A4.204.1.1 ~~and A4.204.1.2~~.

A4.204.1.1 Altered space-conditioning system serving existing single-family dwelling units – mechanical cooling. When a space-conditioning system serving an existing single-family dwelling unit is altered in climate zone 4 (Mountain View) by installation or replacement of an air conditioner, the altered system shall comply with either a or b below in addition to the requirements for installation specified by Title 24, Part 6, Sections 150.2(b)1E and 150.2(b)1F:

a. A heat pump shall be the primary heating source and sized according to the system selection requirements specified by Title 24, Part 6 of Section 150.0(h)5. Supplemental heating may be provided by a~~n existing~~ gas furnace or ~~existing~~ electric resistance heating as specified in Title 24, Part 6, Sections 150.0(h)7 and 150.0(i); or

b. An air conditioner shall meet ~~the following~~ all the requirements in either subsection I or II below:

I. Systems with Existing Duct Distribution Systems:

~~I. R-8 duct insulation for ducts located in unconditioned space; and~~

A. ~~II.~~ The duct system measured air leakage shall be equal to or less than ~~5~~10 percent of the system air handler airflow as confirmed through field verification and diagnostic testing, per the requirements in Title 24, Part 6, Reference Residential Appendix Section RA3.1.4.3.1; and

Exception 1 to A4.204.1.1.b.I.A.: If it is not possible to meet the duct sealing requirements, all accessible leaks shall be sealed and verified through a visual inspection and a smoke test by a certified ECC-Rater utilizing the methods specified in Reference Residential Appendix Section RA3.1.4.3.5.

Exception 2 to A4.204.1.1.b.I.A.: Existing duct systems, constructed, insulated or sealed with asbestos.

B. ~~III.~~ Demonstrate, in every control mode, airflow greater than or equal to ~~400~~ 300 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.45 W/CFM. The airflow rate and fan efficacy requirements

in this section shall be confirmed through field verification and diagnostic testing, following the procedures outlined in Title 24, Part 6, Reference Residential Appendix RA3.3; and

Exception 1 to A4.204.1.1.b.I.B.: Systems unable to comply with the minimum airflow rate and system efficacy requirements shall demonstrate compliance by satisfying all of the following:

1. Following the procedures in Section RA3.3.3.1.5;

2. Installing a system thermostat that conforms to the specifications in Section 110.12;

3. For standard ducted systems (without zoning dampers), meet the applicable minimum total return filter grille nominal area requirements in Table 150.0-B or 150.0-C as confirmed by field verification and diagnostic testing in accordance with the procedures in Reference Residential Appendix Sections RA3.1.4.4 and RA3.1.4.5. The design clean-filter pressure drop requirements specified by Section 150.0(m)12D for the system air filter(s) shall conform to the requirements given in Tables 150.0-B and 150.0-C.

Exception 2 to Section A4.204.1.1.b.I.B.: Multispeed compressor systems or variable speed compressor systems shall verify air flow (cfm/ton) and fan efficacy (Watt/cfm) for system operation at the maximum compressor speed and the maximum air handler fan speed.

Exception 3 to Section A4.204.1.1.b.I.B.: Gas furnace air-handling units manufactured prior to July 3, 2019 shall comply with a fan efficacy value less than or equal to 0.58 W/cfm as confirmed by field verification and diagnostic testing in accordance with the procedures given in Reference Residential Appendix RA3.3.

C. ~~IV.~~ In all climate zones, refrigerant charge verification requirements shall meet the requirements in Title 24, Part 6 Section 150.2(b)1Fiib, including the minimum airflow rate specified in Section 150.2(b)1Fiia; and

D. ~~V.~~ Vented attics shall have insulation installed to achieve a U-factor of 0.020 or insulation installed at the ceiling level shall result in an insulated thermal resistance of R-49 or greater for the insulation alone; luminaires not rated for insulation contact must be replaced or retrofitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception 1 to Section A4.204.1.1.(b).I.D.: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1.(b).I.D.: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.(b).I.D.: Dwelling units with knob and tube wiring located in the vented attic.

Exception 4 to Section A4.204.1.1.(b).I.D.: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

E. ~~VI.~~ Air seal all accessible areas of the ceiling plane between the attic and the conditioned space including all joints, penetrations and other openings that are potential sources of air leakage by caulking, gasketing, weather-stripping or otherwise sealing to limit infiltration and exfiltration.

Exception 1 to Section A4.204.1.1.b.I.E.: Dwelling units with at least R-38 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1.b.I.E.: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.I.E.: Dwelling units with atmospherically vented space heating or water heating combustion appliances located inside the pressure boundary of the dwelling unit.

II. Entirely New or Complete Replacement Duct Systems:

A. R-8 duct insulation shall be installed for all new ducts located in unconditioned space; and

B. The total duct system measured air leakage shall be equal to or less than 5 percent of the system air handler airflow as confirmed through field verification and diagnostic testing, per the requirements in Title 24, Part 6, Reference Residential Appendix Section RA3.1.4.3.1; and

C. Demonstrate, in every control mode, airflow greater than or equal to 350 CFM per ton of nominal cooling capacity through the return grilles, and an air-handling unit fan efficacy less than or equal to 0.35 W/CFM. The airflow rate and fan efficacy requirements in this section shall be confirmed through field verification and diagnostic testing, following the procedures outlined in Title 24, Part 6, Reference Residential Appendix RA3.3; and

D. In all climate zones, refrigerant charge verification requirements shall meet the requirements in Title 24, Part 6 Section 150.2(b)1Fiib; and

E. In Climate Zone 4 (Mountain View), if the air handler and ducts are located within a vented attic, vented attics shall have insulation installed to achieve a U-factor of 0.020 or insulation installed at the ceiling level shall result in an insulated thermal resistance of R-49 or greater for the insulation alone; luminaires not rated for insulation contact must be replaced or retrofitted with a fireproof cover that allows for insulation to be installed directly over the cover; and

Exception 1 to Section A4.204.1.1.b.II.E: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 2 to Section A4.204.1.1.b.II.E: Dwelling units with knob and tube wiring located in the vented attic.

Exception 3 to Section A4.204.1.1.b.II.E.: Where the accessible space in the attic is not large enough to accommodate the required R-value, the entire accessible space shall be filled with insulation provided such installation does not violate Section 806.3 of Title 24, Part 2.5.

F. In Climate Zone 4 (Mountain View), air seal all accessible areas of the ceiling plane between the attic and the conditioned space including all joints, penetrations and other openings that are potential sources of air leakage by caulking, gasketing, weather-stripping or otherwise sealing to limit infiltration and exfiltration.

Exception 1 to Section A4.204.1.1.b.II.F.: Dwelling units with at least R-19 existing insulation installed at the ceiling level.

Exception 2 to Section A4.204.1.1b.II.F.: Dwelling units where the alteration would directly cause the disturbance of asbestos unless the alteration is made in conjunction with asbestos abatement.

Exception 3 to Section A4.204.1.1.b.II.F.: Dwelling units with atmospherically vented space heating or water heating combustion appliances located inside the pressure boundary of the dwelling unit.

Exception 1 to Section A4.204.1.1: Where the capacity of the existing main electrical service panel is insufficient to supply the electrical capacity of a heat pump and where the existing main electrical service panel is sufficient to supply a new or replacement air conditioner, as calculated according to the requirements of California Electrical Code Article 220.83 or Article 220.87. Documentation of electrical load calculations in

accordance with Article 220 must be submitted to the enforcement agency prior to permitting for both the heat pump and proposed air conditioner.

Exception 2 to Section A4.204.1.1: Where the required capacity of a heat pump to meet the system selection requirements of Section 150.0(h)5 is greater than or equal to 12,000 Btu/h more than the greater of the required capacity of an air conditioner to meet the design cooling load or the capacity of the existing air conditioner. Documentation of heating and cooling load calculations in accordance with 150.0(h) must be submitted to the enforcement agency prior to permitting for both the heat pump and proposed air conditioner.

DIVISION 18. BIRD-SAFE GLASS REQUIREMENTS (APPENDIX A5)

SEC. 8.96.05. Bird-safe glass requirements.

Add Section A5.107 (Bird-Friendly Building Design) of Appendix A5 of the 2025 California Green Building Standards Code, inclusive of subsections A5.107.1 through A5.107.3.1, as mandatory measures to be adopted by reference in their entirety.

ARTICLE XIII. DANGEROUS BUILDING CODE

DIVISION 1. PURPOSE AND CODE ADOPTION

SEC. 8.98.05. - Purpose.

The purpose of this Article is to provide procedures for the abatement of buildings deemed to be a danger to the life, limb, health, property, safety and welfare of the general public.

SEC. 8.98.10. - Adoption of the Uniform Code for the Abatement of Dangerous Buildings.

The "Uniform Code for the Abatement of Dangerous Buildings, 1997 Edition," as published by the International Conference of Building Officials, is hereby adopted by reference with changes and modifications as hereinafter set forth, and incorporated fully and from the date on which this Chapter shall take effect, and the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Uniform Code for the Abatement of Dangerous Buildings in the City of Mountain View*."

One (1) copy of the Uniform Code for the Abatement of Dangerous Buildings is on file and open to public inspection in the building division of the community development department of the city of mountain view.

DIVISION 2. LOCAL AMENDMENTS

SEC. 8.100.05. - Deletion of preface.

The “Preface” section of the 1997 Uniform Code for the Abatement of Dangerous Buildings, including the sections related to “Codes” and “Technical Reference and Educational Materials” is deleted in its entirety. Where this code refers to "International" Building, Existing, Residential, Fire, Fuel Gas, Plumbing, Mechanical, Electrical, Energy, or other International Codes, the term “International” shall be replaced with the word "California," where applicable, and shall have the meanings ascribed to them as stated in those codes, inclusive of any local amendments as adopted in this City Code.

SEC. 8.100.10. - Title.

Section 101 (Title) of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

Section 101 – Title. These regulations shall be known as the *Uniform Code for the Abatement of Dangerous Buildings* *in the City of Mountain View*, may be cited as such, and will be referred to herein as “this code.”

SEC. 8.100.15. - Alterations, additions, and repairs to existing buildings.

Section 103 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

Section 103 – Alterations, additions, and repairs. All buildings or structures which are required to be repaired under the provisions of this code shall be subject to the provisions of ~~Section 3403 of the Building Code~~ the applicable California Code(s) in effect.

SEC. 8.100.20. - Administration.

Subsection 201.1 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

201.1 Administration. The building official, or any duly authorized representative, is hereby authorized to enforce the provisions of this code.

The building official, or any duly authorized representative, shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations in order to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this code.

A duly authorized representative may include, but is not limited to, personnel from the city of mountain view fire department, building division, or city attorney's office, including code enforcement. Any reference to "building official" throughout this code can be read to apply to any "duly authorized representative."

SEC. 8.100.25. - Inspections.

Subsection 201.2 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

201.2 Inspections. The health officer, the fire marshal, and the building official, and any duly authorized representative are hereby authorized to make such inspections and take such actions as may be required to enforce the provisions of this code.

SEC. 8.100.30. - Inspection of work.

Section 204 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

204 – Inspection of Work. All buildings or structures within the scope of this code and all construction or work for which a permit is required shall be subject to inspection by the building official, or any duly authorized representative, in accordance with and in the manner provided by this code and ~~Sections 108 and 1701 of the Building Code~~ the applicable California Code(s) in effect.

SEC. 8.100.35. - Appeals.

Subsection 205.1 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

Section 205.1 – General. ~~In order to hear and decide appeals of orders, d~~Decisions or determinations made by the building official, or any duly authorized representative, relative to the application and interpretation of this code, ~~there shall be and is hereby created a board of appeals consisting of members who are qualified by experience and training to pass upon matters pertaining to building construction and who are not employees of the jurisdiction. The building official shall be an ex officio member and shall act as secretary to said board but shall have no vote upon any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant, with a duplicate copy to the building official. Appeals to the board shall be processed in accordance with the provisions contained in Section 501 of this code. Copies of all rules or regulations adopted by the board should be delivered to the building official, who shall make them freely accessible to the public.~~ are subject to the appeal procedures pursuant to Article I, Division 3 of this Chapter.

Where this code refers to “appeal board” or “hearing examiner” it shall mean the appeal procedures pursuant to Article I, Division 3 of this Chapter.

SEC. 8.100.40. - Fees.

A new Section 206 (Fees) is added to Chapter 2 (Enforcement) of the 1997 Uniform Code for the Abatement of Dangerous Buildings to read as follows:

Section 206 – Fees. Any project subject to the payment of fees or fines by the city of mountain view shall be paid in accordance with the city’s master fee schedule, as adopted by city council resolution, or the administrative penalty fees as published by the city attorney’s office of the city of mountain view, both of which may be amended from time to time.

SEC. 8.100.45. - Definitions.

Section 301 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to modify and add the following definitions to read as follows:

Section 301 – General

BUILDING CODE is the ~~Uniform~~ California Building Code ~~promulgated by the International Conference of Building Officials,~~ as adopted by ~~this jurisdiction~~ the city of mountain view.

HOUSING CODE is the ~~Uniform Housing~~ California Residential Code ~~promulgated by the International Conference of Building Officials,~~ as adopted by ~~this jurisdiction~~ the city of mountain view.

LEGISLATIVE BODY is the city council of the city of mountain view.

REPAIR AND DEMOLITION FUND is the development services fund of the city of mountain view.

SEC. 8.100.50. - Method of service – notices and orders.

Section 401.4 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

401.4 Method of Service. Service of the notice and order shall be made upon all persons entitled thereto either personally or by mailing a copy of the such notice and order by certified mail, postage prepaid, return receipt requested, to each such person at their address as it appears on the last equalized assessment roll of the county or as known to the building official and in accordance with servicing requirements pursuant to Chapter 1 of the City Code. If no address of any such person so appears or is known to the building official, then a copy of the notice and order shall be so mailed, addressed to such person, at the address of the building

involved in the proceedings. The failure of any such person to receive such notice shall not affect the validity of any proceedings taken under this section. Service by certified mail in the manner herein provided shall be effective on the date of mailing.

SEC. 8.100.55. - Form of appeal.

Subsections 501.2 and 501.3 of the 1997 Uniform Code for the Abatement of Dangerous Buildings are deleted in their entirety and a new subsection 501.2 is added to read as follows:

501.2 Processing of Appeal. Any appeal filed pursuant to this code shall be processed in accordance with the procedures established pursuant to Article I, Division 3 of this Chapter.

SEC. 8.100.60. - Failure to appeal.

Section 502 of the 1997 Uniform Code for the Abatement of Dangerous Buildings is amended to read as follows:

Section 502 – Effect of Failure to Appeal. Failure of any person to file an appeal in accordance with the provisions of ~~Section 501~~ Article I, Division 3 of this Chapter shall constitute a waiver of the right to an administrative hearing and adjudication of the notice and order or any portion thereof.

EXHIBIT C

Note to Publisher: All text is new

CHAPTER 14

FIRE PREVENTION

ARTICLE I. ADMINISTRATION

SEC. 14.02.05. - Purpose.

The purpose of this Chapter is to establish and maintain minimum requirements to safeguard the health, safety or welfare of persons, resources, or property from the hazards of fire, explosion, or dangerous conditions in new and existing buildings, structures, and premises, and to provide safety and assistance to firefighters and emergency responders during emergency operations.

SEC. 14.02.10. - General procedures for appeals.

Any applicant for a fire or hazardous material permit who is in disagreement with the fire code official on the interpretation of any provision of this Chapter, or for which a fire or hazardous material permit has been refused for permit issuance, may appeal the fire code official's interpretation or refusal to issue said permit to the city council of the city.

a. All such appeals shall be filed within ten (10) business days after the date the decision renders an interpretation of any provision of this Chapter or refusal to issue said permit. All appeals shall be in writing, shall be filed with the city clerk, shall state the ground or grounds of appeal and shall be accompanied by a nonrefundable fee as adopted by council resolution in the City's master fee schedule.

b. Within sixty (60) calendar days after an appeal is filed, or as soon thereafter as possible, the appeal shall be heard by the city council. The city clerk shall give at least five (5) calendar days prior written notice to the applicant of the date, time, and place for the hearing on said appeal.

c. The applicant shall be entitled to present any oral and/or written evidence at said hearing. Any hearing held pursuant to this Section may be continued from time to time by the city council. The hearing shall be informal and shall not require compliance with the rules of evidence. At the hearing, the city council shall hear and consider all relevant evidence.

d. Within twenty-one (21) calendar days after the hearing is closed, the city council shall announce its decision. All decisions of the city council on any appeal shall be final. Failure of any person to file an appeal in accordance with the provisions of this Section shall constitute a waiver of the right to an administrative hearing and a failure to exhaust administrative remedies.

ARTICLE II. FIRE CODE

DIVISION 1. CODE ADOPTED BY REFERENCE AND TITLE

SEC. 14.04.05. - Adoption of the International Fire Code and California Fire Code.

The "International Fire Code, 2024 Edition" in its entirety, along with appendices B, BB, F and N, as published by the International Code Council, Inc., with the amendments adopted by the State Building Standards Commission in the California Code of Regulations (CCR) Title 24, Part 9, known as the "California Fire Code, 2025 Edition," is hereby adopted by reference, with changes and modifications as hereinafter set forth, as defined in California Fire Code Section 1.1.8, and incorporated fully and from the date on which this Chapter shall take effect, the provisions thereof shall be controlling within the limits of the city of mountain view as the "*Fire Code of the City of Mountain View*."

One (1) copy of the California Fire Code is on file and open to public inspection in the office of the fire marshal in the fire department of the city of mountain view, with an additional copy on file in the building division of the community development department of the city of mountain view.

SEC. 14.04.10. - Title.

Subsection 101.1 in the 2025 California Fire Code is amended to read as follows:

101.1 Title. These regulations shall be known as the *Fire Code of ~~[NAME OF JURSIDICTION]~~ the City of Mountain View*, hereinafter referred to as "this code."

DIVISION 2. APPLICABILTY AND PROCEDURES

SEC. 14.06.05. - General requirements of fire protection.

A new subsection 101.6 is added to Section 101 (Scope and General Requirements) of the 2025 California Fire Code to read as follows:

101.6 Fire protection. This code identifies levels of "built-in" fire protection equipment which shall be required in order to provide an adequate level of fire protection to the community at a reasonable cost. Anyone constructing, using properties or processes, or engaging in activities which constitute a higher demand on fire department staffing than are currently budgeted or planned for may be required to install automatic fire extinguishing systems, fire protection equipment, or other such safeguards that will make it possible to provide an adequate fire protection service with the city's fire department capacity.

SEC. 14.06.10. - Conflicting provisions.

Subsection 102.10 of the 2025 California Fire Code is amended to read as follows:

102.10 Conflicting provisions. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall be applicable. Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between requirements in this code and requirements in other local, state, or federal laws, regulations or ordinances, the more restrictive shall apply.

SEC. 14.06.15. - Establish the fire prevention bureau.

Subsection 103.1 of the 2025 California Fire Code is amended to read as follows:

103.1 Creation of ~~agency~~ the bureau of fire prevention. The ~~[INSERT NAME OF DEPARTMENT]~~ bureau of fire prevention in the city of mountain view is hereby created and the official in charge thereof shall be known as the fire code official. The bureau of fire prevention bureau is comprised of personnel from the city fire department and the city community development department with expertise in fire prevention, hazardous materials, building life safety, and emergency response. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code.

SEC. 14.06.20. - Arrests, citations and other enforcement remedies.

Add a new subsection 104.12 to Section 104 (Duties and Powers of the Fire Code Official) of the 2025 California Fire Code to read as follows:

104.12 Arrests, citations, and other enforcement remedies.

1. **Arrests.** The fire chief, fire marshal, deputy fire marshals and other designated fire department personnel of the city may make arrests for violations of this Code under the authority set forth by California Penal Code Sections 830.37, 836.5 and 853.6. The fire chief, fire marshal and deputy fire marshals and other designated fire department personnel who have the discretionary duty to enforce a statute or ordinance may, as provided by law, arrest a person without a warrant whenever any such officer has reasonable cause to believe the person to be arrested has committed a misdemeanor in the officer's presence which the officer has the discretionary duty to enforce and may issue a notice to appear and release such persons on their written promise to appear in court.

2. **Hazardous materials enforcement**. Those employees of the city, including, but not limited to, the fire marshal and hazardous materials specialists who have the duty of enforcing this Code, and city and state laws pertaining to hazardous and toxic materials are hereby authorized, in accordance with and pursuant to California Penal Code Sections 830.37, 836.5 and

853.6, to arrest persons for violations of such ordinances or statutes and to issue Notice to Appear citations as provided by law.

3. **Building enforcement**. The chief building official, deputy building official, or other designated building personnel who have the duty to enforce a statue or ordinance as provided by law, and as governed by the City Code, may issue notices or citations related to violations of this code and require corrective action pursuant to such statute, law, or this City Code.

4. **Other remedies**. The remedies provided for in this Chapter are not exclusive. Pursuant to Chapter 1, Sec. 1.7, 1.18, 1.28 and 1.29 of the City Code, the city, in its prosecutorial discretion, may enforce violation(s) of the provisions of this Chapter as a criminal, civil and/or administrative action.

SEC. 14.06.25. - Additional permits required.

Subsection 105.5.59 of the 2025 California Fire Code is amended to read as follows:

105.5.59 Additional permits. In addition to the permits required by Section 105.6, the following permits shall be obtained from the Bureau of Fire Prevention prior to engaging in the following activities, operations, practices or functions:

a. Production facilities. To change use or occupancy, or allow the attendance of a live audience, or for wrap parties.

b. Pyrotechnics and special effects. To use pyrotechnic special effects, open flame, use of flammable or combustible liquids and gases, welding and the parking of motor vehicles in any building or location used for the purpose of motion picture, television and commercial production.

c. Live audiences. To install seating arrangements for live audiences in approved production facilities, production studios and sound stages. See Chapter 48.

d. Amusements. Temporary haunted house, ghost walks and similar amusements.

e. High-rise buildings. High-rise buildings as defined in Health and Safety Code Section 13210 and California Building Code.

f. Licensed facilities. To operate a state-licensed facility, including, but not limited to, community care, residential care for the elderly and day care.

g. Group E occupancies. Private educational Group E occupancies.

SEC. 14.06.30. - Permits for cryogenic fluids.

Subsection 105.6.4 of the 2025 California Fire Code is amended to read as follows:

105.6.4 Cryogenic fluids. A construction permit is required for installation of or alteration to outdoor stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table 105.5.11. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a construction permit. Additionally, an operational permit is required to store, handle, or use cryogenic fluids in aboveground tanks.

SEC. 14.06.35. - Permits for flammable and combustible liquids.

Subsection 105.6.9 of the 2025 California Fire Code is amended to read as follows:

105.6.9 Flammable and combustible liquids.

a. A construction permit is required:

1. To install, repair, or modify a pipeline for the transportation of flammable or combustible liquids.

2. To install, construct or alter tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed, or used.

3. To install, alter, remove, abandon, or otherwise dispose of a flammable or combustible liquid tank.

b. An operational permit is required:

1. To store, handle or use flammable or combustible liquids in any quantity in aboveground or belowground storage tanks.

2. To engage in on-demand mobile fueling operations in accordance with Section 5707.

3. To utilize a site for on-demand mobile fueling operations in accordance with Section 5707.

SEC. 14.06.40. - Permits for hazardous materials.

Subsection 105.6.13 of the 2025 California Fire Code is amended to read as follows:

105.6.13 Hazardous materials. A construction permit is required to install, repair damage to, abandon, remove, place temporarily out of service, or close or substantially modify a storage facility or other area regulated by Chapter 50 where the hazardous materials in use or storage exceed the amounts listed in Table 105.5.22.

An operational permit is required to store, transport on-site, dispense, use, or handle hazardous materials in excess of minimum quantities as specified in City Code Chapter 24.

SEC. 14.06.45. - Local fees.

Section 108.2 of the 2025 California Fire Code is amended to read as follows:

108.2 Schedule of permit fees. Where a permit is required, a fee for each permit, inspection, special inspection shall be paid as required, in accordance with the schedule as established and adopted by ~~the applicable governing authority~~ resolution by the city council in the city's master fee schedule and administrative penalty fees as published by the city attorney's office, both of which may be amended from time to time.

SEC. 14.06.50. - Appeals.

Subsection 112.1 of the 2025 California Fire Code is amended to read as follows:

112.1 General. In order to hear and decide appeals of orders, decisions, or determinations made by the fire code official relative to the application and interpretation of this code or refusal to grant a license or permit applied for, ~~there shall be and is hereby created a board of appeals~~ the applicant can appeal the decision pursuant to Sec. 14.02.10 of this Chapter. ~~The board of appeals shall be appointed by the applicable governing authority and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.~~ Where there is any reference to "board of appeals" in the California Fire Code, proceedings shall be conducted pursuant to Sec. 14.02.10 of this Chapter.

SEC. 14.06.55. - Violation penalties.

Subsection 113.4 of the 2025 California Fire Code is amended to read as follows:

113.4 Violation penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, or who shall fail to comply with such an

order as affirmed or modified by the city council or by a court of competent jurisdiction, ~~shall be guilty of a [Specify Offense], punishable by a fine of not more than [Amount] dollars or by imprisonment not exceeding [Number of Days], or both such fine and imprisonment~~ shall severally for each and every such violation and noncompliance respectively be guilty of a misdemeanor, punishable as set forth in the City Charter. The imposition of one (1) penalty for any violation shall not excuse the violation or permit to continue; and all such persons shall be required to correct or remedy such violations or defects within a reasonable time; and when not otherwise specified, ~~E~~each day that a violation continues after due notice has been served shall be deemed a separate offense.

The application of the above penalty shall not be held to prevent the enforced removal of prohibited conditions.

Nothing contained in this Section shall be construed to prevent the city from taking whatever appropriate civil action it deems necessary to enforce any of the provisions of this code or Chapter.

DIVISION 3. DEFINITIONS

SEC. 14.08.05. - Interchangeability of terms.

Subsection 201.2 of the 2025 California Fire Code is amended to read as follows:

201.2 Interchangeability. Words used in the present tense include the future; words stated in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural, the singular. Where references are made throughout this code to the local "jurisdiction" or "enforcing agency" this shall mean the city of mountain view.

SEC. 14.08.10. - Definitions.

Section 202 (General Definitions) of the 2025 California Fire Code is amended to add, or modify, the following definitions, to read as follows:

CORROSIVE LIQUID. Any liquid, or material:

a. Which, when in contact with living tissue, will cause destruction or irreversible alteration of such tissue by chemical action; or

b. Having a pH of 2 or less or 12.5 or more; or

c. Classified as corrosive by the U.S. Department of Transportation; or

d. Exhibiting the characteristics of corrosivity in accordance with Title 22, California Code of Regulations Section 66261.22.

FIRE CODE OFFICIAL. The fire chief or other designated authority of the city of mountain view is charged with the administration and enforcement of the code, or a duly authorized representative. Other designated authorities include, but are not limited to:

a. "Fire and environmental protection division" includes those employees of the city of mountain view fire department who have the duty of enforcing this code in accordance with and pursuant to California Penal Code Sections 830.37, 836.5 and 853.6 to arrest persons for violations of such ordinances or statutes and issue notice to appear citations as provided by law. This includes the fire prevention personnel, hazardous materials personnel, fire marshal, and other designated personnel by the fire chief; and

b. "Building division" includes those employees of the city of mountain view community development department who have the duty to enforce this code as it relates to on-site improvements, buildings, and construction in accordance with and pursuant to statues and laws, including this City Code and the California Building Codes, Title 24. This includes personnel such as the chief building official, deputy building official, fire protection engineer, or other designated personnel by the chief building official.

NEWLY CONSTRUCTED (or NEW CONSTRUCTION). A newly constructed building (or new construction) includes either:

1. a new structure, or

2. any additions, alterations, or improvements to existing structures where greater than fifty (50) percent of the sum total of the following structural elements are added, removed, replaced or relocated within a 3-year period: (1) footings and foundation; (2) roof-framing; and (3) exterior walls.

OTHER HEALTH HAZARD MATERIAL. A hazardous material which affects target organs of the body, including, but not limited to, those materials which produce liver damage, kidney damage, damage to the nervous system, act on the blood to decrease hemoglobin function, deprive the body tissue of oxygen or affect reproductive capabilities, including mutations (chromosomal damage) or teratogens (effects on fetuses). Other health hazard materials include carcinogens and radioactive materials. See also California Fire Code Section 202—Health Hazard.

SENSITIZER. A chemical that causes a substantial proportion of exposed people or animals to develop an allergic reaction in normal tissue after repeated exposure to the chemical.

SPILL CONTROL. A level of containment that is external to and separate from the primary containment and is capable of safely and securely containing the contents of the largest container and prevents the material from spreading to other parts of the room.

TEMPORARY. As the term is used throughout this code, "temporary" shall mean a duration of one (1) year or less.

WORKSTATION. A defined space or an independent principal piece of equipment ~~using HPM within a fabrication area~~ using flammable or unstable (Class 3 or 4 as ranked by NFPA 704) hazardous materials where a specific function, laboratory procedure or research activity occurs. Approved or listed hazardous materials storage cabinets, flammable liquid storage cabinets or gas cabinets serving a workstation are included as part of the workstation. A workstation is allowed to contain ventilation equipment, fire protection devices, detection devices, electrical devices and other processing and scientific equipment.

DIVISION 4. INDOOR DISPLAYS

SEC. 14.10.05. - Indoor displays.

A new subsection 314.5 is added to Section 314 (Indoor Displays) of the 2025 California Fire Code to read as follows:

314.5 Electric Vehicles. Electric vehicles of the Battery Electric Vehicle (BEVs), Plug-In Hybrid Electric Vehicle (PHEVs), or Hybrid Electric Vehicle (HEVs) type shall not be displayed indoors.

Exceptions:

1. The cumulative battery pack state of charge does not exceed 50 percent; and
2. The vehicles are not charged or connected to charging equipment within the building.

DIVISION 5. FIRE APPARATUS ROADS

SEC. 14.12.05. - Fire apparatus access roads – definition.

Subsection 502.1 of the 2025 California Fire Code is amended to add a new definition to read as follows:

502.1 Definitions.

UNOBSTRUCTED WIDTH. This shall mean a clear travel way the width of a fire apparatus access road, which is designed to withstand the weight of an emergency vehicle. It shall not include the width of any parking, rolled curbs, sidewalks, or other nondrivable surfaces.

SEC. 14.12.10. - Fire apparatus access roads – dimensions.

Subsection 503.2.1 of the 2025 California Fire Code is amended to read as follows:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm), ~~exclusive of shoulders, except for approved security gates in~~

~~accordance with Section 503.6,~~ and an unobstructed vertical clearance of not less than thirteen 13 feet six 6 inches (4115 mm).

Where buildings, or portions of buildings or facilities, have floors used for human occupancy located more than thirty (30) feet above the access road, the minimum unobstructed width shall be increased to twenty-six (26) feet for aerial fire apparatus access. At least one (1) of the required access roads meeting this requirement shall be located within a minimum of fifteen (15) feet and a maximum of thirty (30) feet from the building and shall be positioned parallel to the longest dimension, or side, of the building, unless otherwise approved by the fire code official.

SEC. 14.12.15. - Fire apparatus access roads – authority.

Subsection 503.2.2 of the 2025 California Fire Code is amended to read as follows:

503.2.2 Authority. The fire code official shall have the authority to require or permit modifications to the required access widths and/or vertical clearance where they are inadequate for fire or rescue operations or where necessary to meet the public safety objectives of the jurisdiction.

SEC. 14.12.20. - Fire apparatus access roads – turning radius.

Subsection 503.2.4 of the 2025 California Fire Code is amended to read as follows:

503.2.4 Turning radius. The required inside turning radius of a fire apparatus access road ~~shall be determined by the fire code official road~~ shall be a minimum of twenty-one (21) feet.

DIVISION 6. ACCESS CONTROL DEVICES

SEC. 14.14.05. - Access to building openings and roofs – access control devices.

Add a new subsection 504.5 to Section 504 (Access to building openings and roofs) in the 2025 California Fire Code to read as follows:

504.5 Access control devices. When access control devices, including bars, grates, gates, electric or magnetic locks, or similar devices are installed, which would inhibit rapid fire department emergency access within and throughout the building, such devices shall be approved by the fire code official.

All electrically powered access control devices shall be provided with an approved means for deactivation or unlocking from a single location or otherwise approved by the fire code official. Access control devices shall also comply with California Fire Code Chapter 10, Means of Egress.

DIVISION 7. ADDRESSING

SEC. 14.16.05. - Premises or address identification.

Subsection 505.1 of the 2025 California Fire Code is amended to read as follows:

505.1 Address identification. New and existing buildings shall be provided with approved address numbers, building numbers, or building identification. The address identification shall be legible and placed in a position that is plainly visible from the street or road fronting the property. Address identification characters (numbers and letters) shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. ~~Numbers shall not be spelled out.~~ Each character, including numbers, shall be not less than ~~4~~ 6 inches (~~102~~ 152.4 mm) high with a minimum stroke width of ½ inch (12.7 mm). Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

Exception: For R-3 occupancies, address characters, including numbers, shall be a minimum of four (4) inches high with a minimum strike width of one-half (0.5) inch.

DIVISION 8. FIRE HYDRANTS AND STANDPIPES

SEC. 14.18.05. - Fire hydrant systems.

Subsection 507.5 of the 2025 California Fire Code is amended to read as follows:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Section 507.5.1 through 507.5.6 ~~and Appendix C or by an approved method~~ and the mountain view public works department's standard provisions and details as published on the city's website, as amended from time to time.

SEC. 14.18.10. - Hydrant for standpipe systems and/or fire department connections.

Subsections 507.5.1 and 507.5.1.1 of the 2025 California Fire Code are amended and a new subsection 507.5.1.2 is added to the 2025 California Fire Code to read as follows:

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction ~~is more than 400 feet (122m)~~ has portions of its first floor exterior walls further than 150 feet (hose lay distance) from a public hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants, wharf hydrants, and/or mains shall be provided where required by the fire code official.

~~**Exception:** For Group R-3 and Group U occupancies, equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2, or 903.3.1.3, the distance requirement shall not be more than 600 feet (183 m).~~ Exception is deleted in its entirety.

507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe system installed in accordance with Section 905 shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections~~.~~, and on the same side of the street or roadway as the fire department connection.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where approved by the fire code official.

507.5.1.2 Hydrant for automatic sprinkler system. Buildings equipped with a fire department connection for any use or purpose shall have a public fire hydrant located within 100 feet of the city fire department connection, and on the same side of the street or roadway as the city fire department connection.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where approved by the fire code official.

SEC. 14.18.15. - Private fire service mains and water tanks.

Subsection 507.5.3 of the 2025 California Fire Code is amended to read as follows:

507.5.3 Private fire service mains and water tanks. Private fire service mains and water tanks shall be periodically inspected, tested and maintained in accordance with *California Code of Regulations, Title 19, Division 1, Chapter 5.*

1. Private fire hydrants of all types: Inspection annually and after each operation; flow test and maintenance annually. The static pressure, residual pressure, and flow (gallons per minute) shall be recorded and submitted to the fire department along with the standard NFPA 25 form(s).

2. Fire service main piping: Inspection of exposed, annually; flow test every 5 years.

3. Fire service main piping strainers: Inspection and maintenance after each use. Records of inspections, testing and maintenance shall be maintained.

SEC. 14.18.20. - Fire-protection equipment and fire hydrants.

A new subsection 509.3 of Section 509 (Fire Protection and Utility Equipment Identification and Access) is added to the 2025 California Fire Code to read as follows:

509.3 Fire-protection equipment and fire hydrants. Fire-protection equipment and fire hydrants shall be clearly identified in a manner approved by the fire code official and maintained

unobstructed. Fire department connections (FDCs) and system control valves shall also be identified by their function and occupancy(ies)/address(es) they serve. When required by the fire code official hydrant locations shall be identified by installation of reflective markers.

DIVISION 9. IMMERSION HEATERS.

SEC. 14.20.05. - Immersion heaters.

A new subsection 603.10 of Section 603 (Electrical Equipment, Wiring and Hazards) is added to the 2025 California Fire Code to read as follows:

603.10 Immersion heaters. All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved overtemperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

DIVISION 10. AUTOMATIC SPRINKLERS AND OTHER LIFE SAFETY FEATURES.

SEC. 14.22.05. - General – existing systems.

A new subsection 901.6.4 of section 901.6 (Inspection, Testing and Maintenance) is added to the 2025 California Fire Code to read as follows:

901.6.4 Existing systems.

a. Fire alarm and detection systems installed prior to the effective date of this Code shall be maintained per NFPA 72.

b. Inoperable or unserviceable fire alarm systems shall be restored to operable conditions, which are equivalent to their original design and installation.

c. Existing multi-family residential (R-2) occupancies with interior exit corridors containing five (5) or more units shall not be occupied without an operable thermal detection system or equivalent detection system.

SEC. 14.22.10. - Automatic sprinkler systems – where required.

Subsection 903.2 of the 2025 California Fire Code is amended to read as follows:

903.2 Where required. Approved automatic sprinkler systems in new buildings and structures, and in existing buildings and structures, shall be provided in the locations described in this Section, or as required in Sections 903.2.1 through 903.2.12 and Sections 903.2.14 through 903.2.21, whichever is more restrictive.

a. **New buildings.** An approved automatic sprinkler system shall be installed throughout all new buildings and structures.

Exceptions:

1. Buildings and structures that do not exceed one thousand (1,000) square feet of building area. This exception does not apply to residential buildings that require the installation of fire sprinklers in accordance with the California Residential Code, except as noted in Exception a.3 below.
2. Group S-2 or U occupancies that are used exclusively for vehicle parking, which meet all of the following conditions:
   i. Noncombustible construction;
   ii. Maximum building area does not exceed five thousand (5,000) square feet;
   iii. Structure is open on three (3) or more sides; and
   iv. Minimum of ten (10) feet of separation from existing buildings, unless the area is separated by fire walls complying with California Building Code Section 706.
3. Accessory dwelling units (ADU) shall not be required to provide fire sprinklers if they are not required for the primary residence on the property. The construction of an accessory dwelling unit shall not trigger a requirement for fire sprinklers to be installed in the existing primary dwelling.

b. **Change in Occupancy or Use.** Any change in the character of occupancy or in the use of any building with a building area at or over one thousand (1,000) square feet which, as required by the fire code official would place the building into a more hazardous division of the same occupancy group or into a different group of occupancies and constitutes a greater degree of life safety, or increased fire risk, shall require the installation of an approved automatic fire sprinkler system.

1. For purposes of subsection b, the following terms shall mean:

   i. “building area” as defined in the California Building Code Section 202;

   ii. "life safety" includes, but is not limited to, increased occupant load, public assembly areas, public meeting areas, churches, indoor amusement attractions, buildings with a complex exiting system due to increased occupant loads, and large schools/day-care facilities and large residential care facilities with nonambulatory clients.

   iii. "fire risk" includes, but is not limited to, high-piled combustible storage, woodworking operations, hazardous operations using hazardous materials, increased fuel loads (e.g. storage of moderate to highly combustible materials), and increased sources of ignition (e.g. welding, automotive repair with the use of flammable liquids and open flame).

c. **Existing nonsprinklered buildings.** For existing nonsprinklered buildings, an approved automatic sprinkler system shall be required when additions meet one of the following criteria:

1. Additions equal to or greater than one hundred (100) percent of the existing square footage, inclusive of the cumulative total of all additions in the preceding three (3) years;

2. Additions that increase the total building area to be over four thousand one hundred (4,100) square feet;

3. Additions or alterations where more than fifty (50) percent of the existing building is modified and meets the definition of new construction; or

4. Where any basement is added to a structure.

d. **Telecommunication buildings.**

Exception: Spaces or areas in telecommunication buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries not required to have an automatic sprinkler system by Section 1207 for energy storage systems and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 of the California Building Code or not less than 2-hour horizontal assemblies constructed in accordance with Section 711 of the California Building Code, or both.

e. **Criteria for determining when an automatic fire sprinkler system is required for any building or occupancy.** In determining whether an automatic fire sprinkler system is required for any building or occupancy, the fire code official shall use the following criteria:

1. Determine the building area as defined in the California Building Code Section 202, except that eave projections twenty-four (24) inches or less shall not be counted.

2. Multiply the building area as determined herein by the number of stories. A full basement shall be counted as a story, and the floor area of mezzanine(s) shall be added to the building area of the story in which they are located.

3. For the purpose of determining whether automatic fire sprinklers are required in a building, the installation of fire walls and fire barriers will not be considered to create separate buildings.

SEC. 14.22.15. - Automatic sprinkler systems – standards.

Subsection 903.3.1 of the 2025 California Fire Code is amended to read as follows:

903.3.1 Standards. Automatic sprinkler systems shall be designed and installed in accordance with Section 903.3.1.1, unless otherwise permitted by Sections 903.3.1.2 and 903.3.1.3 and other chapters of this code, as applicable~~.~~, and designed and installed in accordance with city of mountain view standards, provisions, and details as published on the city's website.

SEC. 14.22.20. - Solar photovoltaic power systems.

Subsection 903.3.1.1.4 of the 2025 California Fire Code is amended to read as follows:

903.3.1.1.4 Solar photovoltaic power systems. Automatic sprinklers shall not be required in the following areas:

1. Solar photovoltaic panel structures with no use underneath. Signs ~~may be provided~~ are required, as determined by the ~~enforcing agency~~ fire code official prohibiting any use underneath, including storage.

2. Ground-mounted ~~S~~solar photovoltaic (PV) panels supported by non-combustible framing that have sufficient uniformly distributed and unobstructed openings throughout the top of the array (horizontal plane) to allow heat and gases to escape, as determined by the ~~enforcing agency~~ fire code official. The solar photovoltaic array shall comply with all of the following requirements:

a. The area within the perimeter of the solar photovoltaic array has maximum rectangular dimension of 40 feet by 250 feet, or as determined by the fire code official;

b. Completely open on all sides (other than necessary structural supports) with no interior partitions;

c. The solar photovoltaic array structure is used only for parking purposes with no storage;

d. The driveway aisle separating the solar photovoltaic array structures has a minimum unobstructed width of 20 feet or 26 feet, depending on the width of the driveway aisle, or as determined by the fire code official; and

e. Minimum 10 feet of separation from existing buildings or other solar photovoltaic array structures.

SEC. 14.22.25. - Standpipe systems – required installations.

Subsection 905.3 of the 2025 California Fire Code is amended to read as follows:

905.3 Required installations. Standpipe systems shall be installed where required by Sections 905.3.1 through 905.3.10 and in the locations indicated in Sections 905.4, 905.5 and 905.6. Standpipe systems are ~~allowed~~ required to be combined with automatic sprinkler systems.

Exceptions:

1. Standpipe systems are not required in Group R-2 townhouses.
2. Standpipe systems are not required in Group R-3 occupancies

SEC. 14.22.30. - Standpipe systems – height.

Subsection 905.3.1 of the 2025 California Fire Code is amended to read as follows:

905.3.1. Height. ~~In other than Group R-3 and R-3.1 occupancies, Class III standpipe systems shall be installed throughout at each floor where any of the following occur:~~

~~1. Buildings where the floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access.~~

~~2. Buildings that are fore or more stories in height.~~

~~3. Buildings where the floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of fire department vehicle access.~~

~~4. Buildings that are two or more stories below the highest level of fire department vehicle access.~~

Class III standpipe systems shall be installed in buildings where the floor level of the highest story is located more than 20 feet above the lowest level of the fire department vehicle access or where the floor level of the lowest story is located more than 20 feet below the highest level of fire department vehicle access.

Exceptions:

1. Class I wet standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2.

~~2. Class 1 standpipes are allowed in Group B and E Occupancies.~~

Exception 2 is deleted.

3. a. Class I wet standpipes are allowed in open parking garages where the highest floor is located not more than 150 feet above the lowest level of fire department vehicle access.

   b. Class I manual dry standpipes are allowed in open parking garages that are subject to freezing temperatures, provided the hose connections are located as required for Class II standpipes in accordance with Section 905.5.

4. Class I wet standpipes are allowed in basements equipped throughout with an automatic sprinkler system.

~~5. Class I standpipes are allowed in buildings where occupant use hose lines will not be utilized by trained personnel or the fire department.~~

Exception 5 is deleted.

6. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
   a. Recessed loading docks for four vehicles or less; or
   b. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

SEC. 14.22.35. - Standpipe systems – underground buildings and parking structures.

Subsection 905.3.4 of the 2025 California Fire Code is amended to read as follows:

905.3.4 Underground buildings and parking garages. Underground buildings and parking garages shall be equipped throughout with a Class I ~~automatic~~ wet ~~or manual wet~~ standpipe system.

SEC. 14.22.40. - Standpipe systems – location of Class I standpipe hose connections.

Subsection 905.4 of the 2025 California Fire Code is amended to read as follows:

905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required ~~interior exit~~ stairway ~~or exterior exit stairway~~, a hose connection shall be provided for each ~~story~~ floor level above ~~and~~ or below grade ~~plane.~~ Hose connections shall be located at ~~the main~~ each floor-level landing, unless otherwise approved by the fire code official.

   ~~**Exception:** A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet (22 860 mm) apart.~~

   Exception is deleted in its entirety.

2. On each side of the wall adjacent to the exit opening of a horizontal exit.

   Exception: Where floor areas adjacent to a horizontal exit are reachable from ~~an interior exit stairway or exterior~~ exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, ~~as measured along the path of travel,~~ a hose connection shall not be required at the horizontal exit.

3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.

Exception: Where the floor areas adjacent to an exit passageway are reachable from ~~an interior exit stairway or exterior~~ exit stairway hose connections by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.

4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than 4 units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with access to the roof provided in accordance with Section 1011.12.

6. Where the most remote portion of a sprinklered or nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection, ~~the fire code official is authorized to require that additional hose connections be provide in approved locations.~~ additional Class I standpipe hose connections shall be provided within one 150 feet of all areas. The distance from a hose connection shall be measured along the path of travel.

SEC. 14.22.45. - Fire alarm and detection systems – new buildings and structures.

Subsection 907.2 of the 2025 California Fire Code is amended to read as follows:

907.2 Where required—New buildings and structures. An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.29 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.

Not fewer than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or waterflow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers or automatic fire alarm systems, a single fire alarm box shall be installed at a location approved by the ~~enforcing agency~~ city.

~~**Exceptions:**~~

~~1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service and fire sprinkler monitoring.~~

~~2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the fire code official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is open to the public.~~

~~3. The manual fire alarm box is not required to be installed when approved by the fire code official.~~

Exceptions 1, 2 and 3 are deleted in their entirety.

SEC. 14.22.50. - Fire alarm and detection systems – installation and monitoring.

Subsection 907.6 of the 2025 California Fire Code is amended to read as follows:

907.6 Installation and monitoring. A fire alarm system shall be installed and monitored in accordance with Sections 907.6.1 through 907.6.6.4, ~~and~~ NFPA 72, and city of mountain view standards, provisions, and details as published on the city's website.

SEC. 14.22.55. - Doors, gates, and turnstiles – stairway doors.

Subsection 1010.2.6 of the 2025 California Fire Code is amended to read as follows:

1010.2.6 Stairway doors. Interior stairway means of egress doors shall be openable from both sides without the use of a key or special knowledge or effort.

Exceptions:

1. Stairway discharge doors shall be openable from the egress side and shall only be locked from the opposite side.
2. This section shall not apply to doors arranged in accordance with Section 403.5.3 of the California Building Code.
3. Stairway exit doors shall not be locked from the side opposite the egress side, unless they are openable from the egress side and capable of being unlocked simultaneously without unlatching by ~~any~~ all of the following methods, or as approved by the fire code official:
    a. Shall be capable of being unlocked individually or simultaneously upon a signal from the fire command center, where present, or a signal by emergency personnel from a single location inside the main entrance to the building, or as directed by the fire code official;
    b. Shall unlock simultaneously upon activation of an automatic fire alarm signal when a fire alarm system is present in an area served by the stairway; and
    c. Shall unlock upon failure of the power supply to the electric lock or the locking system.
4. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group B, F, M and S occupancies where the only interior access to the tenant space is from a single exit stairway where permitted in Section 1006.3.4.
5. Stairway exit doors shall be openable from the egress side and shall only be locked from the opposite side in Group R-2 occupancies where the only interior access to the dwelling unit is from a single exit stairway where permitted in Section 1006.3.4.

SEC. 14.22.60. - Construction requirements for existing buildings; Group R-2.

Subsection 1103.7.6 of the 2025 California Fire Code is amended to read as follows:

1103.7.6 Group R-2. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in existing Group R-2 occupancies more than three stories in height or with more than 16 dwelling or sleeping units. Existing multi-family (Group R-2) occupancies with interior exit corridors containing five (5) or more units shall not be occupied without an operable thermal detection system or equivalent detection system.

Exceptions:

1. Where each living unit is separated from other contiguous living units by fire barriers having a fire-resistance rating of not less than ¾ hour and where each living unit has either its own independent exit or its own independent stairway or ramp discharging at grade.
2. A separate fire alarm system is not required in buildings that are equipped throughout with an approved supervised automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and having a local alarm to notify all occupants.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means of egress door opening directly to an exterior exit access that leads directly to the exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3.
4. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units, do not exceed three stories in height and comply with both of the following:
    1.1. Each dwelling unit is separated from other contiguous dwelling units by fire barriers having a fire-resistance rating of not less than ¾ hour.
    1.2 Each dwelling unit is provided with smoke alarms complying with the requirements of Section 907.2.11.

SEC. 14.22.65. - General fire protection and life safety features – automatic sprinklers.

Subsection 3206.4 of the 2025 California Fire Code is amended to read as follows:

3206.4. Automatic sprinklers. Automatic sprinkler systems shall be provided in accordance with Sections 3207, 3208, 3209 and 903.2 as amended.

SEC. 14.22.70. - Precautions against fire – firewalls.

Add a new Section 3313 of Chapter 33 (Fire Safety During Construction and Demolition) to the 2025 California Fire Code to read as follows:

Section 3313 Precautions Against Fire - Firewalls.

When firewalls are required in combustible construction, the wall construction shall be completed immediately after the building is sufficiently weather-protected at the location of the wall(s).

SEC. 14.22.75. - Fire department site access and water supply; stairways required.

Subsection 3307.1.2 of the 2025 California Fire Code is amended, to read as follows:

3307.1.2. Stairways required. ~~Where building construction exceeds 40 feet (12 192 mm) in height above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided. As construction progresses, such stairway shall be extended to within one floor of the highest point of construction having secured decking or flooring.~~ Each level above the first story in new multi-story buildings that require two (2) exit stairways shall be provided with at least two (2) usable exit stairways after the floor decking is installed. The stairways shall be continuous and discharge to grade level. Exit stairs in new and existing occupied buildings shall be lighted and maintained clear of debris and construction materials at all times.

Exception: For multi-story buildings, one of the required exit stairs may be obstructed on not more than two (2) contiguous floor levels for the purpose of stairway construction (i.e., installation of gypsum board, painting, flooring, etc.).

DIVISION 11. OPEN-FLAME COOKING DEVICES

SEC. 14.24.05. - Portable Fuel-Fired Cooking Appliances - Open-flame cooking devices.

Subsection 4104.2 of the 2025 California Fire Code is amended to read as follows:

4104.2 Open-flame cooking devices. Charcoal burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048 mm) of combustible construction or other combustible hazards.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies and decks are protected by an automatic sprinkler system. This exception does not apply to commercial cooking equipment unless otherwise approved by the fire code official.
3. LP-gas cooking devices having LP-gas container with a water capacity not greater than 2 ½ pounds [nominal 1 pound (0.454 kg) LP-gas capacity].

DIVISION 12. HAZARDOUS MATERIALS AND FUME HOOD REQUIREMENTS

SEC. 14.26.05. - General – health hazards.

Subsection 5001.2.2.2 of the 2025 California Fire Code is amended to read as follows:

5001.2.2.2 Health hazards. The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.

1. Highly toxic and toxic materials.

2. Corrosive materials.

3. Other health hazards.

SEC. 14.26.10. - Liquid-level limit control.

Subsection 5003.2.7 of the 2025 California Fire Code is amended to read as follows:

5003.2.7 Liquid-level limit control. Atmospheric tanks having a capacity greater than ~~500 gallons (1893 L)~~ 60 gallons (227 L) and that contain hazardous material liquids shall be equipped with a liquid-level limit control or other approved means to prevent overfilling of the tank.

SEC. 14.26.15. - General requirements – fire extinguishing systems for fume hoods and workstations dispensing, handling or using hazardous materials.

Add a new subsection 5003.9.11 of Section 5003.9 (General Safety Precautions) to the 2025 California Fire Code to read as follows:

5003.9.11 Fire extinguishing systems for fume hoods and workstations dispensing, handling, or using hazardous materials. Combustible and noncombustible fume hoods and workstations, which dispense, handle, or use hazardous materials shall be protected by an approved automatic fire extinguishing system in accordance with Section 2703.10.

Exception: Internal fire protection is not required for Biological Safety Cabinets that carry NSF/ANSI certification where quantities of flammable liquids in use or storage within the cabinet do not exceed 500 milliliters.

DIVISION 14. EXPLOSIVES AND FIREWORKS REGULATIONS

SEC. 14.28.05. - Explosives and fireworks.

Subsection 5601.1.3 of the 2025 California Fire Code is amended to read as follows:

5601.1.3 Fireworks. The possession, manufacture, storage, sale, handling and use of fireworks, including those fireworks classified as Safe and Sane by the California State Fire Marshal, are prohibited.

Exceptions:

1. Storage and handling of fireworks as allowed in Section 5604.
2. Manufacture, assembly and testing of fireworks as allowed in Section 5605 and Health and Safety Code Division 11.
3. The use of fireworks for fireworks displays, pyrotechnics before a proximate audience and pyrotechnic special effects in motion pictures, television, theatrical or group entertainment productions as allowed in Title 19, Division 1, Chapter 6 Fireworks reprinted in Section 5608 and *Health and Safety Code Division 11*.
4. ~~This possession, storage, sale, handling and use of specific types of Division 1.4G fireworks where allowed by applicable laws, ordinances and regulations, provided that such fireworks and facilities comply with 2006 edition of NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100-185, as applicable for consumer fireworks and *Health and Safety Code Division 11*.~~

Exception 4 is deleted.

DIVISION 15. FLAMMABLE LIQUIDS AND MOBILE FUELING OPERATIONS

SEC. 14.30.05. - Storage – Locations where aboveground tanks outside buildings are prohibited.

Subsection 5704.2.9.6.1 of the 2025 California Fire Code is amended to read as follows:

5704.2.9.6.1 Locations where aboveground tanks outside buildings are prohibited. Storage of Class I and II liquids in above-ground tanks outside of buildings is prohibited within ~~the limits established by law as set forth in the fire code adoption ordinance or other regulation adopted by the jurisdiction~~ any portion of the City of Mountain View, now or hereafter existing.

Exception: Storage of these liquids is permissible in double-walled above-ground tanks used for the storage of diesel fuel (including integral diesel fuel storage tanks) to power listed generators or fire pumps as approved by the fire code official.

SEC. 14.30.10. - On-demand mobile fueling operations – approval required.

Subsection 5707.1.1 in the 2025 California Fire Code is amended to read as follows:

5707.1.1 Approval required. Mobile fueling operations shall not be conducted without first obtaining ~~an operational permit in accordance with Section 105.5.18~~ a permit from the fire code official. Mobile fueling operations shall occur only at approved and permitted locations.

SEC. 14.30.15. - On-demand mobile fueling operations - Site plan.

Subsection 5707.3.3 of the 2025 California Fire Code is amended to read as follows:

5707.3.3 Site plan. Where required by the fire code official, a site plan shall be developed for each location or area at which mobile fueling occurs. The site plan shall be in sufficient detail to indicate:

1. All buildings and structures.

2. Lot lines or property lines.

3. Electric car chargers.

4. Solar photovoltaic parking lot canopies.

5. Appurtenances on-site and their use or function.

6. All uses adjacent to the lot lines of the site.

7. Fueling location(s).

8. Locations of all storm drain openings, on-site stormwater treatment systems/areas, and adjacent waterways or wetlands.

9. Information regarding slope, natural drainage, curbing, and impounding.

10. How a spill will be kept on the site property.

11. Scale of the site plan.

SEC. 14.30.20. - On-demand mobile fueling operations - protection of stormwater systems.

Add a new subsection 5707.4.1.1 of subsection 5707.4.1 (Separation) to the 2025 California Fire Code to read as follows:

5707.4.1.1 Protection of stormwater inlets and/or on-site stormwater treatment systems. When dispensing operations occur within fifteen (15) feet (4,572 mm) of a storm drain and/or on-site stormwater treatment system/area, an approved storm drain cover or an equivalent method that will prevent any fuel from reaching the drain or on-site stormwater treatment system/area shall be used.

SEC. 14.30.25. - On-demand mobile fueling operations - dispensing hoses and nozzles.

Subsection 5707.5.1 of the 2025 California Fire Code is amended to read as follows:

5707.5.1 Dispensing hoses and nozzles. Where equipped, the dispensing hose shall not exceed 50 feet (15 240 mm) in length. The dispensing nozzles and hoses shall be of an approved and listed type and the nozzles provided with a listed breakaway device. ~~Where metal-to-metal contact cannot be made between the nozzle and the fuel fill opening, a means for bonding the mobile fueling vehicle to the motor vehicle shall be provided and employed during fueling operations.~~

Exception: Mobile fueling vehicles equipped with an approved brake interlock tied to the nozzle holder that prohibits movement of the mobile fueling vehicle when the nozzle is removed from its holder.

SEC. 14.30.30. - On-demand mobile fueling operations - drip control.

Subsection 5707.6.2 of the 2025 California Fire Code is amended to read as follows:

5707.6.2 Drip control. Operators shall place a drip pan or an absorbent pillow under the nozzle to catch drips and under each fuel fill opening prior to and during dispensing operations to catch drips. Contaminated absorbent shall be removed from the property by the mobile fueler and disposed in accordance with applicable hazardous waste regulations.

SEC. 14.30.35. - On-demand mobile fueling operations - bonding and training.

Add two new subsections 5707.6.7 and 5707.6.8 of Section 5707.6 (Operations) to the 2025 California Fire Code to read as follows:

5707.6.7 Bonding. A means for bonding the mobile fueling vehicle to the motor vehicle shall be provided. Such bonding means shall be employed during fueling operations.

5707.6.8 Training. Mobile fueling vehicles shall be operated only by designated personnel who are trained on proper fueling procedures and the safety and emergency response plan. The vehicle operator training shall be approved by the fire code official.

DIVISION 16. STORAGE, USE, AND QUANTITIES OF TOXIC GASES

SEC. 14.32.05. - Location of liquified petroleum gas containers – maximum capacity within established limits.

Subsection 6104.2 of the 2025 California Fire Code is amended to read as follows:

6104.2 Maximum capacity within established limits. ~~For the protection of heavily populated or congested areas, s~~Storage of ~~liquified petroleum gas shall not exceed an aggregate~~

~~capacity in any one installation of 2,000 gallons (7570 L) within the limits established by law as set forth in the fire code adoption ordinance or other regulation adopted by the jurisdiction.~~ liquefied petroleum gas (LPG) containers shall not be permitted within the city where natural gas mains exist. Upon the installation of natural gas mains, conversion from LPG to natural gas must be made within thirty (30) days of the installation of the mains. When an area is annexed to the city and no natural gas mains exist, the use of LPG may be continued until natural gas mains are installed. If natural gas mains exist within the area of annexation, conversion from LPG to natural gas shall be made within thirty (30) days of annexation.

Exception: ~~In particular installations, this capacity limit shall be determined by the fire code official, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department.~~ Installations of LPG containers may be permitted within the city if used for filling of portable containers for retail sales, or industrial operators where natural gas would not provide a workable substitute.