

CITY OF ALAMEDA RESOLUTION NO. _____

CONTAINING FINDINGS OF LOCAL CLIMATIC, GEOLOGICAL, AND TOPOGRAPHICAL CONDITIONS AS REQUIRED TO ADOPT ALAMEDA LOCAL AMENDMENTS TO THE 2019 CALIFORNIA ENERGY CODE AND RESCINDING RESOLUTION 15607 LIMITING NATURAL GAS INFRASTRUCTURE FOR NEW RESIDENTIAL CONSTRUCTION ON CITY OWNED PROPERTY

WHEREAS, the California State Building Standards Commission approved and published the 2019 edition of the California Building Standards Code on July 1, 2019, and such code will be effective 180 days thereafter, which is January 1, 2020; and

WHEREAS, the 2019 California Building Standards Code includes the 2019 California Energy Code; and

WHEREAS, California Health and Safety Code Sections 17958.7, and 18941.5 provide that the City may make changes or modifications to the building standards contained in the California Building Standards Code based upon express findings that such changes or modifications are reasonably necessary because of local climatic, geological, or topographical conditions; and

WHEREAS, on or about September 20, 2016, the State of California enacted Senate Bill (SB) 32, which added Health and Safety Code Section 38566 to require greenhouse gas emissions to be reduced to 40 percent below 1990 levels by no later than December 31, 2030; and

WHEREAS, in September 2019, the City Council adopted the City of Alameda's (City) Climate Action and Resiliency Plan (CARP), which included policies directing staff to prepare ordinances requiring all new residential construction to be 100% electric-powered with no gas hookups; and

WHEREAS, in October 2019, the City Council took a first and significant step in this direction by adopting a resolution limiting natural gas infrastructure for new residential construction on City-owned property (Resolution 15607); and

WHEREAS, the proposed local amendments to the 2019 California Energy Code are a targeted "Reach Code," i.e., a local building energy code amendment that "reaches" beyond the state minimum requirements for energy use in building design and construction. It would extend the all-electric requirement adopted for residential construction on city-owned property to new construction throughout Alameda, including nonresidential development, thereby fulfilling a key policy recommendation included in the CARP but would render Resolution 15607 redundant; and

WHEREAS, consistent with the CARP, the local amendments to the 2019 California Energy Code establish requirements to increase energy efficiency and the use of renewable energy, including in particular solar energy, which will reduce demands for local energy and resources, reduce regional pollution, and promote a lower contribution to greenhouse gases emissions as evidenced by the statewide cost-effectiveness studies prepared by the California Statewide Investor Owned Utilities Codes and Standards Program, which demonstrate the potential for both a reduction in emissions and energy usage; and

WHEREAS, based upon the findings contained in this Resolution, the City Council will be adopting an ordinance making local amendments to the 2019 California Energy Code that are reasonably necessary based upon local climatic, geological, topographical, and environmental conditions; and

WHEREAS, cost effectiveness studies prepared by the California Statewide Investor Owned Utilities Codes and Standards Program in conjunction with consultants and cities, demonstrate that the local amendments are cost-effective and do not result in buildings consuming more energy than is permitted by the 2019 California Energy Code.

NOW, THEREFORE, BE IT RESOLVED, by the City Council of the City of Alameda as follows:

Section 1: RECITALS

The City Council finds the foregoing recitals to be true and correct and hereby incorporates those recitals into this Resolution.

Section 2: LOCAL CONDITIONS

The City Council makes the following findings regarding local climatic, geological, topographical, and environmental conditions related to the local amendments to the 2019 California Energy Code described in Section 2 below:

- a. Climatic: The City is located in Climate Zone 3 in the 2019 Edition of the California Energy Code. Climate Zone 3 incorporates mostly coastal communities from Marin County to southern Monterey County including San Francisco. Alameda is already experiencing the repercussions of excessive greenhouse gas emissions including increased temperatures and more extreme weather events, decreased precipitation, and impacts of increased wildfire risk. From 2012 to 2017, Alameda, like the rest of the State, experienced one of the worst droughts on record. In addition, Alameda, along with other jurisdictions in the region and the State of California, experienced the negative impacts of several of the most destructive wildfires in California history in 2020. These climatic conditions, along with the greenhouse emissions generated from structures in both the residential and non-residential sectors, led to severe environmental impacts and accordingly

require Alameda to exceed the energy standards for building construction established in the 2019 Edition of the California Buildings Standards Code. The City Council also adopted a Climate Action and Resiliency Plan that has a goal of reducing greenhouse gas emissions 50% below 2005 levels by 2030. In order to make progress in achieving and/or maintain this goal, the City needs to adopt policies and regulations that reduce the use of fossil fuels that contribute to climate change, such as natural gas in buildings, in new development. Human activities, such as burning natural gas to heat buildings, releases greenhouse gases into the atmosphere and causes an overall increase in global average temperature. These conditions contribute to sea level rise and persistent, seemingly omnipresent wildfires, affecting the City's shoreline and infrastructure, in addition to the health of its residents, which Alameda is particularly vulnerable to as an island community abutting the San Francisco Bay.

- b. Seismic/Geologic: Alameda is subject to earthquake hazard caused by its proximity to both the Hayward and San Andreas faults. Both of these faults are considered active faults which may rupture at any time. The USGS estimates that an earthquake greater than magnitude 6.7 has a 72 percent chance of occurring in the Bay Area before 2043. An earthquake on one of these faults will likely result in widespread liquefaction damaging buildings and buried infrastructure. Reducing the reliance on natural gas in new construction will decrease the risk of fires when gas lines rupture and break or gas appliances topple in earthquakes. Restoring full natural gas service following a major earthquake may take up to six months, compared to about two weeks for electricity.¹
- c. Topographic: The City of Alameda is a low-lying island in the San Francisco Bay, resulting in high groundwater table, particularly during winter storms, which can damage buried infrastructure.
- d. Geographic: The City of Alameda is an island community with access dependent upon bridges and underwater tubes that could make access in the event of a disaster a challenge.

Section 3. LOCAL AMENDMENTS

The City Council expressly finds that the following modifications and changes to the 2019 California Energy Code are reasonably necessary because of the local geological, climatic, topographical, and/or environmental conditions, and that the local conditions detailed in Section 1 above apply to the following modifications and changes to the 2019 California Energy Code, as follows:

¹ <https://onesanfrancisco.org/sites/default/files/inline-files/Lifelines%20Restoration%20Performance%20Report%20Final-03-02-21.pdf>

No.	Code Section(s)	Amendment Summary	Justification from Section 1	Local Conditions
1.	100.0 (SCOPE)	Requiring all newly constructed buildings to be "All-Electric Building[s]"; establishing certain limited exceptions to this requirement, in addition to establishing a rewiring requirement for those projects excepted; providing for discretion of the Building Official to approve alternative materials, design and methods of construction or equipment per California Building Code section 104.	Subsections (a) through (d)	Climatic, seismic/geologic, topographic, and geographic
2.	SECTION 100.1 (DEFINTIIONS AND RULES OF CONSTRUCTION)	Adding definition of "All-Electric Building" to facilitate the foregoing all-electric requirement for new construction	Subsections (a) through (d)	Climatic, seismic/geologic, topographic, and geographic
3.	SECTION 140.0 (PERFORMANCE AND PRESCRIPTIVE COMPLIANCE APPROACHES)	Imposing certain mandatory measures, including a solar voltaic system equipment in size to 15% of the roof or overhang for nonresidential, high-rise residential and hotel/motel buildings	Subsections (a) through (d)	Climatic, seismic/geologic, topographic, and geographic

Section 4: EFFECTIVE DATE

This Resolution shall be in effective immediately upon its passage and adoption.

BE IT FURHTER RESOLVED by the Council of the City of Alameda that City of Alameda Resolution No. 15607 is hereby rescinded.

* * * * *

I, the undersigned, hereby certify that the foregoing Resolution was duly and regularly adopted and passed by the Council of the City of Alameda in a regular meeting assembled on this 18th day of May 2021, by the following vote to wit:

AYES:

NOES:

ABSENT:

ABSTENTIONS:

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of said City this 19th day of May 2021.

Lara Weisiger, City Clerk
City of Alameda

Approved as to form:

Yibin Shen, City Attorney
City of Alameda