FILE NO. 200701

LEGISLATIVE DIGEST

[Building Code - Mandating New Construction Be All-Electric]

Ordinance amending the Building Code to require new construction to utilize only electric power; adopting findings of local conditions under the California Health and Safety Code; affirming the Planning Department's determination under the California Environmental Quality Act; and directing the Clerk of the Board of Supervisors to forward this Ordinance to the California Building Standards Commission upon final passage.

Existing Law

The Building Code does not define or distinguish between all-electric buildings and mixed-fuel buildings or contain a definition of electric-ready design.

Amendments to Current Law

The proposed legislation would define the terms all-electric, mixed-fuel, and electric-ready in the Building Code. All-electric building or design is defined in the proposed legislation as a building that uses permanent electrical supply for air conditioning and heating, water heating, cooking appliances, and clothes drying appliances, and that does not contain any natural gas piping, fixtures, or infrastructure for those building needs. Natural gas piping, fixtures or infrastructure for other uses within a building, such as natural gas piping and appliances for industrial processes, would not disqualify a building as being all-electric for purposes of this legislation. The proposed legislation defines mixed-fuel building as a building that utilizes natural gas and/or contains natural gas piping, fixtures, or infrastructure for any of the following uses: air conditioning or heating, water heating, cooking appliances, clothes drying, or electricity generation. The proposed legislation defines electric-ready as a building that contains sufficient electrical systems and design that would allow for future retrofit to all-electric design.

The proposed legislation would prohibit the Department of Building Inspection (DBI) from issuing building permits for construction of new mixed-fuel buildings where the initial application for the permit was submitted on or after January 1, 2021. It would also prohibit issuance of permits that would result in converting existing all-electric buildings to mixed-fuel buildings—for example, by adding natural gas piping for space heating to a building that currently only uses electricity for space heating—where the initial applications were submitted on or after January 1, 2021.

The proposed legislation contains two exceptions to the all-electric building requirement. The first exception is based on the Building Code's modification process and allows DBI to issue a

permit to construct a new mixed-fuel building where all-electric design is physically or technically infeasible. DBI may only issue a permit under this modification process where it finds: (1) that complete all-electric design is physically or technically infeasible; (2) the installation of natural gas piping, fixtures and infrastructure is limited within the building to the space and use for which all-electric design is infeasible (for example, if electric water heating is infeasible, a natural gas water heater and piping is allowed and no other piping or fixtures may be installed in other locations serving other uses in the building); (3) the limited area in which natural gas piping, fixtures, or infrastructure is to be utilized is also as electric-ready as feasible; and (4) the modified, mixed-fuel design of the building provides equivalent health, safety, and fire protection as all-electric design.

The second exception provides an additional year to submit applications for new buildings that include a designated space for commercial kitchens, including restaurants. This exception allows DBI to issue permits for new construction of mixed-fuel buildings where initial applications are submitted before January 1, 2022, and the new building seeks natural gas piping, fixtures and infrastructure solely to accommodate a commercial food service establishment (a restaurant) and where the use of natural gas is confined to cooking equipment in the food service area of the building.

Background Information

Natural gas combustion, infrastructure, and transport create significant health, safety, and environmental risks for San Francisco. The City's unique topography, high population density, stock of older wooden structures, seismic activity, and wind patterns make the City vulnerable to fast spreading fires triggered or strengthened by gas leaks and explosions. Indoor use of natural gas is also a significant contributor to indoor air pollution, the health impacts of which are exacerbated in denser developments with smaller dwelling units that make up a significant portion of the City's housing stock. Production, transportation, and combustion of natural gas are also significant contributors to climate change, which poses unique risks to the City in the form of sea level rise, extreme heat, and increasing storm frequency.

The objective of the proposed legislation is to recognize the health, safety, and environmental impacts of mixed-fuel buildings and ensure that new construction does not exacerbate these impacts. The proposed legislation would create new building standards in the Building Code, which requires: (1) that the standards are more protective than the California Building Code, (2) findings that the standards are based on unique geologic or environmental conditions, and (3) the standards are submitted to the California Building Standards Commission for review.

The proposed legislation follows other recent legislative efforts to address the risks and impacts of natural gas, including amendments to the Environment Code to mandate new municipal construction be all-electric, and amendments to the Green Building Code creating different energy efficiency standards for mixed-fuel and all-electric buildings.

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