

## **RESOLUTION NO. 2022-0374**

Adopted by the Sacramento City Council

November 29, 2022

### **Establishing Infeasibility Waiver Guidelines to Support Implementation of the New Building Electrification Ordinance**

#### **BACKGROUND**

- A. On June 29, 2020, the Mayors' Commission on Climate Change Final Report recommended the electrification of new and existing buildings, each of which are critical for the reduction of greenhouse gas emissions.
- B. On January 19, 2021, City Council adopted Resolution No. 2021-0022 establishing building electrification as a key strategy of the 2040 General Plan by:
  - 1. Requiring all new buildings to be all electric and eliminate the use of natural gas and fossil fuels for building operations.
  - 2. Gradually transition existing buildings away from natural gas to electric and assist low-income residents by offering financial incentives (Resolution No. 2021-0022).
- C. On June 1, 2021, City Council adopted the 2021 New Building Electrification Ordinance which adopted local amendments to the California Building Standards Code and added to and amended various provisions of Title 15 (Buildings and Construction) of the Sacramento City Code.
- D. On November 29, 2022, City Council adopted the 2022 New Building Electrification Ordinance to align it with the 2022 California Building Code.
- E. The New Building Electrification Ordinance allows the Building Official to waive all-electric requirements for the portions of a building where all-electric is infeasible, provided the building permit applicant has established to the satisfaction of the Building Official that it is infeasible to comply with all-electric requirements.
- F. The New Building Electrification Ordinance provides that the Building Official shall develop guidelines establishing a process to consider infeasibility waivers.
- G. The Infeasibility Waiver Guidance Document (Exhibit A) was developed with extensive input from the 14-member technical panel representing relevant industry experts and practitioners.

H. The Infeasibility Waiver Guidance Document provides a process, criteria, and documentation for the review of requests for infeasibility waivers.

**BASED ON THE FACTS SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:**

**SECTION 1.**

The New Building Infeasibility Waiver Guidance Document as set forth in Exhibit A to this Resolution is approved.

**SECTION 2.**

The City of Sacramento, in partnership with technical and cultural subject matter experts, will conduct workshops with City Council in early 2024 and early 2025 to assess the feasibility of technologies and progress in the electrification of industry sectors. The workshops shall occur prior to city staff recommending changes to the New Building Infeasibility Waiver Guidance Document. The intent of the workshops will be to ensure that continued implementation of the New Building Electrification Ordinance reflects the state of technology and Sacramento’s diversity, economics, and progress towards reducing the impacts of climate change.

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Exhibit A – Infeasibility Waiver Guidance Document

Adopted by the City of Sacramento City Council on November 29, 2022, by the following vote:

Ayes: Members Ashby, Guerra, Harris, Jennings, Loloee, Schenirer, Valenzuela, Vang, and Mayor Steinberg

Noes: None

Abstain: None

Absent: None

Attest:



12/14/2022

Mindy Cuppy, City Clerk

*The presence of an electronic signature certifies that the foregoing is a true and correct copy as approved by the Sacramento City Council.*

# New Building Electrification Infeasibility Waiver Guidance Document

## Section 1: Introduction

The City of Sacramento's New Building Electrification Ordinance establishes phased requirements for the electrification of new building construction. The first phase of the New Building Electrification Ordinance (for newly constructed buildings that are three stories or less) will take effect on January 1, 2023, and second phase (for newly constructed buildings that are four stories or more) will take effect on January 1, 2026.

The New Building Electrification Ordinance does not apply to existing buildings or modifications to existing buildings, including new additions, alterations, retrofits, or tenant improvements.

This document supports the implementation of the New Building Electrification Ordinance by providing a process, criteria and other guidelines for the review and consideration of infeasibility waivers under Section 15.38.030.A of the Ordinance. This guidance document was developed in consultation with relevant industry experts and practitioners.

## Section 2: Communication

This section describes methods of communication the City of Sacramento (City) will use to advise the development community and public about the City's New Building Electrification Ordinance (Ordinance) requirements for building permit applications filed between January 1, 2023 and December 31, 2025. This period excludes:

- Buildings four stories or more.
- Ground-floor food service establishments for cooking equipment.
- Manufacturing or industrial facilities for the area of the building with process loads.
- Water-heating in regulated affordable housing where virtual net energy metering is unavailable.

The new building electrification requirements and the infeasibility waiver do not apply to additions, improvements, modifications, alterations, retrofits, or tenant improvements to existing buildings as defined in the [California Building Code](#).

The City of Sacramento Planning Division will advise applicants about all-electric requirements by:

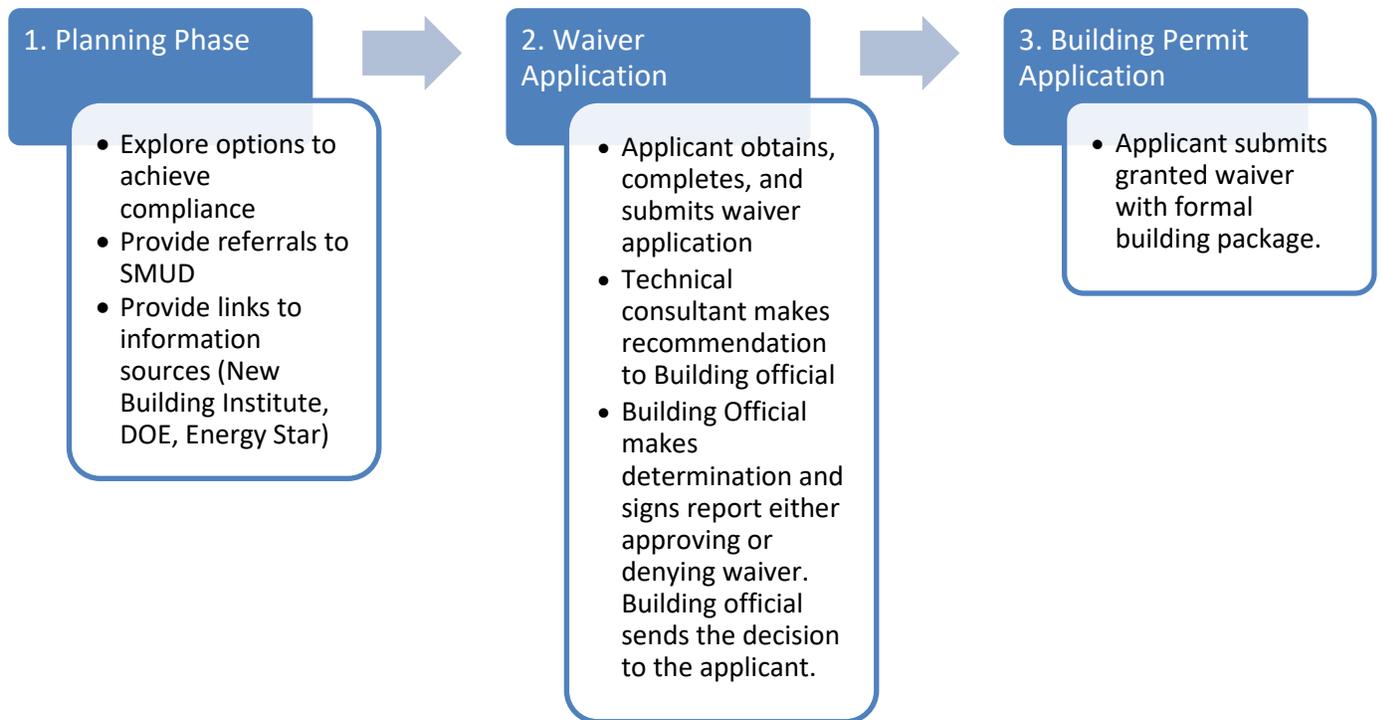
- Advertising: a banner on the Community Development Department webpage, signature line in staff emails, a project webpage, handouts printed at the planning desk upon request, and direct email notifications.
- Advisory language: The City will add advisory language to planning application forms and the Planning Record of Decision for all approved projects.
- Orally: During meetings, including Pre-application Meetings, Subdivision Review Committee (SRC), and Matrix Review Committee (MRC), Planning Division staff will inform applicants about the all-electric requirements.

The City's 3-1-1 customer service center offers a [phone number](#) with translation services for applicants that may need assistance. In addition, [Google Translate](#) may be used to translate a document into other languages as needed.

The media listed above will include links to online information, such as the New Building Infeasibility Waiver Guidance Document, so that project applicants can obtain details about the process of applying for an infeasibility waiver, how the City will review their application, and outcomes that may result from the review. The cost of the infeasibility waiver application will be listed on the website and application form.

### Section 3: New Building Electrification Infeasibility Waiver Process

This section provides an overview of the application, review, and determination processes for a New Building Electrification Infeasibility Waiver for applicants that believe a new construction project is infeasible to be all electric. The infeasibility waiver does not apply to additions, improvements, modifications, alterations, retrofits, or tenant improvements to existing buildings as defined in the [California Building Code](#).



## 1. Planning Phase (Planning Division)

During the Planning Phase, Planning Division staff will advise applicants about options that will assist their projects in achieving compliance with the New Building Electrification Ordinance such as energy efficiency to reduce electrical loads, and site and building design to create space for electric infrastructure and equipment.

Planning Division staff will encourage applicants to consult with SMUD about capacity of SMUD infrastructure, grid, and equipment. It is the developer's responsibility to engage with SMUD's electrical design process as early as possible by following this link: <https://www.smud.org/en/Business-Solutions-and-Rebates/Design-and-Construction-Services/New-SMUD-Construction-Required>.

If the applicant believes that solutions for compliance have been exhausted, Planning Division staff will provide a link to the New Building Electrification Infeasibility Waiver Guidance Document and the New Building Electrification Infeasibility Waiver Application on the Building Division [webpage](#), and refer the applicant to the Building Division.

If the building meets one of the limited exemptions, or is four stories or more, the applicant will check a box on the building permit application denoting which limited exemption applies or that the building is four stories or more. For the following new building situations, the applicant will not need to complete a New Building Infeasibility Waiver Application:

- Building is four stories or more.
- Will have ground-floor food service establishments.
- Will be manufacturing or industrial facilities with process loads.
- Water-heating in regulated affordable housing where virtual net energy metering is unavailable.

## 2. New Building Infeasibility Waiver Application (Building Division with Support from Technical Consultant)

- a) If the applicant believes that an all-electric building is infeasible according to the criteria in Section 5, the applicant will obtain a New Building Electrification Infeasibility Waiver Application (Application) from the Building Division staff or [webpage](#). The applicant for an infeasibility waiver will need to fully complete the application, including the required supporting documentation.
- b) The applicant will submit the application, documentation of evidence necessary to establish that it would be infeasible for the project to comply with all-electric requirements, and all applicable fees to the Building Division. The Application must be submitted before formal submittal to the Building Division for building permit plan check.
- c) The applicant may request a meeting with Building Division staff to present documentation and any other evidence to support the applicant's claim of infeasibility. Building Division staff and/or the City's technical consultant will meet with the applicant and any applicant representatives if requested.
- d) The Building Division will use a qualified technical consultant to review applications and supporting documentation. Following the review of the Application and evidence of infeasibility, the technical consultant will prepare a written report with a recommendation to grant or deny the infeasibility waiver, including justification for the recommendation. The technical consultant will sign the report and submit their recommendation to the City's Building Division.

- e) The Building Official or Building Official's designee will make a determination to approve or deny the waiver, then sign and send the report to the applicant with the decision and justification for denial or approval.

### **3. Formal Building Permit Application/Plan Check Period (Building Division)**

- a) The applicant must submit the New Building Electrification Infeasibility Waiver decision (recommendation, supporting documentation, and report) signed by the Building Official or Building Official's designee with the formal building submittal package to provide a record that the applicant has established to the satisfaction of the Building Official that it is infeasible to comply with the all-electric building requirements. The Building Official can waive the requirements of the New Building Electrification Ordinance only for those portions of the building or type of equipment that is infeasible to be electric.
- b) The Building Division will refer to the approved New Building Electrification Infeasibility Waiver in the City's records for information about the specifics of the waiver and the specific areas of the building or specific types of equipment for which fuel gas piping and fuel gas is allowed. The Building Division will not approve plans that include fuel gas piping except for specific areas of the building or specific types of equipment that are allowed by the approved waiver(s).

### **Section 4: Appeal Process**

A building permit applicant may appeal the Infeasibility Waiver decision in accordance with Sacramento City Code Chapter 1.24 by filing a notice of appeal within 10 business days after the written decision is sent to the building permit applicant.

### **Section 5: New Building Electrification Infeasibility Waiver Criteria**

Architects and designers are expected to plan in advance by designing buildings as all-electric early in the project design process through use of strategies such as energy efficiency to reduce electrical loads, and site and building design to create space for electric infrastructure and equipment.

This section describes the criteria by which applicants can apply for an infeasibility waiver for criteria defined in the New Building Electrification Ordinance. It does not address building types and equipment that currently qualify for a limited exemption under the Ordinance. The infeasibility waiver criteria specified in the New Building Electrification Ordinance include:

- Type of building
- Physical site conditions
- Commercial availability of electric appliances or equipment/technology
- Necessary operational requirements
- The public health, safety, or economic welfare in the event of an electric grid outage
- Electrical infrastructure requirements

The following is an initial list of scenarios for which the City will consider infeasibility applications. This may be revised as described in Section 7.

- Fuel gas piping and fuel gas may be used if the physical site constraints of the building site (property's size, shape, topography, location, or surroundings, but not the building dimensions) make it infeasible for transformers to be located on site in adherence to City of Sacramento Development and Design Standards. Note: Architects and designers are expected to plan in advance by designing the building as all-electric from the start and use strategies such as energy

efficiency to reduce electrical loads, and site and building design to create space for electric infrastructure and equipment.

- Fuel gas piping and fuel gas may be used in appliances or equipment used for process loads (as defined in the Ordinance) if electric equipment/appliance technology is not available to satisfy the calculated load or if SMUD is not able to supply the required electrical service to meet the calculated load.
- Fuel gas piping and fuel gas may be used in the specific reach code scenarios described as “not cost effective using any metric” in the 2022 Cost Effectiveness Studies that will be available on the California Energy Codes and Standards website.  
<https://localenergycodes.com/content/resources>
- Fuel gas piping and fuel gas may be used if electric appliances or equipment are not commercially available, which is defined as “can be purchased for installation in the United States and is available from more than one established supplier.” Fuel gas piping and fuel gas may be used only for the equipment or appliance that is not commercially available.
- Fuel gas piping and fuel gas may be used if installation and/or operation of electric equipment would impede the operation of the building (disrupt the conduct of business or be disruptive to residents), is in conflict with any applicable laws or regulations, would prohibit a type of business or industry, or would prohibit socio-cultural traditions that communities practice.
- Fuel gas piping and fuel gas may be used if electric equipment will cause undue health, safety, or economic harm during a power outage of hours or days and the building will not have access to an emergency power system as defined in the California Building Code.
- Fuel gas piping and fuel gas may be used if electric equipment is prohibited by State or County public health or safety regulations.

## **Section 6: New Building Electrification Infeasibility Waiver Documentation**

The following provides guidance to the applicant about required documentation to submit to the Building Division with the New Building Electrification Infeasibility Waiver application (Application). The applicant is solely responsible for demonstrating infeasibility by submitting all materials to the Building Division for review.

The applicant must submit one or more of the following as documentation with the Application. Calculations must be completed by a qualified third-party or use industry-standard methods of calculation. The Building Division will engage technical consultants with expertise in the type of building and/or type of equipment to review the supporting documentation and assumptions.

- Electrical load calculations using an industry-standard method to demonstrate that energy needs exceed the capabilities of available electric equipment. Calculations must show all assumptions and formulas.
- Documentation of building design solutions considered to demonstrate all-electric equipment cannot be installed due to size or shape of the equipment and the property. The applicant must demonstrate that there are no building design solutions that will create adequate space for electric equipment or infrastructure and comply with City of Sacramento Development and Design Standards, such as reducing the dimensions of the building, and there is not a technical solution, such as reducing electrical load to reduce the size of infrastructure, or the use of different equipment.

- Documentation from at least two suppliers that demonstrates electric appliances or equipment is not able to be purchased for installation in the United States in the required quantity at a price that demonstrates cost-effectiveness of purchase, installation, and operation over the expected life cycle of the equipment.
- Documentation that all-electric construction inhibits or prevents compliance with any applicable laws or regulations.
- Documentation with contextual information about the type of business, industry, or socio-cultural tradition(s) and why it would be prohibited by electric equipment or appliances.
- Documentation with contextual information that demonstrates that stand-by emergency power systems as defined in the California Building Code are not available and that an extended power outage will cause significant physical or financial harm.

### **Section 7: Continuous Improvement**

It is the City's intention to make New Building Electrification Infeasibility Waiver application and review fair and equitable, and to ensure it is not a roadblock to economic development.

On a to-be-determined basis, the City will update the New Building Infeasibility Waiver Guidance Document, Waiver Application, application and review process, and required documentation to incorporate best practices and applicant feedback.

Prior to December 2025, the City will update the New Building Infeasibility Waiver Guidance Document to reflect changes in the California Building Code and the Sacramento City Code, and to reflect changes to the limited exemptions. As needed, the City will engage with individuals and groups that have expertise in building development, a variety of business types, electric equipment and appliances, and ethnic and cultural traditions to ensure that changes reflect the state of technology and Sacramento's diversity, economics, and progress toward reducing the impacts of climate change.