



Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

Approved

DATE: November 25, 2020

Date 11/25/2020

SUPPLEMENTAL

SUBJECT: NATURAL GAS INFRASTRUCTURE PROHIBITION ORDINANCE EXEMPTIONS

REASON FOR SUPPLEMENTAL

This second supplemental memorandum follows the supplemental memorandum dated November 16, 2020 and provides additional information and clarification to the City Council regarding the allowed exemptions under the expanded gas infrastructure prohibition ordinance.

RECOMMENDATION

Staff recommends that City Council consider the following alternative as a replacement for exemption number 4 in the November 16, 2020 Supplemental Memorandum:

Facilities with a Distributed Energy Resource that is necessary for the public health, safety, or economic welfare in the event of an electric grid outage, until December 31, 2024. The Director will report to Council no later than December 31, 2023 with analysis of the availability of fuel substitutes for natural gas and whether or not to transition this section to a Hardship Exemption, effective January 1, 2025.

ANALYSIS

Staff acknowledges concerns raised by San José's environmental advocacy community around the proposed exemption for Distributed Energy Systems that operate using fossil fuels that was included in the November 16, 2020 Supplemental Memo, specifically that the exemption runs counter to the City's stated climate objectives, and allows for an expansion of gas infrastructure in use in some settings that may potentially be in place for the foreseeable future.

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Central to the discussion is the availability of back-up electrical power in the event of a Public Safety Power Shutdown. This power has predominantly been provided in the past by the presence of a back-up diesel generator, but other strategies for avoiding the impacts of power outages have emerged on the market, including the installation of fuel cell systems that operate on natural gas and provide "baseload" power to a facility, with the electric grid serving in a back-up role.

The emissions profiles of diesel generators are well-documented, and their siting is subject to review and permitting by the Bay Area Air Quality Management District. Diesel generators produce more pounds of CO_2 per megawatt-hour than their natural gas fuel cell counterparts.

Staff recommends that the exemption for a facility served by a Distributed Energy Resource sunset on December 31, 2024. The prior recommendation language of an expiration when "low or zero carbon fuels are commercially available for the supply pipeline" does not provide a clear end date. Further research into the existing natural gas infrastructure determined that the pipeline most likely will not accommodate low or zero carbon fuels in the near horizon. As a result, staff believes it is important to continue the City's progress towards its Climate Smart goals and provide a more specific end date. In addition, after December 31, 2024, a facility that requires the Distributed Energy Resource for necessary operational requirements may apply for a "hardship exemption" under the proposed language of Section 17.845.050. Staff will report back to Council by the end of 2023 with a recommendation on whether the hardship exemption should be modified.

In addition to providing a positive benefit on indoor air quality, updating the current natural gas infrastructure prohibition will have a significant positive impact on future GHG emissions from the building sector. Based on the City's latest five-year development forecast, the projected GHG emissions offset over the estimated 50-year lifecycle of these buildings via this update is approximately 608,000 tons of CO₂ emissions. Continuing installations of fossil fuel technologies will reduce those offsets, potentially significantly.

The City remains a leader in addressing the global environmental crisis at a local level, from its approval of Climate Smart San José, to the adoption of Reach Code and Natural Gas Infrastructure Prohibition ordinances. Replacing natural gas ultimately with carbon-free electricity in new buildings will help the City to mitigate the impact of climate change on local conditions, while also continuing to set an example for other cities to follow.

/s/ KERRIE ROMANOW Director, Environmental Services Department

For questions, please contact Ken Davies, Deputy Director, Environmental Services Department at (408) 975-2587.