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<th><strong>Docket Number:</strong></th>
<th>19-BSTD-06</th>
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<td><strong>Project Title:</strong></td>
<td>Local Ordinances Exceeding the 2019 Energy Code</td>
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<td><strong>Document Title:</strong></td>
<td>City of Pacifica - 2019 Final Ordinance 852-CS Part 2 &amp; Exhibits A&amp;B</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Plain text of City of Pacifica submitted ordinance part 2 and exhibits A &amp; B</td>
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<td><strong>Filer:</strong></td>
<td>Danuta Drozdowicz</td>
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<td><strong>Organization:</strong></td>
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<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
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with the California Plumbing Code and any applicable local ordinances; or

iv. Install a rainwater catchment system designed to comply with the California Plumbing Code and any applicable local ordinances, and that uses rainwater flowing from at least 65 percent of the available roof area.

B. Low-rise and High-rise Multifamily Buildings, Hotel/Motel Occupancies, and Nonresidential Buildings. The solar zone shall be located on the roof or overhang of the building or on the roof or overhang of another structure located within 250 feet of the building or on covered parking installed with the building project, and shall have a total area no less than 15 percent of the total roof area of the building excluding any skylight area. The solar zone requirement is applicable to the entire building, including mixed occupancy.

EXCEPTION 1 to Section 110.10(b)1B: High-rise Multifamily Buildings, Hotel/Motel Occupancies, and Nonresidential Buildings with a permanently installed solar electric system having a nameplate DC power rating, measured under Standard Test Conditions, of no less than one watt per square foot of roof area.

EXCEPTION 2 to Section 110.10(b)1B: High-rise multifamily buildings, hotel/motel occupancies with a permanently installed domestic solar water-heating system complying with Section 150.1(c)8Bi and an additional collector area of 40 square feet.

EXCEPTION 3 to Section 110.10(b)1B: Buildings with a designated solar zone area that is no less than 50 percent of the potential solar zone area. The potential solar zone area is the total area of any low-sloped roofs where the annual solar access is 70 percent or greater and any steep-sloped roofs oriented between 90 degrees and 300 degrees of true north where the annual solar access is 70 percent or greater. Solar access is the ratio of solar insolation including shade to the solar insolation without shade. Shading from obstructions located on the roof or any other part of the building shall not be included in the determination of annual solar access.

EXCEPTION 4 to Section 110.10(b)1B: Low-rise and high-rise multifamily buildings with all thermostats in each dwelling unit are demand response controls that comply with Section 110.12(a), and are capable of receiving and responding to Demand Response Signals prior to granting of an occupancy permit by the enforcing agency. In addition, either A or B below:

A. In each dwelling unit, comply with one of the following measures:
   i. Install a dishwasher that meets or exceeds the ENERGY STAR Program requirements with either a refrigerator that meets or exceeds the ENERGY STAR Program requirements or a whole house fan driven by an electronically commutated motor; or
ii. Install a home automation system that complies with Section 110.12(a) and is capable of, at a minimum, controlling the appliances and lighting of the dwelling and responding to demand response signals; or

iii. Install alternative plumbing piping to permit the discharge from the clothes washer and all showers and bathtubs to be used for an irrigation system in compliance with the California Plumbing Code and any applicable local ordinances; or

iv. Install a rainwater catchment system designed to comply with the California Plumbing Code and any applicable local ordinances, and that uses rainwater flowing from at least 65 percent of the available roof area.

B. Meet the Title 24, Part 11, Section A4.106.8.2 requirements for electric vehicle charging spaces.

EXCEPTION 5 to Section 110.10(b)1B: Buildings where the roof is designed and approved to be used for vehicular traffic or parking or for a heliport.

EXCEPTION 6 to section 110.10(b)1B: Performance equivalency approved by the building official.

2. Azimuth. All sections of the solar zone located on steep-sloped roofs shall be oriented between 90 degrees and 300 degrees of true north.


A. No obstructions, including but not limited to, vents, chimneys, architectural features, and roof mounted equipment, shall be located in the solar zone.

B. Any obstruction, located on the roof or any other part of the building that projects above a solar zone shall be located at least twice the distance, measured in the horizontal plane, of the height difference between the highest point of the obstruction and the horizontal projection of the nearest point of the solar zone, measured in the vertical plane.

EXCEPTION to Section 110.10(b)(3): Any roof obstruction, located on the roof or any other part of the building that is oriented north of all points on the solar zone.

C. The solar zone needs to account for shading from obstructions that may impact the area required in 110.10(b)1B. When determined by the Building Official that conditions exist where excessive shading occurs and solar zones cannot be met, a performance equivalency approved by the Building Official may be used as an alternative.

4. Structural Design Loads on Construction Documents. For areas of the roof designated as solar zone, the structural design loads for roof dead load and roof live load shall be clearly indicated on the construction documents.
NOTE: Section 110.10(b)(4) does not require the inclusion of any collateral loads for future solar energy systems.

(c) Interconnection Pathways.
1. The construction documents shall indicate a location reserved for inverters and metering equipment and a pathway reserved for routing of conduit from the solar zone to the point of interconnection with the electrical service.
2. For single family residences and central water-heating systems, the construction documents shall indicate a pathway for routing of plumbing from the solar zone to the water-heating system.

(d) Documentation. A copy of the construction documents or a comparable document indicating the information from Sections 110.10(b) through 110.10(c) shall be provided to the occupant.

(e) Main Electrical Service Panel.
1. The main electrical service panel shall have a minimum busbar rating of 200 amps.
2. The main electrical service panel shall have a reserved space to allow for the installation of a double pole circuit breaker for a future solar electric installation. The reserved space shall be permanently marked as "For Future Solar Electric".

Section 17. Repeal of Chapter 7 of Title 8. Chapter 7 ("Green Building Code") of Title 8 ("Building Regulations") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impede, impact, or negate any administrative, civil, or criminal enforcement of said chapter that commenced prior to the enforcement date of this ordinance.

Section 18. Replacement: Adoption of Chapter 7 of Title 8. Title 8 of the Pacifica Municipal Code is hereby amended to add Chapter 7 to read as follows:

"CHAPTER 7
GREEN BUILDINGS CODE

Sec. 8-7.01 – Adoption of the California Green Buildings Code

For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, conservation of building materials, waste management and sustainability for all buildings and structures in the City of Pacifica, Chapters 1 through 8 of that certain code designated as the California Green Buildings Code, 2019 Edition [CCR Title 24, Part 11], published by the California Building Standards Commission and as adopted by the State of California, which is on file in the office of the City Clerk for public record and inspection, is hereby adopted by reference and made a part of this chapter as though set forth in this chapter in full, subject, however, to the amendments, additions, and deletions set forth in this chapter, and said code shall be known as the Building Code for the City.

Sec. 8-7.02 - Amendments: Section 4.304.1 ("Outdoor potable water use in landscape areas")

Section 4.304.1 of the California Buildings Code is hereby amended to read as follows:
4.304.1 Outdoor potable water use in landscape areas.

New residential developments shall comply with one of the following options:

1. The current California Department of Water Resources' Model Water Efficient Landscape Ordinance (MWELO); or
2. Projects with aggregate landscape areas less than 2,500 square feet may comply with the MWELO's Appendix D Prescriptive Compliance Option.

Sec. 8-7.03 - Amendments: Section 5.304.2 ("Outdoor water use in landscape areas")

Section 5.304.2 of the California Buildings Code is hereby added to read as follows:

5.304.2 Outdoor water use in landscape areas.

When water is used for outdoor irrigation for new construction projects requiring a building or landscape permit, plan check or design review, the following shall apply:

The California Department of Water Resources Model Water Efficient Landscape Ordinance (MWELO) commencing with Section 490 of Chapter 2.7, Division 2, Title 23, California Code of Regulations.

Sec. 8-7.04 - Amendments: Section 8-7.04 ("Streamlined permitting process for electric vehicle charging systems") is hereby added to read as follows:

(a) **Purpose.** The purpose of this section is to adopt an expedited, streamlined permitting process for electric vehicle charging stations that complies with Assembly Bill 1236 (Chapter 598, Statutes 2015, Cal. Gov't Code § 65850.7) to achieve timely and costly-effective installations of electric vehicle charging stations. The ordinance encourages the use of electric vehicle charging stations by removing unreasonable barriers, minimizing costs to property owners and the City of Pacifica, and expanding the ability of property owners to install electric vehicle charging stations. The ordinance allows the City of Pacifica to achieve these goals while protecting the public health and safety.

(b) **Definitions.**

(1) "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.

(2) "Electronic submittal" means the utilization of the City's online building permit web portal.

(3) "Specific, adverse impact" means a significant, quantifiable, direct, and unavailable 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.
City building permit required.

(1) A city building permit is required to install an electric vehicle charging station. "Electric vehicle charging station" or "charging station" means any level of electric vehicle supply equipment station that delivers electricity from a source outside an electric vehicle into a plug-in electric vehicle.

(2) An application for a City building permit to install an electric vehicle charging station shall be processed in accordance with Government Code Section 65850.7.

Review of applications. The following expedited, permitting process applies to applications for a building permit to install an electric vehicle charging station:

(1) Application. The City will make the following available on the City's website: the City's standard building permit application form; and the City's standard electric vehicle charging station plan form and checklist. The checklist will include all requirements that an electric vehicle charging station must meet to be eligible for review and approval under this section. An application to install an electric vehicle charging station may be submitted electronically.

(2) Application review. An application will be deemed complete if the building official determines that the application includes all of the information and documents required by the standard application form, the standard plan form, and the standard checklist, and is consistent with all applicable laws and health and safety standards. If an application is deemed incomplete, the Building Official will notify the applicant in writing of the additional information needed to complete the application. After an application is deemed complete, the Building Official will perform an expedited review of the application and all submittals.

(3) Permit issuance. A building permit will be issued following the Building Official's approval of an application for an electric vehicle charging station and after all required fees have been paid. If the application was submitted electronically, the permit may be issued electronically.

(4) Inspection and authorization to operate. As soon as practicable after the applicant notifies the Building Official that an electric vehicle charging station has been installed, the Building Official will inspect the system to verify compliance with the building permit. If the Building Official determines that a system was not installed in compliance with a building permit, the Building Official will notify the permittee of the actions needed to comply with the building permit and will conduct additional inspections as necessary. No electric vehicle charging station may be operated unless the Building Official verifies in writing that it complies with the building permit.

Electric vehicle charging station installation requirements.

(1) Electric vehicle charging station equipment shall meet the requirements of the California Electrical Code, the Society of Automotive Engineers, the National Electrical Manufacturers Association, and accredited testing
laboratories such as Underwriters Laboratories, and rules of the Public Utilities Commission regarding safety and reliability.

(2) Installation of electric vehicle charging stations and associated wiring, bonding, disconnecting means and overcurrent protective devices shall meet the requirements of Article 625 and all applicable provisions of the California Electrical Code.

(3) Installation of electric vehicle charging stations shall be incorporated into the load calculations of all new or existing electrical services and shall meet the requirements of the California Electrical Code. Electric vehicle charging equipment shall be considered a continuous load.

(4) Anchorage of either floor-mounted or wall-mounted electric vehicle charging stations shall meet the requirements of the California Building or Residential Code as applicable per occupancy, and the provisions of the manufacturer's installation instructions. Mounting of charging stations shall not adversely affect building elements.

(f) Requirements cumulative. The requirements of this chapter are in addition to any other applicable requirements of this Code, and any requirements of a utility provider, that must be satisfied before an electric vehicle charging station may be installed or operated."

**Section 19. Repeal of Chapter 7.5 of Title 8.** Chapter 7.5 ("Residential Code") of Title 8 ("Building Regulations") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impeded, impact, or negate any administrative, civil, or criminal enforcement of said chapter that that commenced prior to the enforcement date of this ordinance.

**Section 20. Replacement: Adoption of Chapter 7.5 of Title 8.** Title 8 of the Pacifica Municipal Code is hereby amended to add Chapter 7.5 to read as follows:

"CHAPTER 7.5
RESIDENTIAL CODE

Sec. 8-7.5.01 – Adoption of the California Residential Code.

For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures and grading in the City of Pacifica, Chapters 1 through 10, including, Appendix H ("Patio Covers"), Appendix J ("Existing Buildings and Structures"), Appendix L ("Sound Transmission"), Appendix Q ("Tiny Homes"), Appendix X ("Emergency Housing"), and Appendix V ("Swimming Pools Safety Act") of that certain code designated as the California Residential Code, 2019 Edition [CCR Title 24, Part 2.5], which incorporates and amends the 2018 Edition of International Residential Code as published by the International Code Council and as amended by the State of California, which is on file in the office of the City Clerk for public record and inspection, is hereby adopted by reference and made a part of this chapter as though set forth in this chapter in full, subject, however, to the amendments, additions, and deletions set forth in this chapter, and said code shall be known as the Building Code for the City."
Sec. 8-7.5.02 - Amendments: Section R101.1 ("Title").

Section R101.1 of the California Residential Code is hereby amended to read as follows:

R101.1 Title. These regulations shall be known as the Residential Code of the City of Pacifica, hereafter referred to as "this Code."

Sec. 8-7.5.03 - Amendments: Section R105.3.3 ("Application for permit: improvements required prior to the issuance of building permits and exceptions").

Section R105.3.3 of the California Residential Code is hereby added to read as follows:

R105.3.3 Improvements required prior to the issuance of building permits and exceptions.

(a) The City Engineer shall require, prior to the issuance of a building permit for the construction of any structure or improvement upon unimproved property within the City where such permit is required and where no public improvements, including street paving, sidewalk, gutter and/or curb and miscellaneous facilities exist, the construction of such public improvements along such property, constructed in accordance with the City of Pacifica's Engineering Standards, as part of the construction of such structure or improvements.

(b) When it is not impractical to establish grades prior to the completion of construction of the structure, the City Engineer may require an executed agreement by the property owner stating he/she will construct public improvements, including street paving, sidewalks, gutter and/or curb and miscellaneous facilities at such time as the City may deem it feasible.

(c) Sidewalks shall not be required prior to the issuance of a building permit for the construction of any structure or improvements upon unimproved property in areas where the Council has, by resolution, deemed that sidewalks are not required. The City Engineer may require an executed agreement by the property owner stating he/she will construct the improvements at such time the City may again require them.

Sec. 8-7.5.04 - Amendments: Section R105.5 ("Expiration").

Section R105.5 of the California Residential Code is hereby amended to read as follows:

R105.5 Expiration of Permit—Generally.

(a) Except as set forth in Section R105.5.1, every permit issued for property within the City of Pacifica shall expire by limitation and become null and void as follows:

(1) If work authorized by such permit is not commenced within 12 months from the issuance date of such permit.
(2) If work authorized by such permit is commenced within 180 days from the issuance date of such permit, such permit shall expire by limitation and become null and void 180 days after the date of the last successful inspection by the City's Building Division. For purposes of this section, "successful inspection" shall mean an required inspection (as provided in Section R109.1 of this Code or elsewhere in this Code) in which work inspected was determined by the Building Official or his/her designee to meet all applicable minimum code requirements and the inspection was documented as successful.

(3) Notwithstanding any provision of Subsections R105.5(A)(1) and R105.5(A)(2), no permit shall be extended, and therefore, no permit shall be valid, for any period exceeding Two (2) years from the original date of issuance. 

(b) In the event of permit expiration, before work authorized pursuant by the expired permit can be commenced or recommenced, a new permit shall first be obtained (hereafter, a "renewal permit"). To obtain a renewal permit, the applicant may be required to resubmit plans and specifications, if deemed necessary by the Building Official and/or Planning Director. The applicant must pay all applicable fees, including but not limited to, a plan check fee and building permit fees, in the amount then established by resolution of the City Council. If renewal permits are applied for, a mandatory site inspection shall be performed by the Building Division to determine compliance of existing conditions and materials with this Code. All work to be performed under a renewal permit must be performed in accordance with all applicable technical codes, regulations, laws, and ordinances in effect on the date of issuance of the renewal permit. Renewal permits are subject to expiration as set forth in (ii), above.

(c) In the event of permit expiration, any work performed under that permit is "unpermitted" as defined in Section R113.1.1 of this chapter, and is subject to the legalization provisions of Section R115 of this chapter.

Sec. 8-7.5.05. - Amendments: Section R105.5.1 ("Expiration of permit for unpermitted structures or grading").

Section R105.5.1 of the California Residential Code is hereby added to read as follows:

R105.5.1 Expiration of Permit for Unpermitted Structures. Notwithstanding any provision of Section R105.5, if a building permit was issued in order to bring an "unpermitted structure" (as this term is defined in Section R113.1.1 of this chapter) or other unlawful, substandard, or hazardous condition into compliance with any applicable law, ordinance, rule or regulation, such permit shall expire by limitation and become null and void sixty (60) days after the date on which the permit was issued. The Building Official may, in his or her sole discretion, extend the validity of the permit for a period not exceeding 180 days beyond the initial 60 day limit upon written request by the applicant filed with the Building Official prior to the expiration date of the original permit, if the Building Official determines that substantial progress has been made toward completing the work authorized by the permit.
Sec. 8-7.5.06. - Amendments: Section R105.6 ("Suspension or revocation").

Section R105.6 is hereby deleted in its entirety and a new Section R105.6 is hereby added to read as follows:

R105.6 - Suspension or Revocation of Permit. The Building Official may, in writing, suspend or revoke a permit issued under the provisions of this Code, or other relevant laws, ordinances, rules, or regulations, whenever the permit is issued in error or on the basis of incorrect, inaccurate, or incomplete information, or in violation of any ordinance or regulation of any of the provisions of this Code.

The Building Official may also, in writing, withhold inspections or approvals, or suspend or revoke a permit, where work is being performed in violation of approved plans, conditions of the permit, or applicable laws, and/or where work is being concealed without approval from the Building & Safety Division, and/or where work is not in accordance with the direction of the Building & Safety Division.

Sec. 8-7.5.07. - Amendments: Section R105 ("Permits: Hours of Construction").

Section R105.10 is hereby added to read as follows:

R105.10 Hours of Construction. The hours of construction for any project for which a building permit is required within the City of Pacifica shall be limited to the hours of 7:00 a.m. to 7:00 p.m. on Monday, Tuesday, Wednesday, Thursday, and Friday. The hours of construction shall be limited to 9:00 a.m. to 5:00 p.m. on Saturday and Sunday.

Sec. 8-7.5.08. - Amendments: Section R108.2 ("Fees: schedule of permit fees").

Section R108.2 of the California Residential Code is hereby amended to read as follows:

R108.2 Schedule of permit fees. On buildings, structures, electrical, gas, mechanical, and plumbing systems or alterations requiring a permit, fees and charges for each permit shall be assessed and paid as required, in accordance with the most current fee schedule adopted in the City of Pacifica Municipal Administrative Policy No. 2.

Sec. 8-7.5.09. - Amendments: Section R108.6 ("Fees: work commencing before permit issuance").

Section R108.6 of the California Residential Code is hereby amended to read as follows:

R108.6 Work commencing before permit issuance. Whenever any work for which a permit is required by this Code has been commenced without first obtaining such permit, an investigation and processing fee equal to the amount of the required permit fee or as otherwise established by the most current fee schedule adopted in the City of Pacifica Municipal Administrative Policy No. 2 shall be collected at the time of application for the required permit and prior to the issuance of the required permit, irrespective of whether a permit is subsequently issued.

Sec. 8-7.5.10. - Amendments: Section R110.3.1 ("Certificate of occupancy: certificate issued: improvements prior to occupancy of structures and utility service exceptions").
Section R110.3.1 of the California Residential Code is hereby added to read as follows:

R110.3.1 Improvements prior to occupancy of structures and utility service exceptions.

(a) No new structure for which a building permit is required shall be occupied or otherwise used, nor shall utility services be supplied thereto, until such public improvements, including street paving, sidewalk, gutter and/or curb and miscellaneous facilities required by Section R105.3.3 have been installed and approved by the City Engineer and until such time as the Planning Director has been satisfied that all planning department requirements for the project have been met.

(b) When it is, in the opinion of the City Engineer and/or the Planning Director, not practicable to complete public improvements including street paving, sidewalk, gutter and/or curb, miscellaneous facilities or planning department conditions prior to completion of construction of the structure, a completion bond in an amount determined by the City Engineer and/or Planning Director to be adequate to insure completion shall be posted for the completion of the required improvements. Exception: The Building Official may authorize the installation of gas and/or electric utilities in buildings for the purpose of testing equipment prior to completion of construction when the Building Official has determined that such utilities are necessary for the testing of required equipment prior to the final inspection of the building.

Sec. 8-7.5.11. - Amendments: Section R112 ("Board of appeals").

Section R112 of the California Residential Code is hereby deleted in its entirety, and a new Section R112 is hereby added to read as follows:

SECTION R112
APPEALS

R112.1 Scope of Appeal.

(a) Notwithstanding the provisions of the Technical Codes, an appeal is limited to the following orders, decisions, or determinations of the Building Official or his/her designee:

(1) Denials of the proposed use of alternative materials, design or method of construction, installation, and/or equipment;

(2) Orders to Vacate and/or Not Enter a building, structure or premises; however, such order shall not be stayed during the pendency of the appeal;

(3) Orders to Demolish a building or structure; however, an order to vacate that may be issued in conjunction with the Order to Demolish shall not be stayed during the pendency of the appeal.
(b) The right of appeal shall not exist for determinations of the Building Official, or a designee thereof, that a violation of any provision of the Technical Codes exists in a building or structure, or portion thereof, or on any premises.

R112.2 Appeal Procedure. Any person who is aggrieved by an order, decision or determination of the Building Official as provided in Section 112.1 may appeal said order, decision or determination. Such appeal shall be in writing and must be filed with the City Clerk within ten (10) business days from the date of service of the order, decision or determination being appealed. The appeal must specify the basis for the appeal in detail, provide a mailing address and telephone number for the appellant, and include the applicable appeal fee. If a timely appeal is not received by the City Clerk, the right to appeal is waived and the order, decision or determination of the Building Official is deemed final and binding. Appeals shall be heard as follows:

(1) Appeals shall be heard before the Emergency Preparedness and Safety Commission ("Commission"). As soon as practicable after receiving the request, the City Clerk shall set a date for the Commission to hear the appeal, which date shall be not less than ten (10) calendar days nor more than forty-five (45) calendar days from the date the appeal was received. The City Clerk shall give each party written notice of the time and place of the hearing at least ten (10) calendar days prior to the date of the hearing, either by causing a copy of the notice to be delivered to the party personally, or by mailing a copy thereof, postage prepaid, addressed to each appealing party at the address(es) shown on the request. Continuances of the appeal hearing may be granted by the Commission on request of the appealing person for good cause shown, provided such request is made no later than 24 hours prior to the scheduled hearing, or upon request of the Building Official or his or her designee for good cause shown, or on the Commission's own motion.

(2) At the time and place set forth in the notice of hearing, the Commission shall hear the testimony of the appealing person(s), the Building Official, and/or their witnesses, as well as any documentary evidence presented by these persons concerning the order, decision or determination being appealed. Only those matters or issues specifically raised in the written appeal shall be considered in the hearing. Appeal hearings are informal, and formal rules of evidence and discovery do not apply.

(3) Upon the conclusion of the appeal hearing, the Commission shall, on the basis of the evidence presented at the hearing, determine whether the order, decision or determination should be affirmed, modified, or rescinded. A copy of the Commission's written decision shall be served upon the appealing person by first class mail or by personal service. Notwithstanding any other provision of the Pacifica Municipal Code, the determination of the Commission shall be final and binding.

(4) If the appellant fails to appear, the Commission shall cancel the hearing and send a notice thereof to the appellant by first class mail. A cancellation of a hearing due to non-appearance of the appellant shall constitute the appellant's waiver of the right to appeal. In such instances, the order, decision or determination of the Building Official shall be final and binding.
Sec. 8-7.5.12. - Amendments: Section R113.1 ("Violations: unlawful acts").

Section R113.1 of the California Residential Code is hereby amended to read as follows:

R113.1 Unlawful Acts. Irrespective of whether a notice of violation has been issued pursuant to Section R113.2 of this Code, it shall be unlawful for any person, firm, or corporation to erect, construct, alter, extend, repair, move, remove, demolish, occupy or maintain any building, structure, equipment, installation or land regulated by the Technical Codes, or cause or permit the same to be done, in conflict with or in violation of any of the provisions of the Technical Codes.

R113.1.1 Unpermitted Structures. No person shall own, use, occupy, or maintain an unpermitted structure. For purposes of this section, "unpermitted structure" shall be defined as any building or structure, or portion thereof, that was erected, constructed, enlarged, altered, repaired, moved, improved, removed, connected, converted, demolished, or equipped, at any point in time by any person, without the required permit(s) having first been obtained from the Building Official or with a valid permit as issued by the Building Official which subsequently expired and became null and void.

Sec. 8-7.5.13. - Amendments: Section R113.4 ("Violations: violation penalties").

Section R113.4 of the California Residential Code is hereby amended to read as follows:

R113.4 Violation Penalties. Any person, firm or corporation who violates any provision of the Technical Codes, or fails to comply with any of the requirements thereof, or who erects, constructs, alters, repairs or maintains a building, structure, installation or equipment in violation of approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of the Technical Codes, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be subject to the punishments set forth in Chapter 2 of Title 1 of the Pacifica Municipal Code.

Each and every day, or portion thereof, during which any violation of the Technical Codes occurs or continues constitutes a separate and distinct offense.

Sec. 8-7.5.14. - Amendments: Section R115 ("Procedure for legalizing unpermitted structures").

Section R115 of the California Residential Code is added to read as follows:

R115 Procedure for Legalizing Unpermitted Structures.

R115.1 Permits. Any person who wishes to legalize an "unpermitted structure" (as this term is defined in Sections R113.1.1 of this Code), shall obtain all applicable permits. Unpermitted structures shall comply with all current Technical Code requirements and other required approvals pursuant to the Pacifica Municipal Code in order to be legalized.

Permits obtained to legalize unpermitted structures shall expire as set forth in Section R105.5.1 of this code.

R115.2 Plans.
R115.2.1 Structures. Prior to the issuance or granting of any permit to legalize an unpermitted structure, plans showing the plot plan, exterior elevations, existing structures proposed structures, and proposed finish materials shall be submitted to the Building Official and Planning Director for review and approval.

R115.2.2 Grading. Prior to the issuance or granting of any permit to legalize unpermitted grading, a grading and drainage plan showing the original grade and existing unpermitted grade on the premises and the existing grade on adjoining properties, and a soils report shall be submitted to the Building Official and Planning Director for review and approval.

R115.3 Inspections.

R115.3 Inspections. Unpermitted structures or unpermitted grading for which a permit has subsequently been obtained shall be subject to inspection by the Building Official in accordance with, and in the manner prescribed in, the Technical Codes. The Building Official may require the removal of finish materials in order to expose framing elements, electrical components, plumbing fixtures, or mechanical systems, or may require the removal of fill, to verify that installation, construction, or grading was performed in conformance with the Technical Codes.

R115.4 Investigation Fees.

R115.4.1 Investigation. Whenever any work for which a permit is required by this code has commenced on land or in connection with any type of structure without first obtaining said permit, a special investigation shall be made before a permit may be issued for such work. For purposes of this section, "special investigation" shall include, but is not limited to, inspecting premises and structures, reviewing permit, license and other records of the City or other agencies, reviewing plans, taking photographs, engaging in conferences and communications with other officials of the City or other agencies, and engaging in conferences and communications with owners or other responsible persons concerning the unpermitted structure or grading.

R115.4.2 Fee. A special investigation fee shall be paid prior to the issuance of a permit for an unpermitted structure or unpermitted grading. The fee shall be assessed as provided in Section R108.4.2 of this chapter.

The payment of such investigation fee shall not exempt any person from compliance with all other provision of this code nor from any penalty prescribed by law.

R115.5 Unpermitted Structures Which Cannot be Legalized.

If the Planning Director determines that the City's zoning regulations prohibit legalization of any unpermitted structure, the structure shall be demolished or, if previously permitted, restored to its original approved condition, with all requisite permits, inspections and approvals.

If the Building Official determines that an unpermitted structure cannot be made to conform with current applicable Technical Code requirements, the structure shall be demolished or, if previously permitted, restored to its original approved condition, with all requisite permits, inspections and approvals.
Sec. 8-7.5.15. - Amendments: Section R202 ("Definitions").

Section R202 of the California Building Code is amended to include the following:


Electrical Code. Chapter 4 ("Electrical Code") of Title 8 ("Building Regulations") of the Pacifica Municipal Code.


Historical Buildings Code. Chapter 8 ("Historical Buildings Code") of Title 8 ("Building Regulations")


Technical Codes. Chapters 1, 2, 3, 4, 5, 7, and 7.5 of Title 8 ("Building Regulations") of the Pacifica Municipal Code.

Sec. 8-7.5.16 – Amendments: Section R313. ("Townhouse automatic fire sprinkler systems")

Section R313.1 of the California Residential Code shall be amended to read as follows

R313.1 Townhouse Automatic Fire Extinguishing Systems.

1. An automatic residential fire sprinkler system shall be installed in Townhouses.

2. Existing Buildings and Structures. An automatic fire sprinkler system shall be installed throughout all buildings when an addition is added to the building.

Exception. When an addition to an R-3 occupancy is less than 1,000 square feet in size no sprinklers are required in either the addition or the existing building.
Sec. 8-7.5.17 – Amendments: Section 313.2 One- and Two-family dwellings automatic fire extinguishing system.

Section R313.2 of the California Residential Code shall be amended to read as follows:

R313.2 One-and Two-family dwelling automatic fire extinguishing system.

1. An automatic residential fire extinguishing system shall be installed in all new one-and two-family dwellings.

2. Existing One- and Two-Family dwellings. An automatic fire sprinkler system shall be installed when an addition is added to the building.

Exception: When an addition to an R-3 occupancy is less than 1,000 square feet in size no sprinklers are required in either the addition or the existing building.

Section 21. Repeal of Chapter 8 of Title 8. Chapter 8 ("Historical Buildings Code") of Title 8 ("Building Regulations") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impeded, impact, or negate any administrative, civil, or criminal enforcement of said chapter that commenced prior to the enforcement date of this ordinance.

Section 22. Replacement: Adoption of Chapter 8 of Title 8. Title 8 of the Pacifica Municipal Code is hereby amended to add Chapter 8 to read as follows:

"CHAPTER 8
HISTORICAL BUILDINGS CODE

Sec. 8-8.01 – Adoption of the California Historical Buildings Code

For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all historical buildings and structures in the City of Pacifica, adopts that certain Code designated as the California Historical Buildings Code, 2019 Edition [CCR Title 24, Part 8]."

Section 23. Repeal of Chapter 8.5 of Title 8. Chapter 8 ("Existing Buildings Code") of Title 8 ("Building Regulations") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impeded, impact, or negate any administrative, civil, or criminal enforcement of said chapter that commenced prior to the enforcement date of this ordinance.

Section 24. Replacement: Adoption of Chapter 8.5 of Title 8. Title 8 of the Pacifica Municipal Code is hereby amended to add Chapter 8.5 to read as follows:

"CHAPTER 8.5
EXISTING BUILDINGS CODE

Sec. 8-8.5.01 – Adoption of the California Existing Buildings Code
For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all existing buildings and structures in the City of Pacifica, adopts that certain Code designated as the California Existing Buildings Code, 2019 Edition [CCR Title 24, Part 10].*

**Section 25. Repeal of Chapter 9 of Title 8.** Chapter 9 ("Reference Standards") of Title 8 ("Building Regulations") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impeded, impact, or negate any administrative, civil, or criminal enforcement of said chapter that that commenced prior to the enforcement date of this ordinance.

**Section 26. Replacement: Adoption of Chapter 9 of Title 8.** Title 8 of the Pacifica Municipal Code is hereby amended to add Chapter 9 to read as follows:

"CHAPTER 9
REFERENCE STANDARDS CODE

Sec 8-9.01 – Adoption of the California Reference Standards

For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures in the City of Pacifica, adopts that certain Code designated as the California Reference Standards Code 2019 Edition [CCR Title 24 Part 12]."

**Section 27. Repeal of Article 1 of Chapter 3 of Title 4.** Article 1 ("Fire Code") of Chapter 3 ("Fire Protection") of Title 4 ("Public Safety") of the Pacifica Municipal Code is hereby repealed in its entirety; however, such repeal shall not affect or excuse any violation of said chapter that occurred prior to the effective date of this ordinance; nor shall such repeal impeded, impact, or negate any administrative, civil, or criminal enforcement of said chapter that that commenced prior to the enforcement date of this ordinance.

**Section 28. Replacement: Adoption of Article 1 of Chapter 3 of Title 4.** Chapter 3 of Title 4 of the Pacifica Municipal Code is hereby amended to add Article 1 as follows:

"ARTICLE 1
FIRE CODE

Sec. 4-3.101 – Adoption of the California Fire Code

For the purpose of regulating the erection, construction, enlargement, alteration, repair, removal, demolition, conversion, occupancy, equipment, use, height, area, and maintenance of all buildings and structures and grading in the City of Pacifica, Chapters 1 through 67, including Appendix B ("Fire-Flow Requirements for Buildings"), Appendix C ("Fire Hydrant Locations and Distribution"), Appendix D ("Fire Apparatus Access Roads"), and Appendix F ("Hazard Ranking"), Appendix L ("Requirements for Fire Fighter Air Replenishment Systems") of that certain code designated as the California Fire Code, 2019 Edition [CCR Title 24, Part 9], published by the International Code Council, amended by the State of California and as adopted and/or amended by the Office of the State Fire Marshal, which is on file in the Office of the City Clerk for public record and inspection, is hereby adopted by reference and made a part of this chapter as though set forth in this chapter in full, subject, however, to the amendments, additions, and deletions set
forth in this chapter, and said code shall be known as Fire Code for the City of Pacifica. All other previously adopted ordinances not modified by this article and amendments shall remain.

Sec. 4-3.102. - Establishment and duties of the Bureau of Fire Prevention.

The California Fire Code shall be enforced by the Fire Prevention Services Bureau in the Fire Department of the City, which Bureau is hereby established and which shall be operated under the supervision of the Fire Chief.

The Fire Marshal in charge of the Fire Prevention Services Bureau shall be appointed in accordance with the provisions of Article 4 of Chapter 5 of Title 2 of this Code and Council Resolution No. 82-69.

The Fire Chief may detail such members of the Fire Department as shall from time to time be necessary.

Sec. 4-3.103. - Amendments: Section 105.1.1 ("Permits required").

Section 105.1.1 is amended by adding the following paragraph at the end of the section:

The city council of the City of Pacifica may if it so desires, establish by resolution permit fees in connection with any permit required or authorized to be issued by the fire chief or any other authorized representative of the fire department.

Sec. 4-3.104. - Amendments: Section 105.6 ("Required operational permits").

Section 105.6 is amended by adding the following at the end of the section:

105.6.50 Institutions and day care. An operational permit is required to operate any and all occupancies that are set forth under Group I Occupancies, and Group E Occupancy of Title 24 of the California Code of Regulations, each accommodating more than six people.

105.6.51 Residential care facility. An operational permit is required to operate a residential care/assisted living facility as set forth under Group R, Division 4 Occupancies.

Sec. 4-3.105. - Amendments: Section 201.5 ("Definitions").

Section 201.5 is added to read as follows:

201.5 Definitions.

(a) Wherever the word "jurisdiction" is used in said California Fire Code, it shall be held to mean the City of Pacifica.

(b) Wherever the term "Corporation Counsel" is used in said California Fire Code, it shall be held to mean the City Attorney.

(c) Wherever the words "Fire Code Official" are used in said California Fire Code, they shall be held to mean the Fire Marshal.

Sec. 4-3.106 – Amendments: Section 509 ("Fire Protection and Utility Equipment Identification and Access")
Section 509.1.2 is added to read as follows:

509.1.2: Utility Identification in Multi-Family Tenant Buildings. Utility markings of all gas and electric utility services in multi-family tenant buildings shall be visibly and legibly marked with the unit identification.

Sec. 4-3.107. - Amendments: Section 505.1.

Section 505.1 is amended by adding the following at the end of the section:

Said numbers shall be internally or externally illuminated in all new construction, or when alterations or repairs of existing construction occur.

The size and location of address numbers for multi-family dwellings and all other occupancies shall be as designated by the fire marshal.

Sec. 4-3.108. - Amendments: Section 507.5.7.

Section 507.5.7 is added to read as follows:

507.5.7 Hydrants. All new fire hydrants shall be UL listed, or equivalent, wet barrel type having a minimum of two 2 ½" and one 4 ½" outlets, all equipped with national standard threads (Clow 860, or approved equivalent). The minimum fire service main size permitted is six inch (6").

Sec. 4-3.109 – Amendments: Section 903.2.21 (“Car Stackers”)

Section 903.2.21 Car Stackers. Parking garage areas containing car stackers shall be protected by an automatic wet-pipe sprinkler system designed to Extra Hazard Group 1. In addition, non-extended coverage standard sidewall sprinklers listed for Ordinary Hazard shall be provided under each parking level, including the bottom level if the stacker is provided with a pit. Each sidewall sprinkler shall cover an area of 80 sq. ft. or less.

The area of application may be reduced from the required 2,500 sq. ft. to as low as 1,500 sq. ft. if:

1. 1-hour fire rated walls are provided to separate the car stacker areas from the standard parking stalls,

2. The car stacker areas are divided up into 1,500 sq. ft. areas via 1-hour fire rated walls, and

3. One-hour fire rated walls are provided to separate the car stacker areas from any other areas in the garage.

One-hour fire rated walls are not required in the driveway areas. For the hydraulic calculation, flow from all sprinklers, upright or pendent sprinklers at ceiling and all sidewall sprinklers at all levels, located in the area of application shall be included in the calculation.

Sec. 4-3.110. - Amendments: Section 903.2 ("Automatic sprinkler systems").
Section 903.2 is hereby amended to read as follows:

903.2 Required Installations.

A. Newly Constructed Buildings and Structures. An automatic fire sprinkler system shall be installed in all new occupancies and locations.

Exception. Detached U-1 occupancies not exceeding 1,000 square feet in size.

B. Existing Buildings and Structures. An automatic fire sprinkler system shall be installed throughout all buildings when an addition is added to the building.

Exception. 1. When an addition to a R-3 occupancy is less than 1,000 square feet in size and when an addition to all other occupancies is less than 500 square feet in size, no sprinklers are required in either the addition or the existing building.

2. When specifically exempted by the Fire Code Official.

Sec. 4-3.111. - Amendments: Section 903.4.2 ("Sprinkler system supervision and alarms").

Section 903.4.2 is amended by added the following to the end of the paragraph:

In addition to the audible device(s) required by this section, an approved strobe light shall be located on the exterior of the building in an approved location.

Sec. 4-3.112. - Amendments: Section 904.2.2 ("Commercial hood and duct systems").

Section 904.2.2 is amended by added the following to the end of the paragraph:

The location(s) of all cooking appliances that are protected by an approved automatic fire extinguishing system shall be permanently identified either by a wall mounted "approved" appliance floor plan or marked on the floor in a manner approved by the Fire Marshal.

Sec. 4-3.113. - Amendments: Section 907.7.3 ("Acceptance tests and completion").

Section 907.7.3 is amended by adding the following paragraph:

Each fire alarm system shall have posted at the main control panel instructions for silencing and resetting the system, the day and night phone numbers of the person responsible for the property, and the company or individual providing maintenance services for the alarm system.

Sec. 4-3.114. - Amendments: Section 907.8.1 ("Maintenance required").

Section 907.8.1 is amended by adding the following paragraph:

Owners and operators of group R-1 occupancies shall provide documentation to the Fire Department, such as annual inspection forms, which confirm that all smoke detection devices and equipment within apartment units are installed and are in good operating condition.
Sec. 4-3.115. - Amendments: Section 914.3.9 ("Firefighter air replenishment system").

Section 914.3.9 is added to read as follows:

914.3.9 Firefighter Breathing Air Replenishment. All Group B and Group R occupancies, each having floors used for human occupancy located more than seventy-five feet (75') above the lowest level of fire department vehicular access, shall be equipped with an approved Firefighter Breathing Air Replenishment System as outlined in Appendix L. Such a system shall provide an adequate pressurized fresh air supply through a permanent piping system for the replenishment of portable life sustaining air equipment carried by fire department, rescue, and other personnel in the performance of their duties. Location and specifications of access stations to, and the installation of, such air replenishment systems shall be made in accordance with the requirements of the fire chief.

Sec. 4-3.116. - Amendments: Section 5608.1 ("Fireworks display").

Section 5608.1 is amended by adding the following paragraph:

The sale and discharge of safe and sane fireworks is permitted only as provided in the Pacifica Municipal Code.

Sec. 4-3.117. - Amendments: Section 5608.1.2 ("Dangerous fireworks prohibited").

Section 5608.1.2 is hereby added to read as follows:

5608.1.2 Dangerous Fireworks Prohibited. Except as hereinafter provided, it shall be unlawful for any person to possess, store, offer for sale, expose for sale, sell at retail, or use or explode any fireworks, except those designated as "safe and sane" and approved by the State Fire Marshal. No person under the age of eighteen (18) shall be permitted to purchase or sell "safe and sane" fireworks. The Fire Chief shall have the power to adopt reasonable rules and regulations for the granting of permits for supervised public displays of fireworks by a jurisdiction, fair association, amusement park, or other organization or for the use of fireworks by artisans in the pursuit of their trade. Every such use or display shall be handled by a competent operator approved by the Fire Chief and shall be of such character and so located, discharged, or fired so as, in the opinion of the Fire Chief after proper investigation, not to be hazardous to property or endanger any person, and shall be in accordance with Chapter 33 of said California Fire Code.

Sec. 4-3.118. - Amendments: Section 5706.2.4.4 ("Locations where above-ground tanks are prohibited").

Section 5706.2.4.4 is amended by adding the following paragraph at the end of the section:

The storage of flammable or combustible liquids in above-ground outside storage tanks is prohibited in all areas of the City except for those areas with the zoning designation of Public Facilities District. Notwithstanding the foregoing, the Fire Chief may grant a permit for such storage in other areas of the City if the Chief determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Chief may impose such conditions and requirements upon the issuance of the permit, as the Chief deems necessary or
appropriate.

Sec. 4-3.119. - Amendments: Section 6104.2 ("Maximum capacity within established limits").

Section 6104.2 is amended by adding the following paragraph at the end of the first paragraph:

The aggregate storage of liquefied petroleum gas at any one installation in excess of two thousand (2,000) gallons (7,570 L) is prohibited in all areas of the City except for those areas with the zoning designation of Public Facilities District. Notwithstanding the foregoing, the Fire Chief may grant a permit for such storage in other areas of the City if the Chief determines, in each case, that the storage is required for the conduct of a lawful use upon the property, will not constitute a safety hazard, and will otherwise comply with all applicable provisions of this Code and all other ordinances, rules and regulations of the City. The Chief may impose such conditions and requirements upon the issuance of the permit, as the Chief deems necessary or appropriate.

Sec. 4-3.120. - Amendments: Appendix D, Section D102 ("Required access").

Section D102.2 is added to read as follows:

Section D102.2. Fire department access shall extend to within 50 feet (15 m) of at least one exterior door that can be opened from the outside and that provides access to the interior of the building.

Exception: one- or two-family dwellings or townhouses protected with 13D or 13R may be permitted to be increased to 150 ft. (46 m).

Sec. 4-3.121. - Amendments: Appendix D, Section D102 ("Required access").

Section D102.3 is added to read as follows:

Large Buildings. Fire department access roads shall be provided such that any portion of the facility or any portion of an exterior wall of the first story of the building is located not more than 150 ft. (46 m) from fire department access roads as measured by an approved route around the exterior of the building or facility.

Sec. 4-3.122. - Amendments: Appendix D, Section D102 ("Required access").

Section D102.4 is added to read as follows:

Fire department access roads shall have an unobstructed vertical clearance of not less than 13 ft. 6 in. (4.1 m).

Sec. 4-3.123. - Amendments: Appendix D, Section D102 ("Required access").

Section D102.5 is added to read as follows:

Exception: When fire department access roads cannot be installed due to location on the property, topography, waterways, nonnegotiable grades, or other similar conditions the AHJ shall be authorized to require fire protection features in addition to those already required.
Sec. 4-3.124. Amendments: Appendix D, Section D101 ("General").

Section D101.2 is added to read as follows:

D101.2 - Definition. Fire Apparatus Access Road. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as but not limited to fire lane, public street, private street, parking lot lane, access roadway and driveway.

Sec. 4-3.125. Amendments: Appendix D, Section D103 ("Minimum specifications").

Section D103.7 of the fire code is added to read as follows:

D103.7 - Marking where fire lanes on private property have been designated by the Fire Marshal, curbs shall be painted red on the side or sides of the street or access route where parking is prohibited and no parking signs or other appropriate notice prohibiting obstructions, as approved by the Fire Marshal, shall be provided and maintained by the owner.

Section 29. Severability. The City Council hereby declares that every section, paragraph, sentence, clause, and phrase of this ordinance is severable. If any section, paragraph, sentence, clause, or phrase of this ordinance is for any reason found to be invalid or unconstitutional, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining sections, paragraphs, sentences, clauses, or phrases.

Section 30. Effective Date. This Ordinance shall be effective as of January 1, 2020.

Section 31. Publication. The City Clerk shall cause this ordinance to be published in a newspaper of general circulation as required pursuant to state law and shall cause this ordinance to be entered into the Pacifica municipal code.

The foregoing ordinance was introduced on November 12, 2019 and passed and adopted at a regular meeting of the City Council of the City of Pacifica held on November 25, 2019 by the following vote:

AYES, Councilmembers: Vaterlaus, Martin, O'Neill, Beckmeyer, Bier.
NOES, Councilmembers: None.
ABSENT, Councilmembers: None.
ABSTAIN, Councilmembers: None.

Sue Vaterlaus, Mayor

Sarah Coffey, City Clerk

Michelle Kenyon, City Attorney
MEMORANDUM

To: Gabriel Taylor, Peter Strait (California Energy Commission)
From: Farhad Farahmand, Abhijeet Pande (TRC)
CC: Joshua Montemayor (City of Pacifica), Rafael Reyes (Peninsula Clean Energy)
Re: Interpretation of Cost Effectiveness Analysis as it Relates to All-Electric Reach Code Proposal

As part of an amendment to the California Building Standards Code, the City of Pacifica is seeking a requirement for all new construction buildings to be all-electric with limited exceptions for residential buildings, nonresidential buildings, and accessory dwelling units. All residential building types may contain non-electric cooking appliances and fireplaces, and accessory dwelling units are exempt from all provisions of reach code requirements. Certain categories of nonresidential buildings such as for-profit restaurants open to the public and publicly owned and operated emergency centers are also proposed to be exempt.

This memo serves to clarify the cost-effectiveness justification of these proposals as required by California Code of Regulations (CCR), Title 24, Part 1, §10-106 and request the Energy Commission's preliminary approval of this justification. If approved, this interpretation will be included with Pacifica's application to the Energy Commission.

The statewide investor owned utility codes and standards program developed a new construction cost effectiveness analysis for all California climate zones which included all-electric measures as part of multiple packages. These analyses have been attached, and:

- Were performed for both residential and nonresidential buildings
  - The residential prototypes included 4 end-uses in analysis: space heating, water heating, cooking, and clothes drying. These assumed savings from avoided natural gas infrastructure to and within the residence.
  - The nonresidential prototypes included 2 end-uses in analysis: space heating and water heating. These also assumed savings from avoided natural gas infrastructure to and within the building.
- Found that it is cost-effective to construct all-electric buildings compared to the 2019 Standards ACM baseline, including all end-uses analyzed, partially due to upfront cost savings associated with foregoing a natural gas connection to the building.

Pacifica's code proposal would allow the construction of code-compliant all-electric buildings which has been shown to be cost-effective compared to a code-compliant mixed-fuel building using the TDV cost-effectiveness metric.
MEMORANDUM (continued)  
To: Gabriel Taylor and Peter Strait (CEC)  
Re: Interpretation of Pacifica Reach Code  
November 4, 2019

We seek your preliminary confirmation that the existing cost effectiveness studies completed are sufficient to support Pacifica’s proposal.

- In residential buildings, a proposed building with electric space- or water-heating is already compared to a standard building with these electric end-uses. Thus, no cost effectiveness criteria is explicitly required for the electrification of these end-uses.

- In nonresidential buildings, the prototypes examined in the cost effectiveness analysis only included space heating and water heating electrification. Other end uses targeted in the Pacifica ordinance are unregulated appliances such as cooking, clothes drying which are not modeled in Title 24 compliance calculations. Adding requirements for these end uses to be electric does not impact the TDV budget for the building or compliance with Title 24.

Nonetheless, these appliances will impact the overall first cost of the code-compliant all-electric building as well as operational impacts. These impacts however are likely to be insignificant compared with the net present value savings of around $25,000 for the retail occupancy and $1.3M for hotel occupancies. Electric cooking and clothes drying first cost difference compared to natural gas versions are between $800-$2000 per appliance. Operational cost increases are around $2,000 per appliance over the building’s lifetime. Thus the added first and operational costs for electric appliances are unlikely to be greater than the significant cost savings resulting from eliminating natural gas infrastructure. We thus propose that existing cost-effectiveness studies should be sufficient to justify Pacifica requirements.

Any guidance on this approach and/or code language format is much appreciated.

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1 These cost figures are interpolated for the 0% code-compliant all-electric prototypes. The nonresidential reach code cost effectiveness analysis did not isolate an energy code compliant all-electric package, but presented results for a federal code minimum building (which was not energy code compliant in this jurisdiction’s climate zone) and for a cost-effective package of energy efficiency measures (which was found to be energy code compliant by a large margin in the jurisdiction’s climate zone).

2 Induction cooking prices can vary widely, based on online retailer search. Lower cost induction cooktops are available. Clothes dryer costs attained from two sources:


2) Residential Building Electrification in California, prepared for SMUD, LADWP, and PG&E by E3. (April 2019)

3 Figures for cooking and clothes drying appear to be similar:

1) Cooking figure based on range top technology assessment by Fishnick.  
   https://fishnick.com/equipment/techassessment/5_range_tops.pdf

2) Clothes drying figure based on aforementioned E3 study from April 2019.
EXHIBIT B
FINDINGS SUPPORTING LOCAL AMENDMENTS

Section 17958 of the California Health and Safety Code provides that the City may make changes to the provisions in the uniform codes that are published in the California Building Standards Code. Sections 17958, 17958.5, 17958.7, and 18941.5 of the California Health and Safety Code require that for each proposed local change to those provisions in the uniform codes and published in the California Building Standards Code which regulate buildings used for human habitation, the City Council must make findings supporting its determination that each such local change is reasonably necessary because of local climatic, geological, or topographical conditions. Also, amendments to provisions not regulating buildings used for human habitation, including amendments made only for administrative consistency, do not require findings.

<table>
<thead>
<tr>
<th>Section Of Ordinance</th>
<th>Title</th>
<th>Justification (See Below For Key)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section 6. Replacement: Adoption Of Chapter 1 Of Title 8 (All Amendments Identified in Section 6, Including Appendix J)</td>
<td>Chapter 1 - Building Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 10. Replacement: Adoption Of Chapter 3 Of Title 8 (All Amendments Identified in Section 10)</td>
<td>Chapter 3 - Plumbing Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 12. Replacement: Adoption Of Chapter 4 Of Title 8 (All Amendments Identified in Section 12)</td>
<td>Chapter 4 - Electrical Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 16. Adoption Of Chapter 6 Of Title 8. (All Amendments Identified In Section 16)</td>
<td>Chapter 6 - Energy Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 18. Replacement: Adoption Of Chapter 7 Of Title 8 (All Amendments Identified in Section 18)</td>
<td>Chapter 7 - Green Buildings Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 20. Replacement: Adoption Of Chapter 7.5 Of Title 8 (All Amendments Identified in Section 20)</td>
<td>Chapter 7.5 - Residential Code</td>
<td>A, B, C</td>
</tr>
<tr>
<td>Section 28. Replacement: Adoption Of Article 1 Of Chapter 3 Of Title 4 (All Amendments Identified in Section 28, including amendments to Appendix D)</td>
<td>Article 1 - Fire Code</td>
<td>A, B, C</td>
</tr>
</tbody>
</table>
Key to Justification Supporting Amendments to Title 24 of the California Code of Regulations

A. CLIMATIC CONDITIONS
   I. The City of Pacifica is unique in its climatic conditions. According to records found at the National Weather Service, the average yearly rainfall for the City is approximately 25" to 30", with a high of 65" in 1995. This rainfall normally occurs from November to April. During the summer months, there is generally no measurable precipitation. Temperatures for this dry period can range into the 80's to 90's Fahrenheit and are frequently accompanied by light to gusty winds. With the extensive Urban-Wild land interface that surrounds the City, the potential for a major fire is high.
   II. Pacifica is exposed to more extreme weather than elsewhere in the Bay Area, including strong winds, almost constant exposure to salt air and frequent heavy rains during the winter months. The off-shore high pressure system and upwelling of deeper, cold water just off the coast result in frequent summer fog.

B. GEOLOGICAL CONDITIONS
   I. Pacifica is located adjacent to the Pacific Ocean and significant areas of the City are subject to extreme wave heights, severe bluff erosion and flooding which cause damage to public facilities and private property, especially during heavy rainfall and El Nino winters.
   II. Due to its proximity to the Pacific Ocean, Pacifica is at risk from a potential tsunami hazard if a major earthquake occurs in the Pacific Ocean resulting in a wave run-up. The approximate wave run-up height of 20 feet presents a risk to structures and individuals in the area, as there are approximately 900 existing dwelling units within Pacifica's tsunami run-up area, as well as important community services and facilities.
   III. Pacifica is framed by ridges of the Coast Range on the east and is home to 37 mountain summits and peaks. Hillside stability is a critical hazard. Slope failures and superficial landslides are a significant hazard, and runoff from heavy rain or ground-shaking are most likely to activate landslides in the hilly terrain.

C. TOPOGRAPHICAL CONDITIONS
   I. The City of Pacifica is comprised of a number of cul-de-sacs off of Highway 1, which divides the City into distinct districts. Each of these districts is isolated from each other by the topography of the City. The City is bordered to the west by the Pacific Ocean and to the east by hills that separate the City from the other communities.
   II. A series of overpasses span Highway 1. The collapse of one or more of these overpasses would greatly restrict access to the majority of the City. Highway 1 narrows at two points in the City. A major accident at these choke points also restricts the ability to provide emergency services throughout the City. Several of the districts within the City, such as Vallemar, Rockaway, and Pedro Point have narrow roads in which parking is either not permitted or is limited to one side of the street only. The roads are steep, between 10 to 19 percent in grade, and wind along the contours of the hillsides. These conditions add to the response times of emergency vehicles and also limit the number of emergency vehicles that can be sent to any particular address in these areas.
   III. The City of Pacifica is subject to ground tremors from large seismic events along the San Andreas, Loma Prieta, and Seal Cove faults. A part of the City is within the Alquist/Priolo special studies zone, as shown in the Alquist-Priolo Earthquake Fault Zone Act of 1972. Seismological evidence indicates there is a probability of an earthquake in the region ranging from 5 to 7 on the Richter Scale. This potential for earthquakes influences fire protection planning. A major seismic event would create a Citywide demand on fire protection service, which would be beyond the response capacity of the fire department.
Structural damage to the overpasses on Highway 1 would seriously delay emergency vehicle access to major parts of the City.