

CITY COUNCIL AGENDA STATEMENT



CITY OF
CHULA VISTA

Item No.: 3

Meeting Date: 1/13/09

ITEM TITLE:

- A. ORDINANCE OF THE CITY OF CHULA VISTA
AMENDING CHAPTER 15.24 OF THE CHULA VISTA
MUNICIPAL CODE BY ADDING SECTION 15.24.060
- B. ORDINANCE OF THE CITY OF CHULA VISTA
AMENDING CHAPTER 15.28 OF THE CHULA VISTA
MUNICIPAL CODE BY ADDING SECTION 15.28.015
- C. RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CHULA VISTA ADOPTING THE CHULA VISTA
PHOTOVOLTAIC PRE-WIRING INSTALLATION
REQUIREMENTS
- D. RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CHULA VISTA ADOPTING THE CHULA VISTA SOLAR
HOT WATER HEATING PRE-PLUMBING
INSTALLATION REQUIREMENTS

SUBMITTED BY: Deputy City Manager/Development Services Director *GA*

REVIEWED BY: City Manager *MS*

4/5THS VOTE: YES ☐ NO ☒

SUMMARY

On July 10, 2008, Council approved Resolution No. 2008-177 in which Council adopted the implementation plans for the Climate Change Working Group (CCWG) measures and approved partial implementation of the measures based on funding levels. The proposed ordinances amend the Electrical Code and the Plumbing Code to require new residential units to be pre-wired for future photovoltaic systems and pre-plumbed for future solar water heaters, respectively. The adoption of the ordinances is a partial implementation of CCWG Measure No. 5, Solar and Energy Efficiency Conversion.

ENVIRONMENTAL REVIEW

The Environmental Review Coordinator has reviewed the proposed project for compliance with the California Environmental Quality Act (CEQA) and has determined that the project qualifies for a

Class 8 categorical exemption pursuant to Section 15315308 (*Actions taken by a Regulatory Agency for Protection of the Environment*) of the State CEQA Guidelines because it will require new residential units to be pre-wired for future photovoltaic systems and pre-plumbed for future solar water heaters, respectively. Thus, no further environmental review is necessary.

RECOMMENDATION

That Council place the ordinances on first reading and adopt the resolutions.

BOARDS/COMMISSION RECOMMENDATION

The Board of Appeals and Advisors at their Monday, December 15, 2008 meeting unanimously recommended adoption of the proposed ordinances.

DISCUSSION

On July 10, 2008, Council approved Resolution No. 2008-177 in which Council adopted the implementation plans for the CCWG measures and approved phased implementation of the measures based on funding levels. One of the components of Measure No. 5, Solar and Energy Efficiency Conversion, is to adopt a requirement for pre-wiring for future photovoltaic systems at time of new residential construction. The pre-wiring ordinance amends Municipal Code Chapter 15.24, Electrical Code and Regulations, to require new residential units to have electrical conduits pre-installed for future photovoltaic systems based on specific installation guidelines; Chula Vista Photovoltaic Pre-Wiring Installation Requirements (Attachment 1). The ordinance applies to multi-residential buildings where a solar array can feed the "House Meter" that supplies the common areas of the building. The estimated additional cost of this requirement during construction of a new residential unit is \$350 and the conduits will be concealed within the attic and walls whereas the cost of installation on an existing unit is at least twice as much and most of the material would be surface mounted on the exterior of the residence.

Since 1982, existing Municipal Code Section 20.04.030, Solar Water Heater Pre-plumbing, requires that new residential units to be pre-plumbed for future installation of solar hot water heater systems. This requirement constitutes a local amendment to the California Plumbing Code (CPC) because it requires the installation of plumbing material beyond the minimum CPC requirements. Therefore, staff is proposing amending the Plumbing Code by adding Section 15.28.015 to Municipal Code Chapter 15.28. In addition, Section 15.28.015 requires the installation to be based on specific guidelines; Chula Vista Solar Water Heater Pre-Plumbing Installation Requirements (Attachment 2). The ordinance also applies to multi-residential units where each unit extends vertically from the foundation to the roof or where multi-residential buildings have a central water heating system that serves all the units. The estimated additional cost of this requirement during construction of a new residential unit is \$450, whereas the cost of installation on an existing unit is at least twice as much and most of the plumbing would be surface mounted on the exterior of the residence.

The adoption of these ordinances is necessary due to local climatic conditions. As a result of high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions. Facilitating the installation of

photovoltaic and solar hot water heating systems will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions.

The proposed ordinances and guidelines constitute modifications to the provisions of the California Building Standards Code. As explained above, these modifications are reasonably necessary because of local climactic conditions. Accordingly, the City is expressly authorized to make these modifications, pursuant to California Health and Safety Code sections 17958.5 and 17958.7. If the Council adopts the ordinances and resolutions, staff will make the requisite filings with the California Building Standards Commission, in compliance with Section 17958.7, within thirty days of Council's action. The Department of Conservation & Environmental Services will also be returning to Council within the next month to add these ordinances to the Energy Conservation section (Ch. 20) of the Chula Vista Municipal Code. The Energy Conservation section has historically been used to incorporate the City Council's environmental policy intent of energy-related ordinances and complements the technical focus of the Building & Construction (Ch. 15) section.

DECISION MAKER CONFLICT

Staff has determined that the recommendations requiring Council action are not site specific and consequently the 500 foot rule found in California Code of Regulations Section 18704.2(a)(1) is not applicable to this decision.

FISCAL IMPACT

Building plan check and permit fees will need to be adjusted to include the additional staff time resulting from implementing these requirements.

Attachments

1. Board of Appeals and Advisors December 15, 2008 Meeting Minutes.

Prepared by: Lou El-Khazen, Deputy Building Official, Planning and Building

DRAFT

ATTACHMENT 1

MINUTES OF A REGULAR MEETING

BOARD OF APPEALS AND ADVISORS CITY OF CHULA VISTA, CALIFORNIA

December 15, 2008

Conference Room #137
276 Fourth Ave. Chula Vista, CA 91910

5:15 PM

MEMBERS PRESENT: Chairman West, Members: Buddingh, Flach, Sides

MEMBERS ABSENT: Buencamino-Andrews, Lopez

CITY STAFF PRESENT: Brad Remp, Acting Director of Planning & Building/ Building Official; Lou El-Khazen, Deputy Building Official; Andrew McGuire, Patricia Salvacion, Secretary

OTHERS PRESENT: None

CALL MEETING TO ORDER: Chairman West called meeting to order at 5:15 PM.

ROLL CALL: Members present constituted a quorum.

1. **DECLARATION OF EXCUSED/UNEXCUSED ABSENTEEISM:** No action taken.

2. **APPROVAL OF MINUTES:** October 13, 2008

MSC (West/Buddingh) (4-0-0-2) Approve the minutes of October 13, 2008. Motion carried with Members Buencamino-Andrews and Lopez absent.

3. **NEW BUSINESS:**

A. ELECTION OF NEW CHAIR AND VICE CHAIR FOR FYE 08/09

MSC (West) (4-0-0-2) Elect Jan Buddingh to Chair.

MSC (Buddingh) (4-0-0-2) Elect Ben West to Vice Chair.

B. Review of ordinance amending City of Chula Vista Chapter 15.24 of the Chula Vista Municipal Code by adding Section 15.24.060 and Chapter 15.28 by adding Section 15.28.015 and recommend to City Council the adoption of both ordinances.

Deputy Building Official, Lou El-Khazen, gave a brief overview of the amendments being proposed for the City of Chula Vista Chapter 15.24 and Chapter 15.28 of the Chula Vista Municipal Code. He also introduced Building Inspector, Andrew McGuire as the expert who created the technical installation standards referenced in the ordinance.

Member Flach asked Mr. McGuire to clarify how the solar water heating provisions would be applied to houses with tankless water heating systems. Mr. McGuire explained how the systems could be made compatible.

MSC (West/Flach) (4-0-0-2) Recommend adoption of Chapter 15.24 of the City of Chula Vista Municipal Code by adding Section 15.24.060 and changing technical guideline language to state on item #7: The location for EMT conduit stubbed up through the roof will be to the largest roof area that is *southerly* facing, or secondarily to the largest *westerly* facing roof area. Motion carried with Members Buencamino-Andrews and Lopez absent.

MSC (West/Flach) (4-0-0-2) Recommend adoption of Chapter 15.28 of the City of Chula Vista Municipal Code by adding Section 15.28.015 and changing technical guideline language to state on item #5: Locations for both pipes and conduit will be to the largest roof area that is *southerly* facing,

or secondarily to the largest westerly facing roof area. Motion carried with Members Buencamino-Andrews and Lopez absent.

4. **MEMBERS COMMENTS/CHAIRMAN'S COMMENTS/REPORTS:** None

5. **BUILDING OFFICIAL'S COMMENTS/REPORTS:**

Assistant Director/Building Official, Brad Remp, reported that the Building Division would be experiencing additional budget cuts to include elimination of a part-time administrative support position, a building inspector position and the Assistant Director/Building Official positions.

6. **COMMUNICATIONS (PUBLIC REMARKS/ WRITTEN CORRESPONDENCE):** None

7. **ADJOURNMENT:**

Chair West adjourned the meeting at 5:45 p.m. to a regular meeting on January 12, 2009 at 5:15 p.m. in Planning and Building Conference Room #137.

BRAD REMP, C.B.O.
ASST. DIR. OF PLANNING & BUILDING/ BUILDING OFFICIAL
SECRETARY TO THE BOARD OF APPEALS & ADVISORS

MINUTES TAKEN BY:
PATRICIA SALVACION, SECRETARY- PLANNING & BUILDING DEPARTMENT

ORDINANCE NO. _____

ORDINANCE OF THE CITY OF CHULA VISTA
AMENDING CHAPTER 15.24 OF THE CHULA VISTA
MUNICIPAL CODE BY ADDING SECTION 15.24.060

The City Council of the City of Chula Vista does ordain as follows:

SECTION I. That Chapter 15.24 of the Chula Vista Municipal Code is hereby amended to read as follows:

Chapter 15.24
ELECTRICAL CODE AND REGULATIONS*

Sections:

- 15.24.010 California Electrical Code, 2007 Edition, adopted by reference.
- 15.24.035 Previously used materials.
- 15.24.045 Distribution panels – Separate required when.
- 15.24.050 Circuit cards to be posted when.
- 15.24.055 Electric fences – Defined – Prohibited.
- 15.24.060 Phase arrangement – Amended.
- 15.24.065 Photovoltaic Pre-wiring Requirements.

* For statutory provisions exempting electrical contractors from licensing under an electrical repairman's statute, see Bus. and Prof. Code § 9804. For statutory provisions authorizing cities to regulate the materials used in wiring structures for electricity and in piping them for water, gas or electricity, and to regulate the manner of such piping, see Gov. Code § 38660.

Prior legislation: Ords. 2045, 2158, 2292, 2459, 2506, 2639 and 2647.

15.24.010 California Electrical Code, 2007 Edition, adopted by reference.

There is hereby adopted by reference the California Electrical Code, 2007 Edition, known as the California Code of Regulations Title 24, Part 3, as copyrighted by the National Fire Protection Association and the California Building Standards Commission. Said document is hereby adopted as the electrical code of the City of Chula Vista, regulating the installation, repair, operation and maintenance of all electrical wiring and electrical apparatus of any nature whatsoever, whether inside or outside of any building within the City, excepting such portions as are hereinafter deleted, modified, or amended. Chapter 15.06 CVMC shall serve as the administrative, organizational and enforcement rules and regulations for this chapter. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.035 Previously used materials.

Previously used materials shall not be reused in any work without approval by the Building Official. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.045 Distribution panels – Separate required when.

Each store in a store building, each flat in a flat building, and each building used as a dwelling shall be so wired that each store, apartment, flat or dwelling shall have separate lighting and/or power distribution panels. Such panels shall not serve other portions of the building. Hotels, motels, hotel apartments and similar types of buildings may be wired from one or more distribution panels. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.050 Circuit cards to be posted when.

When requested by the Building Official, a complete schedule of circuits showing the number, kind and capacity of each outlet on each circuit shall be posted on each job prior to rough inspection. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.055 Electric fences – Defined – Prohibited.

A. As used herein, the term “electric fence” includes all fences which in any way use electrical energy as an additional deterrent or have wires charged with electricity which are not covered with adequate insulation to protect persons and animals coming in contact therewith.

B. No electric fence may be constructed, maintained or operated within the City. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.060 Phase arrangement – Amended.

Section 408.3(E) of the California Electrical Code is hereby amended to read:

Phase Arrangement. The phase arrangement on three-phase buses shall be A, B, C from front to back, top to bottom, or left to right, as viewed from the front of the switchboard or panelboard. The C phase shall be that phase having the higher voltage ground on three-phase, four-wire delta-connected systems. Other busbar arrangements may be permitted for additions to existing installations and shall be marked.

(Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.065 Photovoltaic Pre-wiring Requirements.

All new residential units shall include electrical conduit specifically designed to allow the later installation of a photovoltaic (PV) system which utilizes solar energy as a means to provide electricity. No building permit shall be issued unless the requirements of this section and the Chula Vista Photovoltaic Pre-Wiring Installation Requirements are incorporated into the approved building plans.

The provisions of this chapter can be modified or waived when it can be satisfactorily demonstrated to the building official that the requirements of this section are impractical due to shading, building orientation, construction constraints or configuration of the parcel.

SECTION II. FINDINGS AND DECLARATION.

The City Council of the City of Chula Vista specifically and expressly finds and declares that adding section 15.24.065 to Chapter 15.24 is necessary due to local climatic conditions. As a result of high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions. Facilitating the installation of Photovoltaic systems will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions.

SECTION III. EFFECTIVE DATE.

This ordinance will take effect and be in force thirty days after final passage.

Presented by

Approved as to form by

Gary Halbert
Deputy City Manager/Development
Services Director

Bart C. Miesfeld
City Attorney

ORDINANCE NO. _____

ORDINANCE OF THE CITY OF CHULA VISTA AMENDING
CHAPTER 15.24 OF THE CHULA VISTA MUNICIPAL CODE
BY ADDING SECTION 15.24.060

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- 15.24.050 Circuit cards to be posted when.
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Prior legislation: Ords. 2045, 2158, 2292, 2459, 2506, 2639 and 2647.

15.24.010 California Electrical Code, 2007 Edition, adopted by reference.

There is hereby adopted by reference the California Electrical Code, 2007 Edition, known as the California Code of Regulations Title 24, Part 3, as copyrighted by the National Fire Protection Association and the California Building Standards Commission. Said document is hereby adopted as the electrical code of the City of Chula Vista, regulating the installation, repair, operation and maintenance of all electrical wiring and electrical apparatus of any nature whatsoever, whether inside or outside of any building within the City, excepting such portions as are hereinafter deleted, modified, or amended. Chapter 15.06 CVMC shall serve as the administrative, organizational and enforcement rules and regulations for this chapter. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

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Previously used materials shall not be reused in any work without approval by the Building Official. (Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

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A. As used herein, the term “electric fence” includes all fences which in any way use electrical energy as an additional deterrent or have wires charged with electricity which are not covered with adequate insulation to protect persons and animals coming in contact therewith.

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(Ord. 3091 § 1, 2007; Ord. 3013 § 1, 2005; Ord. 2875 § 1, 2002; Ord. 2785-B § 1, 1999).

15.24.065 Photovoltaic Pre-wiring Requirements.

All new residential units shall include electrical conduit specifically designed to allow the later installation of a photovoltaic (PV) system which utilizes solar energy as a means to provide electricity. No building permit shall be issued unless the requirements of this section and the Chula Vista Photovoltaic Pre-Wiring Installation Requirements are incorporated into the approved building plans.

The provisions of this chapter can be modified or waived when it can be satisfactorily demonstrated to the building official that the requirements of this section are impractical due to shading, building orientation, construction constraints or configuration of the parcel.

SECTION II. FINDINGS AND DECLARATION.

The City Council of the City of Chula Vista specifically and expressly finds and declares that adding section 15.24.065 to Chapter 15.24 is necessary due to local climatic conditions. As a result of high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions. Facilitating the installation of Photovoltaic systems will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions.

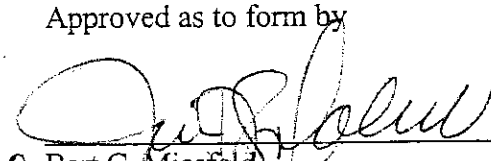
SECTION III. EFFECTIVE DATE.

This ordinance will take effect and be in force thirty days after final passage.

Presented by

Gary Halbert
Deputy City Manager/Development
Services Director

Approved as to form by



Bart C. Miestfeld
City Attorney

ORDINANCE NO. _____

ORDINANCE OF THE CITY OF CHULA VISTA
AMENDING CHAPTER 15.28 OF THE CHULA VISTA
MUNICIPAL CODE BY ADDING SECTION 15.28.015

The City Council of the City of Chula Vista does ordain as follows:

SECTION I. That Chapter 15.28 of the Chula Vista Municipal Code is hereby amended to read as follows:

Chapter 15.28
PLUMBING CODE*

Sections:

15.28.010 California Plumbing Code, 2007 Edition, adopted by reference.

15.28.015 Solar Water Heater Pre-Plumbing.

* Prior legislation: Prior code §§ 23.3 and 23.9; Ords. 779, 1332, 1748, 1917, 2156, 2343, 2506, 2508, 2639 and 2646.

15.28.010 California Plumbing Code, 2007 Edition, adopted by reference.

There is hereby adopted by reference the California Plumbing Code, 2007 Edition, known as the California Code of Regulations, Title 24, Part 5, and Appendices A, B, D and I of that document as copyrighted by the International Association of Plumbing and Mechanical Officials and the California Building Standards Commission. Said document is hereby adopted as the plumbing code of the City of Chula Vista for regulating the complete installation, maintenance and repair of plumbing, drainage systems, water systems, gas systems, and private sewage disposal systems on all properties and within all buildings and structures in the City. Chapter 15.06 CVMC shall serve as the administrative, organizational and enforcement rules and regulations for this chapter. (Ord. 3092 § 1, 2007; Ord. 2877 § 1, 2002; Ord. 2787-B § 1, 1999).

15.28.015 Solar Water Heater Pre-Plumbing.

All new residential units shall include plumbing specifically designed to allow the later installation of a system which utilizes solar energy as the primary means of heating domestic potable water. No building permit shall be issued unless the requirements of this section and the Chula Vista Solar Water Heater Pre-Plumbing Installation Requirements are incorporated into the approved building plans.

The provisions of this chapter can be modified or waived when it can be satisfactorily demonstrated to the building official that the requirements of this section are impractical due to shading, building orientation, construction constraints or configuration of the parcel.

SECTION II. FINDINGS AND DECLARATION.

The City Council of the City of Chula Vista specifically and expressly finds and declares that adding section 15.28.015 to Chapter 15.28 is necessary due to local climatic conditions. As a result of high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions. Facilitating the installation of solar water heating systems will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions.

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15.28.015 Solar Water Heater Pre-Plumbing.

All new residential units shall include plumbing specifically designed to allow the later installation of a system which utilizes solar energy as the primary means of heating domestic potable water. No building permit shall be issued unless the requirements of this section and the Chula Vista Solar Water Heater Pre-Plumbing Installation Requirements are incorporated into the approved building plans.

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SECTION II. FINDINGS AND DECLARATION.

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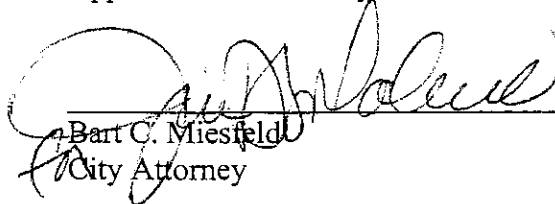
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Presented by

Gary Halbert
Deputy City Manager/Development
Services Director

Approved as to form by



Bart C. Miesfeld
City Attorney

RESOLUTION NO. 2009-_____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CHULA VISTA ADOPTING THE CHULA VISTA
PHOTOVOLTAIC PRE-WIRING INSTALLATION
REQUIREMENTS

WHEREAS, on July 10, 2008, City Council adopted the Implementation Plans for the Climate Change Working Group Measures; and

WHEREAS, a component of the Implementation Plan for Climate Change Working Group Measure No. 5, Solar and Energy Efficiency Conversion, is to require updating municipal codes to facilitate future installations of solar and renewable energy systems; and

WHEREAS, due to local climatic conditions, including high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions; and

WHEREAS, facilitating the installation of photovoltaic pre-wiring will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions; and

WHEREAS, staff is presenting to Council an ordinance amending Chapter 15.24 of the Municipal Code to require pre-wiring at the time of new residential construction for future residential photovoltaic systems; and

WHEREAS, in order to facilitate compliance with the pre-wiring requirements and establish consistency in the installation and inspection of these requirements, staff developed technical installation guidelines, Chula Vista Photovoltaic Pre-Wiring Installation Requirements (attached as, Exhibit "A"); and

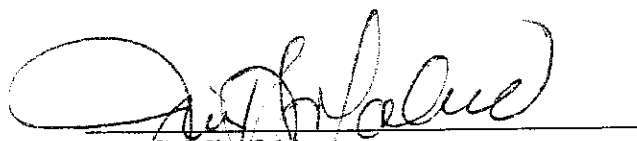
WHEREAS, the Board of Appeals and Advisors, at their December 15, 2008 meeting, recommended that Council adopt the installation guidelines.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chula Vista that it hereby adopts the Chula Vista Photovoltaic Pre-Wiring Installation Requirements, attached as Exhibit "A," as the installation guidelines in the City of Chula Vista.

Presented by

Approved as to form by

Gary Halbert
Deputy City Manager/Development
Services Director



Bart C. Miesfeld
City Attorney



Photovoltaic Pre-Wiring Installation Requirements

These requirements are applicable in all new Single Family Dwellings (SFD's) and Duplexes. They shall also apply to Multi Family Dwellings (MFD's) where a solar array can feed the "House Meter" that supplies the common areas of the building.

1. In SFD's and duplex units up to 2500 sq. ft, **with the electrical service located on the exterior of a garage wall**, a run of one 1" Electrical Metallic Tubing conduit (EMT) shall be installed from an accessible location in the attic to an accessible location stubbed out into the garage. Stub out another conduit from the service to a pull / junction box on the inside of the garage.
2. If the electrical service **is not located on an exterior garage wall**, another 1" conduit shall be run from the electrical service to a junction box on the inside of the garage wall. (Most PV system inverters will work best out of direct sunlight and heat, and may be mounted in the garage on the backside of the electrical service.)
3. Houses over 2500sq.ft and MFD's will require 1-1/4" EMT conduit.
4. Conduit in the attic shall terminate a minimum of 6 inches above the insulation.
5. For roofs having less than a 4" in 12" slope that have clay or concrete roof tiles: EMT conduit, shall be stubbed out a minimum of 12" above the roof, capped off and provided with a roof jack for a future Photovoltaic System.
6. For roofs having a 4" in 12" slope or greater with any type of roof covering: Provide EMT conduit to an accessible location in the attic a minimum of 6" above the insulation and cap off.
7. The location for EMT conduit stubbed up through the roof will be to the largest roof area that is southerly facing, or secondarily to the largest westerly facing roof area.
8. The conduit shall be properly supported, protected, capped off at both ends, and run to accessible locations at both ends.
9. Work shall comply with the Electrical Code in effect at the time of installation.
10. Any notching and boring of studs or top plates shall be strapped/nail plated to provide protection for the conduit and shall reestablish the structural integrity of the members. (Per chapter 23 of the California Building Code in effect at the time of Plan Check approval.)
11. Pre-wire conduit shall be complete for rough frame inspection.

RESOLUTION NO. 2009-_____

RESOLUTION OF THE CITY COUNCIL OF THE CITY OF
CHULA VISTA ADOPTING THE CHULA VISTA SOLAR HOT
WATER HEATING PRE-PLUMBING INSTALLATION
REQUIREMENTS

WHEREAS, on July 10, 2008, City Council adopted the Implementation Plans for the Climate Change Working Group Measures; and

WHEREAS, a component of the Implementation Plan for Climate Change Working Group Measure No. 5, Solar and Energy Efficiency Conversion, includes updating municipal codes to facilitate future installations of solar and renewable energy systems; and

WHEREAS, due to local climatic conditions, including high summer ambient temperatures and periods of heat waves, average load demand and peak load demand of energy used in Chula Vista is an important factor concerning public safety and adverse economic impacts of power outages or power reductions; and

WHEREAS, facilitating the installation of solar hot water heating systems will have local and regional benefits in the reduction of total and peak energy use and greenhouse gas emissions; and

WHEREAS, the requirement for pre-plumbing for solar hot water heating systems constitutes a local amendment to the California Plumbing Code and Chapter 15.28 of the Municipal Code; and

WHEREAS, staff is presenting to Council an ordinance amending Chapter 15.28 of the Municipal Code to require pre-plumbing at time of new residential construction for future solar hot water heating systems; and

WHEREAS, in order to facilitate compliance with the pre-plumbing requirements and establish consistency in installation and inspection, staff established technical installation guidelines, Chula Vista Solar Hot Water Heating Pre-Plumbing Installation Requirements (attached as, Exhibit "A"); and

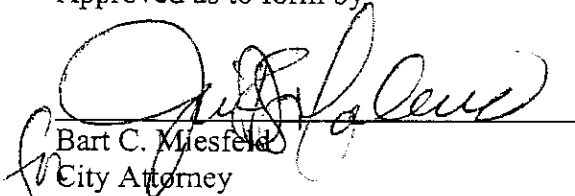
WHEREAS, the Board of Appeals and Advisors, at their December 15, 2008 meeting, recommended that Council adopt the installation guidelines.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Chula Vista that it hereby adopts the Chula Vista Solar Hot Water Heating Pre-Plumbing Installation Requirements, attached as Exhibit "A," as the installation guidelines in the City of Chula Vista.

Presented by

Gary Halbert
Deputy City Manager/Development
Services Director

Approved as to form by



Bart C. Miesfeld
City Attorney



Solar Hot Water Heating Pre-Plumbing Installation Requirements

These requirements are applicable in all new Single Family Dwellings and Duplexes. They also apply to Multi Family Dwellings where each unit extends vertically from the foundation to the roof or where buildings have a central water heating system that serves all the units.

1. For roofs having less than a 4" in 12" slope that have clay or concrete roof tiles: Two 3/4" copper pipes and one 3/4" Electrical Metallic Tubing (EMT) conduit, shall be stubbed out a minimum of 12" above the roof, capped off and provided with roof jacks for a future solar hot water heating system. The pipe and conduit shall be run to the location of the water heater, be capped off and be readily accessible.
2. For roofs having a 4" in 12" slope or greater with any type of roof covering: Provide two 3/4" copper pipes and one 3/4" EMT conduit to an accessible location in the attic a minimum of 6" above the insulation and be capped off. The pipes and conduit shall be run to the location of the water heater, be capped off and be readily accessible.
3. Pipe and conduit should penetrate the roof in the lower one-third of the slope. This will enable proper drainage of the system.
4. Pipes shall be sloped at least 1/4" per foot of run from the upper capped end at the roof to the lowest capped end at the storage tank. This will enable drainage for freeze protection and maintenance.
5. Locations for both pipes and conduit will be to the largest roof area that is southerly facing, or secondarily to the largest westerly facing roof area.
6. Both pipes and conduit shall be run and properly supported the entire length of the building to the area where the water heater will be placed.
7. Pipe insulation shall have at least a 1/2" thick wall and be rated to 212 degrees F
8. The use of Tank-less Water Heaters does not exempt these pre-plumbing/piping requirements.
9. The use of CPVC and PEX piping is not permitted.
10. Work shall comply with the Plumbing and Electrical codes in effect at the time of plan check approval.
11. Any notching and boring of studs or top plates shall be strapped/nail plated to provide protection for the pipe/conduit and shall reestablish the structural integrity of the members. (Per chapter 23 of the California Building Code in effect at the time of plan check approval.)
12. Pre-plumbing/piping shall be complete for rough frame inspection.