ORDINANCE NO. XXX

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF CALISTOGA, COUNTY OF NAPA, STATE OF CALIFORNIA, REPEALING TITLE 15, CALIFORNIA BUILDING STANDARDS, SPECIFICALLY, CHAPTERS: 15.01 GENERAL PROVISIONS, 15.04 ADMINISTRATIVE CODE, 15.08 CALIFORNIA BUILDING CODE, 15.12 CALIFORNIA ELECTRICAL CODE, 15.16 CALIFORNIA MECHANICAL CODE, 15.20 UNIFORM PLUMBING CODE, 15.24 CALIFORNIA ENERGY CODE, 15.28 CALIFORNIA HISTORICAL BUILDING CODE, 15.32 CALIFORNIA FIRE CODE, 15.36 CALIFORNIA EXISTING BUILDING CODE, 15.40 CALIFORNIA REFERENCE STANDARDS, 15.44 UNIFORM CODE FOR THE ABATEMENT OF DANGEROUS BUILDINGS, AND 15.48 UNIFORM HOUSING CODE OF THE CALISTOGA MUNICIPAL CODE, AND ADOPTING THE 2010 CALIFORNIA BUILDING STANDARDS CODE, TITLE 24, AS ADOPTED BY THE CALIFORNIA STATE BUILDING STANDARDS COMMISSION

WHEREAS, the City Council of the City of Calistoga at its regular meeting of _____, 2010 and _____, 2010 considered as one of its items of business, noticed in accordance with Government Code Sections 65090 and 50022.3, this ordinance to be adopted in accordance with Government Code Section 65850;

WHEREAS, the California Building Standards Commission completed the adoption and approval of the California Building Standards Code on July 1, 2010;

WHEREAS, the International Code Council (ICC) has published these model codes that provide jurisdictions such as the City of Calistoga with a complete set of model building-related regulations for adoption. These model codes are updated approximately every three years to reflect the development of improved building construction techniques;

WHEREAS, the California codes were last adopted on November 6, 2007 when the City Council passed Ordinance No. 646 adopting the 2007 California Building Standards Code and related family of codes;

WHEREAS, the Calistoga Building Standards Advisory and Appeals Board at their meeting of September 30, 2010 considered as one of its items of business staff recommendations on the 2010 California Building Standards Code and recommended approval to the City Council;

WHEREAS, the City Council is hereby repealing Title 15, California Building Standards, specifically Chapters: 15.01 General Provisions, 15.04 Administrative Code, 15.08 California Building Code, 15.12 California Electrical Code, 15.16 California Mechanical Code, 15.20 Uniform Plumbing Code, 15.24 California Energy Code, 15.28 California Historical Building Code, 15.32 California Fire Code, 15.36 California Existing Building Code, 15.40 California Reference Standards, 15.44 Uniform Code for the Abatement of Dangerous Buildings, and 15.48 Uniform Housing Code of the Calistoga Municipal Code, to include the 2010 California Building Standards Code, Title 24 of the California Code of Regulations, as adopted by the State Building Standards Commission;

WHEREAS, the City Council finds that in order to best protect the health, safety and welfare of the citizens of the Calistoga, the building standards within the community should comply with State law, except for certain modifications and amendments to the model codes that are based on local climatic, geographical and/or topographical conditions;

WHEREAS, the City Council further finds that use of the most up-to-date California codes is necessary and proper to ensure uniformity in the implementation of building regulations for new construction, alteration, repair, demolition, maintenance, and use of any building or structure in the City of Calistoga; and

WHEREAS, the City Council, based on the materials presented and recommendations of the Building Official, Fire Chief, Planning and Building Director and the Building Standards Advisory and Appeals Board of the City of Calistoga, finds that it is necessary to make procedural and administrative modifications to the model codes as allowed under California Health and Safety Code Section 17958.

The City Council of the City of Calistoga does ordain as follows:

SECTION ONE: Adoption

The City Council of the City of Calistoga adopts this Ordinance repealing Title 15, California Building Standards, specifically Chapters: 15.01 General Provisions, 15.04 Administrative Code, 15.08 California Building Code, 15.12 California Electrical Code, 15.16 California Mechanical Code, 15.20 Uniform Plumbing Code, 15.24 California Energy Code, 15.28 California Historical Building Code, 15.32 California Fire Code, 15.36 California Existing Building Code, 15.40 California Reference Standards, 15.44 Uniform Code for the Abatement of Dangerous Buildings, and 15.48 Uniform Housing Code of the Calistoga Municipal Code, and adopting and replacing Title 15 with the 2010 California Building Standards Code, Title 24 of the California Code of Regulations, as adopted by the State Building Standards Commission as follows: 2010 California Administrative Code (Part 1 of Title 24); 2010 California Building Code (Part 2 of Title 24, Volumes 1 and 2); 2010 California Residential Code (Part 2.5 of Title 24); 2010 California Electrical Code (Part 3 of Title 24); 2010 California Mechanical Code (Part 4 of Title 24); 2010 California Plumbing Code (Part 5 of Title 24); 2010 California Energy Code (Part 6 of Title 24); 2010 California Historical Building Code (Part 8 of Title 24); 2010 California Fire Code (Part 9 of Title 24); 2010 California Existing Building Code (Part 10 of Title 24); 2010 California Green Building Standards Code (Part 11 of Title 24); 2010 California Referenced Standards Code (Part 12 of Title 24).

SECTION TWO: Findings

A. The City Council of the City of Calistoga finds that in order to best protect the health, safety and welfare of the citizens of the City of Calistoga, the standards of building within the City must conform with State law except where local conditions warrant more restrictive regulations.

B. Pursuant to Section 17958 of the California Health and Safety Code, the governing body of the City of Calistoga, in its ordinance adopting the State Building

Standards Code and uniform industry codes, may establish amendments which are more restrictive in nature than those regulations adopted by the State of California commonly referred to as Title 24 of the California Code of Regulations. Based on the materials presented and by the recommendation of the Building Official, the Fire Chief, the Planning & Building Director and the Calistoga Building Standards Advisory and Appeals Board, the City Council further finds that it is necessary to make modifications to the California Building Standards Code and to adopt or not adopt certain appendices to the Code. Under the provisions of Section 17958.5 of the California Health and Safety Code, local amendments shall be based on climatic, geographical and topographical conditions. As such, the City Council finds that the following local conditions exist:

1. **Climate.** The City, on an average, experiences an approximate annual rainfall of 38 inches. This rainfall can normally be expected between October and April. During the winter months, the City may experience periods of heavy rain, which causes local flooding, erosion and contributes to slope instability. Winter storms are often accompanied by high winds, which have uprooted trees and damaged power lines. The City has also experienced periodical days of heavy fog, which could delay the response time for fire fighting apparatus, and prevent early discovery of structure fires.

   Wind is a factor in the spread of fire in that burning embers are carried with the wind to adjacent exposed areas. Calistoga has a characteristic southerly wind, which originates from the San Francisco Bay and becomes a factor in the control of fires. Further, in the dry season, Calistoga experiences an occasional north wind of significant velocity, which is recognized by Fire Officials to be a significant concern with regard to fire spread.

   During the dry period, temperatures range from 70 degrees to over 100 degrees. These temperatures are often accompanied by a wildland-urban interface, creating a hazardous fire condition. With increased development spreading into the brush covered foothill areas, wind driven fires could have severe consequences, as has been demonstrated on several occasions throughout the State.

2. **Geographical.** The City is susceptible to seismic hazards resulting from movement along any one of several known faults in the area. The most serious direct earthquake hazard threat is from the damage or collapse of buildings and other structures due to ground movement. In addition to damage caused by earthquakes, there is a possibility of earthquake-induced landslides. Fire is often the major form of damage resulting from earthquakes. Most earthquake-induced fires start because of damage to gas lines, power lines or heat producing appliances. Such fires expose residential and other development within the City to an increased risk of conflagration. In addition, unstable slopes have been identified in the City, which present a significant potential for landslides. In the event of a major earthquake or landslide, many areas of the City may not be accessible to emergency equipment and, if bridges or roads are damaged, the City may be isolated from outside assistance. Several areas within the City of Calistoga offer poor

access for the delivery of public safety services because of the severity of slopes and the existence of natural barriers such as the Napa River and its tributaries such as Garnett Creek and Cyrus Creek.

3. **Topographical.** The City borders include hilly terrain on the southwest portions of the City. The roadway systems in these hills are designed around the lay of the land with respect to narrow, winding and steep access ways. The grades of these roadways sometimes exceed 25% and road widths of less than 12 feet are not uncommon. The Napa River and other small water ways run directly through the City and could impact emergency response during disasters. The water supply within the City is directly affected by the topographical layout. The water distribution system consists of pressure zones, which carry water by gravity from various reservoirs. Water flow within the City can vary from less than 100 gallons per minute to flows in excess of 1,000 gallons per minute. This wide variation causes major problems to development as well as to fire suppression efforts. The hilly terrain contributes to drainage, erosion and slope instability problems for some development.

SECTION THREE: Title 15, California Building Standards Codes, repealed and adopted.

Title 15 California Building Standard Codes of the Calistoga Municipal Code is hereby repealed and adopted to read as follows:

Title 15

CALIFORNIA BUILDING STANDARDS CODES

Chapters:

Chapter 15.01

GENERAL PROVISIONS

Sections:

15.01.010 Scope

The provisions of this chapter shall apply to all buildings and structures located in the City.

15.01.020 Building Division

A. There is established a Building Division for the City to perform technical building inspections, code enforcement, plan check, mobile home inspection and cross connection control services; and to enforce state mandated codes related to construction.

B. The Building Official thereof shall supervise and have charge of all permit issuance and inspections of work relating to, and the enforcement of the construction regulations adopted in this chapter.

Chapter 15.04

ADMINISTRATIVE CODE

Sections:

15.04.010 Adoption

For the purpose of establishing proper regulations for the administration of the various codes covered in this Title, the 2010 California Administrative Code, is adopted and made a part of this code by reference.

Chapter 15.08

CALIFORNIA BUILDING CODE

Sections:

15.08.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Building Code, Vol. 1 & 2, Appendix A (Employee Qualifications), Appendix F (Rodentproofing), Appendix G (Flood-Resistant Construction), Appendix H (Signs), Appendix I (Patio Covers), Appendix J (Grading), referred to as the "International Building Code" or "IBC," is adopted as amended and made a part of this code by reference.

Chapter 15.12

CALIFORNIA RESIDENTIAL CODE

Sections:

15.12.010 Adoption

15.12.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Residential Code, Appendix A (Sizing and Capacities of Gas Piping), Appendix F (Radon Control Methods), Appendix G (Swimming Pools, Spas and Hot Tubs), Appendix H (Patio Covers), Appendix J (Existing Buildings and Structures), Appendix P (Sizing of Water Piping System), referred to as the "International Building Code" or "IBC," is adopted as amended and made a part of this code by reference.

Chapter 15.16

CALIFORNIA ELECTRICAL CODE

Sections:

15.16.010 Adoption

15.16.010 Adoption

For the purpose of establishing proper regulations for building construction and for installation of electrical systems, the 2010 California Electrical Code, otherwise identified as the National Electrical Code, 2008 Edition, referred to as the "National Electrical Code" (NEC) is adopted and made a part of this code by reference.

Chapter 15.20

CALIFORNIA MECHANICAL CODE

Sections:

15.20.010 Adoption

15.20.010 Adoption

For the purpose of establishing proper regulations for building construction and for the installation of mechanical systems, the 2010 California Mechanical Code, otherwise identified as the Uniform Mechanical Code, 2009 Edition, and referred to as the "Uniform Mechanical Code" or "UMC," is adopted and made a part of this code by reference.

Chapter 15.24

CALIFORNIA PLUMBING CODE

Sections:

15.24.010 Adoption

15.24.010 Adoption

For the purpose of establishing proper regulations for building construction and for the installation of plumbing systems, the 2010 California Plumbing Code, including Appendix A (Recommended Rules for Sizing the Water Supply System), Appendix B (Explanatory Notes on Combination Waste and Vent System), Appendix D (Sizing Storm Water Drainage System), Appendix G (Graywater Systems), Appendix I (Installation Standards),otherwise identified as the Uniform Plumbing Code, 2009 Edition, and referred to as the "Uniform Plumbing Code," or "UPC," is adopted and made a part of this code by reference.

Chapter 15.28

CALIFORNIA ENERGY CODE

Sections:

15.28.010 Adoption

15.28.010 Adoption

For the purpose of establishing proper regulations for building construction and energy conservation, the 2010 Energy Code is adopted and made a part of this code by reference.

Chapter 15.32

CALIFORNIA HISTORICAL BUILDING CODE

Sections:

15.32.010 Adoption

For the purpose of establishing proper regulations for building construction as it relates to historical buildings, the 2010 California Historical Building Code is adopted and made a part of this code by reference.

Chapter 15.36

CALIFORNIA FIRE CODE

Sections:

15.32.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Fire Code, Appendix B and Appendix BB (Fire Flow Requirements for Buildings), Appendix C and Appendix CC (Fire Hydrant Locations and Distribution), Appendix D (Fire Apparatus Access Roads), Appendix E (Hazard Categories), Appendix F (Hazard Ranking), Appendix G (Cryogenic Fluids-Weight and Volume Equivalents), Appendix H (Hazardous Materials Management Plans and Hazardous Inventory Statement), Appendix I (Fire Protection Systems—Noncompliant Conditions), Appendix J (Emergency Responder Radio Coverage) and referred to as the "International Fire Code" or "IFC," is adopted as amended and made a part of this code by reference.

15.32.020 Definitions

For the purposes of this chapter, the words in this Chapter shall have the following meaning:

A. Wherever the word "jurisdiction" is used in the California Fire Code, it shall refer to the City of Calistoga.

B. Where the party responsible for the enforcement of the California Fire Code is given the title of "Fire Marshal" it shall refer to the City of Calistoga Fire Chief or his/her designee.

15.32.030 Amendments

The California Fire Code shall be amended to read as follows:

A. Amend Chapter 1, Division II Administration, Part 1 General Provisions, Section 102 Applicability. Section 102.1 Construction and Design Provisions is amended by adding the following:

102.1 Construction and design provisions.

5. Existing structures to which additions, alterations or repairs are made that involve: the addition, removal or replacement of fire resistive construction related to property lines; additions, alteration or repairs to fire protection systems, additions or alterations made that impact emergency vehicle access; or alterations made that impact the egress system.

B. Amend Chapter 1, Division II Administration, Part 2 Administrative Provisions, Section 105 Permits. Section 105.6.47 Additional Permits is amended by adding the following:

105.6.47 Additional permits.
In addition to the operational permits required by Section 105.6, the following permits shall be obtained from the Building Division prior to engaging in the following activities, operations, practices or functions:

4. Apartment, Hotel, Motel and Bed & Breakfast. An operational permit is required to operate an apartment house, hotel, motel and bed & breakfast.
5. Day Care. An operational permit is required to operate a day care occupancy with an occupant load over eight (8) persons.
6. Emergency Responder Radio Coverage System. An operational permit is required for buildings and/or facilities with emergency responder radio coverage systems and related equipment.
7. Winery Caves – Public Accessible. An operational permit is required to operate a winery cave that is accessible to the public.

C. Amend Chapter 1, Division II Administration, Part 2 Administrative Provisions, Section 109 Violations. Section 109.3 Violation Penalties is amended to read as follows:

109.3 Violation penalties.
Person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of permit or certificate used under provisions of this code, shall be guilty of a

misdemeanor, punishable by a fine of not less than **$500.00**, or by imprisonment not exceeding **six months**, or both such fine and imprisonment. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

D. Amend Chapter 1, Division II, Administration, Part 2 Administrative Provisions, Section 111 Stop Work Order. Section 111.4 Failure to Comply is amended to read as follows:

111.4 Failure to comply.
Any person, who shall continue ay work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable to a fine of not less than **$100.00** dollars or more than **$500.00** dollars. A person shall be fined for each day he or she continues to work after having been served with a stop work order.

E. Amend Chapter 5 Fire Service Features, Section 505 Premises Identification. Section 505.1 Address Identification is amended to read as follows:

505.1 Address identification.
New and existing buildings shall have approved **illuminated or reflective** address number, building numbers or approved building identification placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall be a minimum of 4 inches (101.6mm) high with a minimum stroke width of 0.5 inch (12.7mm). Where access is by means of private road and the building cannot be viewed from the public way, a monument, pole or other sign or means shall be used to identify the structure.

F. Amend Chapter 5 Fire Service Features, Section 510 Emergency Responder Radio Coverage. Section 510.1 Emergency Responder Radio Coverage in Buildings is amended to read as follows:

510.1 Emergency responder radio coverage in buildings.
All buildings **and winery caves** shall have approved radio coverage for emergency responders within the building **or winery cave** based upon the existing coverage levels of public safety communication systems of the jurisdiction, at the exterior of the building. This section shall not require improvement of existing public safety communication systems.

Exceptions:
1. Where approved by the building official and the fire code official, a wired communication system in accordance with Section 907.2.13.2 may be permitted to be installed in lieu of an approved radio coverage system.
2. Where it is determined by the fire code official that the radio coverage system is not necessary.

G. Amend Chapter 6 Building Services and Systems, Section 605 Electrical Equipment, Wiring and Hazards. Section 605 is amended by adding the following:

605.11 Solar photovoltaic installations.

605.11.1 Marking. PV systems must be marked. Marking is needed to provide emergency responders with appropriate warning and guidance with respect to working around and isolating the solar electric system. This can facilitate identifying energized electrical lines that connect the solar modules to the inverter, as these shall not be cut when venting for smoke removal. Materials used for marking must be weather resistant. It is required that Underwriters Laboratories Marking and Labeling System 969 (UL 969) be used as standard to determine weather rating.

605.11.1.1 Main service disconnect. For both commercial and residential applications, the marking of the AC shut off devices and shall be placed adjacent to the main service disconnect in a location clearly visible from the location where the lever is operated.

For integrated systems, a sign at the main panel shall state the following as outlined in Section 605.11.1.2.1 below:

CAUTION: INTEGRATED PHOTOVOLTAIC SYSTEM ON SITE!

605.11.1.1.1 Marking content and format.

a. Marking content: **CAUTION: SOLAR ELECTRIC SYSTEM.**
b. Red background.
c. White lettering.
d. Minimum 3/8" letter height.
e. All capital letters.
f. Arial or similar font, non-bold.
g. Reflective, weather resistant material suitable for the environment (durable adhesive materials may meet this requirement).

605.11.1.2 Marking for direct current conduit, raceways, enclosures, cable assemblies, and junction boxes. Marking is required on all interior and exterior DC conduit, raceways, enclosures, cable assemblies, and junction boxes to alert the Fire Service to avoid cutting them. Marking shall be placed on all interior and exterior DC conduit, raceways, enclosures, and cable assemblies, every 10 feet, at turns and above and/or below penetrations and all DC combiner and junction boxes.

6.05.11.1.2.1 Marking content and format.

a. Marking content: **CAUTION: SOLAR CIRCUIT.**
b. Red background.
c. White lettering.
d. Minimum 3/8" letter height.
e. All capital letters.
f. Arial or similar font, non-bold.

g. Reflective, weather resistant material suitable for the environment (durable adhesive materials meet this requirement).

605.11.1.3 Inverters. The inverter is a device used to convert DC electricity from the solar system to AC electricity for use in the building's electrical system or the grid. For example:

CAUTION: SOLAR CIRCUIT

CAUTION: SOLAR ELECTRIC SYSTEM
INVERTER LOCATED IN _____.

605.11.2 Access, pathways and smoke ventilation. Access and spacing requirements shall be observed in order to:

a. Ensure access to the roof.
b. Provide pathways to specific areas of the roof.
c. Provide for smoke ventilation opportunities area.
d. Provide emergency egress from the roof.

The Fire Chief or Building Official may allow exceptions to this requirement where access, pathway or ventilation requirements are reduced due to:

e. Proximity and type of adjacent exposures.
f. Alternative access opportunities (as from adjoining roofs).
g. Ground level access to the roof area in question.
h. Adequate ventilation opportunities beneath solar array (as with significantly elevated or widely-spaced arrays).
i. Adequate ventilation opportunities afforded by module set back from other rooftop equipment (example: shading or structural constraints may leave significant areas open for ventilation near HVAC equipment).
j. Automatic ventilation device.
k. New technology, methods, or other innovations that ensure adequate fire department access, pathways and ventilation opportunities.

Designation of ridge, hip, and valley does not apply to roofs with 2-in-12 or less pitch. All roof dimensions are measured to centerlines.

Roof access points shall be defined as areas where ladders are not placed over openings (i.e., windows or doors) and are located at strong points of building construction and in locations where they will not conflict with overhead obstructions (i.e., tree limbs, wires, or signs).

605.11.2.1 Residential systems - single and two-unit residential dwellings. Plan review is required on all residential systems.

605.11.2.1.1 Access/Pathways.

a. Residential buildings with hip roof layouts: Modules shall be located in a manner that provides one (1) three-foot (3') wide clear access pathway from the eave to the ridge on each roof slope where modules are located. The access pathway shall be located at a structurally strong location on the building (such as a bearing wall).
b. Residential buildings with a single ridge: Modules shall be located in a manner that provides two (2) three-foot (3') wide access pathways from the eave to the ridge on each roof slope where modules are located.
c. Hips and Valleys: Modules shall be located no closer than one and one half (1.5) feet to a hip or a valley if modules are to be placed on both sides of a hip or valley. If the modules are to be located on only one side of a hip or valley that is of equal length then the modules shall be placed directly adjacent to the hip or valley.

605.11.2.1.2 Smoke ventilation. The modules shall be located no higher than three feet (3') below the ridge.

605.11.2.2 Commercial buildings and residential housing comprised of three (3) or more units. Plan review is required on all commercial systems.

Exception: If the Fire Chief or Building Official determines that the roof configuration is similar to residential (such as in the case of townhouses, condominiums, or single family attached buildings), a determination to apply the residential access and ventilation requirements may be granted. Examples of these requirements appear at the end of this policy.

605.11.2.2.1 Access. There shall be a minimum six foot (6') wide clear perimeter around the edges of the roof.

Exception: If either axis of the building is 250 feet or less, there shall be a minimum four feet (4') wide clear perimeter around the edges of the roof.

605.11.2.2.2 Pathways. Pathways shall be established in the design of the solar installation. Pathways shall meet the following requirements:

a. Shall be over structural members.
b. Centerline axis pathways shall be provided in both axis of the roof. Centerline axis pathways shall run on structural members or over the next closest structural member nearest to the center lines of the roof.
c. Shall be straight line not less than 4 feet (4') clear to skylights and/or ventilation hatches.
d. Shall be straight line not less than 4 feet (4') clear to roof standpipes.
e. Shall provide not less than 4 feet (4') clear around roof access hatch with at least one not less than 4 feet (4') clear pathway to parapet or roof edge.

605.11.2.2.3 Smoke ventilation.

a. Arrays shall be no greater than 150 by 150 feet in distance in either axis.

b. Ventilation options between array sections shall be one of the following:
   1. A pathway 8 feet (8') or greater in width.
   2. Four feet (4') or greater in width pathway and bordering on existing roof skylights or ventilation hatches.
   3. Four feet (4') or greater in width pathway and bordering four feet (4') x 8 feet 8' "venting cutouts" every 20 feet (20') on alternating sides of the pathway.

605.11.3 Location of direct current (DC) conductors. Conduit, wiring systems, and raceways for photovoltaic circuits shall be located as close as possible to the ridge or hip or valley and from the hip or valley as directly as possible to an outside wall to reduce trip hazards and maximize ventilation opportunities. Conduit runs between sub arrays and to DC combiner boxes shall use design criteria that minimize total amount of conduit on the roof by taking the shortest path from the array to the DC combiner box. The DC combiner boxes are to be located such that conduit runs are minimized in the pathways between arrays. To limit the hazard of cutting live conduit in venting operations, DC wiring shall be run in metallic conduit or raceways when located within enclosed specs in a building and shall be run, to the maximum extent possible, along the bottom of load-bearing members.

605.11.4 Location alternating current (AC) and direct current (DC) shut off devices.

605.11.4.1 DC shut off device. A DC shut off device approved by the California Electric Code shall be installed as close to the PV modules as possible. Proper marking as described in Section 605.11.1 shall be provided.

605.11.4.2 AC shut off device. An AC shut off device approved by the California Electric Code shall be installed near the main service panel in line with the inverter.

605.11.5. Non-habitable buildings. Not applicable to this section. Examples of non-habitable structures include, but are not limited to, parking shade structures, solar trellises, etc.

605.11.6 Ground mounted photovoltaic arrays. Ground-mounted, freestanding photovoltaic arrays are subject to the setback and height requirements for accessory structures as specified in CMC Title 17 Zoning. A clear brush area of ten feet (10') is required for ground mounted photovoltaic arrays.

605.11.7 Roofing materials. Roofing material installed under the arrays shall be Class A material throughout as defined by the current edition of the California Building Code.

H. Amend Chapter 9 Fire Protection Systems, Section 903 Automatic Sprinkler Systems. Section 903.2 Where Required is amended by adding the following:

903.2.19 Additions & alterations.
If deemed necessary by the Fire Code Official additions to existing residential and non-residential buildings that increase the square footage by 50% of the existing gross floor area and/or results in the building exceeding 3,600 square feet shall be installed with an automatic fire sprinkler system throughout.

903.2.20 Repairs.
For the purposes of this section for automatic fire sprinkler system requirements, and if deemed necessary by the Fire Code Official, repairs to existing buildings that have sustained damage of more than 50% of the floor area or more than 50% of the value of the building shall meet the requirements for a new building.

903.2.21 Change in occupancy.
For the purposes of this section for automatic fire sprinkler system requirements, a proposed change in use or occupancy to an existing building that would result in a more hazardous use or occupancy shall meet the requirements for a new building.

I. Amend Chapter 49 Requirements for Wildland-Urban Interface Fire Areas. Section 4903 Plans is amended by adding the following:

SECTION 4903 PLANS.

4903.1. General. A Wildland Fire Protection Plan (WFPP) shall be submitted by licensed or registered fire protection specialists/consultant knowledgeable in the field of Wildland Urban Interface Fire Protection.

4903.2. Requirements. The following requirements shall be included in the WFPP:

4903.2.1 Sheltering in place (SIP). During a wildfire, SIP shall be considered if the homes and community as a whole can meet all of the following features:

a. Constructed of ignition resistant materials.
b. Protected eaves.
c. Residential fire sprinklers.
d. Maintain fire resistive landscape with a minimum 100-foot defensible space surrounding all structures.
e. Class "A" non-combustible roof assembly.
f. Dual pane or tempered glass windows.
g. Chimneys with spark arrestors ½ inch screening.
h. Adequate roadway and driveway widths – meeting designed standards.
i. Adequate water supply and water flow for firefighting (2,500 gpm).
j. Vegetation-modification zones and fire department approved landscape plans.

4903.2.2 Water supply. List parcel size, required hydrant spacing, required flow for firefighting (2,500 GPM in Wildland Interface Areas), and show existing and proposed hydrant locations.

4903.2.3 Fire access. Address main access, secondary access, road width, driving surface improvement, capacity (weight of fire apparatus is 75,000 lbs), grade, angle of approach/departure, obstructions, gates, fire lane marking, turnarounds meeting Fire Department design template, and on-going maintenance of these elements.

Note: If the project can not provide secondary access, the applicant shall provide alternatives or justify why it is not needed.

Individual property owners are responsible for maintaining driveways, gates and signs on their own parcel in compliance with fire codes. Private roads and other access components, including gates and signs within the project shall also be maintained in compliance with fire codes in perpetuity. Identify what entity (not a named individual) is responsible for on-going road maintenance, and how that will be funded and monitored.

Address all of the following:

a. Organization responsible for road maintenance (cannot be dissolved or unfunded).
b. Funding obligation, which shall be shared by all project owners.
c. Responsibility to participate conveyed with property transfer.
d. Failure to maintain road elements in compliance with fire codes subjects owners to potential fines and forced abatement by the fire agency or the County, with charges, including administrative costs and penalties, liened against the property.

4903.2.4 Urban wildland interface area. This is land in an area designated or identified as a Hazardous Fire Area. Hazardous Fire Area is any geographic area mapped by the State or the City of Calistoga as a high or very high fire hazard area, or as set forth by the City of Calistoga that contains the type and condition of vegetation, topography, weather, and structure density to potentially increase the possibility of vegetation conflagration fires. (Refer to City Council Resolution #2008-104 for map of the City of Calistoga's Fire Hazard Severity Zone.)

4903.2.5 Fire protection systems. Fire sprinklers are required for all newly constructed buildings.

4903.2.6 Defensible space. Address code minimums (100 feet) and show proposed modifications. If the fire behavior model (Refer to Section 4903.2.8) indicates a greater distance, incorporate it here and reference the fire modeling.

4903.2.7 Vegetation management. Discuss how fuel modification will be maintained. Indicate who the responsible party is (individual property owner or other entity) and how this will be handled in perpetuity. It is not acceptable to have an association charged with the task if that organization can dissolve itself or become ineffective for lack of funding. Individual property owners are responsible for maintaining their own parcel in compliance with fire codes.

Parcels of open space easements, road easements, and similar land uses within the project shall also have vegetation maintained in a fire-safe manner in perpetuity. Identify which entity (not a named individual) is responsible for on-going vegetation maintenance and how that will be funded and monitored.

Address all of the following:

a. Organization responsible for maintenance (cannot be dissolved or unfunded).
b. Funding obligation, which shall be shared by all project owners.
c. Responsibility to participate conveyed with property transfer.
d. Failure to maintain in fire-safe manner subjects owners to potential fines, and forced abatement by the City of Calistoga Fire Department, with charges, including administrative costs and penalties, liened against the property.

4903.2.8 Fire behavior model. Identify the specific model and version being used. Clearly identify your source for worst-case and summer and fall weather conditions. Ensure all additional supplemental information is included, such as product examples or clearing methods and is in full compliance with the California Building Standards Codes and local amendments.

Chapter 15.40

CALIFORNIA EXISTING BUILDING CODE

Sections:

15.40.010 Adoption

15.40.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Existing Building Code otherwise identified as the International Existing Building Code, 2009 Edition, and referred to as the "International Existing Building Code," or "IEBC," is adopted and made a part of this code by reference.

Chapter 15.44

CALIFORNIA GREEN BUILDING STANDARDS

Sections:

15.44.010 Adoption

15.44.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Green Building Standards is adopted and made a part of this code by reference.

Chapter 15.48

CALIFORNIA REFERENCE STANDARDS

Sections:

15.48.010 Adoption

15.48.010 Adoption

For the purpose of establishing proper regulations for building construction, the 2010 California Referenced Standards is adopted and made a part of this code by reference.

Chapter 15.50

BUILDING STANDARDS ADVISORY AND APPEALS BOARD

"Not Repealed & Amended"

Chapter 15.52

VIOLATIONS

"Not Repealed & Amended"

SECTION FIVE:

If any section or portion of this ordinance is for any reason held to be invalid and or unconstitutional by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this ordinance.

SECTION SIX:

THIS ORDINANCE shall take effect. **January 1, 2011**. Before expiration of fifteen (15) days after its passage by the City Council, the City Clerk shall cause to be published a summary of this ordinance in a newspaper of general circulation within the City of Calistoga.

THIS ORDINANCE was introduced with the first reading waived at the City of Calistoga City Council meeting of the _____**2010** and was passed and adopted at a regular meeting of the Calistoga City Council on the _____**2010**, by the following vote:

AYES:
NOES:
ABSTAIN:
ABSENT:

_____
JACK GINGLES, Mayor

ATTEST:

_____
SUSAN SNEDDON, City Clerk