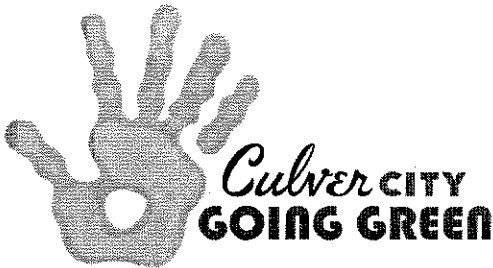




Effective Spring 2008



Culver City Building Safety Division Mandatory Solar Photovoltaic Requirement

All new construction in Culver City of 10,000 s.f. or greater, additions of 10,000 s.f. or greater, and major renovations of 10,000 s.f. or greater are required to install 1 kw of solar photovoltaic power per 10,000 s.f. of applicable building area.

The requirement doesn't apply to one and two family structures, garages, or parking structures.

"Major" renovation of 10,000 s.f. or greater is defined as a renovation of over 50% of the value of the applicable portion of the existing building, as determined by the L.A. County tax assessor's value of the applicable portion of the building, or a certified appraisal of the applicable portion of the building.

Alternate: A project developer may choose to install the required amount of solar photovoltaic power on a different building or structure also located in Culver City, with the approval of Culver City staff.

A project developer may choose to pay an in-lieu fee to the City of Culver City in an amount equal to the installed cost of the required amount of photovoltaic power, with the approval of Culver staff. The in-lieu fee will be based on the current market installed cost of solar photovoltaic power at the time of the payment.

Solar photovoltaic power must be installed concurrently with the other electric work to be installed in the project. The solar photovoltaic power may be installed under its own electrical permit or may be installed as part of the overall electrical permit.

Solar photovoltaic systems may be either grid-intertie systems or may be stand alone systems.

Please also refer to the "Culver City Solar PV Inspection and Submittal guidelines"

Please consult the Culver City Building Safety Division Electrical Inspector for further information, and please note that all solar photovoltaic systems are also reviewed by the Culver City Fire Prevention Division for general firefighter roof access.

City of Culver City, California
City Council Agenda Item Report

Meeting Date: 02/25/08		Item Number: A-2	
AGENDA ITEM: Introduction of an Ordinance Establishing a Mandatory 1 Kilowatt Solar Photovoltaic Requirement for Each 10,000 Square Feet of Gross Floor Area of New Construction for Commercial and Multi-Family Projects, Including Additions Equal to 10,000 Square Feet or More of Gross Floor Area, and Major Renovations to Existing Buildings of 10,000 Square Feet or More of Gross Floor Area.			
Contact Person/Dept.: Craig Johnson/Building; Heather Baker/City Attorney		Phone Number: (310) 253-5802; (310) 253-5660	
Fiscal Impact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		General Fund: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	
Public Hearing: <input type="checkbox"/>		Action Item: <input checked="" type="checkbox"/>	Attachments: <input checked="" type="checkbox"/>
Public Notification: Master Notification List (02/20/08)			
Department Approval: Sol Blumenfeld (02/14/08) Carol Schwab (by H. Baker) (02/14/08)		City Attorney Approval: Carol Schwab (by H. Baker) (02/14/08)	
Fiscal Impact Review: Jeff Muir (02/20/08)		City Manager Approval: Jerry B. Fulwood (02/20/08)	

RECOMMENDATION:

Staff recommends the City Council adopt an Ordinance (Attachment 1) establishing a mandatory 1 kilowatt solar photovoltaic requirement for each 10,000 square feet of gross floor area of new construction for commercial and multi-family projects, including additions equal to 10,000 square feet or more of gross floor area, and major renovations to existing buildings of 10,000 square feet or more of gross floor area.

BACKGROUND/DISCUSSION:

At the City Council meeting of January 22, 2008, the Council introduced a proposed Ordinance, with revisions, by a unanimous vote (5-0). (See the January 22, 2008 City Council Agenda Item Report – Attachment 2). From the dais, the City Council suggested the following revisions to the Ordinance prior to its introduction:

- §15.02.1005 – The method for rounding in calculating the number of panels for a qualifying project has been revised so that a fractional panel equal to or greater than one half is rounded up and a fractional panel less than one half is rounded down.

City of Culver City, California
City Council Agenda Item Report

- §15.02.1010 – The Community Development Director has been designated with the authority to approve any exception to the solar photovoltaic requirement contemplated by this Section.
- §15.02.1010.B. – This Section has been clarified to require that an alternate building for the installation of a solar photovoltaic system be located in Culver City.
- §15.02.1015.A. – The fee waiver has been revised to be capped at Five Thousand Dollars (\$5,000), and the fee waiver provision will sunset after ten years.

The City Attorney opined these were not "substantive amendments" to the Ordinance, and the City Council introduced the Ordinance as amended that evening.

On February 11, 2008, the Ordinance, as revised above, was brought back for adoption. At that time, the City Council determined that it wanted to further revise the solar photovoltaic requirement to include:

- Additions equal to 10,000 square feet or more of gross floor area; and
- "Major" renovations to existing buildings of 10,000 square feet or more of gross floor area, where such renovation is equal to at least 50% of the valuation of the existing building.

The exceptions to the solar photovoltaic requirement relating to one and two family residences, parking structures, garages, and renovations or additions to existing buildings (except as otherwise provided above), would still apply.

Due to the substantive nature of the change to the Ordinance as originally introduced, the City Attorney recommends the Council re-introduce the Ordinance this evening. Should the City Council introduce the Ordinance this evening, the Ordinance will then be brought back to the City Council on March 10, 2008 for adoption.

FISCAL ANALYSIS:

To illustrate a sample project, a simple financial analysis of a new required project is as follows:

A three story building with 3,334 sq. ft. per floor would meet the minimum 10,000 sq. ft. qualification requiring installation of a 1 kilowatt (kw) photovoltaic system. A 1 kw system would cost approximately \$11,000 and the estimated payback would be 16.5

City of Culver City, California
City Council Agenda Item Report

years. However, due to the added energy savings for a project, if the system is financed as part of overall building construction, this payback may produce a positive cash flow of \$3.00 per month or \$34 per year based on a 30 year loan and including Federal tax credits and State tax rebates. The system will also produce energy savings of 1,151 kw hours per year resulting in the economic benefit of energy savings irrespective of project financing. As proposed, the proportionate cost for the energy system is less than one-half of one percent of the overall building construction cost.

From the City's perspective there will be less reliance upon utilities and less UUT revenue generated on a per project basis. The 10,000 sq. ft. threshold means that the effect will be small. (For example, if the proposed Ordinance had been in full effect in FY 06-07, even with the current expanded applicability, it is estimated there would have been a loss of less than \$1,000 in UUT revenues for all qualifying projects)

ATTACHMENTS:

1. Ordinance (redline and final versions)
2. January 22, 2008 City Council Agenda Item Report

MOTIONS:

That the City Council:

Introduce an Ordinance establishing a mandatory 1 kw solar photovoltaic requirement for each 10,000 square feet of gross floor area of new construction for commercial and multi-family projects, including additions equal to 10,000 square feet or more of gross floor area, and major renovations to existing buildings of 10,000 square feet or more of gross floor area.

ATTACHMENT 1

ORDINANCE NO. 2008-_____

1
2
3 AN ORDINANCE OF THE CITY OF CULVER CITY,
4 CALIFORNIA, AMENDING CHAPTER 15.02 OF THE CULVER
5 CITY MUNICIPAL CODE TO ADD SUBCHAPTER 15.02.1000,
6 *et seq.*, ESTABLISHING A MANDATORY 1KW SOLAR
7 PHOTOVOLTAIC REQUIREMENT PER 10,000 SQUARE
8 FEET OF GROSS FLOOR AREA OF NEW CONSTRUCTION.

9
10 **WHEREAS**, California Health and Safety Code §13146 requires local
11 jurisdictions to enforce the California Code of Regulations (CCR), Title 24, also known as
12 the California Building Standards Code; and

13
14 **WHEREAS**, California Health and Safety Code § 17958(a) allows local
15 jurisdictions to establish more restrictive building standards than those contained in the
16 California Building Standards Code, if the amendment is reasonably necessary because of
17 local climatic, geological, or topographical conditions; and

18
19 **WHEREAS**, California Public Resources Code §25402.1 states that a local
20 agency may adopt more restrictive energy standards when they are cost-effective and
21 approved by the California Energy Commission ("CEC"); and

22
23 **WHEREAS**, energy efficiency is an important part of a sustainable Culver
24 City, and Culver City is part of the greater Los Angeles Basin, which climate and
25 topography are known to trap air pollutants that are known to be harmful to human health;
26 and

27
28 **WHEREAS**, solar photovoltaic power generation consumes no fossil fuels,
generates no air pollution and will therefore increase energy efficiency and will reduce air
pollution in the Los Angeles Basin and Culver City; and

WHEREAS, the City Council of the City of Culver City desires to establish a

1 mandatory 1kw solar photovoltaic requirement per 10,000 square feet of new construction
2 for commercial and multi-family projects; and

3 **WHEREAS**, on June 21, 2007, the CEC approved the City's application for a
4 "Locally Adopted Energy Standard" for a mandatory 1kw solar photovoltaic requirement per
5 10,000 square feet of new construction for commercial and multi-family projects.
6

7 **NOW THEREFORE**, the City Council of the City of Culver City, California,
8 **DOES HEREBY ORDAIN** as follows:

9 **SECTION 1.** Based on the foregoing recitations and findings, Chapter 15.02
10 of the Culver City Municipal Code is hereby amended to add subchapter 15.02.1000, et
11 seq. as follows:

12 **SOLAR PHOTOVOLTAIC SYSTEMS**

13 §15.02.1000 Definitions.

14 §15.02.1005 Requirement.

15 § 15.02.1010 Exceptions.

16 § 15.02.1015 Building Permit Fees and Inspections.

17
18 **§ 15.02.1000 DEFINITIONS.**

19 Terms defined herein shall have the following meanings when used in
20 this Subchapter:

21 **Building Official** shall mean the Building Official of the City of Culver
22 City or his or her designee.

23 **California Energy Efficiency Standards** shall mean the California
24 Energy Efficiency Standards set forth in Title 24, Part 6 of the California Code
25 of Regulations.

26 **City** shall mean the City of Culver City.

27 **Director** shall mean the Community Development Director of the City
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1 of Culver City or his or her designee.

2 **Solar Photovoltaic System** shall mean a system that generates
3 electricity from the sun.

4 **§ 15.02.1005 REQUIREMENT.**

5 All new buildings of 10,000 square feet or more of gross floor area,
6 additions equal to 10,000 square feet or more of gross floor area, and major
7 renovations to existing buildings of 10,000 square feet or more of gross floor
8 area where such renovation is equal to at least fifty percent (50%) of the
9 valuation of the existing building, excluding one and two family residences,
10 parking structures, garages, and renovations or additions to existing
11 buildings, shall be equipped with a 1kw solar photovoltaic system per each
12 10,000 square feet of gross floor area, or fraction thereof. Except as
13 otherwise expressly provided, this Section shall not apply to one and two
14 family residences, parking structures, garages, and renovations or additions
15 to existing buildings. For qualifying projects, the number of panels required
16 for any given system shall be the total required energy production of the
17 project, divided by the energy production capability of a single panel as
18 specified on the project. When calculating the number of panels required,
19 fractional panels equal to or greater than one half shall be rounded up to the
20 nearest whole number; fractional panels less than one half shall be rounded
21 down to the nearest whole number.

22 **§ 15.02.1010 EXCEPTIONS.**

23 Upon the written approval of the Director, an applicant who is unable
24 to install the required solar photovoltaic system due to the configuration of the
25 proposed construction project shall comply with one of the following options
26 in order to satisfy the requirements set forth in Section 15.02.1005:
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A. *In-lieu Fee.* An applicant shall pay an in lieu fee in an amount equal to the cost of a solar photovoltaic system installed in a comparable project. Fees generated from in lieu payments pursuant to this subsection, shall be appropriated and disbursed only for solar photovoltaic designs and installations on City buildings or facilities. The amount and process for the collection, utilization and return of fees contemplated by this Section shall be established by resolution of the City Council.

B. *Alternate Location.* An applicant shall install a solar photovoltaic system equivalent to a system installed in a comparable project on another building located in Culver City owned by the applicant.

§ 15.02.1015 BUILDING PERMIT FEES AND INSPECTIONS.

A. Plan check and permit fees in an amount not to exceed Five Thousand Dollars (\$5,000) shall be waived for solar photovoltaic installations. This subsection, 15.02.1015.A, shall remain in effect until March 12, 2018, and as of that date is repealed, unless a later enacted statute, enacted before March 12, 2018, deletes or extends that date.

B. The value of the required solar photovoltaic system shall not be required to be included in the overall construction valuation of the project for the purposes of determining building permit fees.

C. No final inspection shall be approved for a construction project subject to the requirements of this Subchapter, nor shall a temporary or final certificate of occupancy be issued for such project, prior to the installation of the solar photovoltaic system being completed, inspected and fully operational, unless otherwise excepted pursuant to Section 15.02.1010.

SECTION 2. Pursuant to Section 619 of the City Charter, this Ordinance shall take effect thirty (30) days after the date of its adoption. Pursuant to Sections 616 and 621 of the City Charter, prior to the expiration of fifteen (15) days after the adoption,

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the City Clerk shall cause this Ordinance, or a summary thereof, to be published in the Culver City News and shall post this Ordinance or a summary thereof in at least three places within the City.

SECTION 3. The City Council hereby declares that, if any provision, section, subsection, paragraph, sentence, phrase or word of this ordinance is rendered or declared invalid or unconstitutional by any final action in a court of competent jurisdiction or by reason of any preemptive legislation, then the City Council would have independently adopted the remaining provisions, sections, subsections, paragraphs, sentences, phrases or words of this ordinance and as such they shall remain in full force and effect.

APPROVED AND ADOPTED this ____ day of _____, 2008.

ALAN CORLIN, Mayor
City of Culver City, California

ATTEST:

APPROVED AS TO FORM:

CHRISTOPHER ARMENTA, City Clerk

Carol A. Schwab

CAROL A. SCHWAB, City Attorney

1 ORDINANCE NO. 2008-_____

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3 AN ORDINANCE OF THE CITY OF CULVER CITY,
4 CALIFORNIA, AMENDING CHAPTER 15.02 OF THE CULVER
5 CITY MUNICIPAL CODE TO ADD SUBCHAPTER 15.02.1000,
6 *et seq.*, ESTABLISHING A MANDATORY 1KW SOLAR
7 PHOTOVOLTAIC REQUIREMENT PER 10,000 SQUARE
8 FEET OF GROSS FLOOR AREA OF NEW CONSTRUCTION.

9 WHEREAS, California Health and Safety Code §13146 requires local
10 jurisdictions to enforce the California Code of Regulations (CCR), Title 24, also known as
11 the California Building Standards Code; and

12 WHEREAS, California Health and Safety Code § 17958(a) allows local
13 jurisdictions to establish more restrictive building standards than those contained in the
14 California Building Standards Code, if the amendment is reasonably necessary because of
15 local climatic, geological, or topographical conditions; and

16 WHEREAS, California Public Resources Code §25402.1 states that a local
17 agency may adopt more restrictive energy standards when they are cost-effective and
18 approved by the California Energy Commission ("CEC"); and

19 WHEREAS, energy efficiency is an important part of a sustainable Culver
20 City, and Culver City is part of the greater Los Angeles Basin, which climate and
21 topography are known to trap air pollutants that are known to be harmful to human health;
22 and

23 WHEREAS, solar photovoltaic power generation consumes no fossil fuels,
24 generates no air pollution and will therefore increase energy efficiency and will reduce air
25 pollution in the Los Angeles Basin and Culver City; and

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27 WHEREAS, the City Council of the City of Culver City desires to establish a
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mandatory 1kw solar photovoltaic requirement per 10,000 square feet of new construction for commercial and multi-family projects; and

WHEREAS, on June 21, 2007, the CEC approved the City's application for a "Locally Adopted Energy Standard" for a mandatory 1kw solar photovoltaic requirement per 10,000 square feet of new construction for commercial and multi-family projects.

NOW THEREFORE, the City Council of the City of Culver City, California, DOES HEREBY ORDAIN as follows:

SECTION 1. Based on the foregoing recitations and findings, Chapter 15.02 of the Culver City Municipal Code is hereby amended to add subchapter 15.02.1000, et seq. as follows:

SOLAR PHOTOVOLTAIC SYSTEMS

- §15.02.1000 Definitions.
- §15.02.1005 Requirement.
- § 15.02.1010 Exceptions.
- § 15.02.1015 Building Permit Fees and Inspections.

§ 15.02.1000 DEFINITIONS.

Terms defined herein shall have the following meanings when used in this Subchapter:

Building Official shall mean the Building Official of the City of Culver City or his or her designee.

California Energy Efficiency Standards shall mean the California Energy Efficiency Standards set forth in Title 24, Part 6 of the California Code of Regulations.

City shall mean the City of Culver City.

Director shall mean the Community Development Director of the City

1 of Culver City or his or her designee.

2 **Solar Photovoltaic System** shall mean a system that generates
3 electricity from the sun.

4 **§ 15.02.1005 REQUIREMENT.**

5 All new buildings of 10,000 square feet or more of gross floor area,
6 additions equal to 10,000 square feet or more of gross floor area, and major
7 renovations to existing buildings of 10,000 square feet or more of gross floor
8 area where such renovation is equal to at least fifty percent (50%) of the
9 valuation of the existing building, shall be equipped with a 1kw solar
10 photovoltaic system per each 10,000 square feet of gross floor area, or
11 fraction thereof. Except as otherwise expressly provided, this Section shall
12 not apply to one and two family residences, parking structures, garages, and
13 renovations or additions to existing buildings. For qualifying projects, the
14 number of panels required for any given system shall be the total required
15 energy production of the project, divided by the energy production capability
16 of a single panel as specified on the project. When calculating the number of
17 panels required, fractional panels equal to or greater than one half shall be
18 rounded up to the nearest whole number; fractional panels less than one half
19 shall be rounded down to the nearest whole number.

20 **§ 15.02.1010 EXCEPTIONS.**

21 Upon the written approval of the Director, an applicant who is unable
22 to install the required solar photovoltaic system due to the configuration of the
23 proposed construction project shall comply with one of the following options
24 in order to satisfy the requirements set forth in Section 15.02.1005:

25 A. *In-lieu Fee.* An applicant shall pay an in lieu fee in an amount
26 equal to the cost of a solar photovoltaic system installed in a comparable
27 project. Fees generated from in lieu payments pursuant to this subsection,
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shall be appropriated and disbursed only for solar photovoltaic designs and installations on City buildings or facilities. The amount and process for the collection, utilization and return of fees contemplated by this Section shall be established by resolution of the City Council.

B. *Alternate Location.* An applicant shall install a solar photovoltaic system equivalent to a system installed in a comparable project on another building located in Culver City owned by the applicant.

§ 15.02.1015 BUILDING PERMIT FEES AND INSPECTIONS.

A. Plan check and permit fees in an amount not to exceed Five Thousand Dollars (\$5,000) shall be waived for solar photovoltaic installations. This subsection, 15.02.1015.A, shall remain in effect until March 12, 2018, and as of that date is repealed, unless a later enacted statute, enacted before March 12, 2018, deletes or extends that date.

B. The value of the required solar photovoltaic system shall not be required to be included in the overall construction valuation of the project for the purposes of determining building permit fees.

C. No final inspection shall be approved for a construction project subject to the requirements of this Subchapter, nor shall a temporary or final certificate of occupancy be issued for such project, prior to the installation of the solar photovoltaic system being completed, inspected and fully operational, unless otherwise excepted pursuant to Section 15.02.1010.

SECTION 2. Pursuant to Section 619 of the City Charter, this Ordinance shall take effect thirty (30) days after the date of its adoption. Pursuant to Sections 616 and 621 of the City Charter, prior to the expiration of fifteen (15) days after the adoption, the City Clerk shall cause this Ordinance, or a summary thereof, to be published in the Culver City News and shall post this Ordinance or a summary thereof in at least three places within the City.

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SECTION 3. The City Council hereby declares that, if any provision, section, subsection, paragraph, sentence, phrase or word of this ordinance is rendered or declared invalid or unconstitutional by any final action in a court of competent jurisdiction or by reason of any preemptive legislation, then the City Council would have independently adopted the remaining provisions, sections, subsections, paragraphs, sentences, phrases or words of this ordinance and as such they shall remain in full force and effect.

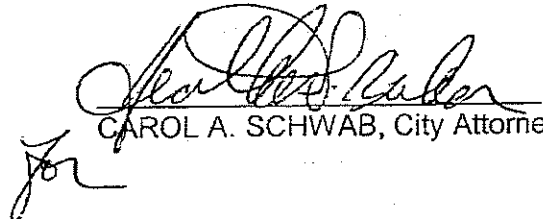
APPROVED AND ADOPTED this ____ day of _____, 2008.

ALAN CORLIN, Mayor
City of Culver City, California

ATTEST:

CHRISTOPHER ARMENTA, City Clerk

APPROVED AS TO FORM:


CAROL A. SCHWAB, City Attorney

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