

Malibu City Council
Environmental Sustainability Subcommittee
Special Meeting Agenda

Wednesday, April 6, 2016

2:00 P.M.

City Hall – Zuma Room
23825 Stuart Ranch Road

Councilmember Skylar Peak
Councilmember John Sibert

Call to Order

Approval of Agenda

Report on Posting of the Agenda – April 5, 2016

Public Comment *This is the time for the public to comment on any items not appearing on this agenda. Each public speaker shall be allowed up to three (3) minutes for comments. The Subcommittee may not discuss or act on any matter not specifically identified on this agenda, pursuant to the Ralph M. Brown Act.*

Discussion Items

1. Approval of Minutes – August 12, 2015

Recommended action: Approve the minutes of the Environmental Sustainability Subcommittee Special meeting of August 12, 2015.

Staff contact: Senior Administrative Assistant Rossine, 310-456-2489, ext. 274

2. Solar Carport Proposal for City Hall

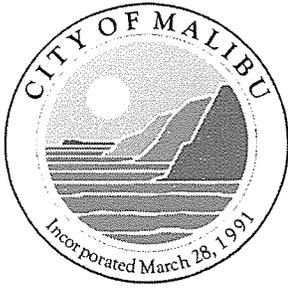
Recommended action: Provide a recommendation to the City Council regarding entering into a Power Purchase Agreement with PFMG Solar to construct solar carports at City Hall.

Staff contact: Acting Environmental Sustainability Director George, 310-456-2489, ext. 229

Adjournment

I hereby certify under penalty of perjury, under the laws of the State of California, that the foregoing agenda was posted in accordance with the applicable legal requirements. Dated April 5, 2016.


Mary-Linden, Executive Assistant



Environmental Sustainability Subcommittee Agenda Report

Environmental
Sustainability
Subcommittee
Special Meeting
04-06-16

Item 1

To: Councilmembers Peak and Sibert

Prepared by: Mary Linden, Executive Assistant *ML*

Approved by: Jim Thorsen, City Manager *JT*

Date prepared: March 29, 2016 Meeting date: April 6, 2016

Subject: Approval of Minutes – August 12, 2015

RECOMMENDED ACTION: Approve the minutes of the Environmental Sustainability Subcommittee Special meeting of August 12, 2015.

DISCUSSION: Staff has prepared draft minutes for the Environmental Sustainability Subcommittee Special meeting of August 12, 2015 and hereby submits the minutes to the Subcommittee for approval.

ATTACHMENTS: Draft Minutes of the August 12, 2015 Environmental Sustainability Subcommittee Special meeting

MINUTES
ENVIRONMENTAL SUSTAINABILITY SUBCOMMITTEE
SPECIAL MEETING
AUGUST 12, 2015
MALIBU CITY HALL
2:00 P.M.

CALL TO ORDER

Mayor Sibert called the meeting to order at 2:09 p.m.

ROLL CALL

The following persons were recorded in attendance by the Recording Secretary:

PRESENT: Mayor John Sibert and Councilmember Skylar Peak

ALSO PRESENT: City Manager Jim Thorsen; Environmental Sustainability Manager Craig George; Environmental Programs Specialist Casey Zweig; and Recording Secretary Rebecca Nelson-Brown

APPROVAL OF AGENDA

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to approve the agenda. The motion carried unanimously.

REPORT ON POSTING OF AGENDA

Recording Secretary Nelson-Brown reported that the agenda for the meeting was properly posted on August 5, 2015.

DISCUSSION ITEMS

ITEM 1 OLD BUSINESS

- A. City Hall Solar Panel Installation (continued from March 9, 2015)
Recommended action: 1) Receive and file presentation on the potential installation of colored solar panels on City Hall; and 2) Provide a recommendation to City Council to consider a project to install a photovoltaic solar panel system on City Hall and its fiscal impact to the City.

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to recommend to City Council that it consider multiple solar project proposals for installation at City Hall and City-owned parks and direct staff to release a Request for Proposals for the preferred project. The motion carried unanimously.

ITEM 2 NEW BUSINESS

A. Approval of Minutes – March 9, 2015

Staff recommendation: Approve the minutes of the Environmental Sustainability Subcommittee Special meeting of March 9, 2015.

MOTION Mayor Sibert moved and Councilmember Peak seconded a motion to approve the minutes of the Environmental Sustainability Subcommittee Special meeting of March 9, 2015. The motion carried unanimously.

B. Energy Coalition

1) Receive and file presentation on Community Choice Aggregation for energy supply options for the City; and 2) Provide a recommendation to the City Council that it authorize the City's participation in a feasibility study related to Community Choice Aggregation.

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to recommend to City Council that it that it authorize the City's participation in a feasibility study related to Community Choice Aggregation. The motion carried unanimously.

C. Solar City Photovoltaic Carport Proposal for City Hall

1) Receive and file presentation on the potential installation of carport solar panels at City Hall; and 2) Provide a recommendation to City Council to consider a project to install a photovoltaic carport solar panel system at City Hall and its fiscal impact to the City.

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to recommend to City Council that it consider multiple solar project proposals for installation at City Hall and City-owned parks and direct staff to release a Request for Proposal for the preferred project. The motion carried unanimously.

D. Solar Sunflowers Installation for Malibu Bluffs Park, Legacy Park, Las Flores Park, and Trancas Canyon Park

1) Receive and file presentation on Solar Sunflowers for energy supply options; and 2) Provide a recommendation to the City Council to consider a project to install Solar Sunflowers at public parks.

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to recommend to City Council that it consider multiple solar project proposals for installation at City Hall and City-owned parks and direct staff to release a Request for Proposal for the preferred project. The motion carried unanimously.

- E. Residential Franchise Agreement for Solid Waste Collection
1) Receive and file report on the City's solid waste program; and 2) Provide a recommendation to the City Council to negotiate a residential franchise agreement with Waste Management, Inc. for solid waste collection services in the City of Malibu, excluding the Malibu Garbage Disposal District.

MOTION Mayor Sibert moved and Councilmember Peak seconded a motion to recommend to City Council that it authorize a residential non-exclusive franchise agreement with Waste Management, Inc. for solid waste collection services in the City of Malibu, excluding the Malibu Garbage Disposal District. The motion carried unanimously.

- F. Property Assessed Clean Energy Financing Programs for Sustainability Upgrades
1) Receive and file presentation on the California Property Assessed Clean Energy (PACE) financing programs; and 2) Provide a recommendation to City Council to consider participating as an Associate Member in the California Home Finance Authority PACE program.

MOTION Councilmember Peak moved and Mayor Sibert seconded a motion to recommend to City Council that it participate as an Associate Member in the California Home Finance Authority PACE program. The motion carried unanimously.

ADJOURNMENT

CONSENSUS

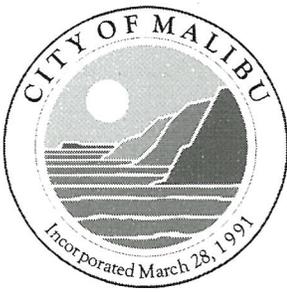
By consensus, the Subcommittee adjourned the meeting at 4:14 p.m.

Approved and adopted by the Environmental Sustainability Subcommittee of the City of Malibu on _____, 2016.

JOHN SIBERT, Councilmember

ATTEST:

MARY LINDEN, Executive Assistant



Environmental Sustainability Subcommittee Agenda Report

To: Councilmembers Peak and Sibert

Prepared by: Craig George, Acting Environmental Sustainability Director

Approved by: Jim Thorsen, City Manager 

Date prepared: April 4, 2016 Meeting date: April 6, 2016

Subject: Solar Carport Proposal for City Hall

RECOMMENDED ACTION: Provide a recommendation to the City Council regarding entering into a Power Purchase Agreement (PPA) with PFMG Solar to construct solar carports at City Hall.

FISCAL IMPACT: There is no direct fiscal impact associated with a PPA. The City will benefit from the lowered electrical rate per kilowatt hour (kWh) over what is currently paid to Southern California Edison (SCE).

DISCUSSION: On January 29, 2016, staff released a Request for Proposal (RFP) for a qualified firm to provide “Solar Photovoltaic Design, Build, and Maintenance Services.” The intent of the RFP was to locate a firm that would be “responsible for design and preparation of complete plans and performance specifications, procurement of all materials, installation, commissioning and performance monitoring with a guaranteed maximum price for the turnkey project.”

Proposals for the RFP were due to the City by February 23, 2016. The City received four qualified responses. These four proposals were then evaluated by a committee of four members, consisting of Public Works Director Brager, Acting Environmental Sustainability Director George, City of Agoura Hills Building Official Hamidzadeh and Solar Consultant Hullar. The committee reviewed the submittals for understanding of the RFP, completeness of the response, fulfillment of the services requested, innovative alternatives, qualifications and experience of key personnel, and related experience and approach to this type of project. A score was assigned by each committee member in each of these areas, and an average score was determined for each proposing firm. There were two firms whose average score separated them significantly from the other proposing firms.

Two responding firms, Borrego Solar and PFMG Solar, were scored by the committee well above the other responding firms and of approximately equal scores. Both firms are located in Southern California. Additional interviews were conducted via teleconference to discuss their submittals. Although both firms have similar approaches for design, construction, operation and financing, they differed in the specific details of each. In addition, these firms provided two distinct financing options for consideration, a purchase price for the design, construction and commissioning of the system and an option for a PPA. There are advantages and disadvantages with either option. These will be discussed in detail below with an analysis of what each offers to the City when considering the construction of solar carports.

The committee unanimously selected carports as the most feasible option for the City. This selection was based on the need to replace the roof on City Hall if a roof-mounted system were to be chosen. A ground-mounted option was also reviewed; however, insufficient area exists on City Hall property to consider this option. There were also concerns about the safety of a ground-mounted system at City Hall. One submittal recommended panels mounted as a façade on the south-facing walls of City Hall. This option was considered to be extremely innovative and artistic; however, such a system was considered inefficient due to the loss of electrical production by the panels in this configuration and the fact that they would need to be supplemented by a carport system. This design has not been utilized on any other public building. In addition, the firm had significant lack of experience and references, when compared to other firms, to validate the assumptions requested in the RFP.

On December 7, 2015, the City engaged a solar consultant to assist in the understanding of the City's solar needs and to participate in the selection of a firm to install the solar system at City Hall. Paul Hullar, owner of Brightwave Energy, was the selected consultant. Mr. Hullar served on the review committee for the final selection of a solar firm. Mr. Hullar ran analyses of the solar cost and the solar savings for both PFMG and Borrego Solar as presented in the attached charts for a 20-year project period.

Both PFMG and Borrego Solar provided extensive lists of installations in the public sector. Staff contacted references for both firms and received positive feedback regarding both. In a vast majority of these installations a PPA was selected by the public agency. In a PPA, instead of owning the photovoltaic system (PV), the City would host the system that is paid for and owned by a taxable entity (financier). The City enters into a long term contract with the financier to purchase the electricity generated by the solar system. The cost of the electricity is set below what SCE currently charges the City, with an annual increase in cost as set in the agreement. The financier is able to offer the energy at a lower rate because it is

able to monetize the state and federal solar tax and direct incentives. For the City, it is a low risk investment in a proven technology. The City is able to “go solar” and harness the many economic, environmental, and marketing benefits without having to pay for a capital investment.

Staff recommends that the City enter into a contract with PFMG Solar with a PPA option. PFMG has estimated the City will save approximately \$181,594 over the life of the solar system. The solar consultant used similar projections and assumptions between PFMG Solar and Borrego Solar. He has estimated the City will save approximately \$258,397 in this PPA agreement. Though this savings is slightly less than the projected savings in 20 years if the system were to be purchased, there is no capital outlay or annual maintenance costs to consider. PFMG Solar has installed solar systems for the City of Palmdale, the County of Orange and multiple school districts throughout California. They are also in the design phase of a solar installation for the City of Oceanside, and other school districts. PFMG Solar listed 26 references of similar projects, and 25 of them were PPA agreements. The importance of the PPA is there is no capital cost for the City. PFMG will charge an aggregate rate per kWh of \$0.1275 for the first year of the agreement; the City currently pays \$0.1366 to SCE. The annual rate of increase for the cost per kWh is 3.9% for the first 15 years of the agreement, and 0.00% for the remainder of the agreement. It is anticipated SCE rates will increase at least 5% per year with potentially greater increases in the later years of the agreement due to the production of electricity through non-sustainable sources such as oil and gas. PFMG Solar estimated that the maintenance cost the firm would provide for the solar system would be \$11,262 for the first year with an increase of 3% per year. There is a significant savings both yearly and over the life of the system in maintenance costs.

ALTERNATIVES: 1) Recommend that no solar system be installed on the City Hall property. Should this option be selected, the City would not have the benefit of a renewable energy source for its electrical demands, and would pay higher escalating rates for its electrical demand from SCE; or 2) Recommend that the City purchase the solar system as a capital investment. If this option is selected, staff would recommend Borrego Solar be selected. Borrego Solar provided a lower purchase option of \$963,842.00, 13% lower than PFMG Solar for a similar option. As a purchase, the City would need to engage Borrego Solar to perform the maintenance of the system. Borrego also had a lower maintenance cost per year of \$9,184.00 for the first year and an annual increase of 2%. Borrego has provided solar installations for numerous school districts, colleges, and counties in California.

If the Subcommittee selects the option to purchase, an appropriation from the General Fund Undesignated Reserve will be needed. The specific amount necessary to complete the work will be determined after City Council approves

staff to move forward with the project at which time an agreement and the recommended appropriation will be presented to the Administration and Finance Subcommittee for review and recommendation prior to submittal to Council for its consideration.

ATTACHMENTS:

1. Savings over 20 Years – “Forced Compliance”
2. Savings over 20 Years as Proposed

Savings over 20 Years "Forced Compliance"

	PFMG	Borrego	
Purchased System	\$100,805	\$307,422	
PPA Agreement	\$258,397	\$114,066	

Differences: PFMG Borrego

Key Factor Data			
Current Malibu kWh Usage:	498116	498116	kWh
Current Malibu kWh Cost/kWh:	\$0.1299	\$0.1480	\$
Estimated SCE Rate Inflation:	5.00%	5.00%	%/Yr
Age kWh Reduction with Solar:	384435	384435	\$

PPA			
Contract Length:	20	20	Years
System Production:	384,435	398,551	kWh/Year
Contract Year 1 PPA Rate:	\$0.1275	\$0.1650	per kWh
Rate Escalation Years 1-15:	3.90%	2.00%	%/Yr
Rate Escalation Years 16-20:	0.00%	2.00%	%/Yr
Panel Deterioration:	0.70%	0.50%	%/Yr

Purchased System			
Modeled Life:	20	20	Years
System Production:	384,435	398,551	kWh/Year
Installed System Cost:	\$1,090,992	\$963,842	\$
Annual Maintenance Cost:	\$11,262	\$9,148	\$
Maintenance Escalation:	3.00%	2.00%	%/Yr
Panel Deterioration:	0.70%	0.50%	%/Yr

Savings over 20 Years as Proposed

	PFMG	Borrogo
Purchased System	\$95,812	\$314,838
PPA Agreement	\$181,594	-\$19,056