MONTECITO FIRE PROTECTION DISTRICT

Agenda for the Regular Meeting of the Board of Directors

July 27, 2020 at 2:00 p.m.

The Special meeting will be held via teleconference connection as permitted under the Governor's Executive Order N-29-20, dated March 17, 2020 due to concerns of COVID-19 ("Executive Order").

Members of the public will be able to observe the Special meeting and provide public comments via Zoom: https://zoom.us/i/94330910774 or by calling 1-669-900-6833, meeting ID: 943 3091 0774. Any member of the public who would like to provide public input on an item listed on the agenda may utilize the "Raise Hand" feature through the Zoom App or enter "*9" if participating by telephone only. The host will be notified and you will be recognized to speak on the agenda item in the order such requests are received by the District.

Agenda items may be taken out of the order shown.

- 1. Public comment: Any person may address the Board at this time on any non-agenda matter that is within the subject matter jurisdiction of the Montecito Fire Protection District. (30 minutes total time allotted for this discussion.)
- 2. Receive presentation from Chief Taylor regarding evacuation modifications during the Public Health Emergency. (Strategic Plan Goal 2)
- 3. That the Board of Directors authorize the Fire Chief to enter into an agreement not to exceed \$279,500 with Bright Future Solar Energy for a 20-year PPA. Infrastructure investment of \$279,500 to be allocated from Account 3653 Land and Building Fund; and, \$10,000 annual allocation from Fund 3650 General Fund to the Capital Replacement Account, or determine Bright Future Solar Energy bid is non-responsive given battery warranty modification and direct staff to research alternatives to provide energy security. (Strategic Plan Goal 6)
 - a. Staff report presented by Chief Taylor, Battalion Chief Chapman and District Accountant Nahas.
- 4. Approval of Minutes of the June 22, 2020 Regular Meeting.
- 5. Fire Chief's report.

- 6. Board of Director's report.
- 7. Suggestions from Directors for items other than regular agenda items to be included for the August 24, 2020 Regular Board meeting.
- 8. CLOSED SESSION: PUBLIC EMPLOYEE PERFORMANCE EVALUATION (Government Code section 54957) Title: Fire Chief

Adjournment

This agenda posted pursuant to the provisions of the Government Code commencing at Section 54950 and the Executive Order. The date of the posting is July 23, 2020.

Kevin Taylor, Fire Chief

Agenda Item #3



STAFF REPORT

To: Montecito Fire Protection District Board of Directors

From: Kevin Taylor, Fire Chief

Prepared by: Scott Chapman, Battalion Chief

Araceli Nahas, District Accountant

Date: July 27, 2020

Topic: Solar Energy System Modification

Summary

The Board authorized the District to enter into a contract with Bright Future Solar Energy in an amount not to exceed \$279,500.00 to provide solar energy security. During contract negotiations, the District learned that Bright Future Solar Energy had misstated the battery storage system warranty. This substantially changed the Solar Project Cost Analysis considered by the Board during deliberations and is well outside the authorization provided by the Board at the June 22, 2020 meeting.

Discussion

After extensive discussion and research of energy security systems, the Board of Directors directed staff to conduct an RFP for a roof-mounted solar energy collection and storage system. Bid documents were published on February 21, 2010 and due April 14, 2020. While we received several inquiries, only Bright Future Solar Energy submitted a bid. The Board authorized the District to enter into a contract with Bright Future Solar Energy in an amount not to exceed \$279,500.00.

The District has learned through the contract negotiation process with Bright Future Solar Energy that the battery storage system warranty is ten years rather than twenty years as originally stated. This substantially changes the Solar Project Cost Analysis (Attachment 1). The initial proposal resulted in a net thirty-year cost savings of \$5,819; the updated contract provides for a thirty-year cost of \$70,949. This new cost is directly related to the District being responsible for the replacement of the battery storage after the ten-year warranty period has expired. Given the anticipated average cost of \$100,000 to replace the battery storage system and the thirty-year life of the PPA, a total of \$200,000 in battery costs has to be included in the Solar Project Cost Analysis.

Conclusion

Contract negotiations with Bright Future Solar Energy resulted in different terms than originally communicated in the bid package and approved by the Board. These terms substantially impact the Solar Project Cost Analysis considered by the Board in June. Given these modifications, staff recommends that the Board:

- 1. Authorize the Fire Chief to enter into an agreement not to exceed \$279,500 with Bright Future Solar for a 20-year PPA. Infrastructure investment of \$279,500 to be allocated from Account 3653 Land and Building Fund; and, \$10,000 annual allocation from Fund 3650 General Fund to the Capital Replacement Account, or
- 2. Determine Bright Future Solar Energy bid is non-responsive given battery warranty modification and direct staff to research alternatives to provide energy security.

Attachments

- 1. Solar Project Cost Analysis
- 2. June 22, 2020 Staff Report and Solar Project Cost Analysis

Strategic Plan Reference

Strategic Plan Goal #6: Strengthen our Infrastructure

	Board Approved 6/22/20			Revised Option 2	No Solar Option			
PPA term	2	0 years		20 years				
System details	Solar + Storage		Solar + Storage		age Solar + Storage		Grid	power only
Initial infrastructure costs*	\$	279,500	\$	279,500				
PPA payments (decreased rate)		378,479		355,247				
Generator integration cost		30,000		30,000				
Battery replacement (years 10 and 20)		100,000		200,000				
Total solar project costs over 30 years	\$	787,979	\$	864,747	\$	940,152		
Plus: SCE bill post-solar over 30 years		146,354		146,354				
Total solar/utility costs over 30 years	\$	934,333	\$	1,011,101	\$	940,152		
Net savings/(cost) over 30 years		5,819		(70,949)				
Approximate payback years		28		31.5				

*Infrastructure costs detail	
Carport (solar support structure)	\$ 130,500
Battery (storage system)	149,000
Total infrastructure costs	\$ 279,500



STAFF REPORT

To: Montecito Fire Protection District Board of Directors

From: Kevin Taylor, Fire Chief

Prepared by: Scott Chapman, Battalion Chief

Araceli Nahas, District Accountant

Date: June 22, 2020

Topic: Bid Award; Solar Energy System

Summary

A Solar Energy System with battery storage would provide energy security to Fire Station 1 by adding a third of layer of power redundancy. This system would ensure that emergency response communications continue without interruption in the event of a major disaster or extended period of Southern California Edison (SCE) power loss. Solar energy systems with battery storage reduce dependence on the SCE grid while providing clean energy and reducing the organizations carbon footprint. Additionally, energy storage systems smooth out demand when grid power is used, greatly reducing SCE energy costs that the District will realize regardless of if a solar energy system is installed.

Background

During the 2017 Thomas Fire, Montecito experienced multiple power failures. This resulted in catastrophic failure of the emergency backup generator at Fire Station 1 and total power loss until a mobile generator could be put in place. Just a few weeks later, the 1/9 Debris Flow caused an even longer sustained loss of power from the electrical grid, leaving the station on generator power with no power backup alternatives.

Solar energy is capable of producing most of the electricity needed to power the fire station. If excess solar energy is produced, it is stored in a battery system for use when solar energy is not available. The electrical grid can also charge the battery storage system during extended periods of cloudy weather. The existing diesel generator acts as the third component of this system. It will automatically start and power the Fire Station and charge the battery storage system if the solar collection system is not able to fully meet energy demands during a long-term outage. Energy storage in the battery system will smooth out peak energy demand spikes caused by large motors, air conditioning units, and compressors reducing demand charges from SCE. Peak demand charges currently account for approximately half of our electric bill.

The solar panel system will be installed on top of a covered parking area to the rear of the Fire Station. In addition to providing the surface area required to power the solar system, the parking area will protect department vehicles that are currently parked outside uncovered. This area can also be fitted with charging systems for future electric vehicle use. Finally, a solar collection system without energy storage system could supplement the energy needs of the station on sunny days, but will not be able to store

energy for backup power at other times or reduce peak demand charges and, therefore, cannot be considered a reliable alternative to achieve energy security.

After extensive discussion and research, the Board of Directors directed staff to conduct an RFP for a roof-mounted solar energy collection and storage system. Bid documents were published on February 21, 2019 and due April 14, 2020. While we received several inquiries, only Bright Future Solar submitted a bid.

Discussion

Bright Future Solar offered five Power Purchase Agreement (PPA) options. A PPA is an agreement to lease an energy collection system and purchase power from the owner for a specified amount of time and at a set cost. During this time the lessor is responsible for all system maintenance and repair. The lessor also receives a tax incentive from the State of California. As a public entity, the Fire District cannot realize the tax incentive if the system components are purchased directly without a PPA.

The Facilities Committee reviewed all five options (see attachment 1) in detail over two separate meetings and concluded that Option #2, 20-year PPA with Infrastructure Investment would achieve the goal of triple redundant energy security. Foundational to the Facilities Committee discussion was the consideration of current and future utility costs. Utilizing a cost escalator assumption, we were able to forecast that our SCE utility costs at Fire Station 1 will total \$940,000 over the next 30-years.

Conclusion

The desired outcome of energy security will be met at Fire Station 1 by adding a solar energy collection and battery storage system. Entering into a PPA will smooth energy costs out over time and purchasing the infrastructure directly will result in lower overall system costs and allow us to start recovering our initial costs through positive cash flows starting in year 1. Given that the District will spend \$940,000 in SCE utility costs over the next 30-years, the addition of the solar project and reduced SCE utility costs will fall below that total over a 30-year period, while providing the District with a clean energy option.

The Facilities Committee recommends that the Board of Directors:

- 1. Authorize the Fire Chief to enter into an agreement not to exceed \$279,500 with Bright Future Solar for a 20-year PPA. Infrastructure investment of \$279,500 to be allocated from Account 3653 Land and Building Fund, or
- 2. Amend, modify, or reject Option 1.

Attachments

- 1. Solar Project Cost Analysis
- 2. Bright Future Solar RFP Response
- 3. Bright Future Solar 20-Year PPA with Infrastructure Investment Proposal

Strategic Plan Reference

Strategic Plan Goal #6: Strengthen our Infrastructure

		option 1		Option 2		Option 3		Option 4		Option 5		No Solar
PPA term	2	0 years	20 years		20 years		20 years		10 years			
System details	Sola	r + Storage	Solar + Storage		Solar + Storage		Solar only		Solar only		Grid	power only
Initial infrastructure costs* Prepaid solar costs Initial PPA costs	\$	279,500 336,000 -	\$	279,500 - -	\$	- - 20,000	\$	- - 10,000	\$	- - 65,000		
Total initial costs	\$	615,500	\$	279,500	\$	20,000	\$	10,000	\$	65,000		
Addt'l PPA payments		-		378,479		635,799		452,541		355,009		
Generator integration cost		30,000		30,000		30,000		30,000		30,000		
Total infrastructure/PPA costs	\$	645,500	\$	687,979	\$	685,799	\$	492,541	\$	450,009		
Battery replacement (after year 20)		100,000		100,000		100,000		<u>-</u>		<u>-</u>		
Total project costs over 30 years	\$	745,500	\$	787,979	\$	785,799	\$	492,541	\$	450,009	\$	940,152
Plus: SCE bill post-solar over 30 years		146,354		146,354		146,354		438,421		438,421		
Total solar/utility costs over 30 years	\$	891,854	\$	934,333	\$	932,153	\$	930,962	\$	888,430	\$	940,152
Net savings over 30 years		48,298		5,819		7,999		9,190		51,722		
Approximate payback years		27		28		28		30		26		

*Infrastructure costs detail	
Carport (solar support structure)	\$ 130,500
Battery (storage system)	 149,000
Total infrastructure costs	\$ 279,500

Agenda Item #4

MONTECITO FIRE PROTECTION DISTRICT

Minutes for the Regular Meeting of the Board of Directors

June 22, 2020 at 2:00 p.m.

Held via teleconference connection as permitted under the Governor's Executive Order N-29-20, dated March 17, 2020 due to concerns of COVID-19 ("Executive Order").

Director Easton called the meeting to order at 2:00 p.m.

Present: Director Easton, Director Ishkanian, Director van Duinwyk, Director Lee, Director Powell. Chief Taylor and District Counsel Mark Manion were also present.

1. Public comment: Any person may address the Board at this time on any non-agenda matter that is within the subject matter jurisdiction of the Montecito Fire Protection District. (30 minutes total time allotted for this discussion.)

There were no public comments at this meeting.

2. Election for CSDA Board of Directors Member.

Director Ishkanian recommended Vincent Ferrante as the CSDA Board of Directors Member. Motion to vote Vincent Ferrante as the CSDA Board of Directors Member made by Director Ishkanian, seconded by Director van Duinwyk. The Roll Call vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

- 3. Report from the Finance Committee. (Strategic Plan Goal 9.1)
 - a. Consider recommendation to approve April and May 2020 financial statements.

Directors van Duinwyk and Lee provided a report regarding the April and May 2020 financial statements. Motion to approve the April and May 2020 financial statements made by Director van Duinwyk, seconded by Director Powell. The Roll Call vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

b. Consider recommendation to approve Resolution 2020-06, Amending Final Budget for FY 2019-20.

District Accountant Nahas provided a report regarding items included in the amended Final Budget for FY 2019-20. Motion to approve Resolution 2020-06, amending Final Budget for FY 2019-20 made by Director van Duinwyk, seconded by Director Powell. The Roll Call Vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

c. Consider recommendation to approve Resolution 2020-07, Adoption of the Preliminary Budget for FY 2020-21.

Chief Taylor provided a report regarding Resolution 2020-07. Motion to approve Resolution 2020-07, Adoption of the Preliminary Budget for FY 2020-21 made by Director Lee, seconded by Director Powell. The Roll Call Vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

- 4. That the Board of Directors authorize the Fire Chief to enter into a contract with Bright Future Solar Energy in an amount not to exceed \$279,500.00 for the Solar Energy Security System, or amend, modify or reject current bid. (Strategic Plan Goal 6)
 - a. Staff report presented by Chief Taylor, Battalion Chief Chapman and District Accountant Nahas.

Chief Taylor and District Accountant Nahas provided a report regarding the Solar Energy Security System. After thorough Board discussion, Director van Duinwyk suggested that the agreement be amended to include language to reflect that the District would share any rebates received by Bright Future Solar Energy. Motion to authorize the Fire Chief to enter into a contract with Bright Future Solar Energy in an amount not to exceed \$279,500.00 for the Solar Energy Security System made by Director van Duinwyk, seconded by Director Powell. The Roll Call vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

5. Approval of the Publicly Available Pay Schedule, effective July 1, 2020, as required by CalPERS.

Motion to approve the Publicly Available Pay Schedule, effective July 1, 2020 made by Director Powell, seconded by Director van Duinwyk. The Roll Call vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

6. Approval of Minutes of the May 26, 2020 Special Meeting.

Motion to approve the minutes of the May 26, 2020 Special meeting made by Director Easton, seconded by Director Ishkanian. The Roll Call vote was as follows:

Ayes: J. A. Powell, M. Lee, J. Ishkanian, P. van Duinwyk, S. Easton

Nays: None Abstain: None Absent: None

7. Fire Chief's report.

Division Chief Widling highlighted significant calls for the month of May. He also reported 1,342 training hours for the month of May. Chief Taylor provided an update regarding COVID-19. The Chief stated that during the COVID emergency, enhancements have been made to the audio visual capabilities of the board room at fire station 1. Chief Taylor provided an update regarding the Fire Station Location Study. The Chief provided an update regarding the Herbivory project. Chief Taylor stated that the Neighborhood Chipping project will conclude this week. Chief Taylor stated that the Department has increased patrol and is working on permanent "no camp fire' signs around the Hammonds Beach area. The Chief provided a reminder that 4 out of 5 District Board members are up for election in the General Election this November. He noted that the candidate filing period is July 13 through August 7, 2020.

8. Board of Director's report.

There were no items to report at this meeting.

t	the July 27, 2020 Regular Board meeting.
	Director Powell suggested that staff provide an overview of an evacuation plan during a pandemic.
	CLOSED SESSION: PUBLIC EMPLOYEE PERFORMANCE EVALUATION (Government Code section 54957) Title: Fire Chief
٦	The Board reported out of closed session at 3:45 p.m. with no reportable action.
Mee	eting Adjourned at 3:46 p.m.

Secretary Judith Ishkanian

President Sylvia Easton

9. Suggestions from Directors for items other than regular agenda items to be included for

Agenda Item #5

Richard H. Coffin 2050 Creekside Road Montecito, CA 93108 805 565-3191

July 9, 2020

Chief Kevin Taylor Montecito Fire District 595 San Ysidro Road Montecito, CA

Re: Weed and Brush Abatement at 2050 Creekside Road, Montecito

Dear Chief Taylor:

We have approximately 20 acres of fairly steep brush land above and behind our property. Once the brush has dried in the late Spring it becomes a very real fire hazard. This is always a real concern for our neighbors who have homes on Ortega Ridge.

Through the years we have tried a number of ways and types of equipment in order to mitigate the fire hazard and our liability. We have tried herbicides, various types of mowers mounted on wheel tractors and track equipment, bull dozers with large disk harrows, and hand labor with weed whackers and machetes with varying degrees of success and expense. Obviously, there are advantages and disadvantages with each approach and equipment.

Recently your Wildland Fire Specialist, Nic Elmquist and Mauve Juarez, approached us with the possibility of using sheep to graze on the slopes and reduce the brush growth and fire hazard. Late June and July is "late in the season" to be eradicating dry brush and weed growth which is less palatable for sheep and goats.

However, Nic and Mauve were able to bring in a sheep herd of approximately 400 animals for seven days as an experiment. They were able to work with the sheep owners and get everything organized in a very professional manner. The owners fenced the areas to be grazed into plots of approximately two acres, established a watering system, and areas where they could load and unload trucks and areas where bales of hay could be stacked. As the sheep grazed off each plot, the owners would move the fences and relocate the animals onto a new area. Your Wildland Specialist continually checked on a daily basis the effectiveness and progress of the grazing herd.

Since we live in a residential area, we thought it would be courteous to advise our neighbors of our plans to bring in a herd of sheep for the purpose of mitigating the inherent fire hazard. We received unanimous approval for the project and people were delighted with the concept of clearing the land with sheep and/or goats. People brought their children and took numerous photos of the sheep "at work."

We believe this is a viable alternative to mechanically "brushing an area" and can work well in a populated semi-urban area. Timing is important and the grazing needs to commence early enough so that the brush and weeds are semi-palatable for the herd animals. At the same time, if you graze an area too early, regrowth can be a problem and it might be necessary to bring the herd back a second time at additional expense. It, somewhat, depends on the weather (cold and rainy vs hot, dry and sunny).

Unfortunately, we can not give you any accurate cost figures for comparative purposes. We know that most herd owners charge approximately \$1,000 per day (and range from \$800 to \$1,200 per day). The cost depends on various factors...hauling distance, availability of feed and water, labor costs, terrain, and various other factors.

Mechanical clearing costs are more predictable. There is usually a fixed rate per day for tractor time, fuel, operator, etc. and typically a tractor can cover a certain number of acres per day.

Hopefully some of this information is useful. We certainly enjoyed working with Nic and Mauve. They are wonderful people and a credit the to the Montecito Fire District.

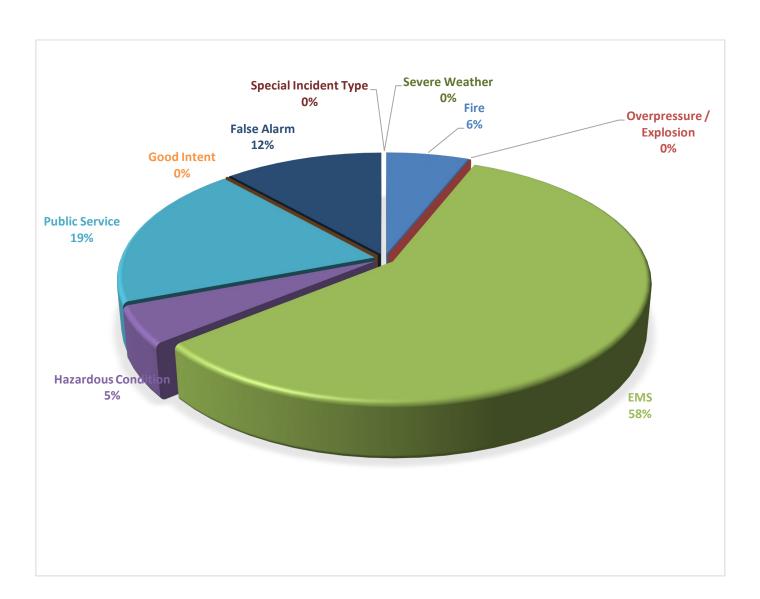
Richard H. Coffin

Calls by Incident Type June 2020

Total Incidents: 198

Fire: 12 EMS: 115 Explosion/Overheat: 0

Public Service: 38 Hazardous Condition: 10 Good Intent: 0
False Alarm: 23 Severe Weather: 0 Special Incident: 0



Definitions:

- **-Good Intent**: Firefighters respond to a reported emergency, but find a different type of incident or nothing at all upon arrival to the area. (Dispatched and Cancelled In Route falls in this category.) Example: A caller reports smoke on the hillside. Firefighters arrive to discover a grading operation at a construction site is creating dust mistaken for smoke.
- **-Public Service**: Non-emergency requests for assistance. Examples: lock out, animal rescue, ring removal, water problem, lift assists, seized gate, stalled elevator, providing the Sheriff's Department with a ladder to enter a building.

