



**Monterey Bay Air Resources District
BOARD OF DIRECTORS MEETING**

WEDNESDAY, MARCH 21, 2018 – 1:30 P.M.

19 Upper Ragsdale Drive, Suite 100, Monterey, CA 93940

Summary of Actions

1. Call to Order – **The meeting was called to order by Chair Muenzer at 1:30 p.m.**

2. Pledge of Allegiance

3. Roll Call

Present

**Jerry Muenzer, Chair
Ryan Coonerty, Vice Chair
Steve Dallas
Zach Friend
Lowell Hurst**

**Steve McShane
Jane Parker
John Phillips
Simon Salinas
Fred Ledesma**

Absent

None

4. Public Comment Period – **None.**

5. Reports by Committee Chairs on Committee Meetings

- a. Budget, Personnel, and Nominating Committee
- b. Advisory Committee

6. Comments and Referrals From Chair and Board Members

- a. Director McShane announced that applications for the Monterey Bay Community Power Advisory Council were now open.
- b. Directors Parker and Hurst commented on their attendance at the Local Government Commission: Leaders for Livable Communities held in Sacramento.

7. Report From Air Pollution Control Officer

Richard Stedman, APCO, reported on the following:

District Business

- Introduced Isael Rubio-Salazar as a new District air quality inspector with Compliance.
- Monterey Regional Waste Management District continues to implement corrective actions for elevated sulfur oxide (SOx) emissions from the combustion of landfill gas. A variance hearing is set for April 19 to continue to allow SOx emissions above permitted limits as additional landfill gas treatment units are installed.
- Public workshops to solicit comments on the FY 18-19 budget and proposed revisions to District fee rules will be conducted in April.
- The application period for the AB2766 grants will be opening today pending Board approval. This will include EV rebates for residents living in the District and additional incentives for low income residents.

- Carl Moyer Program Application Period closed on March 15.
- District applied for \$1.4 million in additional funds from the Moyer Program State Reserve to supplement the District's Carl Moyer Memorial Grant Program.
- Gonzales School District's electric bus has been delivered. It will be put into use as soon as their Level 2 charging station has been installed.
- San Lorenzo Valley Wood Stove Change-out program is continuing. To date, \$3,500 is remaining of the \$75,000 designated for the program.
- Staff is developing a District-wide woodstove change-out program for next season using a \$250,000 grant from the State GHG Reduction Fund.
- San Lorenzo Valley Free Yard Waste Drop-off Program is set for the week of April 7 – 14 at the Ben Lomond Transfer Station for residents with zip codes in the San Lorenzo Valley.

Outreach

- Clean Air Leaders Awards – May 31st at 7:00 pm at Nicklaus Golf Club in Pasadera. Nominations for awards will open March 30th and close April 30th.
- District open house will be scheduled once the remodeling is totally complete.
- With the coming of Spring/Summer, the District will begin participating in outreach events, beginning with the Hartnell Ag Tech the end of March.
- Released RFP for redesign of District website.

Building Remodel

- Update provided.

Board Retreat

- Thursday, March 29, 2018 – 12:00 to 4:00 pm; Monterey One Water
 - Updates from staff and programs, Video premier, Strategic Plan

CONSENT AGENDA

Upon motion of Director Phillips and seconded by Director Coonerty the Board unanimously moved approval of the items on the Consent Agenda.

8. **Accepted and Filed** Summary of Actions for the February 21, 2018 Board of Directors Meeting
9. **Received and Filed** Budget to Actual Report for the Eight Months Ended February 28, 2018
10. **Accepted and Filed** Engineering Division Activity Report for the Month of February 2018
11. **Accepted and Filed** Report of Summary of Mutual Settlement Program Actions for the Month of February 2018
12. **Accepted and Filed** Compliance Division Activity Report for the Month of February 2018
13. **Accepted and Filed** Report on Daily Eight-Hour Peak Ozone Concentrations, Hourly Peak Ozone Concentrations, PM2.5 and PM10 Air Monitoring Data for the month of January 2018
14. **RESOLUTION NO. 18-003: Adopted** a Resolution Authorizing the Administrative Services Manager to Declare the 2009 Honda Civic License 1319168 Located at the District Office as Surplus and Authorizing the Disposition, Sale or Donation of the 2009 Honda Civic

15. **RESOLUTION NO. 18-004: Adopted** a Resolution Authorizing the Air Pollution Control Officer to Enter into an Agreement with Envision Solar International Inc. for the Installation of Solar Powered DCFC EV Charge Stations at the North and Southbound Highway 101 Camp Roberts State Rest Areas in the Amount of \$1,280,650 Under the AB923 Plug-In Monterey Bay EV Infrastructure Program; and Adopt a Resolution Authorizing a Fiscal Year 2017-18 AB 923 Budget Adjustment by Transferring \$924,000 from the AB923 Grants Line Item and Using the AB923 Fund Balance for the Remainder
16. **RESOLUTION NO. 18-005: Adopted** a Resolution Approving the Adoption of the Public Agencies Post-Employment Benefits Trust Administered by Public Agency Retirement Services (PARS); Appoint the Air Pollution Control Officer as the Plan Administrator and Authorize the Air Pollution Control Officer to Execute the Documents to Implement the Program

REGULAR AGENDA

17. **RESOLUTION NO. 18-006: Adopted** a Resolution Authorizing the Air Pollution Control Officer (APCO) to Apply a Portion of the AB 2766 Annual Revenues Towards Funding and Implementing a Program for Motor Vehicle Emission-Reducing Grants Consistent with the Updated Criteria and Procedures Contained in the District's FY 19 AB 2766 Motor Vehicle Emission Reduction Grant Application Packet **Upon motion of Director Salinas and seconded by Director Phillips the Board unanimously moved to adopt the resolution.**
18. **Received a Report and Provided Direction** to the Air Pollution Control Officer (APCO) on a Solar Power Project for the Monterey Bay Air Resources District (District) Office **Received the report and provided direction to staff; no action required or taken.**

CLOSED SESSION

19. The Board **met** in Closed Session pursuant to Government Code section 54950, relating to the following items:
- a. Pursuant to Government Code section 54957, the Board will provide a performance evaluation for the Air Pollution Control Officer. – **Performance evaluation was given.**
 - b. Pursuant to Government Code section 54956.9 (d) (1), one matter of existing litigation: Associated Industries Insurance Company, Inc. v. MBARD, U.S. District Court case no. 5:18-cv-00830 HRL – **No reportable action.**
20. Adjournment – **The meeting was adjourned at 3:00 pm.**

Ann O'Rourke
Executive Assistant

FY19 AB2766 Grant Program

Presented to the Board of Directors
 March 21, 2018
 by:
 Alan Romero, Air Quality Planner III

FY19 AB2766

FY19 AB2766 Anticipated Funding by County

County	Anticipated Funding
Monterey	\$855,000
Santa Cruz	\$525,000
San Benito	\$120,000

Anticipated Total Funding: \$1.5M

Population numbers for fund allocations taken from US Census 2016 estimates
<http://quickfacts.census.gov/qfd/states/06/06060.html>

FY19 AB2766 Direct Emission Reduction Program

- Clean Air Management Program - ~\$1.5M*
 - Monterey – 57%
 - Santa Cruz – 35%
 - San Benito - 8%
- Clean Vehicle Program ~ \$400K*
 - EV Vouchers to Public Agencies
 - EV Rebates (including H2 fuel cell) District wide to the public
 - Increased EV rebate amounts for qualified low income applicants

* contingent upon Board approval

FY19 AB 2766 – Two Programs

- Clean Air Management Program
 - Allocate ~\$1.5M to Public Agencies
 - Long Term Air Quality Benefit:
 - Roundabouts
 - Adaptive Traffic Signal Control
 - Short term Air Quality Benefit:
 - Vanpools
 - New Transit

Anticipated AB2766 Total Funding Level

FY19 AB2766 Funding Total

Program	Anticipated Funding
Clean Air Management	\$1,500,000
Clean Vehicle	\$400,000

Anticipated Funding: \$1.9M



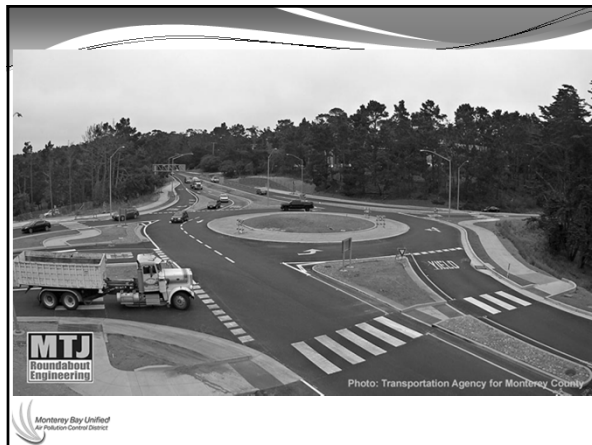


FY19 AB 2766 – Two Programs

2. Monterey Bay Clean Vehicle Program

- EV Voucher Replacement (Public Agencies only)
 - New voucher cap: \$10,000, Sale or Lease
 - Pre-certified used voucher: \$7,000
- EV Rebate (General Public)
 - \$1500 for New 100% Electric (BEV) or \$1000 Used
 - \$750 for New Plug-in Hybrid (PHEV) or \$500 Used
 - *Additional EV Rebates for qualified low income households*
 - \$1500 additional for New BEV or \$1000 Used
 - \$750 additional for New PHEV or \$500 Used

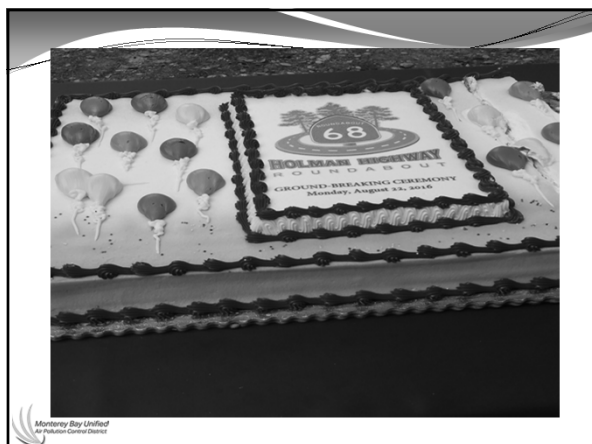
Montgomery Bay Unified
Air Pollution Control District



AB2766 Clean Vehicle Rebate Program

- EV Voucher Replacement: Public Agency
 - 63 New electric fleet vehicles added to agency fleets since FY15
- EV Rebate Program: General Public
 - 445 New electric vehicles, District wide since FY17

Montgomery Bay Unified
Air Pollution Control District

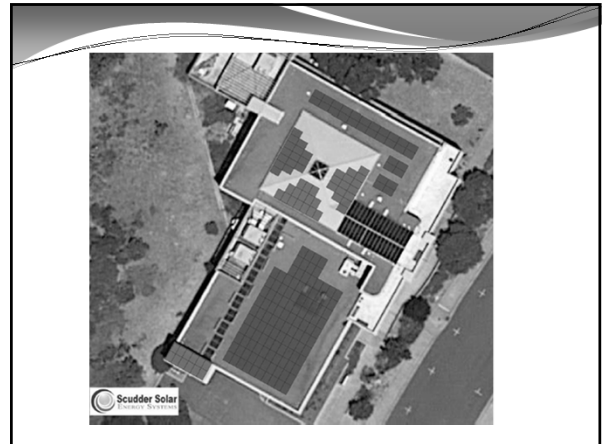


Discussion and Questions....

Montgomery Bay Unified
Air Pollution Control District

MBARD Solar Energy Project

March 21, 2018
Richard A. Stedman
Air Pollution Control Officer



Our Energy Costs Today, Without Solar

Utility Details			Cost Details		
Utility Company	Current Rate Schedule	Utility Escalation Rate	Total Utility Bill	Total Usage (kWh)	Avg blended cost
PG&E	A-10 (Effective Date: 3/1/2017)	3.0%	\$32,846	137,543 kWh	\$0.239/kWh

Monthly usage & billing data:

Bill Ranges & Seasons	Energy Use (kWh)			Max Demand (kW)	Charges				
	On Peak	Part Peak	Off Peak		Other	NBC	Energy	Demand	Total
1/1/2017 - 3/1/2017 W	0	6,403	6,005	52	\$143	\$170	\$1,254	\$568	\$2,275
3/1/2017 - 5/1/2017 W	0	4,738	4,725	60	\$129	\$227	\$954	\$954	\$1,975
5/1/2017 - 7/1/2017 W	0	5,618	6,042	60	\$143	\$202	\$1,172	\$954	\$2,262
7/1/2017 - 9/1/2017 W	0	4,863	6,521	66	\$138	\$285	\$1,134	\$721	\$2,278
9/1/2017 - 11/1/2017 S	3,331	2,371	5,262	63	\$143	\$262	\$1,381	\$1,170	\$3,156
11/1/2017 - 1/1/2018 S	3,017	2,382	5,707	68	\$138	\$271	\$1,618	\$1,242	\$3,169
1/1/2018 - 3/1/2018 S	2,917	2,168	6,607	58	\$143	\$289	\$1,567	\$1,059	\$3,057
3/1/2018 - 5/1/2018 S	2,898	2,277	5,838	72	\$143	\$270	\$1,489	\$1,315	\$3,126
5/1/2018 - 7/1/2018 S	2,781	2,000	6,538	72	\$138	\$262	\$1,523	\$1,315	\$3,228
7/1/2018 - 9/1/2018 S	2,399	2,541	3,168	71	\$143	\$241	\$1,050	\$1,296	\$3,050
9/1/2018 - 11/1/2018 W	0	7,123	3,400	65	\$138	\$264	\$1,095	\$702	\$2,399
11/1/2018 - 1/1/2019 W	0	7,242	5,395	58	\$143	\$316	\$1,290	\$634	\$2,382
Totals:	18,339	45,220	69,978	-	\$1,679	\$1,639	\$15,406	\$11,323	\$32,846

Solar Power System

Total Annual Savings: \$18,522

PV System Characteristics		Solar Equipment Warranties	
Solar Panels:	Qcells SunPower SPR622-360	Solar Panel Warranty:	25-Year Product 25-Year Performance
Inverters:	CSI Solar America STP10000L1-1610 (48V) CSI SolarEdge Technologies SE14-6025	Inverter Warranty:	12-Year Product (Inverters) 25-Year Product (Power Optimizers)
Power Rating:	71,080 W DC		
Power Rating:	66,225 W AC		

Monthly Energy Use Mix

Annual Energy Use Mix

Utility Details			Savings Details		
Utility Company	Post-solar Rate Schedule	Annual Usage	Total Savings	Total Solar Production	Avg blended savings
PG&E	A-10 (Effective Date: 1/1/2018)	137,543 kWh	\$18,522	108,530 kWh	\$0.171/kWh

Monthly Utility Bills, Post-Solar

Bill Ranges & Seasons	Energy Use (kWh)			Max Demand (kW)	Charges				
	On Peak	Part Peak	Off Peak		Other	NBC	Energy	Demand	Total
1/1/2017 - 2/1/2017 W	0	2,743	4,474	52	\$143	\$208	\$717	\$569	\$1,638
2/1/2017 - 3/1/2017 W	0	727	3,029	60	\$129	\$144	\$362	\$657	\$1,291
3/1/2017 - 4/1/2017 W	0	-1,578	3,717	45	\$143	\$166	\$172	\$493	\$974
4/1/2017 - 5/1/2017 W	0	-1,809	2,228	64	\$138	\$154	\$8	\$701	\$1,001
5/1/2017 - 6/1/2017 S	-2,693	-721	2,034	57	\$143	\$122	-\$396	\$1,042	\$911
6/1/2017 - 7/1/2017 S	-3,025	-994	2,354	64	\$138	\$122	-\$463	\$1,170	\$967
7/1/2017 - 8/1/2017 S	-2,076	-434	2,000	28	\$143	\$122	-\$241	\$512	\$545
8/1/2017 - 9/1/2017 S	-2,757	-512	2,567	36	\$143	\$126	-\$321	\$658	\$606
9/1/2017 - 10/1/2017 S	-1,849	-120	3,582	47	\$138	\$148	\$20	\$859	\$1,166
10/1/2017 - 11/1/2017 S	-465	669	5,412	55	\$143	\$199	\$599	\$1,005	\$1,945
11/1/2017 - 12/1/2017 W	0	3,102	1,735	65	\$138	\$157	\$503	\$712	\$1,510
12/1/2017 - 1/1/2018 W	0	3,869	3,864	58	\$143	\$212	\$729	\$635	\$1,720
Totals:		4,940	36,936	-	\$1,679	\$1,893	\$1,729	\$9,011	\$14,324

SunPower Proposal

Solar Production Offset %:

Utility: 29,013 kWh (21.09%)
Solar PV: 108,530 kWh (78.91%)

Avoided Cost calculation:

Pre-solar utility bill:	\$32,846
Post-solar utility bill:	\$14,324
Savings:	\$18,522

Solar PV System Cost And Incentives

Solar PV System Cost: \$249,085

Net Solar PV System Cost: \$249,085

- Total PV Generation Year 1: 108,530 kWh
- Purchase Payback: 11.5 Years
- Total Annual Electric Bill Post-Solar: \$14,324
- Total Annual Electric Bill Savings: **\$18,522**

Solar Financing Proposal:
Monterey Bay Air Resources District
Power Purchase Agreement

Technology
Credit Corporation

Financial Savings Analysis:
20 year PPA, you exercise end-of-term purchase option

Assumptions:
First Year Installation Agreement Estimated System Production 126,211 kWh
Estimated Annual Production Depreciation 12,270
First Year Solar PPA Rate \$0.122 per kWh
Annual PPA Rate Increase 1.0%
Estimated System Bridge Savings \$0.2066 per kWh
Estimated Annual Utility Savings from Solar \$0.2066 per kWh
Estimated Annual Utility Savings Inflation 3.0%

Year	WHAT YOU SAVE (A)			WHAT YOU PAY (B)			NET SAVINGS (A) - (B)	
	Estimated kWh Produced	Estimated Utility per kWh	Estimated Savings ^a	PPA Rate per kWh	PPA Payments for Electricity ^b	Estimated Investor Replacement	Estimated Annual Cash Flow	Estimated Cumulative Cash Flow
1	126,211	\$0.2066	\$33,157	\$0.2176	(\$26,309)	-	\$6,848	\$6,848
2	126,886	\$0.2043	\$34,066	\$0.2211	(\$26,300)	-	\$7,766	\$14,614
3	127,566	\$0.2122	\$35,000	\$0.2253	(\$26,306)	-	\$8,694	\$23,308
4	128,244	\$0.2204	\$35,960	\$0.2296	(\$26,446)	-	\$9,514	\$32,822
5	127,924	\$0.2288	\$36,846	\$0.2340	(\$26,306)	-	\$10,540	\$43,362
6	127,604	\$0.2375	\$37,859	\$0.2384	(\$26,422)	-	\$11,437	\$54,799
7	127,282	\$0.2464	\$38,901	\$0.2429	(\$26,303)	-	\$12,598	\$67,397
8	126,967	\$0.2556	\$40,079	\$0.2476	(\$26,422)	-	\$13,657	\$81,054
9	126,643	\$0.2651	\$41,389	\$0.2523	(\$26,495)	-	\$14,894	\$95,948
10	126,323	\$0.2748	\$42,798	\$0.2571	(\$26,475)	-	\$16,323	\$112,271
11	126,007	\$0.2849	\$44,306	\$0.2619	(\$26,500)	-	\$17,806	\$130,077
12	125,702	\$0.2952	\$45,909	\$0.2669	(\$26,500)	-	\$19,409	\$149,486
13	125,400	\$0.3058	\$47,614	\$0.2720	(\$26,500)	-	\$21,114	\$170,600
14	125,104	\$0.3168	\$49,413	\$0.2772	(\$26,400)	-	\$22,986	\$193,587
15	124,811	\$0.3281	\$48,425	\$0.2824	(\$26,250)	-	\$24,986	\$218,573
16	124,520	\$0.3398	\$48,753	\$0.2876	(\$26,115)	-	\$27,086	\$245,659
17	124,238	\$0.4118	\$51,118	\$0.2933	(\$26,458)	-	\$24,660	\$270,319
18	123,960	\$0.4241	\$52,340	\$0.2996	(\$27,015)	-	\$15,325	\$285,644
19	123,518	\$0.4369	\$53,960	\$0.3045	(\$27,812)	-	\$7,148	\$292,792
20	123,120	\$0.4500	\$55,440	\$0.3103	(\$28,174)	-	\$7,266	\$299,958
21	122,902	\$0.4635	\$56,960	-	-	\$27,776	\$29,184	\$329,142
22	122,956	\$0.4774	\$58,522	-	-	\$27,299	\$31,223	\$360,365
23	122,288	\$0.4917	\$60,127	-	-	\$26,127	\$34,000	\$394,365
24	121,982	\$0.5064	\$61,776	-	-	\$24,776	\$36,000	\$430,365
25	121,677	\$0.5216	\$63,471	-	-	\$23,471	\$38,525	\$468,890
Total	3,135,159	\$1,168,814	\$3,654,073	\$1,168,814	(\$317,011)	(\$13,125)	\$333,878	\$3,654,073

^aBased on actual utility savings analysis.
^bBased on expected annual production performance. There is no actual production at the end of each 10 month period.
^cAssumes based on actual.

Solar Financing Proposal:
Monterey Bay Air Resources District
Power Purchase Agreement

Technology
Credit Corporation

Financial Savings Analysis:
You exercise 5th anniversary FSV purchase option

Year 5 Optional Purchase Price: \$172,127

Assumptions:
First Year Installation Agreement Estimated System Production 126,211 kWh
Estimated Annual Production Depreciation 12,270
First Year Solar PPA Rate \$0.2176 per kWh
Annual PPA Rate Increase 1.0%
Estimated System Bridge Savings \$0.2066 per kWh
Estimated Annual Utility Savings from Solar \$0.2066 per kWh
Estimated Annual Utility Savings Inflation 3.0%

Year	WHAT YOU SAVE (A)			WHAT YOU PAY (B)			NET SAVINGS (A) - (B)	
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Questions/Comments?

