



Laguna Woods Village®

OPEN MEETING

REGULAR MEETING OF THE VILLAGE ENERGY TASK FORCE

Friday, January 10, 2020 – 1:00 PM
Laguna Woods Village Community Center Board Room
24351 El Toro Road

NOTICE and AGENDA

This Meeting May be Recorded

1. Call to Order
2. Acknowledgment of Media
3. Approval of the Agenda
4. Approval of Meeting Report for September 4, 2019
5. Chairman's Remarks
6. Member Comments (*Items Not on the Agenda*)
7. Department Head Update

Consent:

All matters listed under the Consent Calendar are considered routine and will be enacted by the Task Force in one motion. In the event that an item is removed from the Consent Calendar by members of the Task Force, such item(s) shall be the subject of further discussion and action by the Task Force.

8. Project Log
9. Third Mutual Street Light & Walkway Light Outage Report
10. United & Third Mutual Electric Vehicle & Electric Golf Cart Report
11. Third Mutual Solar Production Report
12. GRF EV Charging Station Reports
13. GRF Demand Charges Report (Finance Dept.)

Reports:

14. Third Mutual Walkway Lighting Locations

Oral Discussions:

15. Vote for a New Task Force Chair
16. Comments on TEC Update from October 18, 2019
17. How SCE Power Outage Notifications Affect Laguna Woods Village (Bert)
18. Discuss the Tesla proposal for installing Solar > 240Kw @ \$1.00 per Kw (Bert)
19. Discuss current cleaning method for solar panels (Bert)
20. Discuss product use for solar panel cleaning (Bert)
21. Discuss alternative solutions to EV charging in Third and United (Bert)
22. Discuss alternate methods of financing a Microgrid (Bert)



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Items for Future Agendas:

Third Mutual:

- LED Solar Street Lights (to be considered after the street light fixture LED conversion project is completed.)

United Mutual:

- LED Solar Street Lights
- Additional Walkway Lighting

GRF:

- Installation of Level II EV Bollard Chargers (on the streets)
- Community Choice Aggregation

Concluding Business:

Date of next meeting – March 4, 2020

Adjournment

VACANT, Chair
Ernesto Munoz, Staff Officer
Telephone: 268-2281



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OPEN MEETING

REPORT FOR REGULAR MEETING OF THE VILLAGE ENERGY TASK FORCE

Wednesday, September 4, 2019 – 1:30 P.M.
Laguna Woods Village Community Board Room
24351 El Toro Road

MEMBERS PRESENT: Steve Leonard, – Chair, Dick Palmer, Bert Moldow, Carl Randazzo, Sue Margolis, Cush Bhada, Advisors: Bill Walsh, Sue Stephens

MEMBER ABSENT: None

OTHERS PRESENT: Juanita Skillman, Steve Parsons, Diane Phelps Pat English, Dick Rader, Joan Milliman, Lucy Shimon, Beth Perak

STAFF PRESENT: Ernesto Munoz - Staff Officer, Laurie Chavarria, Jeff Parker, Chris Naylor

1. Call to Order

Chair Leonard called the meeting to order at 1:30 P.M.

2. Acknowledgment of Media

Chair Leonard noted no members of the media were present.

3. Approval of the Agenda

The agenda was approved as written.

4. Approval of Meeting Reports for July 3, 2019 & August 19, 2019

The Meeting Reports of July 3, 2019 & August 19, 2019, were approved as written.

5. Chairman's Remarks

Chair Leonard commented on the agenda; the EV charging stations at the Community Center; and his concerns about lighting.

6. Member Comments (*Items Not on the Agenda*)

- Joe Camera (2404-1H) commented on a proposal for a dual use power station and new amphitheater.

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- Juanita Skillman (2154-N) commented on Mr. Camera's proposal for a new amphitheater.

The Chair and various Directors and Advisors responded briefly to all comments.

7. Department Head Update

Staff Officer Ernesto Munoz provided a brief summary of the EV Charging Station installation at the Community Center and the second pilot for the street light LED conversion project.

Consent:

All matters listed under the Consent Calendar are considered routine and will be enacted by the Task Force by one motion. In the event that an item is removed from the Consent Calendar by members of the Task Force, such item(s) shall be the subject of further discussion and action by the Task Force.

By consensus, the Task Force pulled all items on the Consent Calendar for discussion.

8. Project Log

Director Moldow asked about adding dates to each entry on the project log so that the Task Force can see how current the information is.

Director Randazzo commented on Community Center Charging Station project.

By consensus, staff was directed to add the SCIP rebate amount on the project log for the Community Center Charging Station project.

9. Street Light & Walkway Light Outage Report

Director Moldow asked for more detail on the reason for the outages listed in the report.

Discussion ensued regarding SCE repairs for walkway lights or wiring repairs to street lights; light poles in United Mutual; and purchasing walkway lights in Third Mutual.

By consensus, staff was directed to bring back information to the next meeting that details the amount and location of walkway lights in Third Mutual. Staff will update the outage report to designate which outages refer to street lights and which outages refer to walkway lighting for Third Mutual.

Staff will also create a scope of work and issue an RFP to United Mutual's lighting consultant to locate and examine the existing walkway lighting fixtures; assess if

additional lighting is required; where it is required and the estimated cost for those improvements.

Reports:

10. Electric Vehicle Report

Chair Leonard discussed the electric vehicle report.

Discussion ensued regarding hybrids; plug-in vehicles; the challenges of getting accurate data in the report; measuring the growth of electric vehicles; creating a density map to determine where charging stations may be needed most; golf carts using common area electricity; how many residents have their own charging stations; and the upcoming infrastructure report from TEC.

Oral Discussions:

11. Mission Statement: Clarify role of VETF, Community resource; Task Force, Staff & Vendor Communications

Director Moldow commented that it is difficult to receive energy reports he has requested.

Discussion ensued regarding the VMS policy for requesting data from staff through the Committee Chair; current protocol doesn't specify how information is requested by a non-director on a Task Force; revisions to the VETF Charter; the purpose of a Task Force;

Director Moldow provided a hand out regarding the definition and use of a task force and that handout is attached to these minutes for review.

12. EMS systems – MelRok proposal & building engineer for GRF

Advisor Walsh stated that he supports the idea of using a platform such as discussed in the proposal given by MelRok Energy on August 19, 2019.

Discussion ensued regarding EMS management; how the data will be reviewed; who will perform the suggested improvements; the need for a building engineer; and the continued review of system commissioning.

A motion was made to recommend that GRF M&C consider entering into a 1-year service agreement for energy management with MelRok for the Community Center building. By a vote of 5/1/1 (Director Frankel opposed, Director Bhada abstained), the motion passed.

13. LED Conversions – status and schedule of outstanding facilities; free pilot for tennis courts

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Chair Leonard commented that he was unaware of outstanding LED conversions projects in the Community. Staff Officer Ernesto Munoz clarified which facilities have been upgraded with LED bulbs.

Discussion ensued regarding parking lot lighting at Clubhouse 7; non-working light fixtures; flood lights and bollards. Staff Officer Ernesto Munoz will look into any interior and exterior fixtures that may still be compact fluorescent.

Chair Leonard asked staff to get the annual revenue from the tennis court lighting. Director Moldow stated that he already requested this information.

14. HVAC Scheduling – building/rooms usage reports weekday & weekend

Chair Leonard commented on how we could get information about the usage of the Community Center on the weekdays versus the weekends. Staff Officer Ernesto Munoz will request this information from the Recreation Director.

15. Potential GRF Solar PV – contact vendors for free analysis, financing sources

Chair Leonard commented on the microgrid presentation by TEC. Discussion ensued regarding generator needs for the Community Center; microgrid options; disaster preparedness planning; energy assessments; analysis of needs for a generator; and the command center location for a disaster.

By consensus staff was directed to provide the scope of work we provided to TEC for the Microgrid analysis as well as the cost break down for the Microgrid Option 3 as shown in the presentation from TEC

In addition, staff was asked to communicate with Chief Moy and invite him to attend a future VETF meeting and speak about his plans for Disaster Preparedness.

16. Tennis Building Cooling – HVAC vs. evaporative cooling

Director Palmer commented on the cost difference between evaporative cooling versus a new HVAC system.

Staff Officer Ernesto Munoz provided an update on the project and the scope of work for the bid.

17. Car Registration – VIN number or method to improve PHEV & EV counts/density/trends

Staff Officer Ernesto Munoz recommended that Chair Leonard communicate with the CEO on how to manage the data collected for Electric Vehicles from the Resident Services Department.

18. Level-2 Charging in United and Third Mutuals

Discussion ensued regarding the TEC report; and using the laundry room outlets to charge electric vehicles.

(Director Frankel left the meeting at 3:45pm.)

19. Level-3 Charging Costs for Community Center

Staff Officer Ernesto Munoz added Item 19 to the agenda to discuss the pricing that should be charged for Level III fast charging stations located at the Community Center.

On August 29, 2019, staff and various Directors and Advisors met with a representative from ChargePoint to receive information from the vendor as to what the new pricing should be set at for the newly installed Level III fast chargers.

A motion was made and unanimously approved to recommend that the GRF M&C Committee review and recommendation to the Board that the pricing for Level III fast charging stations be set at \$0.25 per kWh for residents and \$0.40 kWh for the public, while keeping the pricing at no charge for GRF's fleet vehicles.

Additionally parking for both residents and the general public will be set at two dollars per hour after the first sixty minutes. There were no recommended changes to the existing pricing for the Level II chargers.

Items for Future Agendas:

Third Mutual:

- Electric Vehicle History Report
- Golf Cart Report
- LED Solar Street Lights (to be considered after the street light fixture LED conversion project is completed.)

United Mutual:

- LED Solar Street Lights
- Electric Vehicle History Report
- Golf Cart Report
- Additional Walkway Lighting

GRF:

- Install Level II EV Bollard Chargers (on the streets)
- Community Choice Aggregation
- SCE Demand Charges

Concluding Business:

Committee Member Comments:

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- Director Bhada commented on having a more efficient meeting.

Date of next meeting – November 6, 2019

Adjournment

This meeting was adjourned at 4:22 P.M.

UNSIGNED

Steve Leonard, Chair

Energy Task Force Project Log (December 2019)

United Mutual					
#	Name	Description	Status	Estimated Completion	Budget
1	Walkway Lighting Program	This program is dedicated to improving walkway lighting through additional fixture installation, or the upgrade of existing lighting. Alternatives to the existing pagoda style fixtures are evaluated as needed. Requests for additional lighting are received from residents on an ongoing basis. Those requests are vetted and additional lighting is installed if it meets the program requirements.	Currently there are 2 requests submitted for additional walkway lighting. A total of 19 walkway lights have been installed this year.	December 2019 Annual	Budget: \$35,691 Exp: \$34,652 Balance: \$1,039
2	Energy Consultant Services	An energy consultant will be used as-needed in order to advance United's and the Community's future energy initiatives.	In November 2018 the VETF representatives from Third authorized the energy consultant to proceed with the approved scope of work. Significant delays occurred which extended the consultant's timing of deliverables due to SCE not making their infrastructure data available. The consultant presented the results of Task 1 (Perform assessment of community's current electrical infrastructure) to the VETF on October 18, 2019. During this meeting the VETF representative for United Mutual mentioned they may need to modify Task 2 (Develop a Community-wide strategy for electrical infrastructure upgrades & EV Charger Station Installation) and TEC is currently awaiting their direction on how to proceed. Staff will bring the TEC deliverables to a future M&C meeting for further direction.	On-going	Supplemental: \$50,000 Exp: \$28,535 Balance: \$21,465

3	Pushmatic Electrical Panel Replacement	This project is funded to replace 2,750 Pushmatic electric panels over a 10 year period. The Pushmatic panels are unreliable and no longer supported. The Board entered into a five year contract with Coastal Current Electric Corp. to install 1,375 Pushmatic electric panels. This contract expires in May 2021; at which time a new five year contract will be required to complete the remaining 1,375 electric panels. 283 panels were completed in 2019. Estimated Project Completion: Year 2026	COMPLETED	November 2019	Budget: \$425,000 Exp: \$425,000 Balance: \$0 Cumulative Expenditures 2016 through 2018: \$1,115,740
Third Mutual					
1	Solar Street Light Pilot Program	The Energy Committee directed staff to install a solar powered street light as a pilot project. The Committee's goal was to determine whether the solar street light was an economical option to improve street lighting levels without trenching for new conduits.	The pilot installation was completed approximately one year ago on Del Faro. The Board has expressed interest in keeping this fixture and requested a quote to install it permanently. A quote was procured and provided to the Committee for use of a marblelite pole to match others in the community. The Committee directed staff to ask the contractor to wait until Siemens completes the light assessment to determine whether this pilot should be installed permanently.	N/A	Not Budgeted
2	Electrical Systems	These funds are allocated to repair or replace electrical equipment failures as needed. 24 buildings were completed in 2019. The remaining 9 buildings will be completed in 2020.	COMPLETED	December 2019 Annual	Budget: \$50,000 Exp: \$50,400 Balance: \$-400

3	Energy Consultant Services	An Energy Consultant will be used as-needed in order to advance Third's and the Community's future energy initiatives.	In November 2018 the VETF representatives from Third authorized the energy consultant to proceed with the approved scope of work. Significant delays occurred which extended the consultant's timing of deliverables due to SCE not making their infrastructure data available. The consultant presented the results of Task 1 (Perform assessment of community's current electrical infrastructure) to the VETF on October 18, 2019. During this meeting the VETF representative for United Mutual mentioned they may need to modify Task 2 (Develop a Community-wide strategy for electrical infrastructure upgrades & EV Charger Station Installation) and TEC is currently awaiting their direction on how to proceed. Staff will bring the TEC deliverables to a future M&C meeting for further direction.	December 2019	Budget: \$50,000 Exp: \$15,515 Balance: \$34,485 Total expenditures to through 2018: \$24,916
4	Exterior Lighting	In 2018, funding for this program was allocated toward the purchase of the Southern California Edison street light infrastructure. A consultant was retained to assist with the street light acquisition; the retrofit of the existing lighting fixtures to more efficient LED technology, and to perform the operations and maintenance of the asset for three years.	On December 11, the Third M&C Committee voted unanimously to recommend the Board authorize the purchase and installation of the King K427 and Acuity LED light fixtures for conversion on 759 street light poles.	December 2019	Budget: \$800,000 Exp: \$57,280 Balance: \$742,720

GRF					
1	Energy Consultant Services	GRF retained the services of an Energy Consultant to be engaged as needed in order to advance GRF's and the Community's future energy initiatives.	VETF representatives from GRF authorized the energy consultant to proceed with an approved scope of work. The consultant presented the results of Task 2 (investigate the feasibility of a Microgrid and alternative energy systems for electrical generation) to the VETF on July 3, 2019, and is currently no longer under consideration. The consultant presented the results of Task 1 (Perform assessment of community's current electrical infrastructure) to the VETF on October 18, 2019. Staff will bring the TEC deliverables to a future M&C meeting for further direction.	On-going	Supplemental: \$50,000 Invoiced: \$49,806 Balance: \$194
2	Community Center HVAC and Controls Upgrade	Funding for this project is allocated to make the facility more energy efficient by engineering and retrofitting the Community Center with a new Heat Ventilation Air Conditioning (HVAC) system and upgraded controls being integrated to the existing Energy Management System (EMS).	COMPLETED	October 2019	Budget: \$1,447,163 Exp: \$1,032,928 Balance: \$414,235
3	Community Center EV Charging Station Project	Funding for this project is allocated to install three new Level-III Fast Chargers and one dual port Level-II electric vehicle charger at the EV charging stations located behind the Community Center. This project is made possible by a 75% grant from SCIP up to \$210,000. Construction work and installation of three fast chargers and one level-2 charger were completed on August 27. The new stations are currently activated and available for use.	COMPLETED	September 2019	Supplemental: \$251,544 Exp: \$241,492 Balance: \$10,052 Rebate Received = \$180,928

Third Mutual Street Light & Walkway Light Outage Report

Status as of January 2, 2019

SCE Repairs in Progress:

Address	Pole #	Req Date	Description	Note	Mutual	Type of Light
B3249 on San Amadeo	1953837E, 1953838E, 1953839E	12/31/2019	Street Light to Report to SCE	Multiple Lights Out	3	Walkway
B3420 on Calle Azul	2070821E	12/31/2019	Street Light to Report to SCE	Light Out	3	Walkway
B3276 on San Amadeo	1974535E	12/26/2019	Street Light to Report to SCE	Light Out	3	Walkway
B2380 on Via Mariposa	1502282E, 1502285E, 1502286E, 1502289E	12/24/2019	Street Light to Report to SCE	Multiple Lights Out	3	Walkway
B4010 on Calle Sonora Oeste	4849764E	12/3/2019	Street Light to Report to SCE	No Power to Pole	3	Street Light
B4006 on Calle Sonora Oeste	4849765E	10/7/2019	Street Light to Report to SCE	Pole Cracked	3	Walkway
B3280 on San Amadeo	1974539E	5/30/2019	Street Light to Report to SCE	Pole Replacement	3	Walkway
B5475 on Paseo Del Lago East	2118541E, 2118538E	12/4/2019	Street Light Reported to SCE	No Power to Pole	3	Street Light

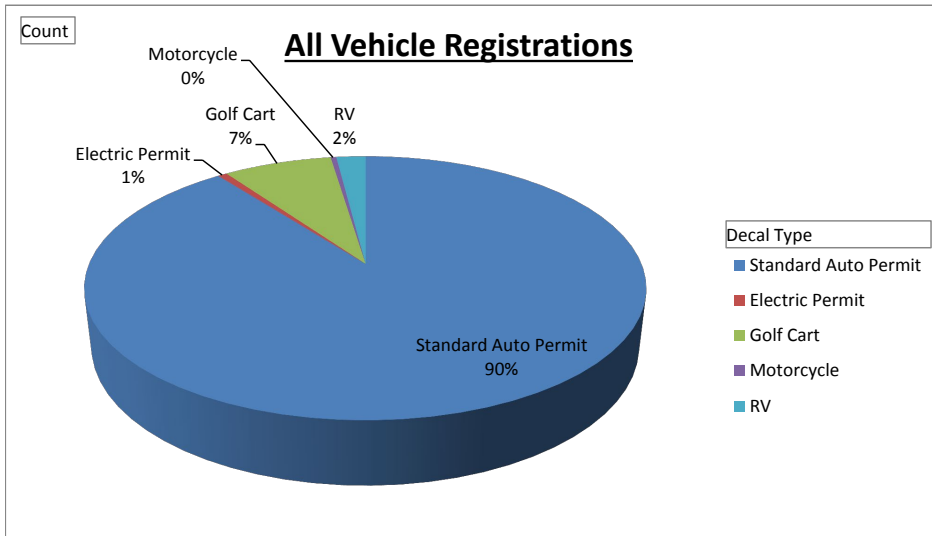
SIEMENS Repairs in Progress:

Address	Pole #	Req Date	Description	Note	Mutual	Type of Light
B5475 on Paseo Del Lago East	218536	1/2/2020	Street Light Reported to Siemens	Light Out	3	Street Light
B3186 on Via Buena Vista	1974308E	12/31/2019	Street Light Reported to Siemens	Flickering Light	3	Street Light
B3377 on Punta Alta	2008606E	12/30/2019	Street Light Reported to Siemens	Light Stays On all Day	3	Street Light

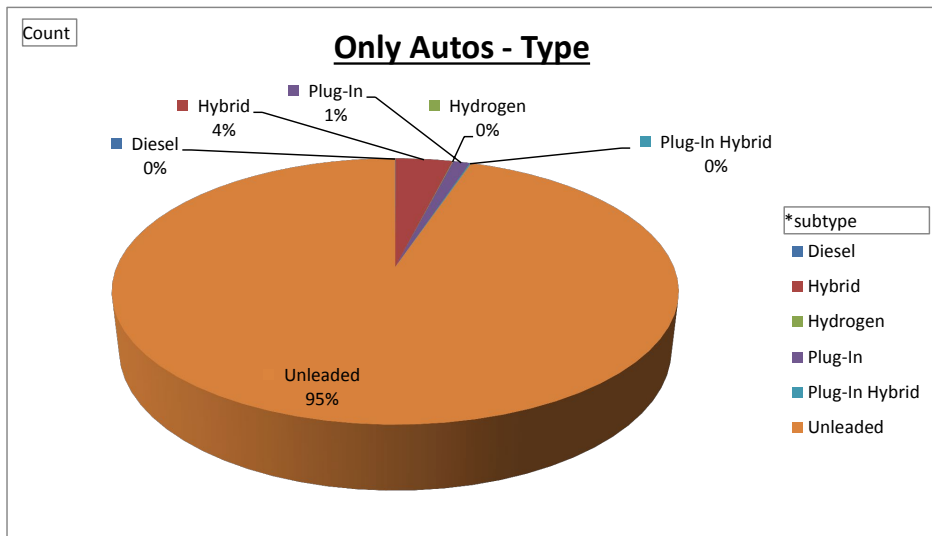
Laguna Woods Village
Electric Vehicle Golf Cart Report as of December 2019

All Registrations	
Decal Type	Count
Standard Auto Permit	15,370
Electric Permit	108
Golf Cart	1,279
Motorcycle	66
RV	345
Grand Total	17,168

Top Electric Vehicle & Golf Cart Locations			
Cul-De-Sac	EV Vehicles	Plug-In Golf Carts	Total
219	7	62	69
203	0	33	33
221	5	26	31
206	1	25	26
216	3	19	22
202	1	18	19
403	2	16	18
46	2	14	16
63	1	15	16
209	2	14	16
205	1	14	15
340	2	13	15
41	1	13	14
207	2	12	14
13	1	12	13
28	0	13	13
344	3	10	13
9	4	8	12
10	0	12	12
59	4	8	12
352	0	12	12
27	3	8	11
306	1	10	11
405	1	10	11
408	1	10	11
8	4	6	10
36	1	9	10
37	2	8	10
210	1	9	10
222	0	10	10
324	1	9	10
406	1	9	10
12	2	7	9
95	0	9	9
213	0	9	9
14	1	7	8
16	0	8	8
17	2	6	8
30	0	8	8
35	0	8	8
40	2	6	8
45	1	7	8
94	0	8	8
204	2	6	8
303	1	7	8
339	2	6	8
341	2	6	8
343	1	7	8
363	0	8	8
3	1	6	7
4	1	6	7
5	1	6	7
11	1	6	7
23	1	6	7
24	2	5	7
29	1	6	7
32	1	6	7
44	0	7	7



Only Autos	
Fuel Type	Count
Diesel	5
Hybrid	605
Hydrogen	6
Plug-In	178
Plug-In Hybrid	14
Unleaded	14736
Grand Total	15544



Third Mutual Solar Production

Year One Production		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18	Apr-18	May-18	Jun-18	Total
Third Mutual Project														
	2353 Via Mariposa	7,336	11,749	9,151	8,125	5,756	5,807	5,860	7,790	10,400	12,370	10,730	14,030	109,104
	2381 Via Mariposa	0	8,566	5,922	6,211	4,410	5,622	4,730	3,340	6,210	8,130	8,260	10,360	71,761
	2393 Via Mariposa West	6,283	8,423	7,967	6,712	4,671	4,157	5,166	6,867	7,876	2,799	10,380	13,260	84,561
	2394 Via Mariposa West	1,789	0	2,203	1,029	5,542	5,826	5,450	8,840	11,420	13,590	12,130	15,450	83,269
	2397 Via Mariposa West	12,437	11,011	8,431	7,446	5,330	3,627	5,590	7,560	9,400	11,660	10,420	13,510	106,422
	2399 Via Mariposa West	6,206	10,194	7,617	6,703	4,770	4,678	5,240	6,780	8,680	10,380	9,340	12,030	92,618
	2400 Via Mariposa West	7,282	5,400	8,697	7,668	5,468	5,514	5,990	7,730	10,130	12,060	10,870	14,150	100,959
	3242 San Amadeo	11,193	9,736	7,256	6,312	4,341	4,433	4,960	6,340	8,600	10,480	9,570	12,220	95,441
	3243 San Amadeo	10,351	9,449	6,901	4,708	3,409	4,397	4,192	5,428	7,896	8,896	7,932	9,953	83,512
	3420 Calle Azul	8,381	7,141	5,666	4,971	3,325	3,288	2,016	2,705	5,128	7,581	6,910	8,744	65,856
	5372 Punta Alta	2,439	8,332	8,216	7,016	5,004	5,081	5,296	7,220	8,918	11,074	10,012	12,649	91,257
	5510 Paseo Del Lago West	7,962	7,090	5,329	4,628	3,110	3,015	3,138	4,451	5,679	7,130	6,098	8,283	65,913
Total Production of kWh =		81,659	97,091	83,356	71,529	55,136	55,445	57,628	75,051	100,337	116,150	112,652	144,639	1,050,673

Year Two Production		Jul-18	Aug-18	Sep-18	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Total
Third Mutual Project														
	2353 Via Mariposa	13,573	12,057	9,830	8,750	6,630	3,390	3,368	5,552	8,329	11,520	11,880	10,870	105,749
	2381 Via Mariposa	9,905	10,918	9,090	8,040	6,120	4,000	4,951	5,431	8,366	9,418	9,650	8,761	94,650
	2393 Via Mariposa West	12,820	11,288	8,970	7,480	5,440	4,440	4,762	5,917	9,176	10,480	11,170	10,230	102,173
	2394 Via Mariposa West	14,888	13,236	10,770	9,530	7,260	6,100	6,393	789	8,618	12,420	13,060	11,910	114,974
	2397 Via Mariposa West	13,295	11,817	9,610	8,350	6,280	5,250	5,506	6,497	9,682	10,880	11,210	10,250	108,627
	2399 Via Mariposa West	11,993	10,669	8,680	7,450	5,580	4,640	4,889	5,796	1,841	0	4,692	7,812	74,042
	2400 Via Mariposa West	13,794	12,137	9,850	8,540	6,380	4,580	3,778	5,036	8,142	9,948	11,760	10,790	104,735
	3242 San Amadeo	12,005	10,177	8,290	6,790	5,090	4,160	3,856	3,756	8,158	9,671	10,250	9,200	91,403
	3243 San Amadeo	10,144	9,481	8,054	6,514	5,035	4,278	4,509	4,952	7,669	8,607	8,162	7,510	84,915
	3420 Calle Azul	8,736	7,770	6,221	5,212	4,008	3,334	3,547	4,197	6,116	7,037	7,019	6,540	69,737
	5372 Punta Alta	12,412	11,369	9,215	7,392	5,853	4,621	5,133	6,126	9,022	10,380	10,391	9,551	101,465
	5510 Paseo Del Lago West	8,253	7,509	6,151	4,990	3,747	2,965	3,287	3,939	5,822	6,766	6,759	6,167	66,355
Total Production of kWh =		141,818	128,428	104,731	89,038	67,423	51,758	53,979	57,988	90,941	107,127	116,003	109,591	1,118,825
Average Monthly Production		111,739	112,760	94,044	80,284	61,280	53,602	55,804	66,520	95,639	111,639	114,328	127,115	1,084,749

Year Three Production						
Third Mutual Project	Jul-19	Aug-19	Sep-19	Oct-19	Nov-19	
2353 Via Mariposa	14,370	13,230	10,120	9,850	5,920	
2381 Via Mariposa	11,590	10,590	8,100	7,920	4,950	
2393 Via Mariposa West	13,470	12,000	7,267	8,380	5,070	
2394 Via Mariposa West	15,680	14,370	10,910	10,800	6,790	
2397 Via Mariposa West	13,500	12,440	9,480	9,250	5,840	
2399 Via Mariposa West	12,100	11,170	8,540	8,240	5,210	
2400 Via Mariposa West	14,170	12,930	9,830	9,500	5,940	
3242 San Amadeo	12,000	10,860	8,180	7,510	4,660	
3243 San Amadeo	8,447	8,849	7,359	7,161	4,706	
3420 Calle Azul	7,120	7,838	5,803	5,617	3,799	
5372 Punta Alta	10,742	10,739	7,271	7,731	5,010	
5510 Paseo Del Lago West	7,837	7,520	5,404	5,424	3,520	
Total Production of kWh =	141,026	132,536	98,264	97,383	61,415	
This Year vs. Average =	26.2%	17.5%	4.5%	21.3%	0.2%	

Average Production through November	
	460,105
Year Three Production through November	
	530,624
YOY Total Change in kWh	
	70,520
Total % Change vs Average	
	15.33%

Lifetime Production	
	2,700,122

Golden Rain Foundation
GRF EV Charging Station Reports
Monthly Accounting Report
January 10, 2020

<u>Chargepoint Inc.</u>		
Deposits in 2019 49009000-OPR-700		
Month	Amount	% Change
Dec, 2018	\$ 128.14	
Jan, 2019	\$ 166.74	30%
Feb, 2019	\$ 125.18	-25%
Mar, 2019	\$ 82.58	-34%
Apr, 2019	\$ 144.29	75%
May, 2019	\$ 174.52	21%
Jun, 2019	\$ 85.79	-51%
Jul, 2019	\$ 88.88	4%
Aug, 2019	\$ 119.97	35%
Sep, 2019	\$ 400.18	234%
Oct, 2019	\$ 404.16	1%
Nov, 2019	\$ 564.21	40%
Total	\$ 2,484.64	

COST BY BILLING MONTH
Cost by Month August 2018 through September 2019

Total Monthly Cost	GRF Locations					Grand Total
	Billing Months	Clubhouse 2	Clubhouse 5	Clubhouse 7	Community Center	
	2018 August	\$ 5,874	\$ 10,599	\$ 5,759	\$ 27,221	\$ 49,454
	2018 December	\$ 2,878	\$ 3,823	\$ 2,205	\$ 9,744	\$ 18,650
	2018 November	\$ 2,852	\$ 4,632	\$ 2,325	\$ 12,355	\$ 22,163
	2018 October	\$ 3,541	\$ 5,784	\$ 2,321	\$ 12,397	\$ 24,043
	2018 September	\$ 4,751	\$ 7,645	\$ 4,743	\$ 19,188	\$ 36,327
	2019 April	\$ 2,725	\$ 5,662	\$ 2,589	\$ 10,107	\$ 21,082
	2019 August	\$ 4,708	\$ 9,741	\$ 5,677	\$ 20,925	\$ 41,050
	2019 February	\$ 2,899	\$ 4,991	\$ 2,167	\$ 8,894	\$ 18,951
	2019 January	\$ 2,954	\$ 3,979	\$ 2,207	\$ 9,242	\$ 18,382
	2019 July	\$ 5,081	\$ 10,433	\$ 5,347	\$ 19,331	\$ 40,192
	2019 June	\$ 4,446	\$ 9,401	\$ 4,649	\$ 18,577	\$ 37,074
	2019 March	\$ 2,814	\$ 5,306	\$ 2,309	\$ 9,180	\$ 19,609
	2019 May	\$ 2,423	\$ 5,938	\$ 2,479	\$ 9,738	\$ 20,578
	2019 September	\$ 5,141	\$ 10,054	\$ 5,238	\$ 18,743	\$ 39,175
	Grand Total	\$ 53,087	\$ 97,988	\$ 50,016	\$ 205,641	\$ 406,731

TOTAL KWH CONSUMED BY BILLING MONTH

Sum of Total Kwhs	Column Labels				
Row Labels	Clubhouse 2	Clubhouse 5	Clubhouse 7	Community Center	Grand Total
2018 August	28,569	46,131	26,845	143,536	245,081
2018 December	23,651	24,845	15,980	80,411	144,887
2018 November	22,164	30,590	18,145	100,947	171,846
2018 October	25,207	36,002	17,232	101,519	179,960
2018 September	26,458	46,067	23,699	113,111	209,335
2019 April	19,134	36,798	18,771	80,127	154,830
2019 August	23,668	44,781	24,286	100,527	193,262
2019 February	22,543	35,566	16,319	71,398	145,826
2019 January	24,716	24,720	16,741	77,882	144,059
2019 July	23,845	42,710	23,151	90,529	180,235
2019 June	21,853	39,814	19,081	75,875	156,623
2019 March	21,123	34,726	16,719	71,410	143,978
2019 May	16,446	40,200	16,963	70,387	143,996
2019 September	26,057	41,771	22,107	95,109	185,044
Grand Total	325,434	524,721	276,039	1,272,768	2,398,962

GRF DEMAND CHARGES PER FACILITY

Billing Months	Clubhouse 2		Clubhouse 5		Clubhouse 7		Community Center		Total Monthly Demand Charges		Total Kwh Demand
	Monthly Demand Charges	Kwh Demand	Monthly Demand Charges	Kwh Demand	Monthly Demand Charges	Kwh Demand	Monthly Demand Charges	Kwh Demand			
2018 August	\$ 3,332	86	\$ 5,850	154	\$ 3,401	91	\$ 15,654	386	\$ 28,237	717	
2018 December	\$ 985	62	\$ 1,825	115	\$ 840	53	\$ 3,667	201	\$ 7,317	431	
2018 November	\$ 1,065	67	\$ 2,240	141	\$ 810	51	\$ 4,847	265	\$ 8,962	524	
2018 October	\$ 1,599	75	\$ 2,638	166	\$ 858	54	\$ 4,792	262	\$ 9,887	557	
2018 September	\$ 2,722	80	\$ 5,571	173	\$ 2,901	94	\$ 11,029	324	\$ 22,222	671	
2019 April	\$ 1,110	62	\$ 2,736	154	\$ 1,040	59	\$ 3,872	219	\$ 8,758	494	
2019 August	\$ 2,452	72	\$ 5,136	134	\$ 3,348	91	\$ 11,864	346	\$ 22,800	643	
2019 February	\$ 1,086	70	\$ 2,225	141	\$ 762	48	\$ 3,366	187	\$ 7,438	446	
2019 January	\$ 1,043	64	\$ 1,985	128	\$ 791	51	\$ 3,332	187	\$ 7,152	430	
2019 July	\$ 2,753	69	\$ 6,563	166	\$ 3,094	96	\$ 11,018	307	\$ 23,427	638	
2019 June	\$ 2,523	72	\$ 6,072	166	\$ 2,753	69	\$ 11,498	293	\$ 22,847	600	
2019 March	\$ 1,031	60	\$ 2,552	141	\$ 923	51	\$ 3,600	202	\$ 8,106	454	
2019 May	\$ 1,020	61	\$ 2,841	147	\$ 1,030	50	\$ 4,104	204	\$ 8,994	462	
2019 September	\$ 2,669	74	\$ 5,998	160	\$ 3,124	86	\$ 10,243	294	\$ 22,034	614	
Grand Total	\$ 25,390	974	\$ 54,232	2086	\$ 25,676	944	\$ 102,886	3677	\$ 208,183	7681	



STAFF REPORT

DATE: January 10, 2020
FOR: Village Energy Task Force
SUBJECT: Third Mutual SCE Walkway Lighting Locations

RECOMMENDATION

Receive and file.

BACKGROUND

Staff received direction to provide an audit of the pathway lighting owned by SCE within Third Mutual.

DISCUSSION

Provided for your information are the results of the walkway lighting audit performed in Third Mutual which includes:

- Audit Report
- A map depicting the existing pathway lights
- Digital photographs of all 260 existing SCE owned pathway lights

Due to the volume of information, these items will be presented at the meeting.

FINANCIAL ANALYSIS

None.

Prepared By: Guy West, Projects Division Manager

Reviewed By: Ernesto Munoz, P.E., Maintenance and Construcion Director