



Laguna Woods Village®

OPEN MEETING

REGULAR MEETING OF THE VILLAGE ENERGY TASK FORCE

**Wednesday, January 9, 2019 - 9:00 AM
Laguna Woods Village Community Center Willow 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 November 7, 2018
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. SCE Street Light Outage Report

Reports:

10. EV Charging Update for Community Center
11. Energy Consultant Update

Items for Future Agendas:

Third Mutual:

- Electric Vehicle History Report
- Golf Cart Report
- LED Solar Street Lights (low priority)
- 2-story Buildings LED Lighting Pilot Program (low priority)

United Mutual:

- Electric Vehicle History Report
- Golf Cart Report



Laguna Woods Village®

GRF:

- Install Level II EV Bollard Chargers (on the streets)

Concluding Business:

Date of next meeting – March 6, 2019
Adjournment

Bert Moldow, Chair
Ernesto Munoz, Staff Officer
Telephone: 268-2281



OPEN MEETING

REPORT FOR REGULAR MEETING OF THE VILLAGE ENERGY TASK FORCE

**Wednesday, November 7, 2018 - 1:30 P.M.
Laguna Woods Village Community Willow Room
24351 El Toro Road**

MEMBERS PRESENT: Bill Walsh – Chair, Carl Randazzo, John Frankel, Bert Moldow, Cush Bhada, Juanita Skillman, Jim Juhan, Voting Advisor: Steve Leonard

MEMBER ABSENT: None

OTHERS PRESENT: Judith Troutman, Joan Milliman, Reza Bastani, Burt Baum, Steve Parsons, Beth Perak, Annette Sabol-Soule, Doug Rook

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

1. Call to Order

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

2. Acknowledgment of Media

Chair Walsh noted no members of the media were present.

3. Approval of the Agenda

The agenda was approved as written.

4. Approval of Meeting Report for September 12, 2018

The Meeting Report of September 12, 2018, was approved as written.

5. Chairman's Remarks

Chair Walsh commented on the agenda topics for today and remarked that he would like to get through them quickly.

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

There were no member comments.

7. Department Head Update

Staff Officer Ernesto Munoz introduced representatives from Ice Energy and they provided a verbal update on how their technology works and how it may be applicable to Laguna Woods Village. Staff is in the process of working with Ice Energy to take advantage of it where appropriate.

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.

A motion was made and unanimously carried to approve the items under the consent calendar.

8. Project Log

9. SCE Street Light Outage Report

Reports:

10. TEC Energy Priority Work Plan Update

Staff Officer Ernesto Munoz provided an update on the TEC Energy priority work plan, and he introduced the TEC team. TEC gave a detailed PowerPoint presentation on their work plan and deliverables.

Discussion ensued regarding long range plans, golf cart charging, current energy efficient upgrades, alternative energy sources, electric vehicle charging capabilities and locations, potential load analysis, transformer upgrades, SCE grant for high speed EV charging, types of microgrids, and residential loads.

By consensus, GRF representatives authorized TEC to implement Phase 1 of Task 2 of their proposal/work plan which includes investigating the feasibility of a facility-level microgrid with a connected interface for the Community Center and researching alternative energy systems for electrical energy generation. GRF representatives requested EV Charging not be considered by the energy consultant at this time, thereby reducing their scope of work for GRF and the associated fee.

By consensus, United Mutual representatives authorized TEC to perform an assesement of the Mutual's electric infrastructure and develop a strategy for electrical upgrades and electric vehicle charging station installations.

By consensus, Third Mutual representatives authorized TEC to perform an assesement of the Mutual's electric infrastructure, focusing on carports and Garden Villa garages, and to develop a strategy for electric vehicle charging station installations.

11. LED Fixture Pilot for Street Lights

Staff Officer Ernesto Munoz provided an update on the LED fixture pilot for street lights and answered questions from the Task Force.

Discussion ensued regarding analysis of cobra head arms prior to the pilot, location of light poles, height of light poles, a pilot for cul-de-sac lighting, pole extenders, other bulb choices, the difference in light colors, the best street to conduct the first pilot and additional equipment added to the poles.

By consensus staff was directed to ask the consultant to provide pricing for an additional pilot for 10 fixtures, pole extenders and the feasibility of using other bulbs such as the sample Director Moldow provided.

12. Field Trip to UCI (oral discussion – Director Moldow)

Director Moldow summarized the trip to UC Irvine and the information that was provided by Dr. Samuelson on alternative energy usage at their research facility.

Discussion ensued regarding emergency power usage for the Community Center, and mobile generators.

13. Officer Selections for Energy Task Force

By consensus, Director Bert Moldow was nominated and accepted the position of the Task Force Chair. Director Carl Randazzo was nominated and accepted the position of Task Force Vice Chair.

Items for Future Agendas:

Third Mutual:

- Electric Vehicle History Report
- Golf Cart Report
- LED Solar Street Lights (low priority)
- 2-story Buildings LED Lighting Pilot Program (low priority)

United Mutual:

- Electric Vehicle History Report
- Golf Cart Report

GRF:

- Install Level II EV Bollard Chargers (on the streets)


Concluding Business:

Date of next meeting – January 9, 2019

Village Energy Task Force
November 7, 2018
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Adjournment

This meeting was adjourned at 4:19 PM


Bert Moldow, Chair

Energy Task Force Project Log (December 2018)

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 ones. 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.	Staff processes additional walkway lighting requests as they are received. 41 additional lights have been added to date. The Committee awarded an "as needed" contract to US Energy for lighting consultant services. US Energy has performed an audit of the walkway lighting in Gates 5 and 6. The Committee decided not to move forward with any additional walkway lighting improvements in this area at this time.	December 2018 Annual	Budget: \$48,408 Invoiced: \$25,960 Balance: \$22,448 Cumulative Expenditures 2010 through 2017: \$295,748
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.	Under the direction of the Village Energy Task Force, TEC and staff finalized the work plan. TEC was asked to perform an assessment of the Mutual's electric infrastructure and develop a strategy for electrical upgrades and electric vehicle charging station installations.	On-going	Supplemental Appropriation: \$50,000 Invoiced: \$2,905 Balance: \$47,095
3	2018 Pushmatic Electrical Panel Replacement	This project is dedicated to replacing 2,750 Pushmatic electric panels over a 10 Year period. The Pushmatic panels are unreliable with high failure rates. 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. 244 panels were installed in 2018. Estimated Project Completion: Year 2026	COMPLETED	October 2018 Annual	Pushmatic Panel Replacement Program Budget: \$371,250 Invoiced: \$370,037 Balance: \$1,213 Corrected Cumulative Expenditures 2016 through 2018: \$965,261

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	2018 Electrical Systems	This program is dedicated to repairing or replacing electrical equipment as needed. Two replacements have occurred this year at Buildings 3366 and 3242. It has been determined by staff that the grounding at some Garden Villa panels are not up to code and should be improved for safety reasons. Staff has performed grounding improvements to the panels at 20 GV buildings. The remaining 33 GV buildings will be completed in 2019.	COMPLETED	December 2018 Annual	Budget: \$50,000 Invoiced: \$32,977 Balance: \$17,023
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.	Under the direction of the Village Energy Task Force, TEC and staff finalized the work plan. TEC was directed to move forward with an assessment of the Mutual's electric infrastructure, focusing on carports and Garden Villa garages, and to develop a strategy for electric vehicle charging station installations.	December 2018	Budget: \$50,000 Invoiced: \$2,996 Balance: \$47,004

4	<p>Exterior Lighting</p> <p>In 2018 funding for this program will be allocated towards the purchase of the Southern California Edison street light infrastructure. a contract with Siemens in the amount of \$843,857 was executed. The scope of work is to assist with the street light acquisition, retrofit of the existing lighting fixtures, and to perform the operations and maintenance of the asset for three years. Additionally, it will offset the cost of consulting services to assist with the acquisition, and the upgrade of other exterior lighting.</p> <p>This program also includes funding for walkway lighting needs.</p>	<p>Street Lights: On May 30, the CPUC approved the sale and transfer of streetlights from SCE to Third. The Siemens team will be working with SCE during the transfer process of surveying, tagging, and auditing the assets that will be purchased from SCE (street light pole, lighting fixtures, above-ground equipment). Once the assets have been identified SCE will invoice Third Mutual. The transfer process was originally scheduled to be completed in November 2018; however, SCE has recently informed our consultant that the process will be extended into January 2019, and the invoice will be sent out immediately thereafter. Once the SCE audit is approved and the invoice is paid by Third the transfer of assets will be completed. After the transfer staff will implement a pilot program to evaluate the selected pilot LED fixtures. After fixtures are selected, the LED retrofit of 788 fixtures will be scheduled.</p> <p>Walkway Lighting: A contract was awarded for walkway lighting upgrades in Gates 5, 6, 7 & 8. During the installation process an additional 34 bollards were identified that were not on the original map. There were fewer concrete bases that needed to be replaced than estimated, and thus the additional bollards were able to be replaced within the original budget. This project has been completed.</p>	2019	<p>Budget: \$500,000 Invoiced: \$64,656 Balance: \$435,344</p> <p>Supplemental walkway lighting budget: \$124,907 Invoiced: \$124,508 Balance: \$399</p>
GRF				
1	<p>Energy Consultant Services</p> <p>An Energy Consultant will be used as needed in order to advance GRF's and the Community's future energy initiatives.</p>	<p>Under the direction of the Village Energy Task Force, TEC and staff finalized the work plan. TEC was authorized to implement Phase 1 of Task 2 of their work plan which includes investigating the feasibility of a facility-level microgrid with a connected interface for the Community Center and researching alternative energy systems for electrical energy generation. GRF representatives requested EV Charging not be considered by the energy consultant at this time, thereby reducing their scope of work for GRF and the associated fee.</p>	On-going	<p>Contingency Fund Supplemental Appropriation: \$50,000 Invoiced: \$3,024 Balance: \$46,976</p>

2	<p>Community Center HVAC and Controls Upgrade</p>	<p>This project is dedicated to making 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).</p>	<p>A design-build contract was awarded to AMS at the July 3, 2018, Board meeting. A pre-construction meeting was held with AMS and the 'Bridging Document' consultant on August 3. AMS submitted a schedule indicating design preparation in September; HVAC fabrication will take 4 months from November 2018 to February 2019; and HVAC will be installed April - May 2019. On-site installation of the digital controller wiring and the replacement of the rooftop boiler have been completed. The variable air volume (VAV) boxes are being installed in December. The project in its entirety is scheduled to be completed by the end of May 2019.</p>	<p>2019</p>	<p>Facilities Fund Contract: \$1,447,163 Invoiced: \$0 Balance: \$1,447,163</p>
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**Energy Task Force
Street Light Outage Report
Status as of December 31, 2018**

Facility	Status	Description	Note	Request Date	Completed Date
Gate-12	Pending	SCE Street Light Outage	Edison lamp post out last four digits are # 938-k. Right behind gatehouse.	11/22/2017	
B3501	Completed	SCE Street Light Outage	Edison lightpole #2070024E light on, during daylight hours, possible timer or sensor issue.	1/1/2018	3/16/2018
B3070	Completed	SCE Street Light Outage	Light Pole, Light OUT. Concrete pole, NO SCE number on pole. Tagged. Located south of B-3070.	1/2/2018	3/22/2018
B3340	Completed	SCE Street Light Outage	street light at CDS340 is out	1/3/2018	1/18/2018
B3020	Completed	SCE Street Light Outage	street light in front of bldg 3020 reported by resident walking	1/3/2018	1/15/2018
B3301	Completed	SCE Street Light Outage	Edison lighting # 4468424E turning on-off every 1-2 minute / YT tagged.	1/8/2018	1/29/2018
B3111	Completed	SCE Street Light Outage	Edison lighting # 1961519E out / YT tagged.	1/8/2018	8/29/2018
B3123	Completed	SCE Street Light Outage	Edison lighting # 1961870E out / YT tagged.	1/8/2018	11/29/2018
B3154	Completed	SCE Street Light Outage	Edison lighting # 1961843E out / YT tagged	1/8/2018	11/29/2018
B5497	Completed	SCE Street Light Outage	Edison lighting # 2118593E out / YT tagged.	1/8/2018	8/29/2018
B5490	Completed	SCE Street Light Outage	Edison lightpole #2118528E light on, daylight hours, adjacent Paseo Del Lago West, possible timer or	1/8/2018	1/29/2018
B5380	Completed	SCE Street Light Outage	Edison lightpole #2258601E light on, daylight hours, southeast of building, adjacent Paseo Del Lago	1/8/2018	1/29/2018
B5381	Completed	SCE Street Light Outage	Edison lightpole #2030043E light on, daylight hours, east of building, adjacent Paseo Del Lago West,	1/8/2018	1/29/2018
B5509	Completed	SCE Street Light Outage	Edison lightpole #2030044E light on, daylight hours, west of unit C, adjacent Paseo Del Lago West, p	1/8/2018	7/29/2018
B5378	Completed	SCE Street Light Outage	Edison lightpole #2044070E light on, daylight hours, west of building, adjacent Avenida Sosiega, pos	1/8/2018	1/25/2018
Avenida Sosiega W.	Completed	SCE Street Light Outage	SCE Pole #2195151E. Light Out. Located at intersection of Portora and Sosiega West. Tagged.	1/17/2018	2/26/2018
B5206	Completed	SCE Street Light Outage	edison light not working properly #e1270502 in front of unit	1/23/2018	2/26/2018
B3366	Completed	SCE Street Light Outage	SCE Light # 2043927 E	1/25/2018	2/26/2018
B489	Completed	SCE Street Light Outage	Edison Light Out - Unknown # - end of CDS 14	1/25/2018	2/26/2018
B5529	Completed	SCE Street Light Outage	street light in front of building is out	1/30/2018	2/26/2018
B5348	Completed	SCE Street Light Outage	Light # 2008541E - Missing Label < Tagged with Caution Tape >	1/31/2018	2/26/2018
B3437	Completed	SCE Street Light Outage	Blinking light Edison pole - # 2043909E	2/1/2018	2/26/2018
B3491	Completed	SCE Street Light Outage	Concrete light pole - Edison- #4468416E Light flickering	2/1/2018	2/2/2018
B3252	Completed	SCE Street Light Outage	SCE Light 1953834E	2/2/2018	2/26/2018
B3092	Completed	SCE Street Light Outage	SCE Light Out - # 1961272E	2/5/2018	3/5/2018
B3429	Completed	SCE Street Light Outage	Edison Lighting Pole # 2043903E turns off & on every 1-2 minutes / YT tagged.	2/7/2018	2/26/2018
B5331	Completed	SCE Street Light Outage	FRONT OF MANOR EDISON LIGHT OUT #2030748E	2/13/2018	2/26/2018
B2389	Completed	SCE Street Light Outage	SCE Light # 1879900E is out	2/13/2018	2/26/2018
B5128	Completed	SCE Street Light Outage	Light out at end of street <tripping hazard> unknown pole #	2/15/2018	2/26/2018
B5557	Completed	SCE Street Light Outage	Edison light pole # 2070014E turns off / on continuous on Bahia Blanca West near building 5557 / YT	2/26/2018	9/16/2018
B3071	Completed	SCE Street Light Outage	SCE Light # 1961379E	3/1/2018	3/16/2018
B5596	Completed	SCE Street Light Outage	Unknown pole #. Does not turn on most of time	3/8/2018	3/16/2018
B5114	Completed	SCE Street Light Outage	Edison lightpole #2030687E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5261	Completed	SCE Street Light Outage	Edison lightpole #2030680E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5138	Completed	SCE Street Light Outage	Edison lightpole #2030683E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5130	Completed	SCE Street Light Outage	Edison lightpole #2030685E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5179	Completed	SCE Street Light Outage	Edison lightpole #2030651E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5180	Completed	SCE Street Light Outage	Edison lightpole #2030712E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5167	Completed	SCE Street Light Outage	Edison lightpole #2030677E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5170	Completed	SCE Street Light Outage	Edison lightpole #2030676E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5200	Completed	SCE Street Light Outage	Edison lightpole #2030717E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5296	Completed	SCE Street Light Outage	Edison lightpole #2030724E light on, daylight hours, possible timer or sensor issue.	3/13/2018	3/22/2018
B5297	Completed	SCE Street Light Outage	Edison lightpole #2030681E, between buildings 5297 & 5298, light on, daylight hours, possible timer	3/13/2018	3/22/2018
B3115	Completed	SCE Street Light Outage	SCE Light # 1961505E is out	3/13/2018	3/22/2018
B3133	Completed	SCE Street Light Outage	SCE Light Out - Edison # 1961545E	3/14/2018	3/22/2018
B5165	Completed	SCE Street Light Outage	Edison lightpole #2030878E light on, daylight hours, possible timer or sensor issue.	3/20/2018	3/22/2018
B3117	Completed	SCE Street Light Outage	SCE Lightpole # 1961508E is out	3/20/2018	3/21/2018
B2405	Completed	SCE Street Light Outage	Edison light (#1879802E) near building burning out, marked w/ YT	3/22/2018	4/20/2018
B2398	Completed	SCE Street Light Outage	Edison light flickers, pole #1879781E, by 2398 Via Mariposa West CDS 221	3/23/2018	4/20/2018
B2397	Completed	SCE Street Light Outage	Edison light out, pole #1379770E, by 2397 Via Mariposa West. Tagged with yellow tape. CDS 219	3/23/2018	4/23/2018
B2384	Completed	SCE Street Light Outage	Edison light out, pole #1879736E, by 2348 Via Mariposa West. Tagged with yellow tape. CDS 203	3/23/2018	4/23/2018
B5190	Completed	SCE Street Light Outage	concrete pole light near blng flickering	3/23/2018	4/4/2018
B3071	Completed	SCE Street Light Outage	Post light on side of B3071 near laundry room - not working	3/26/2018	4/4/2018
B3354	Completed	SCE Street Light Outage	Edison street light out # 4229322E at the intersection of Monte Hermoso & CDS 334 / YT tagged.	3/26/2018	4/6/2018
B3117	Completed	SCE Street Light Outage	Edison Light # 1961511E is out	3/28/2018	4/4/2018
B2397	Completed	SCE Street Light Outage	SCE Light # 1870770 is out	3/29/2018	4/5/2018
B3070	Completed	SCE Street Light Outage	Contact Edison - Path Light # 1981379E between B3071 & B3074 is Out	3/30/2018	4/5/2018
B2397	Completed	SCE Street Light Outage	Contact Edison - Path Lights Out: 1879779E, 1879784E & 1879781E	3/30/2018	4/5/2018
B2218	Completed	SCE Street Light Outage	Concrete pole nxt to the gate <Mnr A> flickering - mem also requesting to get it replaced <old/dirty	4/2/2018	4/5/2018
B3384	Completed	SCE Street Light Outage	street edison pole light # 2043935E near 3384-A is out	4/3/2018	4/23/2018
B3242	Completed	SCE Street Light Outage	Edison Light # 1873691E is out in front of Bldg 3242	4/3/2018	4/5/2018
Monte Hermoso	Completed	SCE Street Light Outage	SCE light 2070028E out on Bahia Blanca West & Monte Hermoso	4/4/2018	4/23/2018
Bahia Blanca E	Completed	SCE Street Light Outage	**Edison light out tagged with tape <possibly purple & unknown #> on corner of avenida sosiega & mont	4/7/2018	4/20/2018
B3123	Completed	SCE Street Light Outage	Edison Light 1961870E out by building 3123 / YT tagged	4/11/2018	4/20/2018
B3277	Completed	SCE Street Light Outage	Contact Edison - Path Light # 1974544E is out	4/12/2018	4/23/2018
B3510	Completed	SCE Street Light Outage	Edison lightpole #2070043E light on, daylight hours, possible timer or sensor issue.	4/15/2018	4/23/2018
B3338	Completed	SCE Street Light Outage	Southwest of building, adjacent cul de sac roadway, Edison lightpole # 2044082E light on, daylight h	4/23/2018	5/22/2018
B3003	Completed	SCE Street Light Outage	Street light is out between 3004-D & 3003-D <no pole #>	4/25/2018	5/2/2018
B5497	Pending	SCE Street Light Outage	Light not working <pole # 21185935>	4/25/2018	

**Energy Task Force
Street Light Outage Report
Status as of December 31, 2018**

B3407	Completed	SCE Street Light Outage	Edison pole light flickering on/off - #1961011E in front of manor 3407 at the sidewalk.	4/26/2018	5/2/2018
B3168	Completed	SCE Street Light Outage	The post light is blinking east of 3168 Via Vista Unit D. CDS 303	4/26/2018	7/12/2018
B5509	Completed	SCE Street Light Outage	Edison light pole #2118824E, light on during daylight hours, possible timer or sensor issue.	4/26/2018	6/14/2018
B2218	Completed	SCE Street Light Outage	Concrete light post next to Mnr A still flickering - light housing old/dirty req replacement	4/26/2018	6/15/2018
B3152	Completed	SCE Street Light Outage	Edison Light # 1961839E (light pole IFO MNR (B) is out	4/30/2018	6/15/2018
B5282	Completed	SCE Street Light Outage	street light is out btwn manor 5283 and 5284	4/30/2018	6/25/2018
B2404	Completed	SCE Street Light Outage	Edison Lights 1879789E & 189790 E are both out < on grass area by Bldg 2404 >	5/4/2018	6/25/2018
B3162	Completed	SCE Street Light Outage	LIGHT ON PASEO DE LAGO #2118594 is outt	5/7/2018	7/9/2018
B5337	Completed	SCE Street Light Outage	2008533E / light tagged with caution tape.	5/8/2018	6/25/2018
B3499	Completed	SCE Street Light Outage	El Toro hi conduit blew out lights 2070028E	5/11/2018	5/14/2018
B3499	Completed	SCE Street Light Outage	CONDUIT WIRING DAMAGED BY ETW 2070029E	5/11/2018	5/14/2018
B3499	Completed	SCE Street Light Outage	CONDUIT WIRING DAMAGED BY ETW 2072030E	5/11/2018	5/14/2018
B3071	Completed	SCE Street Light Outage	#1961382E not working, has a tag on it	5/16/2018	5/22/2018
Pina	Completed	SCE Street Light Outage	Near B5284 - Edison light out - #2030728E.... Marked with yellow tape.	5/21/2018	6/25/2018
B592	Completed	SCE Street Light Outage	**lamppost on walkway by creek behind bldgs 592 & 591 knocked down <unknown #> **	5/25/2018	7/5/2018
B5323	Completed	SCE Street Light Outage	Edison light pole #2008563E is blinking.	5/28/2018	6/25/2018
B5541	Completed	SCE Street Light Outage	street light in front of manor not working at all <unknown #>	5/30/2018	6/22/2018
B3061	Completed	SCE Street Light Outage	solar light #1961369-E btw bldg 3061 & 3062	6/4/2018	6/25/2018
B5327	Completed	SCE Street Light Outage	street light on Bahia Blanca in front of bldg 5327 & 5328 is always on	6/5/2018	6/25/2018
B2384	Completed	SCE Street Light Outage	Flickering Edison Lighting pole 1879761E south of building 2384 / YT tagged.	6/10/2018	6/22/2018
B2391	Completed	SCE Street Light Outage	Flickering Edison Lighting Pole 1879777E east of building 2391 / YT tagged.	6/10/2018	6/25/2018
B2395	Completed	SCE Street Light Outage	Flickering Edison Lighting Pole 1879740E west of building 2395 / YT tagged.	6/10/2018	6/22/2018
B5328	Completed	SCE Street Light Outage	Edison pole light #2088561E, light on during daylight hours, tagged with yellow caution tape.	6/10/2018	6/25/2018
B3138	Completed	SCE Street Light Outage	entrance to the cul de sac	6/12/2018	6/22/2018
B3071	Completed	SCE Street Light Outage	**1961382E - light has never been fixed per resident - reopened with SCE**	6/21/2018	9/19/2018
B3415	Completed	SCE Street Light Outage	<2043929E>Edison light post comes on and off in front of manr N	6/21/2018	6/27/2018
B5518	Completed	SCE Street Light Outage	Edison light pole is out-Pole# 4252363E between B s 5518 and 5519	6/24/2018	6/24/2018
B308	Completed	SCE Street Light Outage	Behind Gate 1	6/25/2018	6/25/2018
B5148	Completed	SCE Street Light Outage	Edison lightpole #203088E, light on during daylight hours, possible timer issue.	6/25/2018	7/9/2018
B3244	Completed	SCE Street Light Outage	2 concrete lights in front of mnr out 1953854E 1953855E	6/27/2018	7/3/2018
B3532	Completed	SCE Street Light Outage	Edison Lighting 2070016E outside B3532 is flickering / YT tagged.	6/28/2018	7/9/2018
B5499	Pending	SCE Street Light Outage	Edison lighting 2070030E out by B5499 / YT tagged.	6/28/2018	
B3306	Completed	SCE Street Light Outage	Edison light in front of building // 2008731E	7/2/2018	8/9/2018
B3190	Completed	SCE Street Light Outage	SCE Light Pole 1974321E outside of MNR (C) flickering	7/2/2018	7/12/2018
B5529	Completed	SCE Street Light Outage	street light in front of Mnr O out <unknown pole number>	7/3/2018	7/9/2018
B5535	Completed	SCE Street Light Outage	Edison light out in front of manor #4229333-E	7/5/2018	8/9/2018
B3056	Completed	SCE Street Light Outage	SCE Light # 1961359E and/ or # 1951359E in front of MNR (D) is out	7/9/2018	8/9/2018
B3003	Completed	SCE Street Light Outage	Contact SCE - Two (2) Path Lights Out - # 1873952E & 1873954E	7/17/2018	8/9/2018
B4008	Pending	SCE Street Light Outage	Edison pole #2118315E leaning due to moving van hitting it/in fron of B4008	7/21/2018	
B3132	Completed	SCE Street Light Outage	Edison Light # 1961545E between B3131 & B3132 needs repair	7/24/2018	8/9/2018
B3224	Completed	SCE Street Light Outage	SCE Street Light Out. #19746345E, Near 3224-A At NE Corner of Carrizo and CDS 24. Tagged w/ Yellow	7/29/2018	8/9/2018
B3134	Completed	SCE Street Light Outage	Edison Light # 1961550E is out	7/31/2018	8/9/2018
B5357	Completed	SCE Street Light Outage	light bulb flickering in front of building/ edison pole 2008546E	8/2/2018	8/9/2018
B5518	Completed	SCE Street Light Outage	**leaning at 30 or so degrees on the walkway to the front entrance**	8/2/2018	8/2/2018
B3301	Completed	SCE Street Light Outage	Edison Light # 1961045E at Carport 3047 near Bldg 3301 is out	8/3/2018	8/3/2018
B3384	Completed	SCE Street Light Outage	in front of manor A SCE pole 2043935E light out	8/6/2018	8/15/2018
B5519	Completed	SCE Street Light Outage	Two unknown pole # s not turning on in front of B5519	8/7/2018	8/7/2018
B5212	Completed	SCE Street Light Outage	light out/ light# 2030718E/ marked with caution tape.	8/8/2018	8/22/2018
B3383	Completed	SCE Street Light Outage	B3383 Punta Alta - Edison light - 2042935E	8/8/2018	8/15/2018
B3401	Completed	SCE Street Light Outage	B3401 Punta Alta - Edison light - 2008606E	8/8/2018	8/15/2018
B5185	Completed	SCE Street Light Outage	5185 Duenas - Edison light - 2030715E	8/8/2018	8/15/2018
B5108	Completed	SCE Street Light Outage	@ 5108 Duenas - Edison light - 2030712E	8/8/2018	8/15/2018
B3031	Completed	SCE Street Light Outage	Light turns on & off between 3031-B & 3029-A - has yellow tape on it <unknown street number>	8/17/2018	8/22/2018
B3173	Completed	SCE Street Light Outage	SCE Light Pole 1961805E Light out. Located SW of B-3173, CDS 303. Tagged.	8/21/2018	9/5/2018
B3175	Pending	SCE Street Light Outage	SCE Light Pole 1963802E Light out. Located N of B-3175, CDS 303. Tagged.	8/21/2018	
B3044	Completed	SCE Street Light Outage	Edison Lamp Out - Fixture # 1961364E < Left Side of Walkway by Manor (A)	8/24/2018	9/4/2018
B3156	Pending	SCE Street Light Outage	Light pole was knocked down near B3156. Pole # 1961821E	8/27/2018	
B5282	Completed	SCE Street Light Outage	street light is out btwn manor 5283 and 5284 since April	8/31/2018	8/31/2018
B5283	Completed	SCE Street Light Outage	Edison lighting pole # 2030728E out by building 5283.	9/6/2018	9/6/2018
B3112	Completed	SCE Street Light Outage	SCE Pole #1961864E Light Out. Located just north of Entrance to CDS 310. No. of B-3112. Tagged	9/10/2018	9/10/2018
B3131	Completed	SCE Street Light Outage	**Edison has a leaning light pole #E5451691 located at 3131-B**	9/12/2018	9/14/2018
B3194	Completed	SCE Street Light Outage	Light between unit B & C flickering <Unknown pole #>	9/17/2018	9/17/2018
B3071	Completed	SCE Street Light Outage	SCE Light # 1961379E light out on the east side of building	9/19/2018	9/19/2018
Gate-07	Pending	SCE Street Light Outage	Light pole #187368E is out- Marked with tape.	10/18/2018	
B3155	Completed	SCE Street Light Outage	SCE Light Fixture Repair - # 1961841E	10/19/2018	11/5/2018
B3249	Pending	SCE Street Light Outage	NO # found, on patch of grass between B3249 and B3250, caution tape has already been placed	10/25/2018	
B3064	Completed	SCE Street Light Outage	SCE Light Post # 19613750E inside of garden area leaning heavily	10/26/2018	11/5/2018
B3065	Completed	SCE Street Light Outage	Edison Light # 1961030E is out	10/29/2018	11/5/2018
B3491	Completed	SCE Street Light Outage	Edison light in medium at the entrance of Monte Hermoso flickers throughout night	11/7/2018	11/16/2018
B3347	Pending	SCE Street Light Outage	Edison Pole #4229322E Street light out - Block 334 @ Monte Hermoso- Marked with Yellow tape.	11/7/2018	

**Energy Task Force
Street Light Outage Report
Status as of December 31, 2018**

B3072	Pending	SCE Street Light Outage	Light out #1961382E has been out for over 1 year, resident can't see sidewalk curb, safety hazard	11/16/2018	
B2388	Completed	SCE Street Light Outage	edison pole 18797775E between 2388-2390 is flickering on and off/ marked with caution tape.	11/20/2018	11/28/2018
B3145	Pending	SCE Street Light Outage	Edison light out on Via Vista on entrance of CDS 303	12/6/2018	
B2145	Pending	SCE Street Light Outage	Light out in front of B2145 on the corner of Ronda Granada	12/12/2018	
B3013	Pending	SCE Street Light Outage	Pole # 187397E - light flickering	12/13/2018	
B3013	Pending	SCE Street Light Outage	Edison lighting 1873957E out by building 3013 / YT tagged.	12/17/2018	
B2386	Pending	SCE Street Light Outage	SCE Lights 1879764E & 1879765E going out	12/19/2018	
B2102	Pending	SCE Street Light Outage	Street light in CDS 210 across from B2102 < Manor N > is out Edison # provided is 175	12/20/2018	
CulDeSac 365	Pending	SCE Street Light Outage	Street light with arm at the entrance of culdesac 365 on paseo del lago is very dim	12/26/2018	
CulDeSac 368	Pending	SCE Street Light Outage	Street Light in Culdesac 368 is out	12/26/2018	
CulDeSac 376	Pending	SCE Street Light Outage	Street light with arm at the entrance of CDS376 on Paseo Del Lago East is out	12/26/2018	
B5527	Pending	SCE Street Light Outage	exterior light out. IR#1835302	12/31/2018	
B3411	Pending	SCE Street Light Outage	Edison lightpole #2043950E, on Calle Azul, light on during daylight hours (11:18 AM) possible timer	12/31/2018	



STAFF REPORT

DATE: January 9, 2019
FOR: Village Energy Task Force
SUBJECT: EV Charging Update for the Community Center

RECOMMENDATION

Select one of the three EV charging installation options presented in this report and provide a recommendation to the M&C Committee for consideration, and direct staff to meet with city planners to discuss special conditions related to parking.

BACKGROUND

The Community Center has one Electric Vehicle Chargepoint charging bollard with two charging ports installed in the rear of the parking lot near the gym. Staff received a request from the General Manager's office to investigate the feasibility of installing additional EV charging stations.

The Southern California Incentive Project (SCIP) promotes easy access to zero-emission vehicle infrastructure by offering rebates for the purchase and installation of eligible public electric vehicle (EV) chargers. Staff has received preliminary approval from the SCIP which will provide grant funding for the installation of four Charge Point CPE200 chargers. The program will reimburse the Golden Rain Foundation (GRF) 75% of the cost up to \$210,000.

We have until October 11, 2019 to complete the project and submit all of the supporting documents online (Attachment 1).

DISCUSSION

Staff is presenting three potential options to the Energy Task Force for consideration. It should be noted that the rebate has been approved for the Community Center location only and cannot be relocated. Any unused funds will be returned to the SCIP and will not be available for use once the project has been completed.

Subsequent to a decision, staff will need to meet with city planners and have a preliminary discussion to ascertain any special conditions the city may impose on the project prior to conditional approval.

Options:

Option One

Use the SCIP grant funding to furnish and install one additional bollard (two charging ports) next to the existing bollard. The Community Center would then have four charging ports total. The preliminary cost estimate for this option is \$25,000, and GRF would receive a reimbursement in the amount of \$18,750. Although this option would abandon a considerable portion of the \$210,000 in possible rebates, it seems to be in-line with the current demand for EV charging at the Community Center Facility. This option minimizes costs to GRF, allows for additional charging, utilizes a portion of the approved rebate, and more than meets our current demand for EV charging at this location.

Option Two

Use the SCIP project to install an additional four bollards (eight additional charging ports). The Community Center would receive much more of the captured grant funding fund and would have a total of 10 ports. Commissioning of a parking study by a traffic engineering consultant would likely be required for approval by the City. This will not only result in additional time for approval, as well as for construction, but will also increase the overall expense by GRF for this the project.

Option Three

Withdraw from this rebate program and defer this project until the demand indicates a positive return on investment. Currently the community has approximately 67 electric vehicle charging permits out of 18,000 vehicles which equates to one out of every 300 residents having an electric vehicle. At this time, the EV charging installation is an expense that benefits very few members of the community. VMS may require employees to charge GRF's EVs at night to free up additions space for residents to charge during the day, without having to implement additional charging locations.

FINANCIAL ANALYSIS

In the first 17 months of operation of the existing charging bollard at the Community Center, 1136 car charges were completed with an average of **2.2 charges per day**. In 2017, 58 different drivers used the charger while only 76 drivers have used the charging bollard so far in 2018.

The current unit is set up to have 4 hours of free parking with a \$2.00 per hour fee for every additional hour thereafter, including energy charges of \$.17 per kWh for residents. Guests are charged \$.30 per kWh and all GRF vehicles charge for free. In total, the chargers have consumed \$1,570 in electricity and created \$1870 in revenue. There is an even distribution in the length of charging time with 89% of the sessions being less than five hours with the most popular being about 90 minutes.

Overall the data indicates that the **chargers are seldom used with only 1.1 charges per day per port** but have high demand at certain portions of the business week. This demand will

likely increase as EV adoption continues, security moves to the Community Center (two additional EVs) or the community purchases more EV vehicles. It should be noted that any investment in additional chargers are unlikely to be profitable regardless of a demand increase or the financial benefit derived from the grant captured by staff.

Prepared By: Christopher Naylor, Senior Management Analyst

Reviewed By: Guy West, Projects Division Manager
Ernesto Munoz, P.E., Maintenance and Construction Director

ATTACHMENT(S)

Attachment 1 – SCIP Application Process

Attachment 2 – Statistics & Charts of Existing EV Chargers at Community Center

Southern California Incentive Project (SCIP)

Application Process

Follow these easy steps to qualify for a SCIP rebate. Be sure to apply before any costs are incurred for starting an installation, and while funds are available.



1. Be an eligible applicant with a qualified installation site.



2. Apply online prior to purchasing and installing the EV charger(s) and equipment.



3. We review your application and confirm eligibility. Once the application is deemed qualified, your rebate funds are reserved, and you have one year to complete your project.



4. Submit your installation documents, including permit and design invoice at a minimum, and receive a milestone payment eight months after funds are reserved. If your project is completed and all required documents uploaded before eight months, final payment can be issued.



5. Receive your rebate check in the mail within 15 days for milestone payment of up to 45% of your reserved funds.



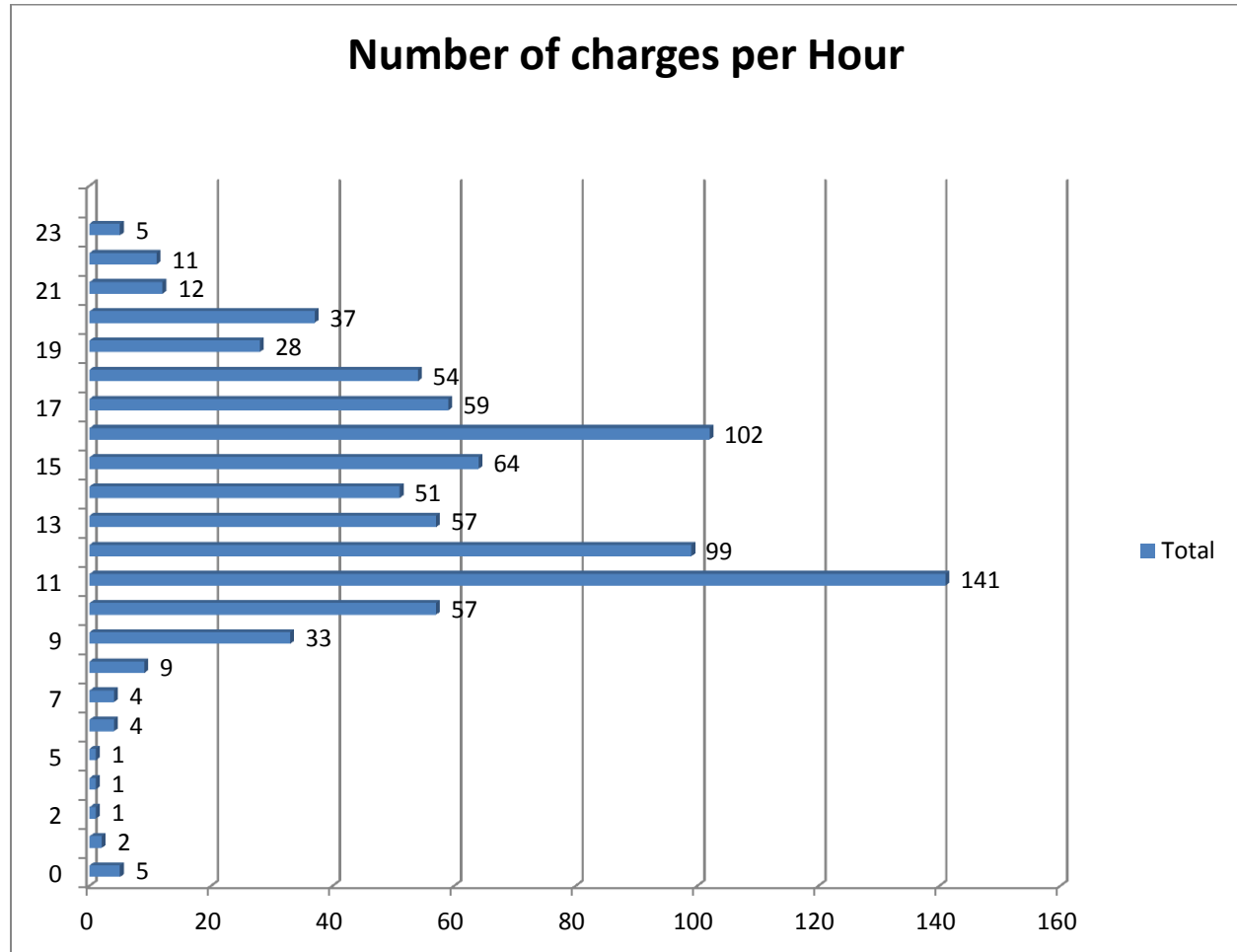
6. Submit your remaining installation documents online. We will review and process for final payment if full payment was not previously awarded.



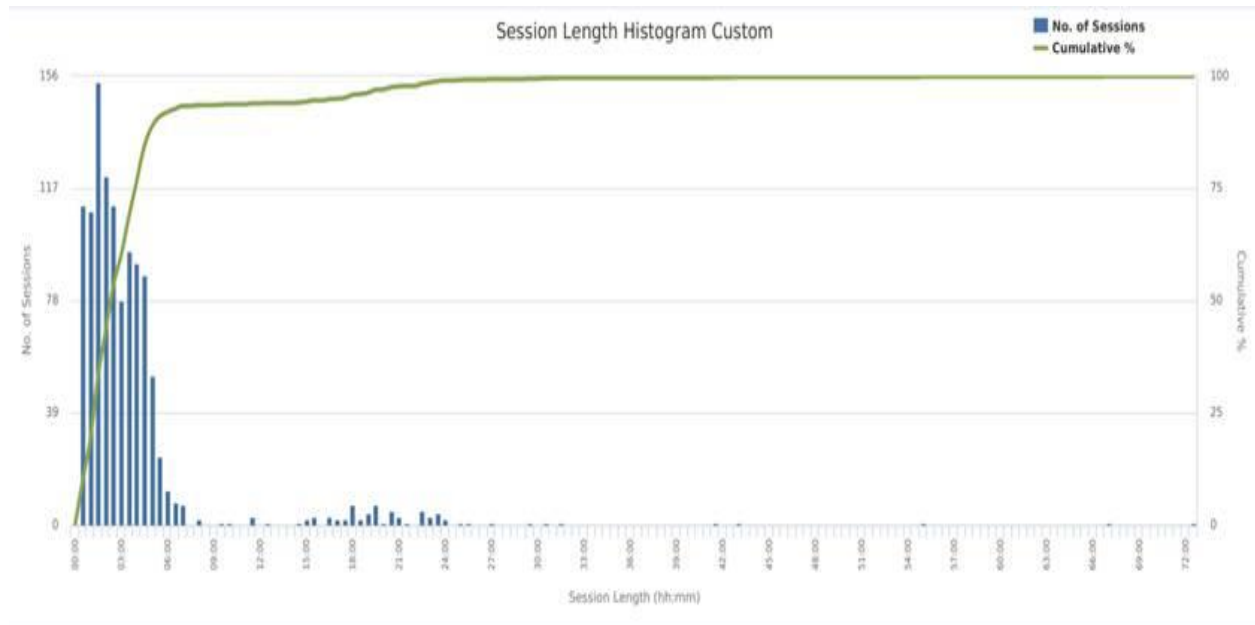
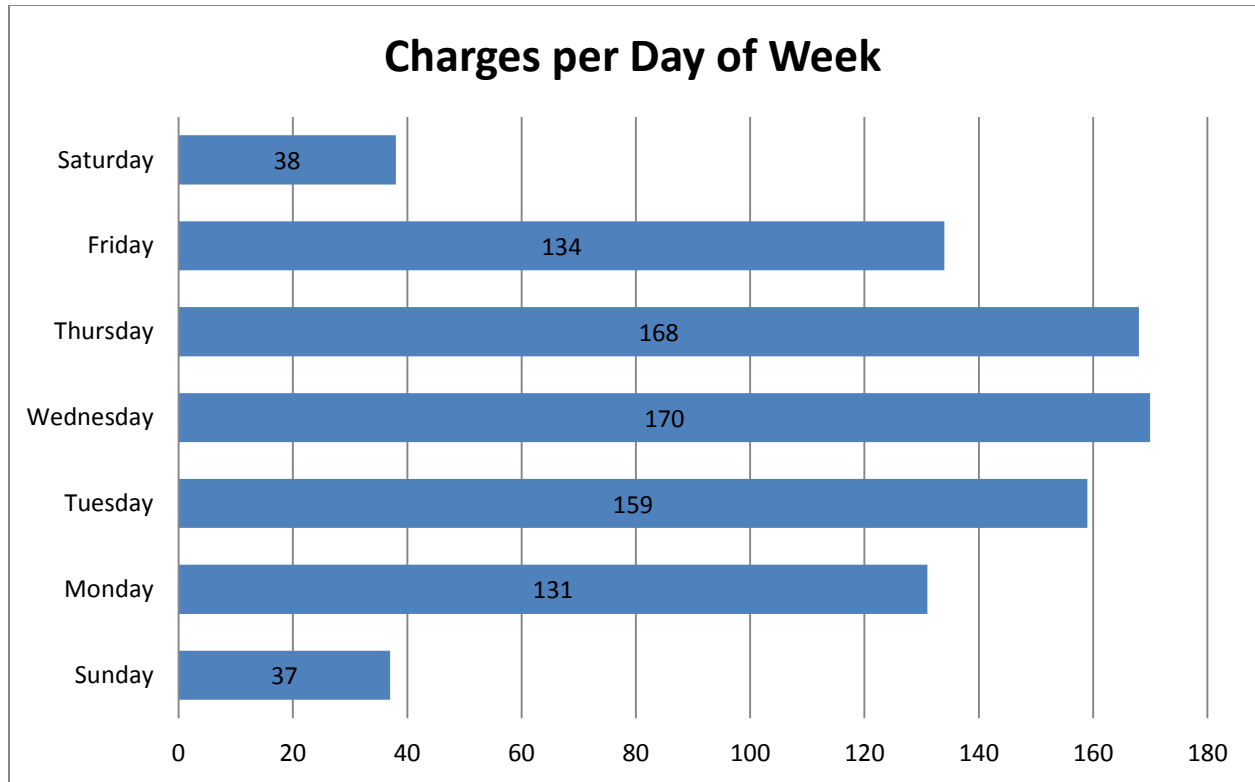
7. Receive your final rebate check in the mail within 15 days.

ATTACHMENT 2

Driver Type	# of Charges	Total Revenue	% of Usage
Public	503	\$1,141	44.3%
Employee	299	\$0	26.3%
Resident	334	\$736	29.4%



ATTACHMENT 2





STAFF REPORT

DATE: January 9, 2019
FOR: Village Energy Task Force
SUBJECT: Energy Consultant Update

RECOMMENDATION

Receive and file.

BACKGROUND

At the November 7, 2018 Village Energy Task Force meeting, the priorities given to the energy consultant was reviewed and revised. The Energy Consultants (TEC) current focus is listed below:

- Third & United Mutuals
 - Deliverables should be an infrastructure improvement plan for the next 5-10 years with costs and plans for implementation of upgrades.
 - Third Mutual: Focus on 3-story buildings and carports for EV infrastructure upgrades.
 - United Mutual: Determine if upgrading electric panels with a 150-amp breaker will require Southern California Edison (SCE) transformer upgrades.
- GRF
 - Perform a microgrid study, to include Clubhouse 7, Clubhouse 7 Parking Lot, and the Community Center. The consultant was also directed to consider the Maintenance Yard, and Broadband building for future study. Clubhouse 7, its parking lot, and Community Center are in the same vicinity and are the main focus of a microgrid solution at this time. The Maintenance Yard and the Broadband building are in the same vicinity (across El Toro Road) and should also be given consideration in subsequent phases.

DISCUSSION

Since the November 7th meeting, the following actions have taken place:

- Staff is in the process of identifying potential problem areas (where electric panels have been overloaded by too many electric vehicles and/or golf carts charging at the same time), by cross referencing previous work orders, by reviewing feedback from the Task Force, Resident Services, and the Electrical Division. Staff is also reviewing vehicle registrations to help focus the consultant's work effort on areas that might have the largest benefit.

- TEC has reviewed utility billing to identify load information for GRF, Third and United Mutual accounts. Additional information taken from the field may be required based on a representative sampling.
- TEC has reviewed existing data (site plans, google maps, and the SCE Distributed Energy Resource Interconnection Map (DERiM)) to develop an approach for conducting the initial site visits, albeit without data requests fulfilled by SCE.
- TEC requested information regarding the community's transformers from SCE. They confirmed that they do in fact have the data but will need to receive multiple layers of approval from their legal team before it is approved for release. At this time we are unable to estimate when or if this information will be available. The consultant and staff are considering alternative ways to obtain the needed data, due to the apparent reluctance of SCE to provide such data.
- TEC conducted field audits on December 19th and 20th to gather field information pertaining to the electrical infrastructure assessment. They visited sites and inspected existing electrical panels at residential, carport and laundry service buildings. Additionally they did review some of the SCE electrical facilities.
- Staff has analyzed the registered Car/Golf Cart and EV data for trends and has been exploring solutions to clean up the existing vehicle data in Stellar and has recommended changes to the information collected. M&C staff has also requested the IT Department to develop drop-down menus in our software, to help Resident Services staff, instead of using manual data entry to record new vehicle registrations into the system. Gathering more information will help staff to better understand potential community EV adoption rates.
- Staff has contacted 12 suppliers to discuss the feasibility of a microgrid for the Community Center, Clubhouse 7, and the Clubhouse 7 Parking Lot facilities. We are currently in advanced discussions with four organizations; American Microgrid Solutions (AMS), Enel X-Demand Energy, Schweitzer Engineering Laboratories and Tesla. We are expecting to compile quotes early in 2019. We will provide this information at a future Task Force meeting in coordination with TEC.

FINANCIAL ANALYSIS

None.

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Reviewed By: Guy West, Projects Division Manager
Ernesto Munoz, P.E., Maintenance and Construction Director