

# INFRASTRUCTURE COMMITTEE

REGULAR MEETING Wednesday, May 30, 2018 - 10:00 am to 12:00 pm 2850 Burton Drive Cambria CA 93428

5/25/2018: Added Regular Business Item 3.A. Attachments 5/30/2018: Added Revised Regular Business Item 3.A. Attachments

# AGENDA

- A. CALL TO ORDER
- B. ESTABLISH QUORUM
- C. CHAIRMAN'S REPORT

# 1. PUBLIC COMMENT

Members of the public may now address the Committee on any item of interest within the jurisdiction of the Committee but not on its agenda today. In compliance with the Brown Act, the Committee cannot discuss or act on items not on the agenda. Each speaker has up to three minutes. Speaker slips (available at the entry) should be submitted to the District Clerk.

# 2. CONSENT AGENDA

A. Consideration to Approve the April 19, 2018 Regular Meeting Minutes

# 3. REGULAR BUSINESS

- A. Discussion and Consideration Regarding the Updated Wastewater CIP List
- B. Brent Patera from PG&E Will Provide a Presentation to the Committee
- C. Discussion and Consideration to Establish Regular Meeting Dates, Times, and a Maximum Meeting Length

# 4. FUTURE AGENDA ITEMS

5. ADJOURN



### INFRASTRUCTURE COMMITTEE

REGULAR MEETING Thursday, April 19, 2018 - 10:00 AM 2850 Burton Drive Cambria CA 93428

### MINUTES

#### A. CALL TO ORDER

Chairman Bahringer called the meeting to order at 10:02 a.m.

### B. ESTABLISH QUORUM

A quorum was established.

Committee members present: Jim Bahringer, Karen Dean, Harry Farmer, Muril Clift, and Mike Lyons

Staff present: General Manager Jerry Gruber, District Engineer Bob Gresens, Wastewater Systems Supervisor John Allchin and Confidential Administrative Assistant Haley Dodson

### C. CHAIRMAN'S REPORT

Chairman Bahringer stated there is no chairman's report, but he'd like everyone attending to introduce themselves. Introductions were made.

### 1. PUBLIC COMMENT

Public Comment: John Martinez

Vice Chair Dean stated the Cambrian has a list of public meetings in the Cambrian, but she didn't see the Infrastructure Committee meeting listed.

Chairman Bahringer asked Haley Dodson to notify the Cambrian about upcoming Infrastructure meetings. Haley Dodson agreed.

#### 2. REGULAR BUSINESS

A. Consideration to Approve the April 10, 2018 Regular Meeting Minutes Committee Member Clift stated that under Regular Business item 2.A., it states the committee defined a scope of work, but he doesn't remember the committee defining this.

Chairman Bahringer agreed and asked that the paragraph be removed.

Committee Member Clift moved to approve the amended minutes.

Vice Chair Dean seconded the motion.

Motion Approved Unanimously: 5-Ayes, 0-Nays, 0-Absent

B. Discussion and Consideration Regarding the Wastewater CIP List

Chairman Bahringer introduced the item and asked General Manager Jerry Gruber to give a brief update on this item.

General Manager Jerry Gruber introduced the Wastewater CIP list and gave a brief summary of the evolution of the standing committee.

District Engineer Bob Gresens provided the committee with a brief summary of the Wastewater CIP list.

The committee asked Bob Gresens questions relating to the Wastewater CIP list.

Public Comment: John Martinez Paul Reichart

Vice Chair Dean said it would be beneficial if John Allchin provided a tour of the Wastewater Treatment Plant, so the committee can understand the projects on the Wastewater CIP list.

General Manager Jerry Gruber agreed and suggested they do one tour of the Wastewater Treatment Plant with John Allchin.

Chairman Bahringer suggested having the tour about an hour before the next meeting.

Chairman Bahringer suggested having the phoenix plan as a future agenda item.

Wastewater Supervisor John Allchin provided the committee with a brief summary on outdated equipment and items that need to be addressed at the Wastewater Treatment Plant.

Public Comment: Paul Reichart Chairman Bahringer suggested the committee recommend staff solve item # 1A, 1B, and 1C on the Wastewater CIP list, and if PGE is the selected vendor to partner with, the committee authorizes them to do so. He also suggests reformatting the CIP list, as discussed. The committee agreed.

Chairman Bahringer suggested a PGE representative attend a future meeting to discuss the electrical power breaker. The committee agreed.

C. Discussion and Consideration to Establish Regular Meeting Dates & Times Limited to 2 Hours

Chairman Bahringer suggested meeting monthly early on and then quarterly. The committee agreed.

D. Discussion and Consideration of the Measure of Success and the End Date of the Committee

Chairman Bahringer suggested this item be deferred to another meeting. The committee agreed.

### 3. FUTURE AGENDA ITEMS

Chairman Bahringer suggested the following items on the next meeting agenda:

- 1. PG&E attend the Infrastructure committee
- 2. Tour the Wastewater Treatment Plant
- 3. Discuss Regular meeting dates and times

Committee Member Muril Clift left the meeting at 11:52 a.m.

Chairman Bahringer stated the next chairman's report will include a synopses of depreciation schedules and discussion from today's meeting, and Vice Chair Dean will review it.

Vice Chair Dean asked if Paul Reichart's list (attached) was completed projects?

Paul Reichart answered said yes.

The Committee agreed to hold the next meeting on May 30, 2018 from 10:00 a.m. to 12:00 p.m. with the Wastewater Treatment Plant tour starting at 9:00 a.m.

### 4. ADJOURN

Chairman Bahringer adjourned the meeting at 11:55 a.m.

6/13 - 12/14

**CCTV** Phase 1

Raised Manhole Project

Woods Dr Survey Sewer Repair

Fern Canyon Sewer Repair

Avon Creek Sewer Repair

Dover Court Sewer Repair

West Street Sewer Repair

San Simeon Creek Hydrology Survey

Flag Lot outfall line

Fern Canyon Culvert Repair

San Simeon Creek Well Profiler survey

LS B Re pump

LS B Controller

LS 9 Re pump

LS A1 Re pump

WWTF Blower improvements

Spray Field Boundary feasibility

Aeration Basin Improvements

Financial Partnering PG&E

WWTF Clarifier repairs Con Ad

San Simeon Creek Well locations

#### 6/17

Brine Pond Survey and Drainage Improvements San Simeon State Park Waterline Survey

#### Wastewater CIP - Capital Improvement Program

DRAFT - For Discussion Only

5/29/2018 revision

sine No.			Outside Grant Funding		Replacement Operations (O		0	Ranking	Budget Year					Projected					Check o	of total
		Esciment	Furning		operations to				FY17/18	1st Half FY18/19	2nd Half FY18/19	FY19/20	PY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	Tot
		T									Dependent on									1.1
	Minutes and a second seco			100						1000	Proposed Rate						THE REAL	11111	file for the	
_	Wastewater Projects	-	-	-			-	-	+ +		Increase									
	Wastewater Treatment Plant Projects	-		-			-		+ +	\$ 150,000										
1	Influent screen, support platform design, & installation	-		-	R/O	20 80		1	1 1	\$ 150,000	\$ \$0.000									5 1
2	Electrical engineering design & cost estimate for WWTP's main incoming power breaker & MCE work			-		20 80		2	+ +		3 30,000	\$ 25,000						110100000000000000000000000000000000000		5
4	Incoming power supply monitoring system Neutral wire installation from PG&F_provided delta to wye main replacement transformer to main MCC				8	29 80		1				\$ 20,000						1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.		\$
SA	Replace WWTP main power supply breaker and auto-transfer switch, (or, do project 58.)					20 80		1		Constraint and the		\$ 30,000		(A		2.871				\$ 1
58	Replace main incoming power Motor Control Center with Y-configuration supply; (or, do project SA)				R	20 80		1				\$ 300,000				A STREET				\$ 30
6	WWTP Update BNR Modeling Update & Value Engineering (early half of FY)		-	and the second second	X/R/O	20 20		1		12 12 13	\$ 40,000	2								5 4
7	Aeration tank baffles, anoxic mixers, & ML recirc system (later half of FY)				R/O	20 80		1			\$ 40,000									\$ 15
8	Automate aeration D.O. control system (CVs at air headers, press control @ main air header, new DO probes)				X/R/O X/R/O	20 20		2	+ +			\$ 100,000 \$ 150,000								5 15
9	Upgrade/replace seration blowers			-	X/H/O	20 20		2	+ +		3 30,000	\$ 10,000								5 1
10	Blower electrical room sir filtration/conditioning for moisture & corrosion control	-	-	-		20 80		2				3 10,000	\$ 200,000							\$ 20
12	Replace main WWIP backup power generator Replace digester catwalk handrallings, clean, and paint		-	-	8	20 80		1		\$ 45,000			2 200,0000							5 4
13	Cathodic protection replacements at digesters	1000	100		R	20 80		3			100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	1	\$ 10,000	in the second	1.000					5 1
14	Plant non-potable 3W improvements & non-potable sprays for screw press					20 80		1		a support of the second		\$ 15,000		And services		and the second				\$ 1
15	Improve grit tank hydraulic capacity (placeholder, insert approx \$10K cost if needed)				X/R/O	20 20		1		0										\$
16	Repair or replace protective surge tank for plant effluent pipeline					20 80		2				\$ 25,000						2 Ma.		5 1
17	Long-term plant upgredes - new sludge digester, flow equalization improvements, denite/phosphorous removal					20 80		1				4 40.000	3 250,000	\$ 250,000	3 250,000	3 250,000	\$ 250,000	\$ 250,000		\$ 1,50
18	Demo and remove old flow equalization tanks in SW comer of plant	-	-			20 80	100	3			\$ 25,000	\$ 40,000								5 1
19	Replace effluent punp (southern pump) Assured effluent (assurements)			-	X/R/O			2			\$ 60,000	5 60.000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 60,000				\$ 30
20 21	Annual electrical & Instrumentation Improvements SCADA System - WWTP - long-term Improvements			-	X/R/O X/R/O	20 20		2			\$ 25,000	\$ 25,000			\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	5 23
22	Scale System : www.in - long-term improvements Effluent P.S. bypess plping					20 80		1				\$ 20,000								5
23	Misci WWTP lab upgrades & Investment in electronic self-monitoring reporting				-		80	1			\$ 10,000		\$ 3,000	\$ 3,000	\$ 3,000	\$ 3,000	5 3,000	\$ 3,000	\$ 3,000	5 4
-	Collection System Projects				The second second					State of the										
24	SCADA System - Collections System - long-term improvements				X/R/O	20 20	80	2			\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	
25	Collection System smoke testing				2		100	2			\$ 50,000					and the second				\$ 1
26	Annual manhole inspections and report on needed corrections (approx. 20% of system/yr)	1000000			The second		100	2			\$ 40,000	\$ 40,000				and the second	-		1	\$ 20
27	Collection System Phased televising & cleaning				R/O		100			I dente de la companya de	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000	\$ 100,000					5 50
28	Collection System Assessment software (E.g. 14 Spatial or other)		-	6044			100				\$ 10,000	2 22 244								
	Collection System Assessment/engineering for repairs			-			100		+ +		\$ 30,000 \$ 50,000	\$ 30,000	\$ 30,000 \$ 50,000		\$ 30,000	\$ 50,000	\$ \$0,000	\$ 50,000	\$ 50,000	5 1
30	Collection System Repairs to reduce I/I & damaged pipe sections	-		-		20 80		1	+ +		\$ 10,000									
31 32	Manhole raising due to street overlays & roadway work Lift Station A (Nottingham & Leighton/Park Hill) new control panel at grade el.	-		-	X/R/O			1			\$ 10,000		10,000	2 10,000	* 10,000	3 10,000				5 1
33	Uft Station A (Notlingham & Leighton/Park Hill) new submarsible pumps, MCC, bypass piping		1		X/R/O	20 20	80	2		State of State				\$ 50,000	\$ 350,000				Constant of the	5 40
34	Uft Station A-1 (Shenwood & Harvey/Marine Terrace) new control panel at grade el.				X/R/O	20 20	80	1			\$ 60,000	A CONTRACTOR				10000 million				5 1
35	Uft Station A-1 (Sherwood & Harvey/Marine Terrace) submersible pumps, MCC, bypass piping	2			X/R/O	20 20	80	2		A CONTRACTOR				\$ 40,000	\$ 225,000			1000		5 21
36	Lift Sation 4 (DeVault PL/Seaclift Estates) VFDs /new elect panel & 3 phase pump motors	1.00		6170	R/O	20	80	3				\$ 25,000	\$ 60,000	1.						5 1
37	Uft Sation 8 improvements (SR Creek/behind Park Hill) new control panel			6170	X/R/O	20 20	80	1				\$ 30,000								5 1
38	Uft Station B - new wet well, submersible pumps, and valve vault (placeholder)	-	-	-		20 20		1				5 60.000			\$ 300,000					5 30
39	Uft Station B - replace existing generator	-		-	X/R/O X/R/O	20 20	80	2	+ +			\$ 300,000								5 30
40	Uft Station 8-1 (Village Ln/Tin City) relocate away from Feb 2017 landalide area (potential 50% FEMA 406 funding)	-		6170	X/R/O			1		-		\$ 75,000		100.000		\$ 35,000	\$ 315,000			\$ 41
41	Uft Station 8-2 (Wood Dr./E. Lodge Hill) new control panel at grade el. Uft Station 8-3 (Green St./W. Lodge Hill) new control panel followed by future submismible pumpi, MCC, bypass piping			0170	X/R/O				1			\$ 90,000		-	\$ 160,000		-	12000		\$ . 25
43	Lift Station B-4 (Green & Gleason/W. Lodge Hill) new submiserible pumps, bypass piping			1000	X/R/O	20 20	80	2						\$ 20,000	\$ 240,000				Contraction of the	5 26
44	Uft station 9 - replace corroded main incoming power breaker					100		1		et la stati	\$ 8,000							and the second	1	5
45	Replacement and New PCs for operators					20	80	2			\$ 10,000				and Manager	\$ 10,000				\$ 3
				-			-	-												
	Wastewater Maintenance Projects (non-CIP)		-				-	-												
	Cleaning of pipelines from headworks to aeration tanks (after screen installation), including cleanout additions			-			100	1		30,000										\$ 1 \$ 1
47	Geaning of pipelines from headworks to aeration tanks (after screen installation), including cleanout additions	-		-	-				1											5 1
48	Cleaning of aeration basins (after screen installation)	-		-			100	1		3 20,000										5
														and the second se						\$
49	Clarifier Repairs (replace eastern drive unit's metallic hubs with non-corrosive hubs)			-		100				\$ 5,000										
49 50	Replace clarifier wear shoes - (western clarifier)							2												\$
49 50 51	Replace clarifier wear shoes - (western clarifier) Western clarifier - Replace wear strips along bottom of tank					100		2	1	\$ 5,000									\$ 30,000	\$ 3
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49 50 51 52 53 54 55 56 57 58 59 60 61	Replace circline ware shoes: (extention clerifier)           Western circline", Replace ware strips also plottom of tark.           Western circline", Replace ware strips also plottom. Star 10 years use           Replace circline", Carlow, ware shoes, skill plates, & sprockets a filer 10 years use           Replace circline", Carlow, ware shoes, skill plates, & sprockets a filer 10 years use           Annual painting of WWTP           Annual painting of This storing fieldines.           Annual painting the Mounted Equipment:           Vehickes and Thieler.           Vehickes and Freigerem.           Vehicke Replacement Freigerem.           Vehicke Replacement Freigerem.           Torubale engingenes replacement program.           Vehicke Replacement Freigerem.           Torubale engingenes registerement and the "Stores".			6045	8/0	20 80 100 20 80 100 20 80 100	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 3 3 2 2 3 3 3 3 4	\$ 5,000 \$ \$ \$ 25,000	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 3,000 \$ 10,000	\$ 25,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 50,000	\$ 3,000 \$ 10,000 \$ \$6,000 \$ 25,000 \$ 15,000	\$ 8,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 7,500 \$ 3,000 \$ 10,000 \$ 15,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
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49 50 51 52 53 54 55 56 57 58 59 60 61 62	Replace circline ware shoes: (extention clerifier)           Western circline", Replace ware strips also plottom of tark.           Western circline", Replace ware strips also plottom. Star 10 years use           Replace circline", Carlow, ware shoes, skill plates, & sprockets a filer 10 years use           Replace circline", Carlow, ware shoes, skill plates, & sprockets a filer 10 years use           Annual painting of WWTP           Annual painting of This storing fieldines.           Annual painting the Mounted Equipment:           Vehickes and Thieler.           Vehickes and Freigerem.           Vehicke Replacement Freigerem.           Vehicke Replacement Freigerem.           Torubale engingenes replacement program.           Vehicke Replacement Freigerem.           Torubale engingenes registerement and the "Stores".			6045 5080M	8/0	20 80 20 20 20 20	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	2 2 3 3 2 2 3 3 3 3 2 3 4 4	\$ 5,000 \$ \$ \$ 25,000	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 3,000 \$ 10,000	\$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 50,000	\$ 3,000 \$ 10,000 \$ \$6,000 \$ 25,000 \$ 15,000	\$ 8,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ 7,500 \$ 3,000 \$ 10,000 \$ 15,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
49 50 51 52 53 54 55 56 57 58 59 60 61 62	Replace during verser shores: (extention clerifier)           Weistern cluffer: - Replace verser shore, sole plotten of rank.           Weistern cluffer: - Replace verser shore, sole plotten, & sprochers after 10 years use           Replace Cluffer during verser shore, sole plotten, & sprochers after 10 years use (extense cluffer)           Annual Processor State (extense cluffer)           Version State (extense cluffer)           Annual Processor State (extense cluffer)           Version State (extense clu				R/0 X/N/O	20 80 20 20 20 20	0 0 100 100 100 100 100 100 80 80 80	2 2 3 3 2 2 3 3 3 2 3 4 4 4 1	\$ \$,000 \$ \$ 25,000 \$ 15,000 \$ 5,000 \$ 5,000	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 10,000 \$ 10,000 \$ 15,000	\$ 25,000 \$ 15,000 \$ 25,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 50,000 \$ 50,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 1,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 7,500 \$ 10,000 \$ 13,000 \$ 15,000 \$ 25,000 \$ 15,000 \$ 15,000 \$ 10,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
49 50 51 52 53 54 55 56 57 57 58 59 59 50 51 52	Replace clarifier verser shores: (eventem clarifier)           Western clarifier - Replace wear strips along bottom of tank.           Western clarifier - Replace wear strips along bottom of tank.           Western clarifier - Replace wear strips along bottom of tank.           Annual gainting of WMTP           Annual gainting of this stom facilities.           Vehicles and Trailer- Mounted Equipment           Vehicles and Trailer.           Provide sequence with new 4800C tust that nerest measion requirements (10 yr loan @ 4.5%)           Vehicles Replacement Program.           Provide sequence regionment program.           Overbade explorement program.           Annual painting of the stresster and of 9.5%!           Annual painting of the stresster strip oportion. @ 1/3 of 23 yr loan payment.           User Fee study (westerwater rates portion)				R/0 X/N/O	20 80 20 20 20 20	0 0 100 100 100 100 100 100 80 80 80	2 2 3 3 2 2 3 3 3 2 3 4 4 4 1	\$ \$,000 \$ \$ \$ 25,000 \$ 15,000	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 10,000 \$ 10,000 \$ 15,000	\$ 25,000 \$ 15,000 \$ 25,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 50,000 \$ 50,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 1,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000	\$ 7,500 \$ 3,000 \$ 10,000 \$ 15,000 \$ 56,000 \$ 25,000 \$ 15,000	\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$
49 50 51 52 53 54 55 56 57 57 58 59 59 50 51 52	Replace during verser shores: (extention clerifier)           Weistern cluffer: - Replace verser shore, sole plotten of rank.           Weistern cluffer: - Replace verser shore, sole plotten, & sprochers after 10 years use           Replace Cluffer during verser shore, sole plotten, & sprochers after 10 years use (extense cluffer)           Annual Processor State (extense cluffer)           Version State (extense cluffer)           Annual Processor State (extense cluffer)           Version State (extense clu		Priorite La	6080M	R/Q X/R/O O	20 80 20 20 20 20	0 0 100 100 100 100 100 100 100 80 80 80	2 2 3 3 2 2 3 3 3 2 3 4 4 4 1	\$ \$,000 \$ \$ 25,000 \$ 15,000 \$ 5,000 \$ 5,000	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 10,000 \$ 125,000 \$ 195,000	\$ 25,000 \$ 15,000 \$ 25,000 \$ 854,000 \$ 253,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 1,981,000 \$ 970,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 969,000 \$ 969,000 \$ 13,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 10,000 \$ 10,000 \$ 309,000 \$ 309,000 \$ 13,000	\$ 3,000 \$ 10,000 \$ 25,000 \$ 25,000 \$ 10,000 \$ 10,000 \$ 1,974,000 \$ 313,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 574,000 \$ 48,000	\$ 3,000 \$ 10,000 \$ 96,000 \$ 25,000 \$ 13,000 \$ 10,000 \$ 10,000 \$ 328,000 \$ 328,000 \$ 328,000	\$ 1,000 \$ 10,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 10,000 \$ 10,000 \$ 13,000	\$ 7,500 \$ 3,000 \$ 10,000 \$ 13,000 \$ 25,000 \$ 25,000 \$ 34,000 \$ 30,000 \$ 219,000 \$ 13,000 \$ 219,000 \$ 13,000 \$ 13,000 \$ 219,000 \$ 13,000 \$ 13,000 \$ 219,000 \$ 13,000 \$ 219,000 \$ 13,000 \$ 13,000 \$ 10,000 \$ 10,0000 \$ 10,000 \$ 10,000 \$ 10,0000 \$ 10,000 \$ 10,000 \$ 10,000 \$	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5
49 50 51 52 53 54 55 56 57 58 58 59 60 61 62	Replace clarifier verser shores: (eventem clarifier)           Western clarifier - Replace wear strips along bottom of tank.           Western clarifier - Replace wear strips along bottom of tank.           Western clarifier - Replace wear strips along bottom of tank.           Annual gainting of WMTP           Annual gainting of this stom facilities.           Vehicles and Trailer- Mounted Equipment           Vehicles and Trailer.           Provide sequence with new 4800C tust that nerest measion requirements (10 yr loan @ 4.5%)           Vehicles Replacement Program.           Provide sequence regionment program.           Overbade explorement program.           Annual painting of the stresster and of 9.5%!           Annual painting of the stresster strip oportion. @ 1/3 of 23 yr loan payment.           User Fee study (westerwater rates portion)				R/Q X/R/O O	20 80 20 20 20 20	0 0 100 100 100 100 100 100 100 80 80 80	2 2 3 3 2 2 3 3 3 2 3 4 4 4 1	\$ 5,000 \$ \$ 25,000 \$ 15,000 \$ 5,000 \$ 5,000 \$ 5,000 \$ 5	\$ 5,000 \$ 7,500 \$ 30,000 \$ 7,500 \$ 1,000 \$ 10,000 \$ 15,000 \$ 195,000 \$ 195,000 \$	\$ 25,000 \$ 15,000 \$ 25,000 \$ 854,000 \$ 253,000 \$ 536,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 1,981,000 \$ 386,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 969,000 \$ 386,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 10,00	\$ 3,000 \$ 10,000 \$ 25,000 \$ 25,000 \$ 10,000 \$ 10,000 \$ 1,974,000 \$ 313,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 574,000 \$ 28,000	\$ 3,000 \$ 30,000 \$ 36,000 \$ 38,000 \$ 15,000 \$ 10,000 \$ 784,000 \$ 328,000 \$ 328,000	\$ 3,000 \$ 10,000 \$ 56,000 \$ 25,000 \$ 15,000 \$ 10,000 \$ 469,000 \$ 13,000 \$ 13,000	5         7,500           5         3,000           5         10,000           5         13,000           5         25,000           5         15,000           5         15,000           5         15,000           5         15,000           5         15,000           5         15,000           5         15,000           5         15,000           5         15,000	\$ 5 5 5 5 5 5 5 5 5 5 5 5 5

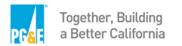
\$ 45,000 \$ 240,000 \$ 1,094,000 \$ 2,221,000 \$ 3,190,000 \$ 3,999,000 \$ 5,973,000 \$ 6,547,000 \$ 7,831,000 \$ 7,800,000 \$ 8,019,000 \$ 8,873,000

																	Revised 5/24/2018							
	Preliminary costs need to be updated & tied to a an ENR/year basis.							Expansion [X],	%	* *	Priority		Budget Year											
					Total Project	Outside Grant	<b>Ops Budget</b>	Replacement [R]	x	R O	Ranking	Mid	and the second second											Check of total
Line/Proj	et de la constance de la const				Estimate	Funding	Account #	Operations [O]				Year	Projected											
No.	Description											FY16/17	FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/23	FY23/24	FY24/25	FY25/26	FY26/27	P/27/28	
								/				5	5	5	5	5	s	5						
	Annual Inflation (Percentage)											3%	3%	3%	3%	3%	3%	3%						
1	Cumulative inflation (Percentage)		1			1000						103%	106%	109%	113%		119%	123%	1000		5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			
	Water Distribution System Projects				1.000								1000			12 10 10 10 10 10	1100000000	1000000000	1100000	A CONTRACTOR OF	in the second			
1	Water Master Plan Amendment (revised fire flow modeling/tank sizing check)	-		-			6080M	R/0/X	20 8	0	2			\$ 35,000										\$ 35,000
2	Stuart Street Tank Replacement (125K gallon welded steel tank with new foundation)		-					19 5974		~	2			a second				\$ 458,000						5 458.000
1	Water pipelines, pumps, and PRV repairs and replacements	-		-				R/O	30	00	2			\$ 25,000	\$ \$0.000	\$ 50.000	\$ 50.000	\$ \$0.000	\$ 50,000	5 50.000	\$ 50,000	\$ \$0.000	\$ 50.000	
4	Piney Way erosion control protection for existing pipeline				1.000		6035	0		100					5 10.000				-		-	2 Accent	3 30,000	5 10.000
6	Study & predesign for pipeline in State Parks wetlands.			1									100000		30,000									- martin
7A	Inspection & spot repair to water transmission main under 5. Parks wetlands area; or do 78					1			20 8	10	1		10.00		11000000	80.000			1111000					80.000
78	Lining of transmission main under 5. Parks wetlands area (alt to relocate ~ 5612K to \$1.16 million), or do 7A				10000				20 8	10	3				1100 000 000	50,000	150,000	816,000			1.0.00 million (1.0.00			1.016,000
8	Pressure zone 2 to zone 7 transmission main @ SR Creek pedestrian bridge			Sector 2					20 8	10	1			120,000		No. 1		1			IN STREET, ILL. TOTAL	A CONTRACTOR OF THE OWNER		120,000
9	Subzone metering of distribution system									100	2				\$ \$0,000	\$ \$0,000					View Constant			5 150,000
10	Pine Knolls - Iva Court zone 1 pipeline expansion							R/O	20 8	10	3					\$ 40,000	\$ 125,000						9.11.11.11.11.11.1	\$ 165,000
11	Replacement of problematic service lines within Leimert										3	-		\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	5 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 100,000
12	Water Meter Replacements & Upgrades							R/O	7	5 25				\$ 50,000										\$ 1,050,000
13	Annual GE updating & upgrades			1.00				R/0		100	3		Contraction (State	\$ 10,000	\$ 10,000		\$ 10,000		\$ 10,000	5 10,000	\$ 10,000	\$ 10,000		\$ 100,000
14	Valve Replacements		1.00								2			\$ 20,000						\$ 20,000	\$ 20,000			
15	Replacement of problematic service lines within Leimert		10 000					CONTRACTOR OF			3			5 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	5 10,000	\$ 10,000	5 10,000	\$ 10,000	\$ 10,000	\$ 100,000
	Water Treatment	1000											10000						7.1					
16	Electonic self monitoring reporting program (yr 1 is software + consulting, yrs 2 + are annual tech support)			-						100	2			\$ 10,000	\$ 1,000	5 1,000	\$ 1,000	\$ 1,000	5 1,000	\$ 1,000	\$ 1,000	\$ 1,000	\$ 1,000	5 19,000
	Tank & Booster Pump Station Projects	10000	1.000														1121				And a local state	1		
17	Rodeo Grounds Pump Station Replacement (aka Zone 2 Booster pump station)	-						R/X	20 8	0	2			\$ 25,000	\$ 101,000	\$ \$00,000	\$ 400,000					1		\$ 1.026.000
18	SCADA System - Long-term Water Portion							R/O	5	0 50	3			5 10.000	\$ \$0,000	\$ \$0,000	\$ 50,000	\$ 50,000						5 210.000
19	Electrical transfer switch and conduit to well SS-3				1000	1		0		100	2				\$ 25,000	Contraction of the second						N	and the second second	\$ 25,000
20	San Simeon well field generator replacement	1.000	1	1				R/O	20 8	0	2					\$ 100,000								\$ 100,000
21	Leimert Tank - Seismic Upgrade							R	20 8	0	3					\$ 30,000	\$ 75,000	\$ 75,000						\$ 180,000
	Water conservation															10 10 10 10 10 10 10 10 10 10 10 10 10 1								
22	Database for water conservation program/tracking with parcel links & APN file conversion							X/R/O	80	20	3			\$ 10,000	5 10,000	In the second second								5 20,000
	Vehicles & Trailer Mounted-Equipment			1000						-					-	1	the second							
23	Replacement Dump Truck (75 K with 6 yr Ioan @ 4% assumed)		1							-	11			5 14,000	\$ 14,000	5 14.000	\$ 14.000	\$ 14,000	5 14.000			A CONTRACTOR		5 84.000
24	Trailer Mounted Air Compressor						6170	0	1 1	00	2			\$ 25,000										\$ 25,000
25	Trailer mounted, small capcity vactor		-			720	6170	0	1	00	2			\$ 55,000				1.		1000000000	F			\$ \$5,000
26	Vehicle Replacement Program					1	1	CONTRACTOR OF THE			2		TOT I	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	\$ 25,000	5 25,000	\$ 25,000	\$ 25,000	\$ 25,000	5 250,000
	Overhead Projects				-																			
27	Finance/billing software upgrade (water est'd @ 50%)	-						R/O	1 1	00	1			\$ \$0,000	\$ 25,000									5 75.000
28	Administrative Offices - est'd water proportion @ 1/3 total of 20 yr loan	-						R/O		00	4			\$ 10,000		\$ 10,000	5 10.000	\$ 10,000	5 10,000	5 10.000	\$ 10,000	\$ 10,000	\$ 10,000	
29	User fee study (water rates portion)	-					6080M	0		00	1		\$ 30,000	2 10,000	2 30,000	2 10,000	2 10,000	y 10,000		-	-			5 30,000
-		-	-							-			-										20-21-5	
						subtotal	water project	s - noninflated \$/yr				5 - 1	\$ 30,000	5 514,000	\$ 651,000	\$ 1,250,000	\$ 1,200,000	\$ 1,749,000	\$ 350,000	\$ 136,000	\$ 136,000	\$ 136,000	\$ 136,000	5 6,258,000
																							1	-
							Prior	ity Level 1 projects:				5 -	\$ 30,000	\$ 234,000	\$ 239,000	\$ 294,000			\$ 214,000			5 -		\$ 1,439,000
							Prior	ity Level 2 projects:				5 -	5 -	\$ 220,000	\$ 272,000	\$ 746,000				\$ 96,000	\$ 96,000			\$ 2,818,000
								ity Level 3 projects:				5 .	\$ -	\$ 50,000		\$ 200,000			\$ 30,000	\$ 30,000	\$ 30,000			\$ 1,901,000
						1	Prior	ity Level 4 projects:				5 -	5 -	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	\$ 10,000	5 100,000
											1													And the second se

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#### Water Projects

	SWF Projects																	Revised 5/29/2	018
	Preliminary costs need to be updated & tied to a an ENR/year basis.				Expansion [X],	* *	*	Priority											
		Total Project			Replacement [R]			Ranking											Check of total
Line/P		Estimate	Funding	Account#	Operations [0]	* *	*												
	Description				-	XR	0		FY17/18	FY18/19	FY19/20	FY20/21	FY21/22	FY22/28	FY23/24	FY24/25	FY26/27	FY27/28	
									5	\$	5	\$	5						
	Annual Inflation (Percentage)								3.0%	3.0%	3.0%	3.0%	3.0%						
	Cumulative Inflation (Percentage)								109.27%	112.55%	115.93%	119.41%	122.99%						
	SWF Projects																		
_	Regular Coastal Development Permitting Support								La Carlo			and in the				ALL AND			
1						20 80		1 5	5 10,000	3 10,000	5 10,000	111111							\$ \$0,000
2			100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100 - 100	1.0	A RELEASED FOR	20 80		1		\$ 125,000				1.1.1					\$ 125,000
	Off-Site RO Concentrate Disposal Mods							122				1							
3	Mods at SWF for trailer fill station (piping & spill contrainment/loading ped)					20 80		1		\$ 200.000						distant of the second	0.11		\$ 200,000
100	Advanced Water Treatment Plant Improvements	and the second se	F F F F F F F F F F F F F F F F F F F						1000			1000	1	1000					
	AWTP pull-bern style covers for outdoor equipment & control panels					20 80		2			5 50.007								\$ \$0,000
5						20 80		1		3 10,000	2 35,000	10000			Contract of the owner of the	Contraction of the	11.1 A 12.5 A 12.5 A	-	\$ 45,000
6			States and			20 80		2	TO THE R.	\$ 25,000	\$ 2,000	5. 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 2,000	\$ 41,000
7			100000000000000000000000000000000000000			20 80		3			\$ 10,000						Contraction of the		\$ 10,000
11.00	Long-Term Improvement Modifications		5									1.200			1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	20.201		a set of the set of	
		Internet of the Internet	In the second second	100	Constrained and a	20	80	3			Contract of the local division of the local		1100	\$ 150,000	5 100 031	\$ 400,000			\$ 1,350,000
9		Contraction of the second second	Marca and	and the second		20			1			Long Contest	Calendary States	2	\$ 75,000	\$ 330,000	1711-1220	Comparison in the	\$ 425,000
10						20	80	3	All and a start of the					1.000	3 75,500	\$ 150.000		Contraction of the	\$ 425,000
1								3	1000		1 175,000								
	2017 Cease & Desist Order Compliance - Non-capitalized Expenses	Contraction of the second second			A CANADA AND A CANADA		1000		1000	1000		1.00		A CONTRACTOR		ALL STREET	1	States and states	
1		New York Transformer Street Street		12	1	20 80		1 1	25.337	10000000				12212 243		10000000000			\$ 75,000
11			Contractorios			20 80		1 3	\$0.000					2010.00		Maxim 18	1.02	18.1	\$ \$0,000
34			1.000	Contraction of the local distance			100	1 1	52,000	\$ 10,000		And the second second							\$ 60,000
15				ALL SOR			100	1		3 35,000				the second					
	Potential Future Project Capital Expenses		1.000															0.0000	
16						20 80		3				\$ 200,000							\$ 200,000
17			States and the second	1.0		20 80		3	120a. 11			\$ 100,000	1.22			10000	100 C		\$ 100,000
	Off Hauling & Disposal of RO Concentrate - Operatinal Costs	COLUMN THE REAL POLY		11.00										- L		1111122			
11										5 63.000	5 63,000	5 63,000	5 63.000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ 63,000	\$ \$67,000
11		Manager of the second statements	Sector Contraction		Contraction ( second		100			\$ 13,200	\$ 13,200	5 13,200	\$ 13,200	\$ 13,200	\$ 13,200	\$ 13,200	\$ 13,200	\$ 13,200	\$ 118,800
20							100			\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 129,600	\$ 1,166,400
	Operational Expenses																		
21			10.000		1000 TO 100		100		Concernance of	\$ 20,000	\$ 20,000	\$ 20.000	\$ 20,000	\$ 20.000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 20,000	\$ 180,000
22	Annual Adaptive management Plan (AMP) monitoring by biologist		3			100	100	5	5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 5,000	\$ 50,000
							1	1	TORN STORE	7100									1000
Not			subotal	water project	s - noninflated 5/yr	1		5	185,000	\$ 415,000	\$ 482,000 !	\$ 2,000	\$ 2,000	\$ 152,000	\$ 752,000	\$ 1,302,000	\$ 2,000	\$ 2,000	\$ 5,268,200
	1 Estimated at 250 KW, & approximately \$1.50 per KW installed		-																
	2 Shown because cost could be 75% federally funded via existing WRDA grant with Army Corps (i.e., Local match would be \$375,000 X, 25 = \$94,000)				ity Level 1 projects:			5		\$ 390,000									\$ 620,000
	Future candidate for Renewable Energy System Credit Transfer (RESCT) to allow applying production towards remote CCSD electrical loads, such as WWTP. Shading indicates the cells included within the totals B.e., totals do not include operational costs nor potential future costs.)				ty Level 2 projects:	-		5		\$ 25,000	\$ 52,000	\$ 2,000			\$ 2,000				\$ 91,000
	snearing indicates the cells included within the totals (i.e., totals do not include operational costs nor potential future costs.)				ity Level 3 projects:	-		5		5 .	\$ 385,000	5 - 1	5 -		\$ 750,000			5 .	\$ 2,585,000
			-	Prior	ity Level 4 projects:			15		3 -			5 .	5 +	5 .	\$ .	3 .	3 -	3 .
							-												



# SUSTAINABLE SOLUTIONS TURNKEY (SST) PROGRAM

#### **PROGRAM GOAL**

PG&E has developed the SST Program to assist selected customers in completing comprehensive and integrated energy projects through a fully managed design-build implementation process. Projects are developed to reduce a customer's utility consumption (electricity, gas & water), operating costs and carbon footprint through an appropriate combination of efficiency, demand management and on-site generation measures. Savings generated from the measures will be used to fund project costs.

#### **QUALIFICATIONS**

The program is focused on larger customers with greater than \$1 Million in combined annual utility costs and/or a minimum of \$750,000 in energy-related capital project opportunities. Candidate customers should confirm acceptance of design-build construction as a delivery method and complete a preliminary review of both CA Government Code 4217.10 – 4217.18 and PG&E's standard Master Services Agreement.

#### **PROGRAM OUTLINE**

The SST Program has a defined process designed to establish a rigorous evaluation of customer opportunities while providing both the customer and PG&E with clear decision points and "off ramps" at each project milestone. Initial assessments and project development are provided at no cost (NC) to the customer. Subsequent design, construction, PM/CM and post-project services will be paid by the customer (C) according to detailed specifications, scopes of work, schedules of values and firm, "not to exceed" cost proposals. While the customer will be expected to pay for services provided, all SST projects are designed to pay for themselves from the cost savings generated from the implemented measures. A summary of the process is provided as follows:

**Project Qualification (NC):** Through a preliminary review of the customer's facilities and utility expenses, PG&E will determine the availability of qualifying energy-related projects. Concurrently, the customer will confirm the viability of design-build construction and at least a preliminary level of comfort with CA GC 4217 and PG&E's Master Services Agreement.

**Feasibility Assessment (NC):** In collaboration with the customer, PG&E will conduct a Feasibility Assessment to determine the viability of an SST project. This work will include a review of utility bills, a survey of customer facilities, systems and methods of operation and a preliminary economic analysis. The findings of the assessment will be detailed in a Feasibility Report which will identify potential energy/water-saving measures with engineering estimates for utility savings, cost savings, incentives, construction costs and potential funding options.

**Investment Grade Assessment (C):** Candidate measures from the Feasibility Assessment that are mutually approved will be further evaluated for implementation in the Investment Grade Assessment (IGA). The IGA work effort will include additional site visits to assess equipment/systems, set data loggers and fully

The information contained herein is confidential and proprietary. It is provided solely for the use of the intended recipient and may not be used or distributed without the permission of Pacific Gas and Electric Company characterize methods of operation for all systems and environments. Solutions for each measure will be fully developed including specifications, detailed scopes of work and ~ 50% design documents. Contractor packages will be developed and a "best-value" RFP will be conducted with qualified installation contractors to ensure competitively sourced construction costs. The findings will be provided in the IGA Report containing a detailed description of each measure, supporting documentation for all utility and engineering calculations and detailed financial analysis including savings, incentives, construction cost and models for ROI, Cash Flow, SIR and Total Life-Cycle Cost (TLCC). Funding and/or financing options will be evaluated and presented to the customer for consideration. The IGA Report will also include a firm, fixed "not to exceed" proposal for implementation accompanied by detailed openbook accounting of all costs and mark-ups, an estimated implementation schedule and a preliminary schedule of values.

**Project Implementation (C):** Design-Build construction of all measures selected by the customer for implementation. PG&E will provide all construction and related services to complete the project including final design, drawings and specifications, submittals/approval, permitting, PM/CM, testing, manuals and operator training.

**Commissioning, Acceptance and Incentives (C):** PG&E will complete all postconstruction tasks required for project close-out and customer acceptance including commissioning of all equipment and/or systems, "as-built" drawings and all associated documentation. PG&E will complete the measurement and verification (M&V) for each measure as appropriate and will complete final coordination of all related incentives to ensure timely payment is received from the utility.

#### **FUNDING AND FINANCING**

All SST projects are developed to pay for themselves entirely from the generated savings. SST projects may be funded from any combination of sources, including customer budgets, low-interest energy efficiency loans and/or 3<sup>rd</sup>-Party project financing. PG&E will provide all supporting calculations, applications and project packages to assist the customer in coordinating and securing the best possible funding solution for the project, including conducting competitive solicitations from qualified 3<sup>rd</sup> party financiers.

#### **PROJECT APPROVAL AND COMMUNICATION**

By design, the SST process supports the series of approvals that are required before any project can be implemented. PG&E collaborates with the customer to develop strategies and materials for each stage of approval to ensure the project is thoroughly and accurately represented to staff, management and the Board or Council. As appropriate for each customer, this work includes staff reports, supporting documentation, presentation materials and attendance at the associated meetings. Finally, a communication plan will be developed in conjunction with the customer to maximize the value and impact of the successful project.