



CAMBRIA COMMUNITY SERVICES DISTRICT

Harry Farmer, Chair of the Resources & Infrastructure Committee, hereby calls a Special Meeting pursuant to California Government Code Section 54956. The Special Meeting will be held: **Tuesday, December 10, 2019, 3:00 PM, 1000 Main Street Cambria, CA 93428**. The purpose of Special Meeting is to discuss or transact the following business:

NOTICE OF SPECIAL MEETING

CAMBRIA COMMUNITY SERVICES DISTRICT RESOURCES & INFRASTRUCTURE COMMITTEE

**Tuesday, December 10, 2019
3:00 PM
1000 Main Street Cambria, CA 93428**

Copies of the staff reports or other documentation relating to each item of business referred to on the agenda are on file in the Office of the Commission Chairperson, available for public inspection during District business hours. The agenda and agenda packets are also available on the CCSD website at www.cambriacsd.org. The District Office hours are Monday - Thursday, and every other Friday from 9:00 a.m. through 4:00 p.m. Please call 805-927-6223 if you need any assistance. If requested, the agenda and supporting documents shall be made available in alternative formats to persons with a disability. The Commission Chairperson will answer any questions regarding the agenda.

- 1. CALL TO ORDER**
- 2. ESTABLISH QUORUM**
- 3. CHAIRMAN'S REPORT**
- 4. AD HOC SUB-COMMITTEE REPORTS**
- 5. PUBLIC COMMENT ON AGENDA ITEMS**
- 6. CONSENT AGENDA**
 - A. Consideration to Approve the November 19, 2019 Regular Meeting Minutes
- 7. REGULAR BUSINESS**
 - A. Receive Report from Wastewater Supervisor John Allchin and Water Supervisor Jim Green on the Presentations from the Companies being Considered for the CIP Project Plan

- B. Discuss Criteria for Selection of Company for the CIP Project Plan and Consideration of Recommendation to the Board
- C. Review Recommendations from the Board and Revise the Mission Statement, Goals and Objectives to be Resubmitted to the Board as the 2020 Mission Statement, Goals and Objectives
- D. Discussion and Consideration of 2020 Resources & Infrastructure Standing Committee Regular Meeting Dates

8. FUTURE AGENDA ITEMS

9. ADJOURN



RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
Tuesday, November 19, 2019 - 3:00 PM
1000 Main Street, Cambria, CA 93428

MINUTES

A. CALL TO ORDER [0:00]*

Chairman Farmer called the meeting to order at 3:02 p.m.

B. ESTABLISH QUORUM [0:00]

A quorum was established.

Committee members present: Harry Farmer, Karen Dean, Tom Gray, James Webb and Brad Fowles

Absent: Paul Nugent

Staff present: General Manager John F. Weigold IV.

Public present:

Allan Dean
Crosby Swartz
Laura Swartz
Leslie Richards

C. CHAIRMAN'S REPORT [0:00]

Chairman Farmer reported on the following topics:

--R&I Committee advisory role in update of "Stage" declarations for water conservation.

--R&I Committee Mission Statement, Goals and Objectives to be postponed to December meeting.

--Upcoming meetings of staff with Johnson Controls, PG&E and Jacobs Engineering regarding wastewater/water projects.

D. AD HOC SUBCOMMITTEE REPORTS [0:09]

Report by Vice Chair Dean on work of Urban Water Management Plan update Ad Hoc Committee.

Public Comment:

Leslie Richards

1. PUBLIC COMMENT [0:13]

Public Comment:

Leslie Richards

2. CONSENT AGENDA [0:16]

A. Consideration to Approve the October 22, 2019 Special Meeting Minutes

Motion to approve the minutes.

Motion by: Vice Chair Dean

Seconded by: Member Webb

The motion was approved 4-Ayes (Dean, Gray, Webb, Fowles), 0-Nays, 1-Absent (Nugent)

3. REGULAR BUSINESS [0:17]

A. Progress Report from the Ad Hoc Committee on the UWMP Update
[0:170]

No action: Report delivered during "Ad Hoc Committee Reports" earlier in meeting.

- B. Discuss the Resources & Infrastructure Committee members willingness to continue serving the second term of their position and forward the information to the CCSD Board of Directors
[0:17]

Members present polled on their willingness to stay on R&I Committee. All stated their intention to do so. Vice Chair Dean informed Committee that absent member Paul Nugent also intends to remain.

- C. Receive update from the general manager on the presentations by the companies being considered by the District for the CIP Project Plan **[0:20]**

General Manager Weigold delivered an update report on this topic.

- D. Discuss and consider establishing the criteria to be used by the district in deciding on a company to work with on CIP Projects and to consider forwarding the committee's recommendation of the criteria to the Board of Directors
[0:23]

Public Comment:

Leslie Richards
Crosby Swartz
Laura Swartz

Item 3D is continued until December R&I Committee meeting and receipt of report from Wastewater System Supervisor John Allchin.

- E. Discuss and consider Forming an ad hoc subcommittee on water conservation and gray water use **[0:49]**

Public Comment:

Leslie Richards

Motion: To appoint Chairman Farmer and members Webb and Brad to an ad hoc subcommittee to investigate potential conservation and retrofit measures, as well as gray water use.

Motion by: Member Gray

Seconded by: Vice-chair Dean

The motion was approved 4-Ayes (Dean, Gray, Webb, Fowles), 0-Nays, 1-Absent (Nugent)

4. FUTURE AGENDA ITEMS [1:06]

See Chairman's Report (on Mission Statement, Goals and Objectives) and Item 3D (selection of Company for CIP projects) for items placed on December 2019 Agenda. No further future agenda items were proposed.

5. ADJOURN [1:10]

Chairman Farmer adjourned the meeting at 4:12 p.m.

*** Time on recording (hrs:mins)**

RESOURCES & INFRASTRUCTURE COMMITTEE MEETING SIGN-IN SHEET

Meeting Date: November 19, 2019

Name	Name
Crosby Swartz	
Laura J. Swartz	
Paul Swartz LESLIE RICHARDS	
Alle M. N.	
JIM WEBB	
Karen Dean	
John Weigold	
Tom Gray	
Kathy Jenner	
BRAD FOWLES	

November 15, 2019

Mr. John Allchin
Wastewater Systems Supervisor
CAMBRIA COMMUNITY SERVICES DISTRICT
5500 Heath Lane
Cambria CA 93428

RE: Investment Grade Audit Proposal – REVISED TO INCLUDE ALL DISTRICT FACILITIES

John:

First, thank you for all of the time and work invested by the members of the Cambria Community Services District (CCSD) team. This collective input has been instrumental in the successful completion of our efforts to date. It has been a pleasure working with each of the team members on this exciting opportunity.

On behalf of PG&E, I am pleased to provide the following proposal for the next step in our Sustainable Solutions Turnkey (SST) Program – the **Investment Grade Audit (IGA)**. As requested by CCSD, the previous IGA Proposal dated May 6, 2019 has been revised such that the scope and cost now include all district facilities as reflected in the **Table 1** below.

As we have previously discussed, the IGA is a detailed validation of the Energy Conservation Measures (ECMs) outlined in our **Preliminary Energy Assessment** plus those facilities added to scope at the recent request of the District. The benefits of the IGA for CCSD remain valid:

- **Technical validation** of the ECMs including 30% design and specification documents
- **Collaborative engagement** with CCSD staff on solution development, design & equipment selection
- **Condition Assessment** of all CCSD facility assets to inform CIP planning
- **Financial analysis** to confirm savings, funding sources and available grants or incentives
- **Firm fixed-cost implementation proposal** of the mutually developed ECMs

Please review the information provided below. Do not hesitate to reach out if you have any questions or needs for additional information.

Thank you again for the opportunity to be of service to CCSD. We look forward to working with the extended team to deliver a successful project.

Respectfully submitted,

PACIFIC GAS AND ELECTRIC COMPANY

Brent

Brent R. Patera
Senior Business Development Manager
Turnkey Energy Solutions

November 15, 2019

Cambria Community Services District

5500 Heath Lane
Cambria CA 93428
Attn: John Allchin

The SST Program has been developed to assist customers in completing comprehensive energy and infrastructure projects which enhance facility performance while reducing the associated operating cost and environmental footprint – delivered through a single end-to-end turnkey process. This means that customers can complete significant facility improvement projects with a minimum of impact on their internal resources.

The program offers the Cambria Community Services District all of the services required to complete a successful project that would otherwise have to be procured by the District on a piecemeal basis:

- Integrated development, engineering and installation services
- Equipment, material and contractor procurement
- Project, construction and safety management
- Commissioning, start-up testing, documentation and operator training
- Funding procurement assistance, including available grants and low-interest financing
- Supplemental Facility Condition Assessment (FCA) Services

As the next step in the process, the PG&E Sustainable Solutions Turnkey (SST) Program is pleased to provide the following proposal for the Investment Grade Audit (IGA).

Proposal for Investment Grade Audit

This proposal includes all costs for professional consulting and engineering services required to complete the Scope of Work defined below. As a result of CCSD's request to expand the scope of the IGA, the Scope of Work below has been revised to include additional Energy Conservation Measures (ECMs) that were originally excluded from the Preliminary Energy Assessment at CCSD's direction. These ECMs have been added to this revised proposal in the following manner:

- Enhancements and/or clarifications for **ECM-2 Influent Lift Station Modifications**
- Enhancements and/or clarifications for **ECM-12 Sewer Lift Stations**
- Addition of
 - **ECM-13 Well Sites**
 - **ECM-14 Booster Stations**
 - **ECM-15 Storage Tanks**
 - **ECM-16 Facilities and Resources**
 - **ECM-17 Tertiary Treatment**
- Note that the assessment of **AMI Water Meters** has been excluded from this proposal at this time due to the lack of sufficient data but can be added as an amendment to this proposal at a later date as requested by CCSD.

ENERGY CONSERVATION MEASURES (ECMs)

PG&E and the SST team will evaluate the twelve (12) Energy Conservation Measures (ECMs) shown in Table 1 below. These ECMs are described in the 100% Preliminary Energy Assessment (PEA) Report titled: "Preliminary Energy Assessment Report for Cambria Community Services District" submitted on February 20, 2019 and revised on May 6, 2019.

Table 1: Recommended ECMs

ID	ECM Description	Site	Process Area	Level of Analysis
1	Influent Flow Equalization	WWTP	Equalization Basins (New)	30% Design
2	Influent Lift Station Modifications (Modified)	WWTP	Influent Lift Station	30% Design
3	Modified Ludzak-Ettinger Process Upgrade	WWTP	Aeration Basins	30% Design
4	Blower System Improvements	WWTP	Blower Room and Aeration Basins	30% Design
5	RAS and WAS Pumping Improvements	WWTP	Aeration Basins	30% Design
6	Sludge Thickening	WWTP	Solids Processing Area	30% Design
7	Electrical Upgrades	WWTP	Control and Generator Building	30% Design
8	Backup Power	WWTP	Control and Generator Building	30% Design
9	SCADA System	WWTP	Communications Systems	30% Design
10	Secondary Water System (3W) Improvements	WWTP	3W Station	30% Design
11	Effluent Pump Station Improvements	WWTP	Effluent	30% Design
12	Sewer Lift Stations (Modified)	Collection	Lift Stations	30% Design
	Expanded ECM's			
13	Well Sites	Water	Supply	Feasibility Analysis
14	Booster Stations	Water	Distribution	Feasibility Analysis
15	Storage Tanks	Water	Distribution	Feasibility Analysis
16	Facilities and Renewable Resources	Various	Admin & General	Feasibility Analysis
17	Tertiary Treatment	WWTP	Treatment	Feasibility Analysis

IGA ACTIVITIES AND DELIVERABLES (GENERAL)

The Investment Grade Audit will consist of the following activities that are integral to all Energy Conservation Measures (ECMs):

- Conduct IGA Kickoff Meeting with CCSD to discuss project goals, scopes, process, access requirements, communication protocol, Utility Tariffs and schedule.
- Acquire updated billing and usage information for Electricity, Natural Gas and Water for Utility Analysis.
- Acquire additional, detailed, ECM-specific information from CCSD as listed by ECM below.
- Conduct additional staff interviews and site audits, including energy metering, to enhance and verify information collected in the Preliminary Energy Assessment (PEA) and to establish utility baselines for each measure.
- Perform all necessary work to develop guaranteed firm fixed implementation pricing for the ECM's identified with a level of analysis of "**30% Design**" in Table 1 (all original WWTP ECM's):
 - Scopes of Work (SOW)
 - 30% (estimated) mechanical, electrical, structural, & instrumental / controls design
 - Competitive contractor selection including packages, site walks, RFI management, submittal evaluation and selection
 - Detailed analysis of utility and other operational cost savings, installation cost, and constructability
 - Specific work required at the ECM level is detailed in the respective sections below.
- Perform all necessary work to develop preliminary pricing for the ECM's identified with a level of analysis of "**Feasibility Assessment**" in Table 1:
 - Preliminary SOW & pricing
 - Design sketches
 - Preliminary analysis of utility and other operational cost savings and constructability
 - Design sketches as required
- Conduct Workshop Meetings with CCSD staff to discuss the findings and recommendations developed during the IGA. The meetings will be organized as follows:
 - Kick-Off Meeting
 - Utility Baseline Review
 - Energy Conservation Measures
 - Initial ECM Development Workshop focused on Feasibility of ECMs
 - 50% Development Review
 - 90% Development Review
 - Construction/Financing Workshop
- Upon conclusion of the IGA, a **Final Report** will be issued which will include:
 - Executive Summary

- Detailed Utility Analysis
- Detailed Development of Recommended Energy Conservation Measures
- Firm Fixed Implementation Proposal
- All supporting design information including basis of design documentation, design drawings, subcontractor & material quotes.
- 30% Design Completion for ECM's identified in Table 1
- Preliminary Construction Schedule
- PG&E Electric Service Upgrade Plan
- Financial Analysis that includes Cost Benefit Analysis and Firm-Fixed Project Cost Estimates
- Funding Options and Recommendations, Including Applicable Grants, Low-Interest Loans, Rebates and Incentives
- **Feasibility Assessment Report** for those ECMs so specified in Table 1

IGA ACTIVITIES AND DELIVERABLES (ECM-SPECIFIC)

1. ECM-1 Influent Flow Equalization

- Assess condition of existing welded equalization tank
- Review plant flow records and confirm size of equalization tank(s)
- Develop hydraulic profile from lift station through new screen, grit removal, and proposed equalization tanks
- Develop cost comparison of rehabilitating existing welded tank with new liner or new coating; constructing two new concrete tanks; and constructing two new glass-coated bolted steel tanks
- Develop preliminary size and description of major equipment items, including blowers and enclosure, transfer pumps, coarse bubble diffusers, valves, process instrumentation, and piping

2. ECM-2 Influent Lift Station Modifications

- Review plant flow records and confirm design criteria for new pumps
- Develop system curve for influent lift station **and four (4) priority collection system pumps**
- Evaluate potential wet well improvements **for influent pumps** including baffling to improve flow distribution
- **Evaluate potential improvements for collection system pumps**
- Review and confirm options for pump type with District staff
- Confirm number and flow range of pumps over a range of motor speeds
- Develop preliminary size and description of major equipment items, including new pumps, process instrumentation including flow meter(s), and piping
- **Develop scope of work and design to integrate collection system pumps into SCADA system**

3. ECM-3 Modified Ludzak-Ettinger Process Upgrade

- Review plant flow and water quality records and confirm design criteria
- Confirm proposed anoxic and aerobic basin size and configuration from prior studies
- Determine recirculation and waste activated sludge flows and aeration requirements under a range of operating conditions
- Develop preliminary piping and mechanical plan for review by District staff

- Develop preliminary size and description of major equipment items, including new anoxic mixer(s), diffusers, valves, process instrumentation, and piping

4. **ECM 4 – Blower System Improvements**

- Determine range of air requirements under various influent loading conditions based on analysis in ECM 3
- Develop description of process instrumentation (including air flow meters and dissolved oxygen probes)
- Evaluate options for upgrading / retrofitting blower system
- Develop scopes of work and preliminary design for recommended upgrades/retrofit
- Develop new sequences of operation to optimize system operation

5. **ECM-5 RAS and WAS Pumping Improvements**

- Perform assessment of visible surfaces within scum pit and RAS wet well
- Develop description of RAS pumps, WAS control valve, flow meters, process instrumentation, piping, valves, scum troughs, and scum pumps

6. **ECM-6 Sludge Thickening Improvements**

- Review plant sludge quality and flow records
- Assess capacity, condition and improvement options for existing thickener and screw press
- Confirm size of proposed glass-coated bolted steel sludge storage tank(s)
- Develop preliminary layout of biosolids handling area
- Develop preliminary layout of roll-off area
- Prepare lifecycle cost comparison of (1) onsite sludge storage and (2) roll-off storage with more frequent disposal
- Review and confirm preferred alternative with District staff

7. **ECM-7 & 8 Electrical Upgrades and Backup Power**

- Evaluate and develop retrofit solution for power requirements (hp and voltage) for new motors and loads in proposed ECMs
- Size and specify replacement solution for standby generator and transfer switch

8. **ECM-9 SCADA System**

- Develop preliminary process and instrumentation diagrams for coordination with SCADA design
- Develop scope of work for all necessary SCADA upgrades

9. **ECM-10 Secondary Water System (3W) Improvements**

- Review condition of existing wet well, pumps, and exposed piping
- Determine design criteria (flow and pressure) for 3W system
- Evaluate cost/benefits of variable frequency drives compared to hydro pneumatic storage
- Review and confirm solution with CCSD staff
- Recommend improvements to existing system or replacement with new pumps and valves

- Develop scopes of work for new pumps, valves, and appurtenances

10. ECM-11 Effluent Pump Station Improvements

- Field review effluent pipeline alignment, air release valves, and other appurtenances
- Confirm design criteria (flow and head requirements) for effluent pumps
- Determine if constant speed or variable speed pumping should be implemented
- Perform preliminary surge analysis on effluent pump and force main system
- Develop recommendations for cleaning pipeline, including provisions for a “pigging” station
- Determine repair and rehabilitation recommendations for existing coatings and equipment
- Develop scopes of work for new pumps, valves, instrumentation, and appurtenances

11. ECM-12 Sewer Lift Stations (B1 and B4)

- Develop design flows for each lift station based on available plant records, review of upstream land uses, and estimated peaking factors
- Confirm design criteria (flow and head requirements) for submersible pumps at each station
- Confirm size (depth and operating ranges) for wet well
- Evaluate dimensions and visible condition of existing wet well to determine if it can be used or a new wet well should be constructed
- Develop preliminary layout of B1 and B4 for review by CCSD staff
- Develop description of new pumps, valves, access hatches, instrumentation, and appurtenances
- Develop scope of work and 30% design to integrate lift stations into existing SCADA system
- Conduct Feasibility Assessment for four (4) additional priority Lift Stations

12. ECM-13 Well Sites (5 Total)

- Investigate adding back-up power for the four (4) non-equipped sites
- Evaluate the San Simeon pumps to determine the best retrofit option to optimize energy efficiency and operational performance
- Evaluate San Simeon electrical transfer switch and electrical panel to determine potential retrofit options
- Evaluate alternatives to tie new backup generation and booster pumps into SCADA system
- Confirm design criteria, develop preliminary scopes of work, and prepare design sketches

13. ECM-14 Booster Stations (3 Total)

- Evaluate Rodeo Grounds and Stewart pumps to determine best retrofit options to optimize energy efficiency and operational performance
- Evaluate alternatives to tie pumps into SCADA system
- Confirm design criteria, develop preliminary scopes of work, and prepare design sketches

14. ECM-15 Storage Tanks (4 Total)

- Evaluate issues related to booster pumps and storage tanks and feasibility of installing two (2) new tanks and booster pumps
- Evaluate alternatives to tie pumps into SCADA system
- Confirm design criteria, develop preliminary scopes of work, and prepare design sketches

15. ECM-16 Facilities and Renewable Resources

- Audit Veteran's Building, F&R Shop, Public Restrooms, Street Lights, and Fire Stations to identify energy efficiency, water conservation, and infrastructure upgrades
- Assess available siting locations for PV generation (ground, roof and/or carport)
- Assess available siting location for Electric Vehicle (EV) charging stations
- Assess opportunities to combine PV and EV charging
- Assess opportunities to deploy energy storage (battery) to minimize demand charges
- Prepare preliminary energy, sizing and economic analysis for confirmed ECMs
- Confirm design criteria, develop preliminary scopes of work, and prepare design sketches

16. ECM-17 Tertiary Filtration

- Evaluate plant hydraulics and treatment requirements
- Evaluate the feasibility of constructing tertiary facilities at the WWTP
- Develop preliminary scope of work and budgetary pricing
- Prepare conceptual sketches
- Prepare preliminary analysis of operational cost savings

COST AND PAYMENT TERMS

The total cost for the work described herein is **\$688,404**. Mobilization in the amount of \$160,000 is due at the time of contract execution. The balance of the cost shall be due and payable under the following options:

- 1) In the event CCSD elects to proceed with completion of the project, the remaining balance of the IGA cost will be carried into the construction contract.
- 2) In the event CCSD elects NOT to proceed with completion of the project, the remaining balance will be due and payable upon receipt of the Final IGA Report or no later than 270 days after IGA contract execution.

ASSUMPTIONS AND CLARIFICATIONS

The following assumptions and clarifications apply to the scope and costs presented in this proposal.

- PG&E assumes that specified facility data/information will be made available in a timely fashion including utility bills, facility construction drawings, equipment data, and operations and maintenance data.

- PG&E will require close coordination with District staff and other personnel in order to successfully complete the IGA.
- The District will arrange and provide access for PG&E and consulting personnel to all facility areas and equipment as needed to complete the work.
- PG&E assumes that appropriate personnel will be available during the site visits and meetings, and will also be available by email and telephone for follow-up consultations.
- Any additional work requested by the District will be priced based on the agreed to SOW.
- The District will provide available data and conduct additional analyses (including flow monitoring, pressure monitoring/recording, laboratory analyses, and other tests) if required for development and/or design. PG&E to provide testing protocols for use in collecting this data.
- PG&E has the right to rely on record drawings provided by the District in developing preliminary plans under the IGA
- PG&E has the right to rely on prior studies provided by the District in determining design criteria and developing preliminary plans

SCHEDULE

PG&E is prepared to begin work on the IGA immediately upon being provided a Notice to Proceed (NTP) from CCSD. Upon receipt of the NTP we will provide a schedule for the IGA work and arrange the kick-off meeting. Excluding review and/or administrative time required by CCSD, the estimated duration of the IGA is eight (8) months from the date of NTP.

Mission Statement:

The Standing Resources and Infrastructure Committee is an advisory group established to advise the CCSD Board of Directors on matters pertaining to the District's physical assets.

Objectives:

- Assess existing resources and gather information regarding the current and future needs of the community.
- Discern needs of the community, and maintain a working relationship with the community and the CCSD Board of Directors.
- Consider and recommend plans of action that meet Infrastructure and Resources needs within the CCSD, or at the discretion of the Board.
- Hold public meetings, tour and evaluate facilities, provide public access to tours.
- Review annual staff reports on regulatory compliance.
- Readdress yearly Resources and Infrastructure Committee goals to ensure they are inline with the District's overall priorities.

Goals:

- Analyze and minimize loss of District water.
- Create inventory management system for physical assets
- Advise Board on lifecycle expectations for physical assets and assist staff with long-term planning.
- Review and amend District conservation programs and identify opportunities.



CAMBRIA COMMUNITY SERVICES DISTRICT
RESOURCES & INFRASTRUCTURE STANDING COMMITTEE
2020 REGULAR MEETING SCHEDULE

January ____, 2020 at ____

February ____, 2020 at ____

March ____, 2020 at ____

April ____, 2020 at ____

May ____, 2020 at ____

June ____, 2020 at ____

July ____, 2020 at ____

August ____, 2020 at ____

September ____, 2020 at ____

October ____, 2020 at ____

November ____, 2020 at ____

December ____, 2020 at ____

Regular meetings are held at the Veterans' Hall Dining Room
1000 Main Street, Cambria CA 93428