



RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
Monday, July 10, 2023 - 2:00 PM
1000 Main Street Cambria, CA 93428

AGENDA

In person at:
Cambria Veterans' Memorial Hall
1000 Main Street, Cambria, CA 93428

AND via Zoom at:
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1. OPENING

A. CALL TO ORDER

- B. ESTABLISH QUORUM
- C. CHAIRPERSON REPORT
- D. AD HOC SUBCOMMITTEE REPORTS
- E. COMMITTEE MEMBER COMMUNICATIONS

Any Committee Member may make an announcement, report briefly on his or her activities, or ask a question for clarification.

- F. DISTRICT ENGINEER REPORT

2. 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. Future agenda items can be suggested at this time. 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.

3. CONSENT AGENDA

- A. Consideration to Approve the May 24, 2023 and June 26, 2023 Special Meeting Minutes and June 12, 2023 Regular Meeting Minutes

4. REGULAR BUSINESS

- A. Recommendation to Proceed with Procurement by Non-Competitive Proposal Pursuant to CCSD Policy 2135 and Select Badger as the Sole Source for Advanced Metering Infrastructure Upgrade
- B. Update on Stuart Street Tanks Project

5. FUTURE AGENDA ITEMS

6. ADJOURN

District Engineer's Report

Project	Description	Status
Coastal Development Permit for the Water Reclamation Facility	Land Use Application DRC2013-00112 for the regular permitting of the Water Reclamation Facility.	District and County staff met to discuss current need to extend the schedule due to the inclusion of Instream Flow Study Task 1 results and the Section 7 consultation. County staff acknowledges will continue to work with the District
Instream Flow Study Task 1	Study of the Lower San Simeon Watershed from Palmer Flats to the lagoon. Follows the California Department of Fish and Wildlife's methodology to establish instream flow needs for critical species and habitat.	The Technical Advisory Committee met to review the Draft IFS on 03/02/2023. IFS documents are now available at www.cambriacsd.org/instream-flow-study Additional scope to include Van Gordon Creek analysis and agricultural pumping from our percolation ponds was requested.
Instream Flow Study Task 2	Completion of the Annual Adaptive Management Plan report and supporting groundwater modeling and monitoring.	The 2022 draft AMP Annual Report can be read at www.cambriacsd.org/instream-flow-study 2023 monitoring continues and additional modeling is in progress to better define lagoon level thresholds and triggers for AMP.
Endangered Species Act Section 7 Consultation	Federal consultation process to ensure that WRF project activities are not likely to jeopardize the continued existence of listed species or destroy or adversely modify designated critical habitats. Includes permitting assistance, reporting, and technical support.	Data from Instream Flow Study Task 1 is being considered to inform this Consultation. This effort is on hold until the additional scope of work for the Instream Flow Study is completed.
San Simeon Well Field (SSWF) Transmission Main Project	Developing a permanent repair of the San Simeon Water Main. This project will also include solutions for the Sewer Effluent Main that runs parallel.	R&I Committee approved to award the engineering and permitting efforts to Cannon Engineering at the June 26 th special meeting. Financial options will be presented to the Finance Committee in July.
Water Meter Replacement Project – AMI	Upgrades system to Advanced Metering Infrastructure (AMI) with new meters and real-time water analytics.	Staff and legal counsel are reviewing the contracting approach Staff presented a sole source approach to R&I on July 10th.

EV Charging Station	Installation and operation of two EV charging stations at the Vets Hall.	Efforts to engage the County to move this station are in process. The possibilities to contract with a project manager to do the design and permitting were discussed.
Cambria Skatepark Project	Design and construction of a new skatepark facility at the old skatepark location on Main St across from the Vets Hall.	The Board approved commencing with the permitting process during the Nov 17 th meeting. The application package was submitted to the County on Nov 28. The Board approved staff to apply for the LWCF grant in the May 25, 2023 special meeting.
Community Park Restroom	Design and construction of a restroom facility located near the Dog Park on the Fiscalini Ranch Preserve.	Generating building specifications to respond to the County comments. Resubmittal to address comments is anticipated by August 2023
Pilot project for Zero Liquid Discharge for Brine in WRF	Pilot study project to test innovative technology for brine reduction with the goal of zero liquid discharge	Next phase is the Piloting agreement. Global Water Innovations is working through the process with the granting agencies. National Alliance for Water Innovations (NAWI) has approved the statement of project objectives. The project has now gone to the Dept of Energy for their review. The piloting agreement would follow afterwards.
Stuart Street Tank Project	Critical water infrastructure project to rebuild the Stuart Street tanks which have reached their useful operational life	Our EPA representative acknowledge receipt of our submitted NEPA CATEX form (the Federal version of a categorical exemption) which is under review. Staff presented an update to R&I on July 10th to explain the need for design and geotechnical efforts.
Coastal Commission Notice of Violation	Coastal Commission issued a Notice of Violation on 4/19/22 regarding CCSD intent to serve letters, water service to Tract 1804, and alleged violations of existing water extractions.	<i>No change from last month.</i> Staff submitted a formal response to the Commission and is awaiting next steps. A follow-up communication was sent to Commission staff on June 20, 2022. No response yet.
Annual Water Supply and Demand Assessment	The AWSDA is required by the California Water Code to analyze current water supply and demand conditions as well as project water supply reliability over the next year.	This report is due to the California Department of Water Resources on July 1. Staff submitted this report on June 27, 2023.

COVID-19 Wastewater Surveillance	The District introduced COVID-19 wastewater surveillance to the County in March 2020. Participating in Centers for Disease Control (CDC) National Wastewater Surveillance System (NWSS) sponsored program till summer 2023. No cost to the District.	Monitoring ongoing.
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RESOURCES & INFRASTRUCTURE COMMITTEE

SPECIAL MEETING
Wednesday, May 24, 2023 – 2:00 PM
1000 Main Street, Cambria, CA 93428

MINUTES

1. OPENING

A. CALL TO ORDER

Chair Dean called the meeting to order at 2:02 p.m.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present: Karen Dean, Derrik Williams, Juli Amodei, James Webb, and Steven Siebuhr. Committee member Mark Meeks was absent.

Staff present: Administrative Analyst Haley Dodson, Utilities Department Manager/District Engineer Ray Dienzo, Program Manager Tristan Reaper, and Jim Green.

Attendees Present: Community members Chris Siebuhr and Allan Dean.

C. CHAIRMAN'S REPORT

Chair Dean reported that she and General Manager McElhenie attended a boat tour of the proposed Chumash Heritage National Marine Sanctuary with the Chumash tribal council.

D. AD HOC SUB-COMMITTEE REPORTS

None to report.

E. COMMITTEE MEMBER COMMUNICATIONS

None to report.

F. DISTRICT ENGINEER'S REPORT

In response to the Board of Directors direction to modify the WRF description, Mr. Dienzo and legal counsel are reviewing the project description. The proposed revisions will be sent to the board provided to the Board of Directors for approval after they are finalized.

Chair Dean suggested committee member Siebuhr could assist with the charging station relocation project because of his previous employment as an electrical engineer. Mr. Dienzo welcomed his help.

Mr. Dienzo states that the annual supply & demand report will come to the R&I committee before it goes to the Board. This will hopefully happen next month.

Committee member Amodei asked about the status of the East Ranch Restroom project. Mr. Dienzo stated. says the civil design group is busy is designing both the skatepark and the restroom. He hopes to get the project moving by late summer or early fall.

G. PUBLIC COMMENTS ON AGENDA ITEMS

Mr. Swartz asks if there has been any investigation of permitting requirements for the Zero Liquid Discharge (ZLD) project, particularly the impacts of any water injection. Mr. Dienzo stated that both RWQCB and Coastal Commission staff are aware of the project. It is likely both RWQCB and Coastal Commission will review the project. The project does not envision any water injection. Jim Green states that the District's current NPDES permit covers any discharge of the product water.

Mr. Dudzik asks about the ad-hoc water storage committee. Chair Dean states that the committee is reviewing all the documents he has suggested.

2. CONSENT AGENDA

A. Consideration to Approve the April 17, 2023 Special Meeting Minutes

Committee member Jim Webb moved to approve the minutes.

Committee member Juli Amodei seconded the motion.

The motion was approved: 4-Ayes; 0-Nays; 0-Abstain; 1-Absent

3. REGULAR BUSINESS

A. Receive Update on San Simeon Water Main and Effluent Project RFP Process and Consider Appointment of R & I Committee Member to Participate in Panel Interviews for Selection Process

Mr. Dienzo provided a review of the water main break under State Park property near San Simeon Creek Road.

CCSD released an RFP for replacing the temporary pipes that included alternative analysis, permitting, and design for the water and sewer line replacements.

CCSD received 3 qualified proposals, and recommends all 3 be interviewed. Mr. Dienzo requests that the interview panel include one R&I Committee member.

Interviews will be May 30 and 31, Mr. Dienzo will present the results of the interviews to R&I at the June 12 meeting. Mr. Dienzo will discuss financing alternatives for this project with the finance committee. This may happen at a joint meeting between the R&I and the finance committee in June. Mr. Dienzo

expects to recommend the preferred candidate to the Board for consideration in July.

Committee member Juli Amodei moved to approve Mr. Williams as the R&I Committee representative to the interview panel

Committee member Steve Siebuhr seconded the motion.

The motion was approved: 4-Ayes; 0-Nays; 0-Abstain; 1-Absent

4. FUTURE AGENDA ITEMS

Chair Dean suggested the following future agenda items.

- June 12 Interview results,
- Bylaws review (time permitting),
- Review of annual water supply & demand assessment

5. ADJOURN

Chair Dean adjourned the meeting at 2:40 p.m.

RESOURCES & INFRASTRUCTURE COMMITTEE

REGULAR MEETING
 Monday, June 12, 2023 - 2:00 PM
 1000 Main Street Cambria, CA 93428

MINUTES

A. CALL TO ORDER

Chairperson Dean called the meeting to order at 2:00 p.m.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present: Karen Dean, Derrik Williams, Juli Amodei, James Webb, and Steve Siebuhr. Committee member Mark Meeks was absent.

Staff present: Utilities Department Manager/District Engineer Ray Dienzo, Program Manager Tristan Reaper, Water Systems Superintendent Jim Green, and Administrative Analyst Haley Dodson.

Staff present via Zoom: General Manager Matthew McElhenie

C. CHAIRMAN'S REPORT

Former District Board member Cindy Steidel passed away unexpectedly on June 11. There will be a remembrance of her at Thursday's Board of Director's meeting.

The R&I Committee will have a special meeting to review proposals for the San Simeon water and wastewater pipeline replacement project. The meeting will be on Monday, June 26 at 10:00.

D. COMMITTEE MEMBER COMMUNICATIONS

No Report.

E. DISTRICT ENGINEER REPORT

District Engineer Ray Dienzo presented the engineering report.

- Mr. Dienzo plans on bringing the skate park CEQA review to the Board of Directors on June 15. The CEQA consultant decided that a categorical exemption is appropriate, and this is what will be brought to the Board.
- Mr. Dienzo anticipates submitting plans for the East Fiscallini Ranch restroom to the County by the end of June. He hopes that the restroom can be constructed by the end of the year.

- The proposals for replacing the San Simeon water and wastewater pipelines have been reviewed. The consultant selected by the interview panel will be presented to the R&I committee on June 26. The consultant's contract should go to the Board in July.

Public comment

- Ms. Dickason asked for clarification on the justification for the Skate Park's categorical exemption. This will be a discussion item at the next Board meeting.

1. PUBLIC COMMENT

Mr. Dudzik was hoping to make a statement during Ad-Hoc committee reports. He looks forward to discussing ideas about long-term water storage with the Ad-Hoc committee.

2. REGULAR BUSINESS

A. Discussion Regarding CCSD Standing Committee Bylaws

Chair Dean highlights the following changes from previous bylaws and emphasizes their importance for committee members.

- Section 1.1 Committee members are expected to stay current on the issues under discussion by the Board of Directors
- Section 1.3 Committee members have no authority to represent the committee or the CCSD in any policy, act, or expenditure.

B. Receive Update on Annual Water Supply and Demand Assessment

Mr. Dienzo and Mr. Reaper gives update on annual water supply and demand assessment.

Public Comment

- Mr. Dudzik asked to what extent the information in the Annual Water Supply and Demand Assessment goes to the County or Coastal Commission, particularly regarding the Coastal Development Permit.
- Dr. Bettenhausen asked if CCSD tracks commercial water use and if there is a limit on commercial water use. She asks if there is a standard for commercial use.
- Mr. Dudzik asks to what extent the Annual Water Supply and Demand Assessment data melds into with the long-term water storage assessment.

3. FUTURE AGENDA ITEMS

Chairperson Dean asked for any future agenda items.

- Committee member Williams asks for a presentation about regular maintenance of District infrastructure.

- Chairperson Dean asked for a report on the status of the Sustainable Solutions Turnkey projects.
- Chairperson Dean suggested the committee receive report from the Ad-Hoc committees
- Meeting minutes from the May 24 special meeting will be included in the next meeting's agenda packet

4. ADJOURN

Chairperson Dean adjourned the meeting at 3:00 p.m.

DRAFT

**CAMBRIA COMMUNITY SERVICES DISTRICT
RESOURCES & INFRASTRUCTURE COMMITTEE SPECIAL MEETING
Monday, June 26, 2023
10:00 AM**

1. OPENING

A. CALL TO ORDER

Chairperson Dean called the meeting to order at 10:00 am.

B. ESTABLISH QUORUM

A quorum was established.

Committee members present: Karen Dean, Juli Amodei, Mark Meeks, James Webb, Derrick Williams, and Steve Siebuhr

Staff present: Utilities Department Manager/District Engineer Ray Dienzo, Program Manager Tristan Reaper, and Administrative Analyst Haley Dodson.

Others present: Larry Kraemer/Cannon Engineering and Michael Kielborn/Cannon Engineering

C. CHAIRPERSON'S REPORT

No Report.

D. AD HOC SUB-COMMITTEE REPORTS

No Report.

E. COMMITTEE MEMBER COMMUNICATIONS

No Report.

F. PUBLIC COMMENTS ON AGENDA ITEMS

Ms. Tina Dickason asked if the WRF project description modification would come to the R&I Committee before it goes to the Board of Directors. The project description modification is a product of a Board ad hoc committee, and therefore will not come to the R&I Committee.

2. REGULAR BUSINESS

- A. Discussion and Consideration of an Agreement for Consultant Services and Cost Estimate with Cannon Engineering for the San Simeon Water Main and Effluent Line Replacement Project and Approve Recommendation to Refer Project and Necessary Budget Adjustment to the Finance Committee

Mr. Dienzo presented the purpose and history of the RFP for engineering design services. Three firms that responded to the RFP were interviewed by a panel from CCSD. Mr. Meeks from the R&I Committee was a member of the interview panel. The interview panel came to a unanimous consensus to recommend Cannon Engineering.

The original budget estimate for this project was \$500,000. Cannon Engineering's cost proposal is for \$585,000. CCSD will need to formalize the budget adjustment.

Mr. Kraemer and Mr. Kielborn from Cannon Engineering were present to respond to Committee member's questions.

Public comment:

- Mr. Crosby Schwartz expressed a preference for alternative 2 in the proposal.
- Ms. Tina Dickason asked if the Committee decided on any of the three alignment options. No decision on a preferred alignment has been made.

Committee member Williams moved to forward the proposal to the finance committee

Committee member Webb seconded the motion.

The motion was approved: 5-Ayes; 0-Nays; 0-Abstain

3. FUTURE AGENDA ITEMS

Chairperson Dean asked for any future agenda items.

Chair Dean requested Ad-Hoc committees report any findings at the next meeting in anticipation of the Board of Directors' strategic planning sessions. The long-term water storage ad hoc committee should discuss if there are any new feasible water storage options. The brine disposal ad hoc committee. should discuss if there are any new feasible brine disposal options.

4. ADJOURN

Chairperson Dean adjourned the meeting at 10:31 am.

CAMBRIA COMMUNITY SERVICES DISTRICT

TO: Resources & Infrastructure Committee

AGENDA NO. **4.A.**FROM: Ray Dienzo, Utilities Department Manager/District Engineer
James Green, Water Systems Superintendent

Meeting Date: July 10th, 2023

Subject: Recommendation to Proceed with Procurement by Non-Competitive Proposal Pursuant to CCSD Policy 2135 and Select Badger as the Sole Source for Advanced Metering Infrastructure Upgrade

RECOMMENDATIONS:

Staff recommends that the Resources and Infrastructure Committee recommend to the Board of Directors that it approve proceeding with procurement by non-competitive proposals for a sole-source acquisition of Badger meter endpoints and software for upgrading District water meters to Advanced Metering Infrastructure (AMI) meters, pursuant to the CCSD Purchasing Policy 2135.

DISCUSSION:

The CCSD's Purchasing Policy 2135 provides for procurement by non-competitive proposals when an item is only available from a single source. Staff is requesting that the Resources and Infrastructure Committee review the process of upgrading existing Badger water meters and recommend to the Board of Directors that it authorize proceeding with procurement by a non-competitive proposal (sole source) based upon the following:

All the water meters installed in the CCSD's water distribution system are Badger meters, many of which have been in service for 15+ years. Each water meter has an electronic transmitter or endpoint attached. These existing endpoints have reached the end of their useful life, with over half no longer transmitting, necessitating a full manual read of the meter. The District needs to upgrade all the water meters in the water system to AMI and upgrade the software for collecting the water-use data.

The existing Badger meters can be upgraded to AMI-capable meters by replacing the current endpoint with one capable of transmitting water-use data over the cellular network, thereby eliminating the need to replace the whole meter. The need for sole source procurement is based on compatibility: the Badger AMI endpoints are the only endpoints compatible with the existing water meters and the accompanying Badger software upgrade. In order to maintain compatibility across the entire water system, the 10% of meters that will be replaced entirely will also be Badger meters sole-sourced from Badger.

Another advantage of the Badger Orion AMI system is its comparability with 100% of the existing equipment. This eliminates the need for replacing meter bodies that are operating accurately, as the system can be easily retrofitted onto current meter bodies. Unlike other alternatives, the Badger Orion system utilizes a cellular network, eliminating the need to construct and maintain

a fixed communication network throughout the community and providing cost savings to the District.

Primary advantages of the Badger Orion AMI system include improved timeliness and consistency in meter readings, providing customers with real-time water usage data, alerts for high consumption thresholds, and rapid leak detection and notification to reduce water losses on the customers' side, therefore saving customers money in a leak event. The system will also provide tampering alerts, enhance distribution system operations, and improve demand projections for future water shortage demand assessments. Additionally, the system will offer backflow prevention events.

Staff seeks a recommendation from the Committee to proceed with procurement by non-competitive proposals pursuant to CCSD Policy 2135 and select Badger as the sole source for the AMI upgrade.

If approved, staff will move through the contracting phase and bring this issue before the Finance Committee for further review. Once the Committee review is complete, the item will be agendaized for Board consideration.

Attachment: Badger products and cost estimate



ORION® Cellular Water Endpoints

DESCRIPTION

ORION® Cellular water endpoints are innovative, two-way endpoints for smart water applications. The endpoints utilize existing IoT (Internet of Things) cellular infrastructure to efficiently and securely deliver meter reading data to the utility in a Network as a Service (NaaS) approach. Leveraging existing cellular infrastructure, the NaaS solution offers all the performance benefits of AMI, while eliminating network-related maintenance and technology concerns and enhancing deployment flexibility.

Cellular endpoints are members of the time-tested ORION family of products from Badger Meter, designed for maximum flexibility. Since 2002, the ORION product family has provided comprehensive Advanced Metering Analytics (AMA) for interval meter reading and data capture using both one-way and two-way communications.

FUNCTIONALITY

Operation: ORION Cellular water endpoints communicate with the encoder and capture 15-minute interval read data and meter status information. The endpoints then automatically broadcast the information, including endpoint status information, via the cellular network to BEACON® Software as a Service (SaaS). ORION NaaS is powered by the proven ORION system for interval data capture and two-way communication. The solution employs cellular endpoints which, as they leverage the public cellular network and require no proprietary gateways to operate, dramatically reduce infrastructure requirements compared to a traditional fixed network. This speeds installations and simplifies expansion as a system evolves.

The endpoints are designed to call in four times each workday and feature a configurable schedule that enables utility customers to select call-in times that best support their processes.

Activation: ORION Cellular water endpoints are shipped in an inactive, non-transmitting state. The Badger Meter IR Communication Device can be used to activate the endpoints and verify the encoder connection. Successful endpoint function can be confirmed through a web app demonstrating that communication has been verified to both the encoder and the network.

Alternatively, the endpoints offer a Smart Activation feature. After installation, the endpoints begin broadcasting data when the encoder senses the first usage of water. No field programming or special tools are required.

Broadcast Mode: ORION Cellular water endpoints broadcast fixed network reading data through the secure cellular network within the service area.

Specific configurations also transmit a radio frequency (RF) message to facilitate troubleshooting in the field. See "[Configurations](#)" on page 2.

Data Storage: The endpoints store 42 days of 15-minute data.



ORION Cellular C endpoint (pictured)

Output Message: ORION Cellular water endpoints broadcast a unique serial number, meter reading data, and applicable status indicators. As an advanced data security measure, each message is securely transported to BEACON SaaS only via private network and never over the public internet.

APPLICATION

Configurations: ORION Cellular water endpoints are multi-purpose endpoints that can be deployed in indoor, outdoor and pit (non-metal pit lid) applications. The electronics and battery assembly are fully encapsulated in epoxy for environmental integrity. The endpoint is available with a connector assembly for ease of installation.

Meter Compatibility: When attached to a Badger Meter High Resolution Encoder, the ORION Cellular water endpoint is compatible with all current Badger Meter Recordall® Disc, Turbo Series, Compound Series, Combo Series and Fire Service meters and assemblies, and with E-Series G2® Ultrasonic, E-Series® Ultrasonic, E-Series® Ultrasonic Plus, and ModMAG® electromagnetic flow meters.

Encoder Compatibility: The ORION Cellular water endpoint is suitable for use with a Badger Meter High Resolution Encoder as well as the following Badger Meter approved three-wire encoder registers that have a manufacture date within 10 years of the current date as long as the encoder has three wires connected to it and is programmed into the three-wire output mode for AMR/AMI: Honeywell® (Elster) ScanCoder® encoder with Sensus® protocol module and evoQ4 meter (encoder output); Master Meter® Octave® Ultrasonic meter encoder output; Metron-Farnier Hawkeye; Mueller Systems 420 Solid State Register (SSR) LCD; Neptune® ProRead, E-Coder®, ARB-V®, and ProCoder; and Sensus iPerl®.



SPECIFICATIONS

Dimensions	5.125 in. (130 mm) (H)
	1.75 in. (44 mm) Diameter at top 2.625 in. (W) x 2.875 in. (D) at base (67 mm (W) x 73 mm (D) at base)
Broadcast Network	LTE-M cellular network (primary communication technology)
	NB-IoT (secondary communication technology for certain variants)
RF Message for Troubleshooting	Where available (see table below) frequency is FCC-regulated 902...928 MHz frequency hopping modulation
Operating Temperature Range	• Storage, Meter Reading and RF Message (for troubleshooting) -40...60° C (-40...140° F)
	• Cellular Communications -20...60° C (-4...140° F)
Humidity	0%...100% condensing
Battery	One (1) lithium thionyl chloride D cell (nonreplaceable)

Construction: All ORION Cellular water endpoints are housed in an engineered polymer enclosure with an ORION RF board, battery and antenna. For long-term performance, the enclosure is fully potted to withstand harsh environments and to protect the electronics in flooded or submerged pit applications.

Wire Connections: ORION Cellular water endpoints are available with in-line connectors (Twist Tight® or Nicor®) for easy installation and connection to compatible encoders/meters. The endpoints are also available with flying leads for field splice connections. Other wire connection configurations may be available upon request.

License Requirements: ORION Cellular water endpoints comply with Part 15, Part 22, Part 24, and Part 27 of the FCC Rules. No license is required by the utility to operate an ORION meter reading system. This device complies with Industry Canada license-exempt RSS standard(s).

Transportation: **WARNING:** The operation of transmitters and receivers on airlines is strictly prohibited by the Federal Aviation Administration. As such, the shipping of radios and endpoints via air is prohibited. Please follow all Badger Meter return and/or shipping procedures to prevent exposure to liability.

Warning: To reduce the possibility of electrical fire and shock hazards, never connect the cable from the endpoint to any electrical supply source. The endpoint cable provides SELV low voltage limited energy power to the load and should only be connected to passive elements of a water meter register.

Caution: Endpoint batteries are *not* replaceable. Users should make no attempt to replace the batteries. Changes or modifications to the equipment that are not expressly approved by Badger Meter could void the user's authority to operate the equipment.

FEATURES

Smart City Ready	Future-proof technology
Communication Type	Two-way
Application Type	Control/Monitor
Endpoint Communication	Configurable call-in schedule, up to four times each workday
Reading Interval Type	15-minute
Encoder Compatibility	Absolute
Fixed Network Reading	✓
Cut-Wire Indication	✓
Encoder Error	✓
Low Battery Indication	✓
Remote Clock Synchronization	✓
Firmware Upgrades	✓

CONFIGURATIONS

Endpoint	Notes
ORION Cellular C	Includes RF and IR messages for troubleshooting
ORION Cellular CS	Secondary carrier; includes RF and IR messages for troubleshooting
ORION Cellular LTE-M	Includes RF and IR messages for troubleshooting
ORION Cellular LTE-MS	Secondary carrier; includes RF and IR messages for troubleshooting
ORION Cellular HLA	Includes IR message for troubleshooting

NOTE: For the ORION Cellular LTE-MP endpoint, see the *ORION Cellular LTE-MP Endpoint product data sheet*, available at www.badgermeter.com.

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Badger Meter

BEACON® Advanced Metering Analytics EyeOnWater® Consumer Engagement



Direct Water Consumption Data

Gives utility customers direct access to their water consumption data, allowing them to easily view, understand and manage their water usage.

Improved Customer Service

Improved customer service and reduced calls to the utility.

Promotes Water Conservation

Promotes changes in behavior related to water conservation.

EyeOnWater® is a consumer engagement application that goes beyond traditional monthly statements to connect utilities and their customers like never before. Available exclusively through BEACON® AMA, EyeOnWater enables utility customers to view and understand their usage profile through easy-to-understand consumption graphs and provides a simple method to establish alerts to better manage their water use.

Literally putting water usage data in the palm of consumers' hands, EyeOnWater mobile apps bring the power of the online portal to your customer's iOS device or Android smartphone.

Features:

- Secure, cloud-based – ISO 27001 certified and SOC 2 examined for security, availability and confidentiality
- Hourly, daily, monthly, and yearly data and charts
- Temperature and precipitation overlays
- Week-over-week consumption comparisons
- Configurable leak alerts by email or SMS text
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**Better information. Better utility management.
Clearly Better.**

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www.badgermeter.com

The Americas | Badger Meter | 4545 West Brown Deer Rd | PO Box 245036 | Milwaukee, WI 53224-9536 | 800-876-3837 | 414-355-0400
México | Badger Meter de las Americas, S.A. de C.V. | Pedro Luis Ogazón N°32 | Esq. Angelina N°24 | Colonia Guadalupe Inn | CP 01050 | México, DF | México | +52-55-5662-0882
Europe, Middle East and Africa | Badger Meter Europa GmbH | Nurtinger Str 76 | 72639 Neuffen | Germany | +49-7025-9208-0
Europe, Middle East Branch Office | Badger Meter Europe | PO Box 341442 | Dubai Silicon Oasis, Head Quarter Building, Wing C, Office #C209 | Dubai / UAE | +971-4-371 2503
Czech Republic | Badger Meter Czech Republic s.r.o. | Mařikova 2082/26 | 621 00 Brno, Czech Republic | +420-5-41420411
Slovakia | Badger Meter Slovakia s.r.o. | Racianska 109/B | 831 02 Bratislava, Slovakia | +421-2-44 63 83 01
Asia Pacific | Badger Meter | 80 Marine Parade Rd | 21-06 Parkway Parade | Singapore 449269 | +65-63464836
China | Badger Meter | 7-1202 | 99 Hangzhong Road | Minhang District | Shanghai | China 201101 | +86-21-5763 5412



BEACON® Advanced Metering Analytics

With ORION® Network as a Service (NaaS)

OVERVIEW

The BEACON® Advanced Metering Analytics (AMA) Solution with ORION® Network as a Service (NaaS) presents a simple, yet powerful solution to bring a new level of utility optimizing information to light.

The solution combines our intuitive BEACON AMA Software as a Service (SaaS) with a NaaS approach using proven ORION Cellular endpoints to deliver greater visibility and control over utility management.

Built-in infrastructure management services and a system design that keeps you in step with technology advancements, allows you to do what you do best—manage your water utility. Plus, built-in consumer engagement tools help enhance customer service, increase satisfaction and reduce costs.

SOFTWARE APPLICATIONS

BEACON Advanced Metering Analytics (AMA)

With tools beyond meter reading and network management, BEACON AMA software offers targeted Advanced Metering Analytics. BEACON AMA software puts interval meter data to work to increase efficiency in day-to-day utility operations and address demands for actionable intelligence.

- **Problem solver** – User intuitive data tools place the power of water consumption data at your fingertips, allowing you to rapidly respond to customer inquiries and quickly resolve—and even eliminate—many billing issues.
- **Customized design** – A customizable dashboard delivers information configured to user security access level in a format matched to the utility's individual requirements, providing data management integrity, security and control.
- **Works with you** – Integration with utility systems—billing, work order, inventory, Customer Relationship Management (CRM) and Geographic Information Systems (GIS)—streamlines and improves utility operations without disrupting the current utility billing interface file transfer process.
- **Find out fast** – Alert conditions can be set to monitor and notify users of system exceptions, including continuous flow, for faster leak detection.
- **Innovation at your service** – Secure, hosted platform with automatic software upgrades ensures the latest technology and features are always available.

EyeOnWater®

The BEACON AMA software suite includes informative consumer outreach tools to improve customer service consisting of the EyeOnWater consumer engagement website, smartphone mobile apps, and email or SMS text alerts, providing easy access to personal consumption data and alerts to potential leaks. With these tools, water consumers are able to view their usage activity, and gain greater understanding and control of what they use and the value you provide.

BEA-DS-00554-EN-10 (August 2020)



HARDWARE

ORION NaaS is powered by the proven ORION system for interval data capture and two-way communication. The solution employs cellular endpoints which, as they leverage the public cellular network and require no proprietary gateways to operate, dramatically reduce infrastructure requirements compared to a traditional fixed network. This speeds installations and simplifies expansion as a system evolves.

- **High resolution data** – ORION Cellular endpoints are programmed to automatically broadcast 15-minute meter reading and event data to the BEACON software up to four (4) times per day. The high resolution data helps identify potential customer-side leaks and other anomalies in water use, and provides the utility with a potent tool to enhance its customer service.
- **Two-way communication** – BEACON AMA software communicates with ORION Cellular endpoints to accomplish a number of system tasks, including requesting additional information from the endpoint and synchronizing the internal endpoint clock. If needed, the ORION two-way system architecture sends upgrades to the endpoint firmware over the air via the network, utilizing the powerful BEACON AMA software suite.
- **Data integrity** – Each message from the ORION Cellular endpoint is securely transported to the BEACON AMA software only via private network and never over the public internet.

SECURITY

BEACON AMA is ISO 27001 certified and SOC 2 examined for security, availability and confidentiality.

TECHNICAL SUPPORT AND TRAINING

Configured for the utility, safe and secure BEACON AMA SaaS provides utilities with regular software updates, long-term support and maintenance. Comprehensive BEACON AMA training courses are available for online or on-site delivery at the time of system deployment. To maintain best practices, a library of online resources and options for group web-based training and support are also available. Once deployed, our technical support specialists can be contacted by phone, email and web to provide ongoing, customer-friendly support. Customized one-on-one training is available (fee applies) to further enhance user expertise.

Additionally, Badger Meter offers extended customized training to further enhance user expertise.

TECHNICAL REQUIREMENTS

BEACON AMA

Developed as a hosted software platform, BEACON AMA is a cloud-based application accessed through a standard web browser. Internet access is required. User logins provide secure access.

BEACON AMA supported web browsers include the latest and next previous major releases of Google® Chrome, Microsoft® Edge, Mozilla® Firefox®, Microsoft® Internet Explorer® (IE 11 only); and Apple® Safari®.

EyeOnWater Consumer Engagement

The EyeOnWater consumer engagement website is a cloud-based application accessed through a standard web browser. Internet access is required. Water consumer user logins provide secure access to their information.

Supported web browsers include the latest and next previous major releases of Google® Chrome, Microsoft® Edge, Mozilla® Firefox®, Microsoft® Internet Explorer® (IE 11 only); and Apple® Safari®.

EyeOnWater smartphone applications require Android 6.0 or iOS 9.1 or later, and can be downloaded from Google Play or the Apple Store.

SMART WATER IS BADGER METER

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Due to continuous research, product improvements and enhancements, Badger Meter reserves the right to change product or system specifications without notice, except to the extent an outstanding contractual obligation exists. © 2020 Badger Meter, Inc. All rights reserved.

www.badgermeter.com



Quotation

940 Riverside Pkwy #30
 West Sacramento, CA 95605
 PHONE: 877-348-0700
 FAX: 707-575-0700

CREATED DATE: June 28, 2023
 QUOTED BY: Kathy Richards
 REQUESTED BY: Ray Dienzo
 PHONE: 805-927-6119
 EMAIL: rdienzo@camabriacs.org

BILL TO: Cambria CSD
 PO box 65
 Cambria, CA 93428

SHIP TO: Cambria CSD
 5500 Heath Ln.
 Cambria, CA 93428

Subject to review: 12/31/2023

SALESPERSON	PROPOSAL SUBJECT	SHIPPING TERMS	PAYMENT TERMS
Kathy Richards	ORION upgrade	Prepay/No Charge For Shipments > \$35,000 FCA Factory/Warehouse	Net 30 Days
QTY	PRODUCT DESCRIPTION	UNIT PRICE	AMOUNT
2200	HR-E LCD encoder register, CF, 5' Twist Tight connector with cable shield, ORION Cell-C Cellular endpoint, 8" Twist Tight connector with cable shield, thru lid installation kit	\$ 197.00	\$ 433,400.00
1800	HR-E LCD encoder register, CF, 5' Twist Tight connector with cable shield, ORION Cell-CS Cellular endpoint, 8" Twist Tight connector with cable shield, thru lid installation kit	\$ 211.50	\$ 380,700.00
400	1" Model 55 bronze disc meter, brz bottom, meter body only	\$ 171.00	\$ 68,400.00
65	3"x17" E-Series G2 Ultrasonic commercial meter, lead free bronze w/test plug, HR-E LCD encoder register, CF, 5' Twist Tight connector with cable shield, ORION Cell-C Cellular endpoint, 8" Twist Tight connector with cable shield, thru lid installation kit	\$ 2,318.00	\$ 150,670.00
1	#68468-001 HR-E LCD programming kit, USB	\$ 200.00	\$ 200.00
3	#68891-001 IR Communication Device	\$ 118.00	\$ 354.00
1	Engagement Fee	\$ 5,675.00	\$ 5,675.00
	One-time fee includes the setup and activation of the District's BEACON AMA portfolio		
1	#66220-201, Billing Integration	\$ 5,880.00	\$ 5,880.00
	One-time fee for work performed by Badger Meter to integrate the District's Billing System with BEACON. This includes the evaluation of the import file into BEACON as well as the configuration and testing of a billing read file from the BEACON environment.		
	Fees charge to the District by its utility billing vendor for an interface file are separate and are the responsibility of the District.		
1	Onsite Training - Getting Started with BEACON AMA #69328-202	\$ 2,625.00	\$ 2,625.00

Sales Tax: 7.25% San Luis Obispo County
 *sales tax charged at rate in effect at time of order, point of delivery
 Est. Lead Time: To be provided at time of order.

SUBTOTAL	\$ 1,047,904.00
SALES TAX	\$ 74,944.99
FREIGHT	
TOTAL	\$ 1,122,848.99



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Kathy Richards	ORION upgrade	Prepay/No Charge For Shipments > \$35,000 FCA Factory/Warehouse	Net 30 Days
QTY	PRODUCT DESCRIPTION	UNIT PRICE	AMOUNT
	Software:		
1	BEACON AMA Advanced Metering Analytics Software suite Internet access is required. User logins provide secure access.	included	
1	EyeOnWater consumer engagement portal and smartphone apps	included	
	#68886-104 Subscription Fee Service Units		
48780	Year 1 quantity Based on 4,065 services x 12 months Subscription Fee includes:	\$ 0.83	\$ 40,487.40
	- BEACON and EyeOnWater licenses and software updates		
	- Cellular communication		
	- Cloud hosting and data storage		
	- Data Security		
	- Field and Technical Support		
	- Network up-time guarantees		

Notes and Assumptions:

If applicable, sales tax and freight, if included on the proposal, is an estimate and will be recalculated based on rates and tax status in effect at time of invoicing.

Actual lead time to be provided at time of order

To aid in processing your order, please include the Quote number on the PO that is submitted for this proposal

Badger Meter provides certification files to help manage meter and endpoint inventory and to maintain meter accuracy data. The standard method of delivery for this information is via electronic mail. Any deviations from our standard format, or any custom file formats, will be considered on a time and material basis.

Due to continuous improvements and redesign of Badger Meter products and technology solutions, Badger Meter reserves the right to provide our newest product solutions as an alternative to the proposed products provided they are in conformance with the requirements of the specifications and do not exceed the prices quoted.

THANK YOU FOR YOUR BUSINESS!!

Estimated ship dates subject to change based upon component availability, as a result of global supply chain constraints or credit review.

This acknowledgement is made subject to the terms and conditions found on our web-site: <https://www.badgermeter.com/terms-and-conditions>

Terms and conditions related to service units, training, and professional services can be found here:

<https://badgermeter.com/service-units-terms-and-conditions>