

## Citizen Advisory Board

### Meeting Agenda

Monday, May 10, 2021 2:00 PM

zoom

Port Townsend, WA 98368



To join online go to: <https://zoom.us/my/jeffcopud>. Follow the instructions to login. Meetings will open 5 minutes before they begin. TOLL FREE CALL IN #: 833-548-0282, Meeting ID# 4359992575#. Use \*6 to mute or unmute. \*9 to raise a hand to request to begin speaking.

Page

#### 1. Call to Order

Per the Governor's Extended Proclamation 20-28 and in response to the COVID-19 Pandemic, Jefferson County PUD is no longer providing an in-person room for meetings of the BOC. All meetings will be held remotely via Zoom until otherwise informed by the Governor. Participant audio will be muted upon entry. Please unmute at the appropriate time to speak. If you are calling in, use *\*6 to mute and unmute and \*9 to raise a hand to request to speak.*

#### 2. Introductions

#### 3. Agenda Approval

#### 4. Public Comment

This public comment period of up to 15 minutes is for any items not on the agenda. During the meeting, the Chair may also permit public comments on other discussion items. Each speaker is limited to 3 minutes.

#### 5. Minutes (Discussion)

#### 6. BOC Update

#### 7. GM Report

#### 8. CAB Business

8.1. Meter Replacement Study Presentation

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[Jefferson PUD Project Plan 5-4-2021.pdf](#) 

[Resolution 2018-015.pdf](#) 

- 9. Subcommittee Reports**
- 10. CAB Open Forum**
- 11. Announcements**
- 12. Communications**
- 13. Future Agenda Items / Calendar**
- 14. Adjourn**

## PROJECT PLAN – ELECTRIC METERING APPROACH

Jefferson Public Utilities District

May 4, 2021

### PURPOSE

The purpose of this project is to help Jefferson Public Utilities District (JPUD) reach a decision about what approach to take to electric metering. This decision includes choices about whether to replace the existing meters and, if so, what technology type and functional requirements to specify in a new metering system. If JPUD ends up deciding to replace the meters, this project should provide guidance for a Request for Proposals (RFP) process.

The decision process is timely because the current metering service contract with Landis & Gear will expire in February 2023, and because the current mixture of metering systems presents persistent operational challenges and inaccurate data.

### GUIDING PRINCIPLES FOR DECISION PROCESS

- The analysis should include credible research and a comparison of alternatives.
- The status quo must be evaluated so the analysis will have a frame of reference. However, truly doing nothing is not a preferred option. This effort should result in one intentional approach to metering, whether it be manual-read, AMR, or AMI metering.
- Among the other alternatives, the analysis should not have a predetermined outcome.
- An effort will be made to engage members of the public in the decision, with transparency and full access to available information.
- Decision criteria will be applied to the designated options.
- The recommendation is to be based on the best available information, following the research, analysis, and discussion.

### BACKGROUND

#### Current Meters

Jefferson Public Utilities District (JPUD) currently relies on about 19,500 meters to provide data for its account billing and system management. It currently has two main groups of meters, with different capabilities and limitations.

#### Landis & Gear (L&G) Meters

- About 16,300 are legacy L&G meters received when JPUD purchased the electric system from Puget Sound Energy in 2013.
- JPUD owns the meters but L&G owns the cell net monitoring inside the meters that allows connectivity to their network. L&G reads these meters under contract for a fixed charge per meter per month. The total contract costs about \$355,000 per year.
- The meters are considered AMR-capable meters because they send out a radio signal. A few drive-by or walk-up reads are needed just because the customer locations are out of range of the L&G collectors. However, most of these meters (about 16,000) are within range of the L&G collectors, and these allow daily reads.

- Approximately half of the L&G meters are mechanical meters, which lose accuracy over time. Because they are old, they understate actual electric usage. A preliminary estimate based on testing in 2018 is that the older mechanical meters understate actual usage by an average of 10%. This estimate should be updated and documented as part of this project.
- As of 2017, about 450 of the legacy meters were failing each year. While the failure rate appears to have declined more recently, a substantial number still must be replaced each year.

#### Itron Aftermarket Meters

- As the L&G meters fail, they have been replaced by Itron meters purchased as replacements. Initially, the spot replacements were new meters, but over the past 2-3 years, used Itron meters have been available for purchase from Overton Power in Nevada, which is going through a meter upgrade project. The purchase of new or used Itron meters was intended as a stop-gap solution, but JPUD now has about 3,050 of them.
- JPUD owns the Itron meters.
- The Itron meters are technically considered AMR meters because they send out a radio signal, but they require drive-by meter reading. Two staff members read them each month, which requires about 8 days per month per employee. As more L&G meters fail and more Itron meters are acquired, the demand on staff time will grow.
- Because these meters require drive-by reading, they cannot provide daily reads.
- The Itron meters are digital meters without moving parts, so they do not lose accuracy over time. As a result, there is a growing inequity between customers who are billed with digital meters and those billed with mechanical meters.

#### Opt-Out Meters

- There are also about 150 walk-up meters with no telecommunications capability. These are used upon request by customers who opt out of the existing AMR metering. “Opt out” customers are charged a monthly fee to recover the extra labor time required for walk-up reads.

### AMR and AMI Technology

AMR stands for Automated Meter Reading, which uses one-way radio communication. It is an older technology, but it is more advanced than “manual read” meters that require a person walk up and visually take a reading on site. Depending on whether it requires drive-by reads or not, AMR can be an efficient way to do one thing: measure electric usage for the sake of calculating customer bills.

There is a newer class of meters referred to as AMI (Advanced Metering Infrastructure). AMI meters have two-way radio communication, so they are not limited to measuring electric usage for billing purposes. They can also be used for operational tasks, such as:

- Remote disconnects and reconnects;
- Outage notifications;
- On-demand reads (for move-outs);
- Daily reads that allow customers (through an app) to track their own usage;
- Power theft notification;
- Hot socket detection (to notify customers of fire hazards); and
- Notifications of low voltage.

In general, the two-way capability of AMI allows more efficient operational control and a real-time view of system demand, including problems and anomalies. With AMI, the system operator does not depend as much on customer call-ins to find out what is happening across the system.

AMI technology also allows greater control of the frequency of the radio signals sent by the meters. The current L&G meters broadcast every five minutes. Newer AMI meters are programmable, and they allow the data to be transmitted as few as two times per day. This feature could reduce the total level of RF (radio frequency) in the County.

## Previous Consideration of Meter Replacement

In 2017, JPUD staff initiated a Request for Proposals process to replace all of the meters with a single type of meter with advanced technology. After concerns were expressed by the public, the Board decided to hold off on the project, pending further research and public discussion. This project is an attempt to step back from an RFP process and first examine the preliminary questions: should the meters be replaced, and if so, with what?

The 2017 effort yielded useful information about potential vendors, options, and the cost of potential replacement systems. JPUD also recently received unsolicited proposals from two firms for replacement metering systems, which gives us further information about options and costs.

A meter replacement program (whether AMR or AMI) includes decisions about not just the new meters themselves, but also the communications technology that allows the meters to send data to and from the JPUD office.

## ALTERNATIVE APPROACHES FOR CONSIDERATION

### 1. Status Quo

Continue current mixture of metering systems, with limited annual meter replacements and a continuation of the service contract. This is the frame of reference for evaluating the other options.

### 2. Full Meter Replacement with Manual Read System

This assumes that the PUD replaces its meters over 3-5 years with a manual read only program, including the necessary staffing, vehicles and equipment.

### 3. Full Meter Replacement with AMR System

This assumes that the PUD replaces its meters over 3-5 years with AMR meters and the communications technology to support their use.

### 4. Full Meter Replacement with AMI System

This assumes that the PUD replaces its meters over 3-5 years with AMI meters and the communications technology to support their use.

For Option 2, we assume that the manual reads would be done by District employees. A self-read metering approach can be considered in conjunction with the other approaches, if it is justified by the remoteness of the customers.

The AMR and AMI alternatives (Options 3 and 4) may require consideration of more than one way to provide the service. For example:

- » The communications technology can rely on existing cell networks, mesh networks, or a hybrid.

- » The District can purchase its own equipment, or a contractor may own the equipment.
- » System operation and maintenance might either be contracted or performed in-house.

This is particularly true for the AMI option. Because it is the most current type of technology, it might also come with the greatest variety of technical and business configurations. The financial analysis might need to explore “sub-options” as part of deciding whether to install AMI at all.

The 2017 proposals give us good information about what types of AMI configurations are available in the current marketplace. AMR and manual-read meters might be harder to evaluate for cost, because they are less-current types of technology, with fewer options available in the market.

## CRITERIA FOR CHOOSING AN APPROACH

### ● **Reliability and Safety**

The chosen approach to metering should allow reliable and accurate service, including well established technology offered by reputable vendors, with support during installation. The approach should also provide for safe collection and transmission of data, including the mitigation of cybersecurity threats.

### ● **Functionality**

The chosen approach to metering should at least provide electric usage data for customer billing purposes. It would be advantageous for the chosen approach also to provide system management capability, such as improved operational control, flexibility, resilience, and data available to customers. The functionality assessment should take into account the potential for long-term changes to the nature of electric demand.

### ● **Compatibility**

The chosen approach to metering should be compatible with the JPUD billing software, both current software and any projected updates from the vendor. If possible, it should also allow compatibility with future investments in the water metering system.

### ● **Cost**

The chosen approach to metering should be available for a reasonable and affordable cost. The cost evaluation includes total up-front installed cost, projected ongoing O&M costs, and projected meter replacement costs. The cost analysis should have a forecast horizon of 20 years or five years beyond the expected useful life of the meters, whichever is greater.

## ROLES AND RESPONSIBILITIES

**Staff:** Provide information to consultant; help research alternatives; prepare staff recommendation to the Board about the metering approach. If the Board chooses one of the meter replacement options, the staff would be responsible for managing the RFP process.

**Consultant:** Analyze financial impact of each alternative; research other impacts; apply criteria to options; prepare presentation to stakeholder committee; facilitate meetings of stakeholder committee; prepare presentation and report containing recommended approach. If the Board decides on a meter replacement program, the consultant would not be involved in a follow-up RFP process.

**Citizen Advisory Board/Stakeholder Committee:** The Citizen Advisory Board (CAB) is a nine-member standing group tasked with providing customer input to major Board decisions. Subject to direction from the Board of Commissioners, the CAB might be part of a separate Stakeholder Committee to review this decision. Alternatively, the CAB could serve as the Stakeholder Committee

itself. Stakeholder Committee members would need to be willing to meet, review preparatory materials, ask questions, and offer their perspective to the staff and the Board of Commissioners on the optimal approach to metering. They would have access to the full range of information relevant to this decision. The total time commitment would be at least two meetings plus preparatory time:

- Meeting #1: Process.
- Meeting #2: Analysis and recommended approach.

If requested by the Board of Commissioners, Stakeholder Committee members may be asked to conduct further review or participate in additional meetings.

**Board of Commissioners:** Make the decision about metering approach and commitment of resources. This decision would be based on the analysis, the consultant recommendation, the staff recommendation, and Stakeholder Committee input. Depending on their decision about the approach, they may also need to make the final selection of a vendor after an RFP process.

## TENTATIVE SCHEDULE (BEST CASE)

Week	Process Tasks	Technical Tasks
April 19-23	April 22 Board reviews project plan	
April 26-May 7	Update project plan	Financial modeling and data collection
May 10-14	May 10 Citizen Advisory Board meets – review project plan	Financial modeling
May 17-21		Financial modeling and options evaluation
May 24-28		Financial modeling and options evaluation, develop preliminary recommendation
May 31-June 4	Staff review of business case analysis and recommendation	Adjustments to model and analysis
June 7-11		Draft presentation to Stakeholder committee
June 14-18	CAB/Stakeholder review business case analysis and recommendation	Begin drafting technical memo on business case analysis
June 21-25		Adjustments to analysis and presentation Continue drafting technical memo
June 28-July 2	Submit draft technical memo to staff	
July 5-9		Edits to draft technical memo
July 12-16	Submit technical memo to Board	
July 19-23	July 20 Board reviews business case analysis and recommendation (follow-up August 3 if needed)	

**PUBLIC UTILITY DISTRICT NO.1  
OF  
JEFFERSON COUNTY**

**RESOLUTION NO. 2018-015**

A RESOLUTION of the Board of Commissioners of Public Utility District No. 1 of Jefferson County, Washington ("the PUD"), Updating and Clarifying the Role of the Citizen's Advisory Board (CAB).

WHEREAS, RCW 54.12.010 states "The powers of the public utility district shall be exercised through a commission..." and

WHEREAS, the Board of Commissioners (Board) approved Resolution 2012-017 on or about the 1<sup>st</sup> day of October 2012; and

WHEREAS, Resolution 2012-017 set forth a policy for establishment of citizen boards, blue ribbon work groups and citizen task forces; and

WHEREAS, Resolution 2012-017 requires all committees established by the Board to be subject to periodic review so as to determine whether the committee and its function continue to be appropriate and necessary; and

WHEREAS, Resolution 2012-028 establishing a Citizen's Advisory Board (CAB) was approved by the Board on or about the 20<sup>th</sup> day of November, 2012; and

WHEREAS, Resolution 2012-028 sets forth that the purpose of the CAB is to provide recommendations on subjects selected by the Board, a process of appointing CAB members, terms and rotation of CAB members, and Board administrative support; and

WHEREAS, on or about the 2<sup>nd</sup> day of September 2014, the Board approved a motion that determined the CAB is a valuable instrument of the Board and should continue indefinitely, the terms and succession of CAB members, and the general process for appointment to the CAB; and

WHEREAS, on or about the 28<sup>th</sup> day of September 2016, the CAB Chair provided a letter to the Board and General Manager requesting clarity of the CAB role and expressing the CAB's desire to undertake projects and tasks both assigned by the Board and not assigned by the Board; and

WHEREAS, after discussion of the September 28, 2016 CAB letter, the Board at its October 3, 2016 meeting directed General Counsel to prepare a resolution superseding the resolutions referred to herein as they relate to the CAB, which would clarify and update the role of the CAB;



WHEREAS, Resolution 2016-019 modifying the policies of the CAB was approved by the Board on November 1, 2016; and

WHEREAS, Resolution 2017-017 further modified the policies of the CAB and was approved by the Board on August 15, 2017.

WHEREAS, The CAB was created for the purpose of providing a mechanism for the Board to obtain the benefits of recommendations, advice and opinions on policy matters from a volunteer committee which may devote the resources necessary for careful consideration of such matters and which will increase citizen participation and input to the Board.

THEREFORE, BE IT RESOLVED, by the Commissioners of the Public Utility District No. 1 of Jefferson County, Washington as follows regarding the Citizen's Advisory Board (CAB):

1. **Purpose:** The CAB provides advisory reports and recommendations to the Board of Commissioners (Board).
2. **Procedures:**
  - A. The General Manager (GM) or his/her designee is the liaison between the Board and the CAB.
  - B. The Board will make its CAB requests through the GM or his/her designee. The Board prioritizes issues to be studied by the CAB. The CAB administers the list of prioritized issues.
  - C. Policy issues may be studied by a CAB subcommittee. CAB members volunteer to be on a subcommittee based on their area of expertise or interest. A subcommittee shall not constitute a quorum of the CAB. Based on unanimous approval by subcommittee members, a subcommittee may invite non-voting members of the public to participate.
  - D. With the advance concurrence of the Board, a Board member may serve in an advisory capacity on a CAB subcommittee.
  - E. The Board recognizes that CAB members come from diverse professional backgrounds. Therefore, at a regularly scheduled CAB meeting, members may introduce topics to be discussed and studied and may recommend prioritization. If agreed upon by the CAB, the GM or his/her designee will submit the topic to the Board for approval and prioritization.
  - F. Interim and final subcommittee reports are presented to the CAB. If the CAB approves, the approved interim or final subcommittee report will be submitted to the CAB President and GM for inclusion in the Board agenda.

**3. Membership:**

- A. The full CAB consists of up to nine community volunteer members – three from each Commissioner District. CAB members are nominated by their respective Commissioner. Nominations must be confirmed by the Board before a nominee may join the CAB.
- B. The Board wishes to maintain stability and institutional knowledge on the CAB while providing opportunity for increased citizen participation. To that end, the CAB members shall have staggered 3-year terms.
- C. As terms of current CAB members expire, each Commissioner will nominate one person for a new 3-year term. The nominee must reside within the Board member's respective district. A sitting CAB member must be nominated by their Commissioner to serve a subsequent term.
- D. Vacancies on the CAB shall be filled by nomination. The Board approved CAB member will serve the remainder of any unexpired term and then may re-apply for a full 3-year term.
- E. CAB member residency within the respective Commissioner District is required. Should Commissioner District boundaries change or should a CAB member move out of their respective Commissioner District, then that CAB member shall be replaced unless otherwise approved by the Board.

**4. Removal of CAB Member:**

- A. At its sole discretion, the Board may remove a CAB member if the CAB member has not performed satisfactorily in carrying out his or her duties, provided the CAB member has first been notified of the Board's concerns and has had a reasonable opportunity to correct the issue. The Board shall have absolute discretion whether its concerns have been adequately addressed.
- B. A CAB member may resign their position by providing written notice to the Commissioner representing the CAB member's district. Their replacement must be nominated following the process in Section 3.D.

5. **Meeting Agenda:** The GM or his/her designee and the CAB Chair shall set the agenda for each CAB meeting based on input from the CAB and with consultation from the Board, as necessary and appropriate.

**6. Manner of Communication:**

- A. Each regular Board meeting agenda that follows a CAB meeting should include a written "CAB Update" that includes current and future CAB activities.

- B. The CAB and its members are an advisory group only, and do not represent the Board.
- C. When expressing their views regarding District business in any venue, CAB members shall make it clear that such views are personal and not those of the CAB or the District.

**7. Administrative Procedures and Support:**

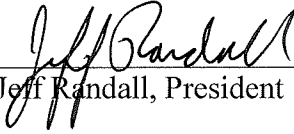
The CAB shall:

- A. Be subject to the Washington State Open Public Meetings Act (RCW 42.30) and Public Records Act. (RCW 42.56). Each CAB member shall complete the trainings that are required by RCW 42.30.205 and RCW 42.56.150. The CAB will be notified when training is available, and each CAB member shall provide a Certificate of Training.
- B. Conduct an annual election of a Chair and Vice-Chair to one-year terms. Current officers will remain in office until new officers are elected.
- C. Conduct a monthly meeting, open to the public at an agreed-upon date and time. The CAB agenda packet will be published on the District website no fewer than two business-days before the meeting.
- D. Be provided an adequate meeting venue and a voice recording system.
- E. Be provided a contract or District staff person to take minutes, and other such support as the Board may approve.
- F. Follow the CAB Operating Guidelines.

Board members will rotate to attend all CAB meetings.

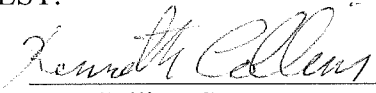
- 8. **Periodic review:** The Board shall review the CAB purpose and effectiveness periodically but, no less than every 3 years.
- 9. **Supersedure:** This resolution supersedes any previous policy, resolution or Board action as they relate to the CAB.

ADOPTED at a regular meeting of the Board of Commissioners of Public Utility District No. 1 of Jefferson County, this 26th day of October, 2018.

  
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Jeff Randall, President

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Wayne King, Vice President

ATTEST:

  
\_\_\_\_\_  
Ken Collins, Secretary

