

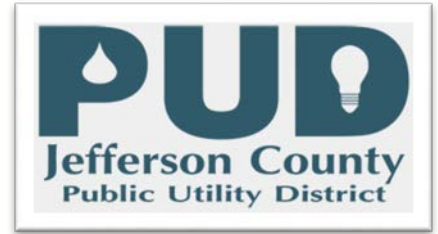
# Jefferson County PUD Advanced Metering RFP Proposal



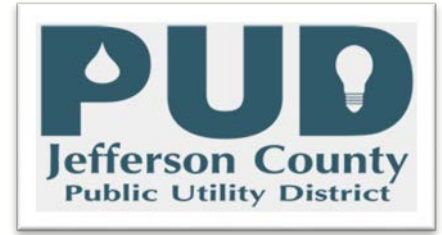
# PUD METERING TODAY

Currently utilize two separate meter reading systems

- » Landis & Gyr reads approximately 16,000 meters via radio frequency and manually
- » PUD reads approximately 2,500 electric meters via radio frequency / drive by system
- » The PUD and Landis & Gyr have overlapping read responsibilities
- » Due to age we are experiencing high failure rates and RF read issues



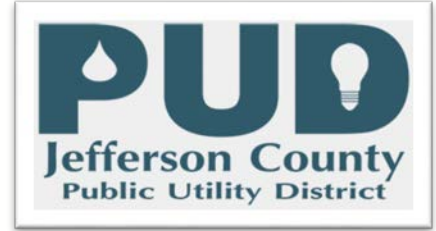
# PUD METERING TODAY



- » Landis & Gyr reading costs \$355,000 annually
- » PUD metering costs approximately \$200,000 annually
- » Annually the PUD replaces approximately 450 failed meters
- » Approximately 60% of the meter population is of the high failure rate, low accuracy, mechanical type
- » An estimated 30% of the meters are not capable of daily reads



# PUD RFP FOR ADVANCED METERING INFRASTRUCTURE

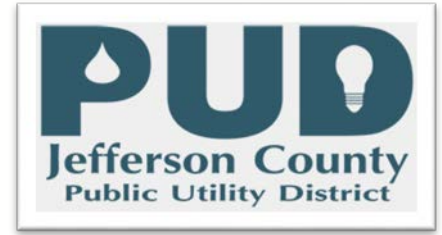


## The Goals of RFP Process

- » Smart grid solution
- » Open to all available technologies
- » Innovative ideas
- » Compliments existing PUD systems
- » State of the art technology
- » Streamlines internal processes



# PUD RFP FOR ADVANCED METERING INFRASTRUCTURE

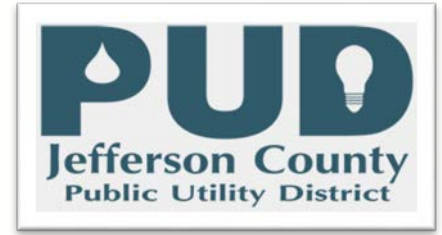


## RFP Responses From Bidders

Company	Meter	Base Bid
Itron	Itron	\$2,135,220.50
Eaton	Itron/Elster	\$2,137,442.14
Sensus	Sensus	\$2,464,033.00
Landis Gyr	L&G	\$2,501,429.00
Honeywell	Elster	\$2,868,436.84
Tantalus	Itron	\$2,903,343.50
Aclara	Aclara	\$3,246,563.49
Aclara	Aclara	\$3,319,877.00
Verizon	GE	\$3,560,363.00



# ADDITIONAL COSTS BASED ON PROPOSALS

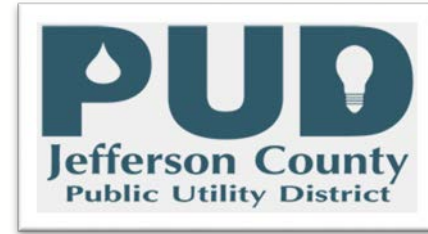


- » Full deployment of disconnect meter
- » Off site data processing
- » Meter Data Management System Interfaces
- » Gold level support
- » Other

Estimated adder to base price \$280,000  
Estimated yearly cost \$100,000



# PUD METERING RFP EVALUATION CRITERIA

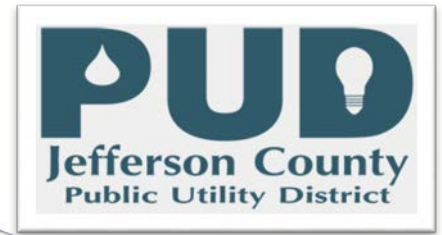


Jefferson County PUD will select the proposal that is judged to be in the best interest of the PUD. The criteria for selection will be based on these factors and the overall proposal from vendors. The life expectancy of the Operating Software and Hardware System is to be at least 10 years from installation to obsolescence, and for the Meters 20 years.

- Availability of equipment
- Software support
- Hardware support
- Warranty Terms and Duration
- Schedule for Implementation
- Maintenance Plan
- Ability to Interface with NISC & Survalent Software Systems
- System & Equipment Training Proposal
- System Complexity
- Total Installed Cost
- Ability to Interface with existing equipment
- PUD personnel familiarity
- Communications
- Computer & interfaces
- Physical Location of equipment
- Ability and ease of Onsite Meter Reads
- Installation ease



# RFP EVALUATION SCORING



25 points Total Cost, including, but not limited to: System and Equipment, Installation, Field Implementation, New Infrastructure, Maintenance, recurring fees and charges, and ratio of function to cost (value engineering).

25 points System and Equipment Features, including but not limited to Third Party Software Interface ability, System Services, Reports, Communication Latency, Upgradeability, Complexity, Reliability, Security, Flexibility

25 points Vendor Confidence, including but not limited to past experience with similar Projects, Ability to deliver a fully functional System, Support capabilities long term, Support capabilities for implementation and startup, Compatibility with the PUD implementation Schedule, Equipment and Parts availability, quantity of third party critical components

25 points Integration with existing PUD infrastructure, including but not limited to interfacing with NISC and Survalent, Utilization of existing Communications, Utilization of existing Hardware, Utilization of existing Meters

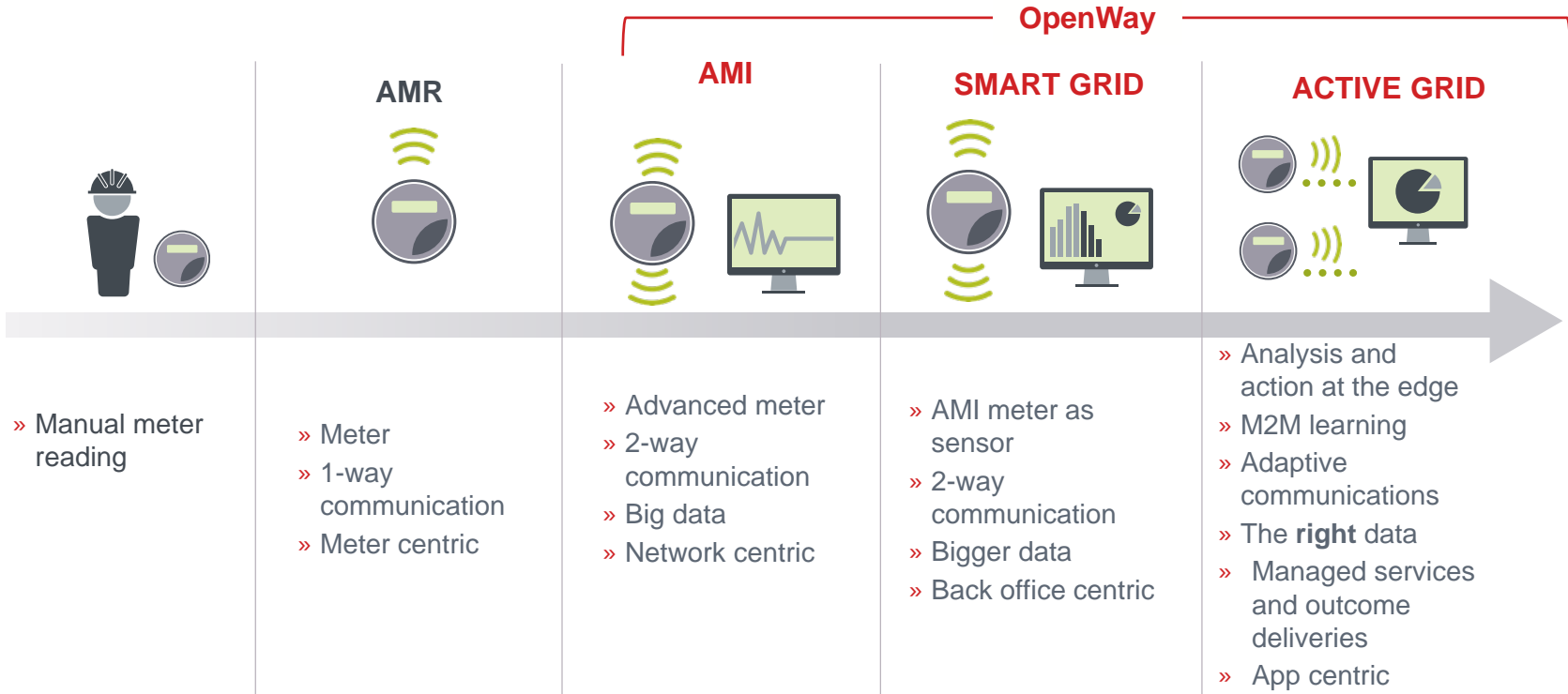
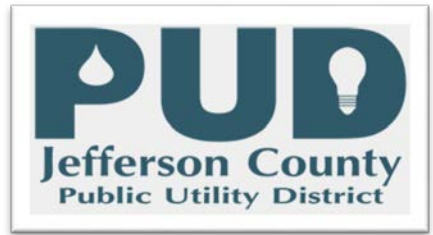


## Evaluation Review Score

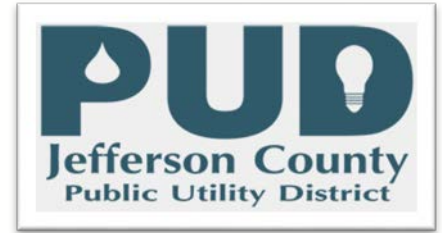
1. Itron Score = 74.25
2. Eaton Score = 57.51



# TECHNOLOGY EVOLUTION



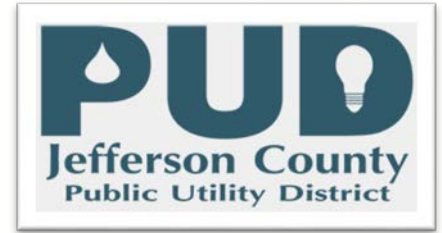
# OPENWAY CENTRON® RIVA METER



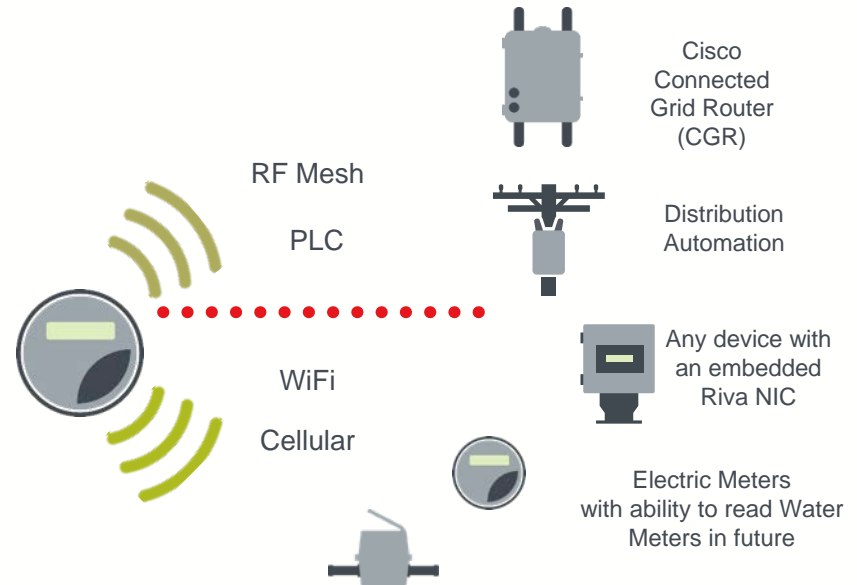
- » Advanced measurement capabilities
- » Energy registers - 12
- » Demand registers - 6
- » Time of Use – register data
- » Load Profile – 8 channels
- » Voltage profile – 4 & 12 channels
- » Over the Air (OTA) upgradeable
- » Remote disconnect switch
- » Outage reporting
- » Advanced computing on-board every meter
- » Advanced communications – RF & PLC
- » Made in the USA



# ADAPTIVE COMMUNICATIONS

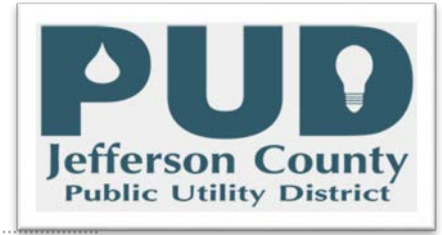


- » Single network solution incorporates three communications technologies — RF, PLC, secure Wi-Fi — in all meters
- » Continuously monitors network for most reliable and fastest communication path
- » Network dynamically self-selects best communication path, from available media and modulation schemes
- » Assured connectivity at highest available speed
- » PLC provides data connectivity for customer opt-out program

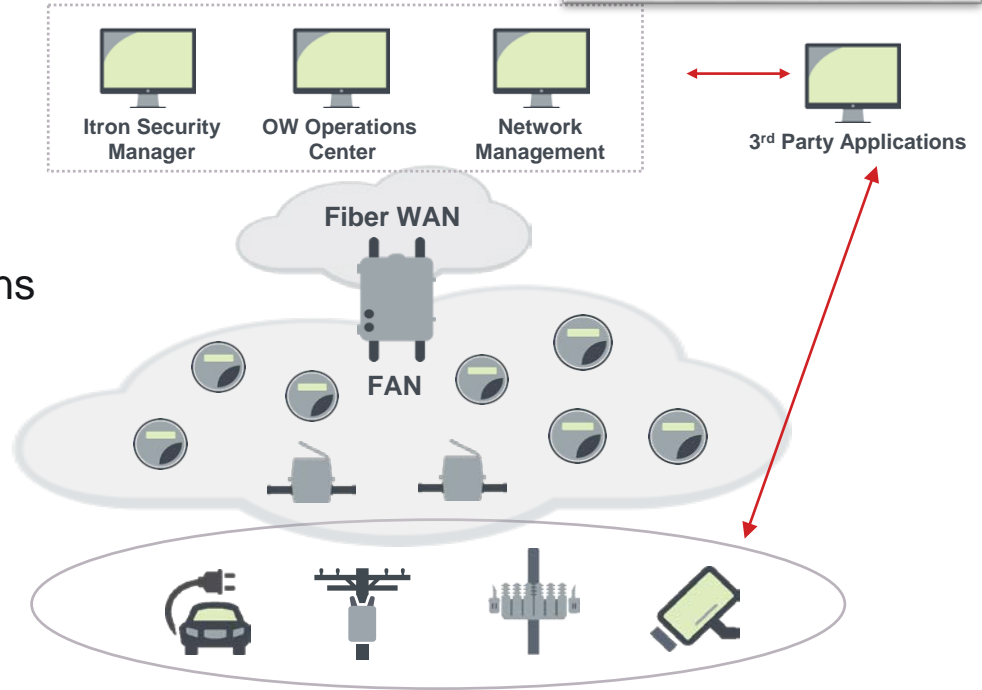


# AMI NETWORK: IS MULTI-PURPOSE

Multiple application network connectivity to endpoints



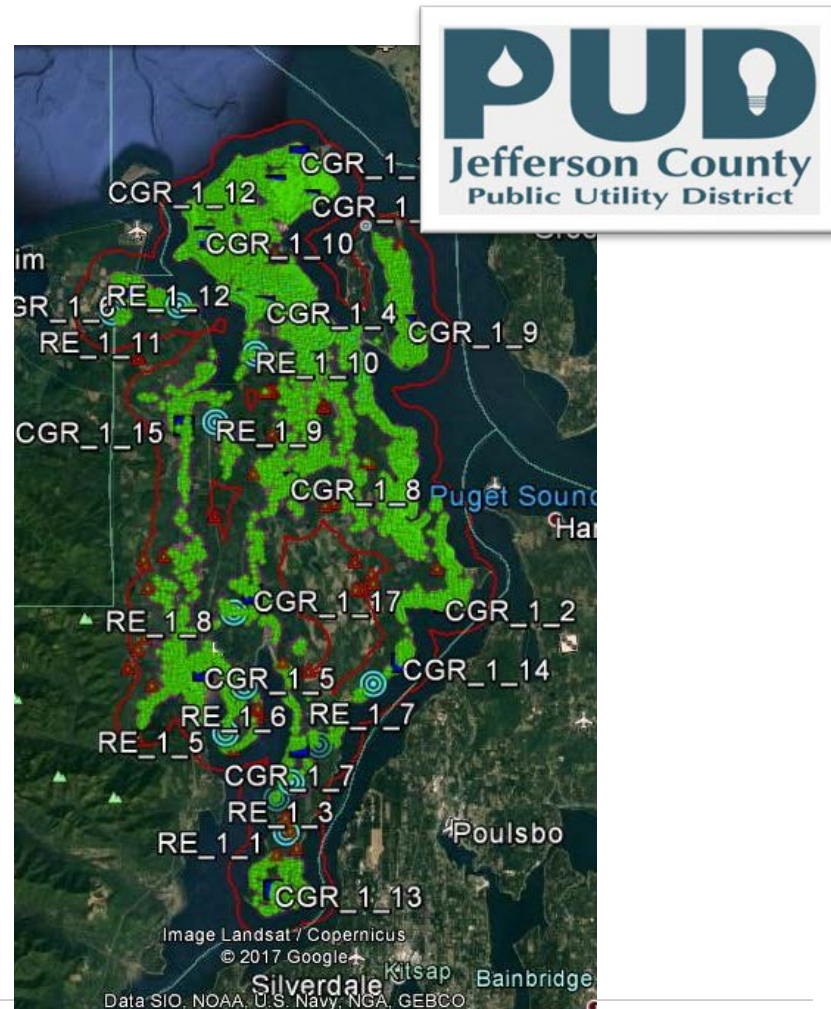
- » Allows unlimited communications for 3rd party application control and management systems that plug and play with the network
- » Direct IP routing to 3<sup>rd</sup> party applications
- » Not dependent on AMI headend software



# OPENWAY RIVA SOLUTION

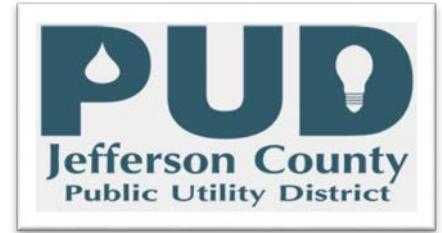
## Devices

- » 19,500 CENTRON Riva meters
- » 17 Connected Grid Routers (CGR)
- » 15 Routing Nodes (range extender)

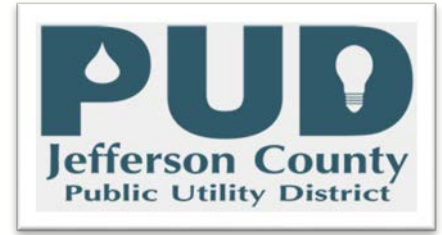


# DEPLOYMENT ISSUES

- » Opt out program
- » Possible meter base repairs/relocation
- » Incorrect and unbilled meters
- » Meter read accuracy
- » Remote disconnect / reconnect
- » Meter exchange issues
  - » Property access
  - » Outages
- » Landis & Gyr
  - » Existing contract
  - » Cooperation
- » Other



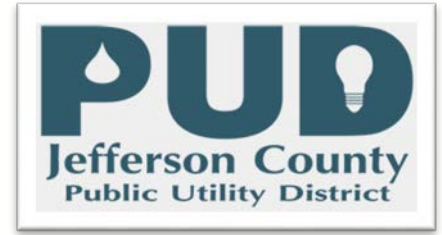
# CUSTOMER OUTREACH



- » Proactive
- » Planned
- » Accurate
- » Timely



# THE PATH FORWARD



- » Board approval
- » Staff to set schedule and outreach plan
- » Project kickoff meeting summer 2017
- » Purchase approximately 5,500 meters
- » Deployment of communications infrastructure
- » Begin deployment of select service districts





# Questions?

