

Request for Proposal

Advanced Metering Infrastructure and Services



The City of Paris - Electricity Department
525 High Street
PARIS, KY 40361

Prepared by Patterson & Dewar Engineers, Inc.
Date: March 13, 2025

Confidential

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Paris, KY Electric Dept. AMI RFP

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1 Introduction

1.1 Project Overview

The City of Paris Electric Department (PED) located in Paris, Kentucky, would like to purchase a new advanced metering infrastructure (AMI) system for its electric meters. Key drivers of the project are to provide accurate and timely billing, improved customer satisfaction, tamper/theft detection, automated connect/disconnect orders, outage and restoration notifications, and to offer additional services to customers, e.g., prepaid and electric vehicle charging rates. PED is soliciting proposals from qualified vendors to design, deliver, and provide services for such a system. Vendor shall furnish all electric meters, RF communication infrastructure, all necessary hardware and software, pre-paid utility service, on-premises/data center hosting, integration between AMI and back-office applications, project management services, and any ancillary equipment or services necessary to provide PED a fully functional AMI system.

The project will deploy the AMI system throughout the PED service territory (see full system map and location data attachments) and includes approximately 3,300 electric meters. A response to this request for proposal (RFP) shall be organized as specified in section 5.1. Equipment and service pricing shall use the attached Excel workbook template (modified as necessary). See B for pricing template notes.

1.2 About the Paris Electric Department

Paris Electricity Department provides electric service to the city of Paris, KY. It has approximately 3,300 electric meters. The current billing and customer information system (CIS) is Local Government Corporation. The payment system is Paymentus.

PARIS services its electric load via five substations and power is purchased from the Kentucky Municipal Energy Agency (KYMEA). Reference the maps provided as attachments to this document (Appendix C).

Other details:

- PED customers consist of approximately 90% residential and 10% commercial/industrial/government accounts.
- Electric meters are Landis+Gyr.
- PED utilizes an interactive voice response system (IVR).
- PED currently utilizes Tantalus AMI with Neptune 360 meters for its water system (see full system map and DIS attachments for collector locations).
- Substation SCADA (Novatech) employs cellular routers for communication; PED has no fiber at present.

1.3 Projected Schedule

- RFP, vendor evaluation, selection, contract Q2 - 2025
- Full deployment Starting Q3 - 2025

2 Instructions to Vendors

2.1 General

Vendors are encouraged to examine all sections of this RFP carefully. Whenever the terms "must", "shall", "will", "is required", or "are required" are used in the RFP, the subject is a requirement of the project.

Taking exception to the requirements in this document may not necessarily make the vendor's submittal non-compliant and shall be documented as listed in section 6.9 with a recommended alternative and justification.

2.2 Contact Information

Project Manager: Aaron Sparkman (Asparkman@paris.ky.gov)
Purchasing Agent: Merissa Williams (Purchasing@paris.ky.gov)
Consulting Engineer: Jack Wallace (Jwallace@pdengineers.com)

Submittal/Delivery Address

Aaron Sparkman
525 High Street, City Hall
Paris, KY 40361

2.3 Inquiries about the RFP

Should a vendor find any discrepancies in, or omissions from, the RFP or other documents, or should a vendor be in doubt as to their meaning, the vendor shall request an interpretation or clarification prior to submitting a final proposal. All inquiries and requests for information from prospective vendors concerning this RFP must be submitted in writing to the contacts listed in section 2.2 no later than **Friday, April 4, 2025**. The use of e-mail is encouraged.

Questions and responses will be captured in an addendum and sent to all known prospective vendors.

2.4 Due Date

Responses to this RFP are due on **April 25, 2025, by 10:00 a.m. Eastern Time.**

2.5 Proposal Opening

All proposals received by the due date and time will be opened and read aloud on April 28, 2025 in the City Hall located at 525 High Street, Paris, Kentucky, 40361.

2.6 Distribution and Use Restrictions

This document, accompanying diagrams, and all attachments are confidential to PED and shall not be distributed or used in any way except for the purpose of providing a proposal for and working with PED.

2.7 Proposal Format

One (1) printed copy and one (1) electronic version on a USB flash drive shall be enclosed in a sealed envelope or package and addressed as listed in section 2.2. The package shall include the name and address of the firm and, in the lower left-hand corner the following: **“Request for Proposal, Attention Purchasing-Electric AMI to be opened on Monday, April 28 at 10:00 a.m.”** All items required for a responsive proposal shall be included. It is the sole responsibility of the proposer to ensure that the proposal package is received no later than the established due date and time at the proper location. Proposals received after the due date and time will not be considered. **Proposals submitted by email, facsimile, or other electronic means will not be accepted.**

The electronic version of the response shall be provided in Adobe PDF file format apart from pricing which shall be in Microsoft Excel format using the template included in Appendix B. Vendor may make minor changes to the pricing template to align with its specific solution.

Vendors may submit the response using its own document formatting, styles, and graphics; however, the proposal shall contain all the information and be ordered as listed in section 5.1.

Do not submit files or information unrelated to this specific RFP, i.e., boilerplate and/or marketing documents.

PED or P&D Engineers may conduct additional interviews or follow up with selected vendors for the purpose of clarifying or obtaining additional information about proposals.

3 Technical Requirements

The AMI system shall meet the requirements and include the features outlined in this section. Vendor shall document and submit any exceptions (with a recommended alternative) to the technical requirements listed below as part of the proposal.

3.1 General

The project will build out the entire PED service territory (see maps/attachments listed in Appendix C).

- a. The AMI system shall include prepaid utility services as an option or together with third-party prepaid services.
- b. PED's billing and customer information system (CIS) is Local Government Corporation. The vendor shall provide integration software and services to transfer data between the AMI software (head-end) and the CIS.
- c. The AMI system shall interface to PED's other computer systems (both on-premises and data center hosted) through a single platform providing extensibility for existing and future applications including MDMS, outage management (OMS), and the geographic information system (GIS).
- d. The AMI headend software may be hosted at the vendor's data center delivered in a software-as-a-service (SaaS) model or it may be hosted on PED servers (on-premises model). Vendor shall provide descriptions and pricing for both models.
- e. PED personnel interface to the AMI system head-end shall be through a web-based portal where PED can access the total functionality of the system. Sign-on credentials with password and two-factor authentication shall be provided for each user.
- f. Vendor shall provide an overall solution architecture block diagram to illustrate the components and connectivity of the proposed solution.

3.1.1 Standards

- a. The system shall adhere to best practice metering and utility industry standards throughout including, but not limited to, ANSI, IEEE, and FCC standards.
- b. Vendor shall provide the industry standard(s) where compliance has been demonstrated for all components of the AMI. These should be listed on equipment data sheets or along with the description of the equipment/service.

Security standards should be listed as part of the overall security description in section 3.5.

3.2 Meters

Advanced meter technology with two-way communication between PED's customer meter and the AMI head end system is a required component. The meters will be selected to meet the requirements of basic revenue and prepaid utility metering as well as other PED requirements such as time of use (TOU), peak pricing, outage management, and other advanced smart grid functions.

- a. Vendor shall indicate the quantity, form, and model number of single-phase and poly-phase electric meters that will be supplied using the information in Appendix A. Vendor shall list any meter types referenced in the appendices that are not supported and provide an alternative.
- b. The residential and commercial meters selected shall allow the ability to monitor, gather and control all the advanced functionality contained in the meter.

- c. Vendor shall provide any special installation, equipment, or configuration requirements for the meter types referenced in the appendices.
- d. Vendor shall provide data sheets for all proposed meters.

3.2.1 Electric

The electric meters shall provide the following functionality:

- a. The electric meter shall have integrated electronics under-the-glass solid state and meet, at minimum, the following applicable standards:
 - o ANSI C12.1, C12.10, C12.20 (0.2 accuracy class)
 - o UL 2735 Standard for Electric Utility Meters
- b. All S-base units including 1s, 2s, 4s, 8s, 9s, 15s, 16s
- c. Residential/single phase commercial meters shall include a remote 200 amp disconnect / reconnect switch for forms 2S and 12S meters with the open/closed status of the switch indicated on the meter display
- d. Optional: 320 amp disconnect switch for residential/commercial single-phase meters
- e. Energy (bi-directional), demand (optional for residential meters), TOU metering measures and load profile recording capability for up to 4-channels of information
- f. Support for interval read data down to 15 minutes, programmable
- g. Secure, remote (over-the-air) firmware upgrades to the communication module and metrology
- h. Nonvolatile data storage for measurement data including load profile data. Vendor shall provide the size of the NV memory and how many days of load profile data at 1-hour intervals will be stored
- i. Support for ANSI reading and programming standards C12.18 and C12.19
- j. Alphanumeric display
- k. Integrated security, tamper detection, theft of service, and over-temperature detection and reporting
- l. Outage (last gasp), restoration, and alarm notifications
- m. Power outage carryover storage device for momentary outages
- n. Event Log up to 200 events capturing information about alerts, diagnostics, cautions, communication, and meter operations
- o. Voltage measurement and out of range notification with programmable parameters
- p. For poly-phase: Demand (kW), kVA, power factor, kVAR, and kVA measurements
- q. Optional power quality monitoring features
- r. Integrated support for pre-paid utility service programs
- s. Support for system-wide time synchronization
- t. Front panel tamper-resistant label with utility name, serial number, and meter ID according to PED's meter management standards specified at purchase

3.3 Communication Network

3.3.1 General

- a. Vendor shall propose a two-way, advanced, secure meter communications network which will cover PED's entire service territory.
- b. Vendor shall list any communication dependencies that arise based on which meter data set is configured, i.e., the amount of data versus available throughput.
- c. The communications infrastructure shall provide 100% coverage for all endpoints (meters) with secondary, redundant (head-end to meter) paths to at least 80% of the meters.
- d. Vendor shall provide a table showing the number of endpoints reachable by more than one transceiver.
- e. 100% system coverage shall be demonstrated by successful communications for a two-month period during system commissioning prior to final acceptance.
- f. Vendor shall describe how 100% system coverage will be defined and attained during worst case conditions, e.g., during full summer foliage for RF systems.

- g. Communication nodes in the system, other than meters, shall include enough battery backup to operate for at least 8 hours. Vendor shall specify the worst-case battery-backed operation time for all network equipment.
- h. Vendor shall list (using GPS lat/long coordinates) all of the network take-out locations that require backhaul communication. Backhaul communication to be provided by PED or, optionally, proposed by the vendor. See section 3.3.3.
- i. If any FCC licensing is required, vendor shall obtain those license(s) on behalf of PED. PED will bear the charge for the application fee and this charge shall be listed in the response. Vendor will provide FCC license(s) and supporting documentation to PED. Describe the network frequency spectrum proposed.
- j. All radio transceivers shall be FCC certified and labeled in accordance with all applicable FCC requirements.
- k. Vendor shall describe the method and supported protocols to accommodate downline SCADA devices (if supported) for possible future use.

3.3.2 RF Designs/Proofs of Concept

- a. Vendor shall provide an accurate and complete RF design and propagation study for the entire service territory using the information provided in the appendices and/or any other data requested of PED.
- b. Vendor shall describe the designs in detail including quantities and placement of all communication equipment. Latitude/longitude coordinates shall be provided as well as height above ground level (AGL)
- c. Vendor shall provide details of the proposed backhaul locations including those using substation structures, city owned water towers, and existing water meter collection structures (which are preferred) and those using other structures in the PED service territory.
- d. Vendor shall provide a legend for all maps and graphic representations of the network.
- e. Vendor shall provide a table showing the percentage of endpoints that can communicate with more than one adjacent transceiver providing a path back to the head-end.
- f. The RF Design shall meet the performance requirements in section 3.3.4.

3.3.3 Equipment Location and Height Considerations

- a. Vendor shall provide the proposed installation locations for all network equipment. Backhaul/take-out points on the network need not be limited to substation locations or water towers, i.e., PED infrastructure, however these are strongly preferred since reliable power and higher mounting structures are available.
- b. Vendor shall provide the required installation height (AGL) of all equipment including RF antenna centerlines. PED has a bucket truck capable of reaching up to 65 feet, however distribution/transmission pole installation locations shall not exceed 60 feet AGL.
- c. All new equipment mounting to water tanks must use banded installation; no welding allowed. Any reliability or maintenance issues due to this restriction shall be noted.

Structures at a higher elevation than typical distribution poles available for communication network equipment are provided as an attachment (see Appendix C). These fall into two general categories and can be prioritized as follows:

- City of Paris water towers
- City Hall Communication Tower, appx. 70'
- Electric substations, e.g., static mast poles greater than 40'

3.3.4 Performance

- a. Vendor shall fill out the following table listing projected worst-case system times for the operational functions in the proposed PED network.

Function	Time (typical)	Time (worst case)	Assumptions and/or caveats
Daily reading of the entire meter population			
On-demand reads and/or status checks			
Outage (last gasp) and restoration message after loss/resumption of power			
On-demand read of voltage on an individual meter			
Firmware or configuration updates for a given population of meters			
Prepaid service messages or updates			
Remote demand reset			
Remote connect/disconnect			

- b. On-demand meter reads shall not exceed 30 seconds round trip time measured at the head-end server.
- c. Loss of power (outage) and restoration at any meter shall be reported immediately. Momentary outage thresholds shall be programmable by PED.
- d. Vendor shall fill out the following table listing estimated worst-case outage and restoration notification success rates. Success is defined as a notification of outage or restoration received in 5 minutes or less.

Case	Estimated success rate	Assumptions and/or caveats
Outage (>1000 endpoints)		
Restoration (>1000 endpoints)		
Outage (<100 endpoints)		
Restoration (<100 endpoints)		

- e. Vendor shall provide the time accuracy, worst case, which can be maintained via synchronization throughout the entire meter population.
- f. Meters shall immediately identify and (re-)join the network upon energization. Vendor shall provide the maximum time for transceivers (meter endpoints and communication equipment) to become fully functional and accessible in the communication network upon energization, i.e., after an outage and if applicable, backup battery depletion.

3.3.5 System Scalability and Redundancy

- a. Vendor shall describe any redundancy features of the proposed system.
- b. Vendor shall provide the percentage of overall network communication capacity used by the proposed system or available for future growth.

- c. Separately or as part of the RF Design vendor shall provide a table showing the percentage of endpoints with double and triple communication channel redundancy.
- d. Vendor shall describe how the system can be augmented to increase data throughput and accommodate growth in targeted areas.
- e. Vendor shall describe how the system recovers from the loss of any communication component and the effect on the throughput and latencies of the system.

3.3.6 Configuration and firmware updates

- a. The system shall support secure remote (over-the-air) configuration and firmware upgrades over the network. Vendor shall describe the implementation and security protocols/standards in use.

3.3.7 Monitoring

- a. The system shall support remote monitoring of all communication network equipment, and any failures shall generate an alert. Vendor shall describe the network management and monitoring tools provided.
- b. The system shall support monitoring meter voltages, power outages and restorations, loss of meter communications, tampering, over-temperature, and other detected events/anomalies.
- c. Vendor shall describe how devices are monitored, system alarm management, and how the data is transmitted, displayed, and logged.

3.4 Head End System

Vendor shall provide a complete functional description of the head end system software features and options that are available. PED would like to compare the benefits and costs of hosting the head end software on-premises versus at vendor's data center.

3.4.1 Head End Software

- a. The AMI system shall provide meter billing data to the PED CIS.
- b. The AMI system shall execute connect/disconnect meter commands as well as configuration and firmware updates.
- c. The AMI system shall support initial and periodic exchange of geographical information for meter location with the PED GIS.
- d. The AMI system shall support outage and restoration event exchange with future OMS.
- e. The AMI system shall support voltage out-of-range events as well as the ability to periodically query and record voltages on a select set of endpoints.
- f. The AMI system shall support these interfaces via the MultiSpeak protocol; vendor shall list the version(s) supported for each interface.
- g. Vendor shall provide documentation on previous integration experience with meter data management systems.
- h. Vendor shall provide documentation on previous integration experience with Local Government Corporation CIS.
- i. The AMI system shall provide monitoring, firmware updates, and management of the network equipment; the backhaul communication equipment may be managed from a separate application.
- j. The AMI system shall generate alerts and display meter and communication equipment outages.
- k. The AMI system shall provide statistical indications of connectivity to all devices in the communication network.
- l. The AMI system shall support bidirectional metering for future DER sites.
- m. Vendor shall clearly identify and separate the base modules/functions included in the proposed head end software from the optional modules.
- n. Vendor shall elaborate on any ability and advantages of integration with existing Tantalus water AMI system (if applicable).

3.4.2 Data Center Hosting (SaaS model)

Vendor shall describe this service in detail including, but not limited to:

- Communication requirements between PED service centers and the vendor data center
- Computer and security requirements for PED workstations
- PED expectations and responsibilities
- Remote access for consumer and utility portals
- All management services provided by the vendor, such as:
 - Application maintenance and upgrades
 - Data backup
 - Middleware services
 - Disaster recovery capabilities
 - Operating system updates and testing
 - Virtualization
 - Server, storage, and networking hardware
 - Security – user and role-based credentials
- Pricing structure
- Standard service level agreements (SLAs) including credit for outage times below the SLA
- Software licenses

3.4.3 On-Premises Hosting

Vendor shall describe the requirements for hosting the head end software on PED servers in detail including, but not limited to:

- Specifications and security requirements for PED servers and workstations
- Operating system and virtualization requirements
- Server architecture and disaster recovery recommendations
- Remote access required by the vendor
- Required management tasks, such as:
 - Primary application maintenance and upgrades
 - Data backup
 - Any required middleware or other applications
- Software licenses

3.4.4 Meter Data Management System (optional)

Vendor may provide an MDMS as part of an integrated solution with the head end system. If this option is to be part of the overall proposal, vendor shall request the MDMS RFP from PED and address the requirements listed in that document.

3.4.5 Customer Portal (optional)

Vendor may provide a list of features, benefits, and pricing for a software application or module that could provide customer portal functionality fully integrated with the PED CIS/MDMS.

3.4.6 Analysis Applications (optional)

Vendor may provide information, benefits, and pricing on head-end software analysis applications that would be advantageous for PED to consider.

3.5 Security

Vendor shall describe the security features and methods used throughout the system. The description shall include:

- Security measures built into the system to protect data during transmission
- The security measures built into the system to protect stored data
- Any third-party products that are used to provide security services
- Any system impacts, e.g., data throughput or latency, from using the recommended security protocols and functionality
- Key management including generation of seed values, storage of the keys, and the means of getting the keys to the proper locations, e.g., meters, in the system
- User and/or role-based authentication and authorization
- Method for notifying PED in the event of a data breach or other cyber security event that may impact PED data
- Applicable standards

3.6 System Functions

3.6.1 Outage and Restoration Detection

Vendor shall describe:

- a. How the electric endpoints report a power outage and a power restoration
- b. How the system provides for determining the extent of an outage
- c. How the system can provide power status checks (i.e., confirm power/outage at specific meters)

3.6.2 Voltage Monitoring

- a. Vendor shall describe the capabilities of the proposed system to monitor voltage at meter points as well as the minimum, maximum, and typical time to report voltage readings and excursions outside of the ANSI C84.1 limit.
- b. Vendor shall describe the method for on-demand voltage reads.
- c. Vendor shall describe other hardware or devices, if any, required for voltage monitoring in addition to electric meter endpoints.
- d. Limit thresholds for voltage monitoring alerts shall be configurable.
- e. The system shall support monitoring at a subset of the meter population, i.e., bellwether meters.

3.6.3 Loss and Theft Monitoring

- a. Vendor shall describe how the system provides a means to identify potential tampering and theft situations.
- b. The system shall provide the ability to link meters with transformers for sizing and theft detection.

3.6.4 Prepaid Services Support

Prepaid services are very important to PED in realizing the full value of the AMI system.

- a. Vendor shall describe the system's ability to support prepaid utility service options for PED customers.
- b. Vendor shall describe its support of third-party prepaid services and documentation/references of previous integration projects.

3.6.5 Load Monitoring (optional)

Vendor shall describe:

- a. How the system provides a means to monitor and report on loading for distribution transformers and other distribution assets
- b. How the system provides a means to monitor and report on loading for line sections, substation circuits, substations and total distribution system

3.6.6 Distribution Automation (future)

Vendor shall describe (if applicable):

- a. The system's capability to support distribution automation devices deployed on the electric distribution system. Support must be both monitoring, control, and configuration.
- b. The protocols supported for communicating with distribution devices and supported devices

3.6.7 Additional Applications (optional)

Vendor may provide information on any additional applications that would potentially be advantageous to PED. Vendor is encouraged to not only include a feature list but also a justification and benefits description.

4 Service and Support Requirements

The following details are the system delivery service and support requirements of the vendor. The RFP response shall provide a description of the service along with an example document (if available) for each section.

4.1 Installation

4.1.1 General Plan

PED desires to install (or have a contractor install) the new AMI meters and any communication equipment requiring specialized training, e.g., installation in the distribution power space or around pad mount transformers.

Vendor will provide on-site training and guidance during initial installation of the communication network equipment per the proposed system design and direct any changes resulting from on-site test and commissioning.

The project will conclude with a vendor-led system acceptance test (SAT) for the deployed components.

4.1.2 Specific Requirements

- a. Vendor shall provide documentation, direction, and best practices for the installation of the meters and communication network equipment per the proposed system design.
- b. Vendor shall provide training of PED personnel on the test, installation, and configuration of all AMI equipment and software. Installation training shall include, but not be limited to, meter/communication device programming, antenna/power supply/lightning protection installation, and proper mounting techniques.

4.2 Deployment

Include a description of standard deployment services. Vendor shall, at minimum:

- a. Conduct a field site survey to confirm or modify the RF network
- b. Develop a project schedule in collaboration with PED

- c. Install, configure, and prepare the head-end software and IT system for initial PED network and meter installation
- d. Commission network and initial meter population ensuring error-free operation
- e. Setup all cyber security tokens and keys
- f. Direct the integration with the PED CIS in collaboration with the vendor of that system
- g. Support PED personnel with troubleshooting and stand-up of the system

4.3 System Acceptance Testing (SAT)

Include an example or description of a typical SAT. The following are requirements for PED:

- a. Vendor shall demonstrate error and warning free operation of the entire deployed AMI system, including integration with the PED CIS, during the SAT process at the end of the project.
- b. The SAT shall include, but not be limited to, the following:
 - o 100% communications to all equipment with a report detailing the performance of the entire system
 - o Compliance with technical, service, and support requirements in the contract
 - o Full functional test of the head-end software
 - o Full functional test of the interfaces to PED's CIS
 - o Verification of all field tools
 - o Verification that all the latest releases of software and firmware have been installed throughout the system
 - o All security measures have been tested, and in-place include cyber key management systems
 - o Compliance to all PED health, safety, and regulatory standards
 - o Identification of action items and any follow up work required for acceptance of the System
- c. All required configuration programs, documentation and final setup files will be provided to PED.
- d. Vendor shall provide a list of proposed tests to be run for approval from PED. PED retains the right to add or modify tests in collaboration with the vendor to achieve error and warning free operation.
- e. PED shall approve all test results prior to final signoff and payment.

4.4 Project Management

Include an example or description of a typical project. Vendor shall:

- a. Describe its project management approach, including the process from kickoff through SAT
- b. Assume the full system deployment will last approximately 18 months
- c. List key milestones and provide a typical high-level timeline for this project given the number meters and size of the PED territory
- d. Identify on the timeline and describe the system acceptance procedure (see the requirements of 4.3)
- e. Identify subcontractors and/or partners that will be involved in this project along with a brief description of vendor's prior experience with the contractor, their roles, and expertise

4.5 System Service Level Agreements (SLA) for Data Center Hosting

Include an example or description of a typical SLA. The following are requirements for PED:

- a. System availability shall be measured, monitored, and reported to PED in accordance with and subject to the requirements of a mutually agreed service level agreement (SLA)
- b. Vendor shall provide a typical SLA in the response for consideration.
- c. Vendor shall provide an availability guarantee for the hosted head-end software as part of the SLA.
- d. Vendor should provide service level credit if contracted levels of head-end software availability are not met on a monthly basis.

4.6 Training Services

PED views training as an important part of fully realizing the potential of this AMI project. Training must be included in the proposal. The proposal shall include:

- a. Training for utility personnel or subcontractors responsible for the installation and maintenance of the hardware installed in the field, as well as training for the software system administrator(s), operators, and customer service representatives
- b. All recommended training services as well as any recommended optional or advanced training. Vendor shall clearly distinguish between training modules delivered on-site in Paris, at a vendor facility, or online.
- c. Ongoing training or written/video products available for future employees

4.7 Support Agreements

Vendor shall describe in detail all lifecycle maintenance, service and support for the system after deployment including:

- Hardware and software maintenance
- 24/7/365 Help Desk
- Service level agreements
- Product fixes and enhancements
- Product releases and upgrades

Vendor shall identify a single point of contact for communicating all issues by providing a help desk number that can be used for reporting issues directly with a customer service representative.

4.8 Quality Assurance and Warranties

Vendors will be evaluated on the quality of its products and services as described by the programs they have in place as well as its customer references.

- a. Vendor shall describe its quality assurance program in the factory, during system deployment, and after system acceptance
- b. Vendor shall provide warranty periods and general terms for all equipment, software, and services

4.9 Customer Communication Materials (optional)

List any materials, e.g., flyers, door hangers, billing inserts, etc., that could be provided to PED to assist with customer communications during the deployment of the AMI.

5 Proposal Submission and Evaluation Criteria

5.1 Response Composition

Responses must clearly address all items listed in section 3 (Technical Requirements) and section 4 (Service and Support Requirements) and shall be organized in the following manner:

Cover Letter

- Addressed to PED purchasing agent (see section 2.2)
- Signed by a legally authorized representative of the vendor
- Brief summary and scope of the overall solution
- Contact information for response questions and follow-up

Executive Summary

- Brief description of the proposed system
- Important and unique provisions of the proposal
- The most relevant experience(s)

Company Profile

- Company background, years in business, location(s)
- Quality assurance/quality control process and/or documentation

Project Experience

- Projects completed in the last 5 years with similar scope and size to this project. List size, location, and brief description highlighting any unique characteristics or challenges of the project. Utilities in the KYMEA area are preferred
- 3 project references with email and phone number of a primary contact

Proposed Solution and Project Execution

- Technical approach, system architecture, block diagram, and key features
- Equipment and software list for the entire proposed solution
- Performance table (per section 3.3.4)
- Radio propagation study and redundancy table (per section 3.3.2)
- Assumptions, exclusions, exceptions (documented per section 6.9), and recommended alternatives
- Proposed scope of work and high-level timeline (see section 1.3) with vendor and PED division of responsibilities and expectations
- List of subcontractors and/or partners that will be utilized for the project
- Example of system acceptance test and/or procedures (per section 4.3)

Service Level Agreements (SLAs)

- Describe and quantify the SLAs which will govern system performance during the term of the agreement
- List warranty information for primary equipment, software, services, and for the overall project delivery

Pricing

- Use the MS Excel template and notes in Appendix B. The template may be modified to include all equipment, software, services, and options
- Complete list of deliverables for including auxiliary equipment, e.g., mounting hardware, special cabling, adapters, etc.
- Estimated equipment delivery times on the provided table
- Data center and on-premises hosting separated
- Include all hardware, labor, software, licensing, FCC spectrum fees, training, documentation, recommended spares, service, and maintenance agreements
- Optional items and/or recommended alternatives separate and clearly identified

5.2 Evaluation and Selection Process

The purpose of this RFP is to select the technology, services, and long-term partner that will best fit PED's desire to operate more efficiently while strengthening the relationship with its customers. A team of key PED stakeholders will evaluate the proposed solutions and RFP responses to determine the system that best matches this goal.

During the evaluation period, vendors may be asked to provide a presentation of the response along with a working demonstration of the head end software and/or dashboard that will be visible to PED customer service personnel. This demonstration should be designed to give PED a sense of the tools and data that will be available for continuous, interactive use.

Each proposal will be scored, and the final solution will be selected based on the following criteria:

1. RFP response clarity, completeness, and adherence to the format	10 pts
2. Quality of the proposed technical solution/met requirements	40 pts
3. Information and endorsements from references	20 pts
4. Proposed service, support, and training/met requirements	25 pts
5. Lifecycle price (initial and recurring charges)	25 pts
Total	120 pts

All responses meeting the requirements will be evaluated by PED based on information provided in the proposal and any prior or subsequent discussions. If a proposal is determined to be the most advantageous to PED, further actions, including contract negotiations, may be pursued by PED.

5.3 RFP-Contract Alignment

A response to this RFP will be incorporated by attachment into the final contract with the selected vendor.

6 RFP Terms and Conditions

6.1 Acceptance Time

The RFP response shall be valid for three (3) months following the due date in section 2.4.

6.2 Reservation of Rights

PED reserves the right to supplement, amend, reissue, cancel or otherwise modify this RFP at any time before the selection of a qualified vendor.

PED reserves the right to waive any defect or technicality and to advertise for new proposals without notification or justification.

Any submittal may be rejected which PED determines to be incomplete, conditional, obscure, or has irregularities of any kind. PED reserves the right to award to the firm, or firms, which in its sole judgment, will best serve its long-term interest.

PED reserves the right to reject all proposals, including without limitation, nonconforming, nonresponsive, or conditional proposals. The solicitation of proposals by this RFP shall not commit PED to award a contract.

6.3 References

PED reserves the right to investigate all references, and the past performance information provided in the submittal with respect to vendor’s successful performance of similar projects, compliance with specifications and contractual obligations, completion or delivery of a project on schedule, and lawful payment of employees and workers.

PED reserves the right to check all sources for information and to include sources other than the references provided in the submittal. PED may consider information available from any source including government bodies and regulatory authorities in evaluating vendors.

6.4 Clarification of Responses

At any time during the evaluation process, PED reserves the right to request clarification of any item in any response, or to request additional information necessary to properly evaluate a particular response. All requests for clarification and responses shall be in writing.

During the evaluation of proposals, vendors must respond to any request for clarification from PED (or its agent) **within 2 business days of request** (Monday through Friday). Inability of PED (or its agent) to reach a vendor for clarification and/or failure of a vendor to respond with the time stated may result in rejection of that vendor's submittal.

6.5 Conformance to Solicitation Requirements

Submittals shall conform to the requirements of the RFP. All necessary attachments shall be submitted with the proposals and in the required format as specified in sections 2.7 and 5.1. Failure to comply with all requirements without suitable justification may result in proposal rejection.

6.6 Signature on Submittal

An authorized representative of the vendor shall sign the submittal. This signature certifies that the response is made without connection with any person or another vendor submitting a proposal for the same services and is in all respects fair and made without collusion or fraud. The signature also certifies that the vendor has read, fully understands, and agrees with all requirements and obligations. No consideration will be given to any claim resulting from responding without fully comprehending all requirements of the RFP.

6.7 Vendor Expenses

Expenses for developing and presenting proposals shall be the entire responsibility of the vendor and shall not be chargeable to PED. All supporting documentation submitted with this proposal will become the property of PED.

6.8 Withdrawals

A proposal may be withdrawn if requested, in writing, or on the vendor's letterhead signed by an authorized representative and received by PED prior to RFP due date. Submittals may also be withdrawn in person before the RFP due date upon presentation of appropriate identification.

6.9 Exceptions

Exceptions will not necessarily make a response non-compliant. Any exceptions to the requirements of this solicitation shall be clearly highlighted in the response with a thorough description of the reason and proposed alternative for consideration. However, exceptions that are not documented in this manner or submitted verbally may result in proposal rejection.

6.10 Acceptance

Submission of a proposal indicates acceptance by the vendor of the conditions contained in this Request for Proposal unless an exception is specifically noted by the vendor. PED reserves the right to reject any proposal that takes exception to the terms and conditions set forth in this RFP.

6.11 Compliance with Laws

The vendor shall comply with all applicable federal, state and local laws, statutes, rules, regulations and ordinances.

6.12 Collusion

The vendor certifies by submission of a response to this RFP that it is not colluded, conspired, connived, or agreed, directly or indirectly, with any other vendor or person to refrain from proposing. Further, the vendor certifies by submission of a response to this RFP, that it has not in any manner, directly or indirectly, sought by agreement, collusion, communication, or conference, with that of any person to fix the proposed amount herein or cost element of said proposal amount, or that of any other vendor, or to secure any advantage against PED or any person interested in the proposed contract.

Appendix A Data Tables

Table 1 provides the current active meter population in the types and quantities for quotation.

Notes:

- "RD" designates a meter with a remote disconnect switch
- All types should be quoted using the quantities in the right-most column
- This table is also included as an attachment (MS Excel file)

Table 1, AMI Meter Quantity				
Form	Class	Active Meters	Spares	Subtotals
1s	100	5	0	5
2s-RD	200	3101	60	3161
2s	320	5	1	6
4s	20	11	1	12
8/9s	20	86	9	95
12s	200	1	0	1
15/16s	200	70	10	80
15/16se	320	1	2	3
Totals		3280	83	3363

Table 2 provides coordinates for the locations with AMI.

Table 2, Locations with AMI	
Location	Coordinates
Scott Sub	38.204464, -84.238725
Vine Sub	38.206332, -84.250341
Claysville Sub	38.203146, -84.257180
Weaver Sub	38.200585, -84.271606
City Building Antenna	38.211909, -84.252317
Bypass Water tank	38.220428, -84.275911
City 19th St tank	38.198873, -84.266100
Winchester St tank	38.202078, -84.250791

Appendix B Pricing Template

A Microsoft Excel workbook ("PED AMI price template") is provided to facilitate a common pricing format.

Notes

- a. Vendor may modify the template Excel sheets if needed to fit with vendor's pricing structure as long as the general format is maintained.
- b. Vendor shall provide a line item for each type of equipment, e.g., meter form, communication device, software module, service offering, auxiliary equipment such as mounting hardware, special cables, and adapters, etc.
- c. Vendor shall provide the most recent delivery (lead) time estimates of all equipment.
- d. Vendor shall provide and itemize all recurring costs.
- e. Vendor shall determine the communication equipment, auxiliary equipment, and software quantities required using the data provided as part of this RFP (see attachments listed in APPENDIX C).
- f. For any product/service options or alternatives, vendor shall provide pricing, both one-time and recurring, for PED to consider.
- g. All meter quantities listed in Appendix A are approximate based on current billing system. Please quote the quantities shown in the rightmost column.
- h. If an item is not applicable (N/A), it shall be noted.

Pricing Template Outline

One-time project costs

Electric Meters – subdivided by form and class
Network infrastructure with recommended spares and aux. equipment
Tools – software and other recommended equipment for deployment and testing
Software-as-a- Service (data center hosted) service fees
Software when hosted on-premises
Data Analytics service fees (if applicable)
Project delivery services (include system/software integration in category)
Training/workshops (clearly note the location of the training modules)
Shipping estimate and method of calculation

Current delivery times of all components

Annual recurring costs

Software-as-a- Service (hosted) service fees
Software support and maintenance
Hardware support and maintenance
Any other recurring fees

Proposed options and alternatives, e.g., distribution automation components, meter retrofit kits, etc.

Vendor's pricing notes, assumptions, and exclusions (these can also be included in a separate document)

City of Paris, KY - Electric Dept
AMI RFP Response

Fill in company name here

Mandatory Components

- Notes:
- 1. Provide a separate line item for each meter or module type
 - 2. Use the quantities as listed in the RFP appendices and meter quantity attachment
 - 3. Add or delete rows as necessary to include all necessary components
 - 4. Please indicate time periods for items such as services or licenses

Residential Electric Meters

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal - Residential Electric Meters			\$ -

Commercial & Industrial Electric Meters

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal - Commercial & Industrial Electric Meters			\$ -

Network Infrastructure

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal - Network Infrastructure			\$ -

Recommended Spare Network Infrastructure

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
Subtotal - Recommended Spare Network Infrastructure			\$ -

Tools

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
Subtotal - Tools			\$ -

City of Paris, KY - Electric Dept
AMI RFP Response

Fill in company name here

Software for On-Premise Installation - One-Time Fee(s)

Indicate the period that is covered by this/these fee(s)

Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
Subtotal - Software for On-Premise Installation - One-Time Fee(s)			\$ -

Software-as-a-Service (hosted) Service - One-Time Fee(s)

Indicate the period that is covered by this/these fee(s)

Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
Subtotal - Software-as-a-Service (hosted) Service - One-Time Fee(s)			\$ -

Data Analytics Software - One-Time Fee(s)

Indicate the period that is covered by this/these fee(s)

Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
Subtotal - Data Analytics Software - One-Time Fee(s)			\$ -

Project Delivery Services

Indicate the period that is covered by this/these fee(s)

Description of professional services included	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
Subtotal - Project Delivery Services			\$ -

Training

Modules	Qty	Unit Price	Ext. Price	Location*
			\$ -	
			\$ -	
			\$ -	
Subtotal - Training			\$ -	

*S = on site at utility, F = at vendor facility, W = online

Shipping

If shipping is included in the price of the equipmenet, please indicate

Method of calculation	Ext. Price
Subtotal - Shipping	\$ -

Total One-Time Price for All Mandatory Components	\$ -
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Delivery times (estimate based on current manufacturing status)

Component	Lead Time
Residential Electric Meters w/ integrated comm. module	
C&I Electric Meters w/ integrated comm. module	
Network Communication Infrastructure	

City of Paris, KY - Electric Dept
AMI RFP Response

Fill in company name here

Recurring Fees

Annual Recurring Fees

- Starting after meter population
- Hosted software and IT services
- System Support, Software, and Maintenance
- Software Licenses
- Other

Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
Subtotal - Annual Recurring Fees			\$ -

Optional Components

Optional Equipment or Services

Model and Description	Qty	Unit Price	Ext. Price
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
			\$ -
Subtotal - Optional Equipment or Services			\$ -

Notes, assumptions, and exclusions

Appendix C Attachments

The following table lists the files included with this document which provide GPS endpoint data, service territory maps, meter quantities, and RFP response templates.

Description	Filename
AMI meter quantities summary	Appendix A, AMI meter quantities.xlsx
Pricing template	Appendix B, PED AMI price template.xlsx
List of all meters by form, service address, and service type	Appendix C, Paris Electric Meter List.xlsx
Map of 2025 service area, PED electric	Service area 2025- PED electric.pdf
Map of 2025 service area, PED electric substations	Service area 2025- PED electric substations.pdf
Map of 2025 service area, PED water	Service area 2025- PED water.pdf
Map of 2025 service area, PED water towers	Service area 2025- PED water towers.pdf