



# **Honeywell**

## **Proposal to Greenville Utilities Commission**

### **Response to:**

Request for Qualifications (RFQ) for 25-10 Advanced Metering Infrastructure (AMI)  
Vendor Selection  
March 11, 2025

### **Contact:**

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March 11, 2025

Cleve Haddock  
Greenville Utilities Commission  
P.O. Box 1847  
Greenville, NC 27835-18474

Dear Mr. Haddock,

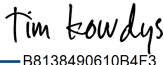
Honeywell Smart Energy is delighted to present to Greenville Utilities Commission our response to your Request for Qualifications (RFQ) for 25-10 Advanced Metering Infrastructure (AMI) Vendor Selection.

As an industry leader with a genuine focus on the needs of utilities like Greenville Utilities Commission, we are committed to ensuring our customers' needs and goals are both understood and met. The result of this uncompromising commitment over many years is a proven track record delivering more than 200 Smart Grid/AMI systems that enable our customers to realize the full value of their investments.

Honeywell's proposed EnergyAxis solution (including Connexo NetSense AMI software and Standards-Based SynergyNet IPv6 Mesh combined with CAT-M1 Cellular technology) supports our most advanced residential and commercial & industrial electric meters and gas and water communication modules that provide many value-added capabilities which are further detailed in our proposal. It is a network solution based on open standards which supports interoperability. The communication infrastructure can be either owned (IPv6 Mesh) or maintained and managed by a wireless carrier partner of Honeywell (CAT-M1 Cellular) or a hybrid of both. This places GUC in the position of deciding how and when to expand its AMI electric/water/gas footprint beyond the scope of this project without concern for additional infrastructure and integration costs.

Our proposal package consists of this offer letter and the pages that follow. Honeywell's technical responses are subject to due diligence. We are excited about the prospect of partnering with you on this important initiative and look forward to the next step in your process. If you have any questions about our proposal, or require additional information, please contact Oscar Dominguez, Regional Sales Manager. Oscar can be reached at [Oscar.Dominguez1@Honeywell.com](mailto:Oscar.Dominguez1@Honeywell.com) or at 786 2394070.

Best regards,

DocuSigned by:  
  
B8138490610B4F3...

Tim Kowdys  
Sales Director, North America  
Honeywell Smart Energy

## 2 - Company Background and Relevant Experience

### Organization and Background

As a Fortune 100 company with approximately \$38.4 B in sales and 102,000 employees, Honeywell invents and manufactures technologies that address some of the world's most critical challenges around energy, safety, security, productivity, and global urbanization. Our solutions enhance the quality of life of people around the globe and create new markets and even new industries.

Today, nearly half of our revenue is linked to energy efficient products, and a growing portion supports clean air and clean water to promote healthy and sustainable living — especially in parts of the world where the need is greatest. We are committed to enabling a better quality of life and a cleaner, more sustainable environment for future generations.

### Honeywell Process Solutions

Honeywell Industrial Automation (IA) is a pioneer in automation control, sensor technologies, metering systems, automated supply chains, make warehouses smarter, and improve worker safety. It is also a leader in providing software solutions and instrumentation that help manufacturers find value and competitive advantage through Honeywell Connected Plant, Honeywell's Industrial Internet of Things (IIoT) solution. Smart Energy Solutions is part of Honeywell's Industrial Automation strategic business group, which also includes Honeywell UOP ([www.uop.com](http://www.uop.com)), a leading international supplier and licensor of process technology, catalysts, adsorbents, equipment, and consulting services to the petroleum refining, petrochemical, and gas processing industries.

### Honeywell Smart Energy Overview

Honeywell Smart Energy, with headquarters in Raleigh, North Carolina, is part of Honeywell Process Solutions. Smart Energy is helping transform how energy is consumed in homes, buildings, and industries around the world. We enable gas, electricity, and water utilities to deploy advanced metering and software capabilities that transform operations, improve reliability, and enhance environmental sustainability. Our intelligent grid solutions and connected technologies help electricity, gas, and water providers supply customers and communities more efficiently. As a global leader in connected solutions, Honeywell Smart Energy is a world leader in intelligent grid solutions and connected technologies, including:

- |                                |                         |
|--------------------------------|-------------------------|
| • Smart Metering               | • Smart Street Lighting |
| • Demand Response              | • Energy Storage        |
| • Energy Efficiency            | • Customer Engagement   |
| • Grid Automation              | • Data Disaggregation   |
| • Distributed Energy Resources | • Data and Insights     |
| • Distribution Automation      | • Advanced Analytics    |

We're proud of our success in delivering solutions that help our customers achieve the full value of their Smart Grid investments. We've delivered more than 200 Smart Grid/AMI systems globally. Additionally, our utility customers have deployed over 20 million operational meters and EnergyAxis modules.

## History and Background

Elster Solutions, now part of Honeywell, traces its roots to the earliest days of the metering industry. Elster American Meter was founded in New York in 1836 and was an early producer of gas meters in the United States. In Europe, our history dates back to the nineteenth century as Elster Meters was founded in 1848. Smart Energy continues our strong history of innovation and Research and Development. We hold 181 US patents granted, 207 foreign patents granted, and 82 patents pending US and worldwide.

## The Honeywell Philosophy

Honeywell creates solutions that improve quality of life for people around the globe — generating clean, healthy energy, and using it more efficiently; increasing our safety and security; enabling people to connect, communicate, and collaborate; and equipping our customers to be even more productive.

At Honeywell, diversity is the foundation of a performance culture that promotes respect, understanding, and appreciation of different perspectives, backgrounds, and experiences. It is part of the energy that has and will continue to help the company achieve a sustainable and global competitive advantage for many years to come. It enables our global teams to generate new and better ideas faster and to collaborate and innovate more effectively.

Honeywell embraces the following eight behaviors as we work together and on behalf of our customers:

- Have a Passion for Winning
- Be a Zealot for Growth
- Think Big...Then Make It Happen
- Act with Urgency
- Be Courageous
- Go Beyond
- Inspire Greatness
- Become Your Best

## Project References

<b>City of Wilson, NC</b>	
<b>Customer Address</b>	208 Nash Street, Wilson, NC 27894
<b>Customer Type</b>	Municipal
<b>Honeywell Account Executive</b>	Oscar Dominguez
<b>Utility Contact Person: (Name, Phone Number, Email)</b>	<p>Daniel Mendoza Electrical Engineer 1800 Herring Avenue Wilson NC, 27894 <a href="mailto:dmendoza@wilsonnc.org">dmendoza@wilsonnc.org</a> 252-299-1059</p>
<b>Project Summary</b>	<p>The City of Wilson selected Honeywell to deliver an integrated electric, gas, and water AMI solution utilizing Honeywell's EnergyAxis and EI Server Meter Data Management (MDM) solution. The comprehensive Honeywell solution delivers AMI Smart Meter and MDM services and utilizes the same Honeywell AMI network to enable the city to better serve its electric, gas, and water customers. The Honeywell solution includes implementation; broad improvements to Customer Service; Prepay; Business Process Change Management; Consulting Services; Load Control/ Demand Response; and Data Analytics applications.</p>
<b>Type &amp; Number of Meters Deployed</b>	37,000 electric, 21,000 water, and 15,500 gas meters
<b>Project Description</b>	<p>The Honeywell solution addressed the electric, gas, and water requirements of Wilson Energy, Wilson Energy Gas, and the Wilson Water Distribution Divisions.</p> <p>The Wilson Energy Division maintains the fourth-largest municipal distribution system in North Carolina. The community-owned network supplies electricity to about 100,000 people in 37,000 households, businesses and industries. Wilson purchases their reliable supply of electricity through the North Carolina Eastern Municipal Power Agency (NCEMPA).</p> <p>The Wilson Energy Gas Division is one of only eight municipal gas distribution systems in North Carolina. Based on the number of customers in their system, they are the third largest municipal gas system in North Carolina – consisting of four supply points, twelve regulator stations, more than 390 miles of pipeline, and over 15,500 residential, commercial, and industrial services.</p> <p>The Wilson Water Distribution Division constructs and maintains approximately 400 miles of water distribution mains ranging in size from 2" to 30". The City currently has 21,000 water taps ranging in size from 3/4 inch to 12 inches.</p>



	<p>Phase I of Wilson's Smart Meter deployment included a 12-month plan to deploy approximately 5,000 endpoints (electric, gas, and water) w. Wilson selected Honeywell, who provided all three services on the same network.</p> <p>During Phase II, Honeywell will be building upon the successful deployment of Phase I to expand Honeywell's MDM application and install the residential electric, water, and gas meters and modules.</p> <p>Along with the Honeywell solution, in Phase II Wilson will pilot Prepay and Demand Response programs that will leverage the functionality of Honeywell AMI and MDM systems. Exceleron Prepay and Energate Load Control device program pilots roll out the summer of 2016. After successful pilots, Wilson plans to move into full implementation of Prepay as well as 20,000 Load Control devices for hot water heaters and air conditioners. Both of these 3rd party applications will be fully integrated into the Honeywell systems.</p>
<b>Length of Project</b> <b>(Start date and finish date)</b>	Phase I: 2013-2014; Phase II: December, 2014 – December, 2020
<b>Honeywell Solutions</b>	EnergyAxis EA_MS; REX Residential meter; A3 Alpha C&I polyphase meter; EA_Gatekeeper; EA_AMI Module; EA_Water Module; EA_Gas Module; EI Server MDM.
<b>3rd Party Applications</b> <b>(provided with Honeywell solution)</b>	Exceleron Prepay; Energate Load Control device program for hot water heaters and air conditioners.
<b>Integrations</b>	SunGard CIS, GIS, and Meter Synch custom integration.

<b>Kings Mountain Energy Services Department</b>	
<b>Customer Address:</b>	Kings Mountain, NC
<b>Customer Type:</b>	Municipal
<b>Honeywell Account Executive</b>	Oscar Dominguez
<b>Utility Contact Person</b> (Name, Phone Number, Email)	Holly Black, Director 704-730-2125 hollyb@cityofkm.com
<b>Project Summary</b>	Highlights Honeywell's EnergyAxis solution vis partner Leidos and features both electric and water meters.
<b>Type &amp; Number of Meters Deployed</b>	Approximately 15,000 electric, gas, and water
<b>Project Description</b>	<p>Kings Mountain is a community near Charlotte, North Carolina that provides electric, gas, and water utilities to its customers. Honeywell's partner Leidos worked with Kings Mountain to deliver a Smart Grid as a Service (SGS) pilot project with approximately 1,255 meters consisting of 535 electric, 330 gas, and 390 water meters. The success of the pilot project validated the business case to deploy AMI across the entire service territory starting in 2014.</p> <p>The AMI project included a comprehensive network design by Honeywell's Network Design team, a complete design of the system, and deployment of Honeywell meters, gatekeepers, and communications equipment, the Leidos Cloud Service Platform for the AMI head-end, Honeywell's MDMS, Outage Analysis (powered by Esri®), and Analytics solutions. Leidos also performed business process reviews and helped Kings Mountain with community engagement meetings.</p>
<b>Length of Project</b> (Start date and finish date)	September 2012- October 2015
<b>Honeywell Solutions</b>	EnergyAxis Management System (EA_MS); REX residential meters; A3 Alpha meters; EA_Gatekeepers; EIServer Meter Data Management System (MDMS).
<b>3rd Party Applications</b>	N/A
<b>Integrations</b> (Utility – Back office, existing)	N/A



<b>SECO Energy</b>	
<b>Customer Address:</b>	330 US-301 Sumterville, FL 33585
<b>Customer Type:</b>	Co-op Utility – Serving 7 counties in central Florida
<b>Honeywell Account Executive</b>	Oscar Dominguez
<b>Utility Contact Person</b> <i>(Name, Phone Number, Email)</i>	Tim Wallace, Manager Consumer Billing & Accounting (352) 569-9614 tim.wallace@secoenergy.com
<b>Project Summary</b>	SECO Energy hosts and manages Honeywell’s NetSense Solution for 7 different central Florida counties. SECO have fully deployed Honeywell’s Cat M1 and SynergyNet Advanced Metering Infrastructure (AMI) and its associated electric meters including meter installation and Project Management Services. All systems are operating as contracted.
<b>Type &amp; Number of Meters Deployed</b>	A4 Cellular Cat M1 deployed – over 100,000 meters A4 RF SynergyNet deployed – over 21,000 meters  Several active municipal projects currently deploying the Honeywell EnergyAxis AMI solution.
<b>Project Description</b>	SECO Energy hosts Honeywell’s Connexo NetSense software. SECO have successfully deployed 120,000+ electric AMI meters.  SECO is making successful use of the NetSense functions including interval data, remote disconnect, time-of-use (TOU) information, outage detection, and voltage data.  SECO plans to fully deploy about 194,000 A4 Cat M1 and 74,000 A4 SynergyNet electricity meters by the end of the project.
<b>Length of Project</b> <i>(Start date and finish date)</i>	Project is ongoing. SECO began their AMI project in 2023 and continue today. Project completion scheduled by Q1 2026
<b>Honeywell Solutions</b>	Connexo NetSense software; Routers; A4 Meters, Project Delivery Services / Meter Installation/ Training / Integration
<b>Integrations</b> <i>(Utility – Back office, existing)</i>	Honeywell integrated its AMI solution into a SECO’s CIS and MDM systems and is ongoing integration with SECO’s OMS.

### 3 - Technical Approach and Solution Design

#### Proposed Solution to Greenville Utilities Commission [“GUC”]

As a leader of AMI deployments in North America and the first to market with a full two-way AMI system in 2004, Honeywell Smart Energy has the deep experience to bring a fully integrated Smart Grid offering—edge intelligence, communication network infrastructure, software, professional delivery services, and more—all under the umbrella of our EnergyAxis solution. Tested, deployed, and proven in a wide variety of geographical and climatological utilities, our Connexo® intelligence software, RF mesh network and direct connected wireless CATM powers a full range of Smart Grid solutions that can scale and expand to provide a future-proof AMI platform.

**Honeywell AMI System Design and Scalability:** The award-winning EnergyAxis system is a multi-purpose end-to-end solution designed to meet these challenges. Honeywell built EnergyAxis on a flexible, scalable, open-standards platform, which facilitates secure two-way communications between connected, smart devices. The EnergyAxis AMI system enables communications between the AMI headend, SynergyNet Routers, A4 meters and other CIS systems.

Designed for greater flexibility, EnergyAxis supports a wide variety of WAN solutions customized to the utility’s needs, which can accommodate future technology advancements and support the integration of additional services as they emerge.

**Network Infrastructure Deployment:** Effectively managing the Network Infrastructure Deployment of Honeywell EnergyAxis AMI system is the cornerstone of business and financial success for Honeywell and its customers.

Honeywell’s project services team has an excellent track record of providing robust, utility-grade Smart Grid solutions (including integration and installation services) to global customers of all sizes and geographic and climatic conditions – urban, suburban, and rural locations, 40-story high-rise apartments, flat terrain and high mountains, southwest desert, arctic tundra, and coastal areas where salt, air, humidity, and strong winds are a seasonal threat. These real world deployments (over 200 EnergyAxis systems and > 20 million AMI meters) have given us vetted experience in smoothly and successfully managing AMI projects, from system planning and network design through deployment, system acceptance, and ongoing maintenance. Honeywell’s project management approach enables customers to manage and control their systems as quickly and practically as possible.

**Integration Strategy:** Honeywell provides integrated electric, water, and gas solutions on the same EnergyAxis network, using a central AMI head end (Connexo NetSense) and database (Oracle Enterprise). Other solutions require either more than one head-end system for electric, gas and water, or they “band-aid” a third-party’s water head-end software onto their electricity head end. The advantage here is that Honeywell manufactures all the proposed hardware and has built simplified and unified solutions under a single modular platform. Utilities have successfully deployed millions of electric, gas and water meters with the Honeywell EnergyAxis system. Honeywell has integrated with SCADA, GIS, OMS, CIS solutions and systems, providing billing integration between EnergyAxis and the utilities’ CIS Billing system.

Our proposed solution can be deployed in a variety of ways based on the specific needs, strategies, and capabilities of our customers.

#### Infrastructure as a Service (*BaseProposal*)

Our cloud-hosted head-end infrastructure, also known as Infrastructure as a Service (IaaS), relieves the stress of managing and maintaining a data center and reduces the burden of overhead. With the IaaS solution, GUC would operate, manage, and maintain the EnergyAxis system using Connexo NetSense as if it were on premise. Using a

standard web browser access, users would access the Connexo NetSense system, which is hosted in the cloud, via the intranet. GUC resources would be used to operate the EnergyAxis system on a day-to-day basis. GUC would own the field hardware, meters, routers, and modems. Additionally, GUC would be responsible for all communications and communications infrastructure between the hosted environment, the wide area network infrastructure (WAN), and <GUC's> network.

For more information, please refer to: Attachment 01 - Solution Overview.

## 4- Project Management and Implementation Strategy

### Approach and Philosophy

Effectively managing the delivery of Honeywell products and services is the cornerstone of business and financial success for Honeywell and its customers.

Honeywell's Customer Service team has an excellent record of accomplishment of providing robust, utility-grade Smart Grid solutions (including integration and installation services) to global customers of all sizes and geographic and climatic conditions.

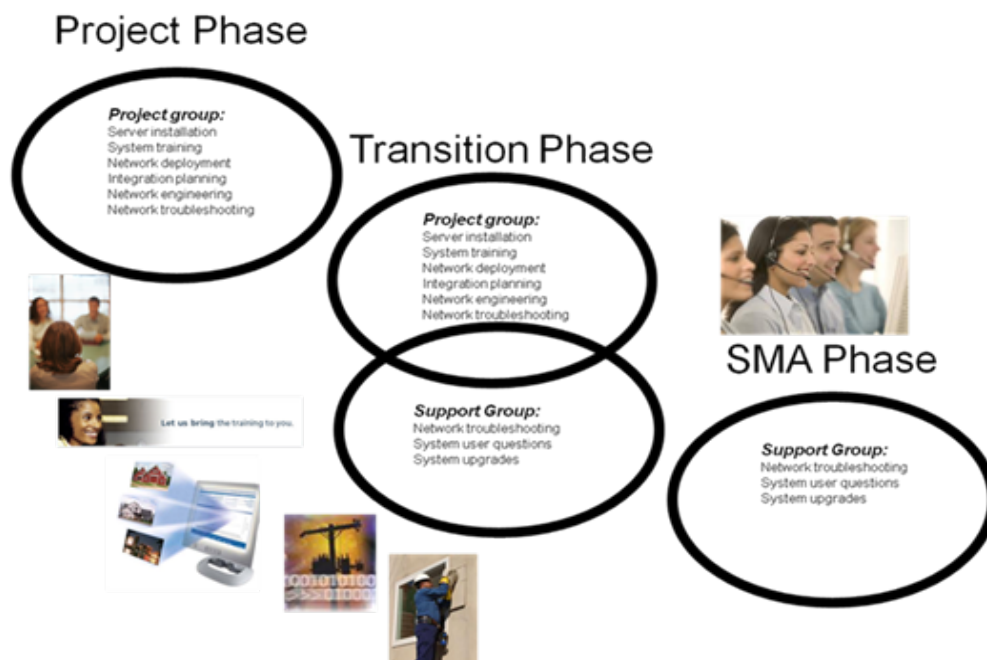
We tackle urban, suburban, and rural locations, 40-story high-rise apartments, flat terrain and high mountains, southwest desert, arctic tundra, and coastal areas where salt, air, humidity, and strong winds are a seasonal threat.

These real world deployments, which number in excess of 200 Smart Grid and Advance Metering Infrastructure (AMI) systems globally and over 20 million operational meters and EnergyAxis modules, have given us profound and documented experience in smoothly and successfully managing AMI projects, from system planning and network design to deployment, system acceptance, and ongoing maintenance.

Honeywell's project management approach enables customers to manage and control their systems as quickly and practically as possible in order to support a "steady state." The following graphic highlights the key components of that process.

#### Honeywell Transition to Customer Empowerment

Honeywell uses a traditional project approach based on a work breakdown structure to achieve project milestones and deliver successful, on-time projects within budget. See the below graphic.



## Honeywell's Project Management Process



## Project Services Team Experience

All Honeywell's Project Managers must obtain Project Management Process (PMP) certification. The majority of the Project Managers are already PMP certified. The remaining few are in the process of achieving this goal. Honeywell's Project Managers average over 25 years of professional experience and 14 years of Project Management experience.

Honeywell's numerous customer-focused teams have performed remote firmware upgrades on over 500,000 AMI network elements including meters, SynergyNet Routers, EA\_Gatekeepers, water-and-gas modules, and grid monitoring devices.

Furthermore, we have performed over 125 NetSense system upgrades on production, test, and backup servers, and have supported over 86 integrations of EnergyAxis with third party systems. Honeywell's Customer Delivery team has also developed customized reports, based on a specific Utility's requirements.

In addition to providing phone and email support to address customer cases, Honeywell resources respond to any customer and Utility issues during initial installation providing feedback and assistance to project engineers in monitoring the schedules and health of the system.

We track the EnergyAxis deployment for these elements: schedule performance, network analysis, component errors and exceptions, network capacity information, meter counts, registration counts, monthly reports, run-time usage, CPU usage, memory usage, disk space usage and logs.

## Establishing the Work Breakdown Structure

Initially, we develop the project Work Breakdown Structure (WBS) to define the top three levels—organizational, business, and technical. As the project proceeds through development and becomes more clearly defined, Project Managers warrant that the WBS distinctly identifies all high-cost and high-risk elements for management

and reporting, while ensuring flexibility to extend the WBS beyond the reporting requirement to reflect how we will compete the job.

## Purposes of the WBS

**Organizational** - The WBS provides a coordinated, complete, and comprehensive view of program management. It establishes a structure for organizing system deployment activities.

**Business** - The WBS provides a structure for budgets and cost estimates. Managers use the WBS to organize collection and analysis of detailed costs for earned value reports—Cost Performance Reports or Cost and Schedule Control System Criteria reporting.

**Technical** - The WBS establishes a structure for these tasks:

- Identifying products, processes, and data.
- Organizing risk management analysis and tracking.
- Enabling configuration and data management, which helps establish interface identification and control.
- Developing work packages for work orders and material/part ordering.
- Organizing technical reviews and audits the WBS groups product items for specification development, to develop Statements of Work (SOW) and to identify specific contract deliverables.

## Project Execution Procedures

The Honeywell Project Manager will institute specific procedures as required to coordinate activities with the Utility to internally manage the work. This section discusses some of those procedures that are required by the established Honeywell guidelines. These procedures will be coordinated with the overall program management procedures implemented by the Utility.

**Project Documentation Procedures** - The project plan addresses procedures to follow during the course of the project and further describes all communications, interface requirements, and means to control the activities between the Utility and the Honeywell project teams.

**Transmittals** - The Honeywell Project Manager must approve all formal transmittals. We further request the Utility and the other parties to implement a similar transmittal policy to assure that all involved properly track and record these important documents. This transmittal procedure will be coordinated with the overall project management procedures implemented by the Utility.

**Project Scheduling** - Honeywell uses computer-based project scheduling tools to schedule project activities and to track progress. These scheduling tools use an activity network that identifies the interdependencies and precedence relationships between project tasks. Project schedules include customer Statement of Work requirements and their dependencies.

Honeywell Project Managers and Project Engineers will use the project schedules to plan and control the project. These scheduling procedures and the deployment schedules will be coordinated with the overall program management scheduling implemented by Utility.



Using the activity network, we identify project milestones and generate a project milestone schedule to monitor the project progress. The Honeywell Project Manager closely monitors major milestones associated with contract deliverables.

**Project Control** - We use project control procedures to ensure that we accomplish project schedules and objectives in a timely and effective manner. This control function involves working with the project staff to determine the progress that is taking place and what problems, if any, are occurring in the execution of the work. Based on regular reviews, the manager will take corrective actions to prevent potential problems.

The Honeywell Project Manager is required to make internal project reports on a monthly basis. If the monthly project review indicates that progress is not in accordance with plan, corrective actions are required under the project management procedures.

Impact analysis is a natural part of this process, as is a series of what-if analyses that help to focus on the most effective course of corrective action, e.g., the course of action that avoids delays in the overall project schedule, i.e. critical path mitigation. In addition, the Honeywell Project Manager proactively assesses and manages project risks, which we review on a regular basis throughout the project.

All operations and deployment control procedures as well as the reporting functions will coordinate with the overall program management control procedures that the Utility implements.

**Monthly Progress Reports** - We will transmit the progress reports—the updated summary milestone schedule and the updated accomplishment report—to the Utility by the tenth working day of each month.

Installation progress reports are available at any time.

Along with these graphic reports is a narrative, prepared by the Honeywell Project Manager, which addresses key issues associated with the contract. The contents of the monthly progress report include the following review of last month and next month's activities:

- Last month's progress
- Project action items
- Problem areas
- List of deliverable documents and equipment
- Scheduled activities for next month
- Open contractual issues

More frequent reporting is likely to be required during the early stages of the project.

**Network Monitoring** - Once the deployment of the system begins and as part of our normal course of operation, the deployment team monitors system behavior and read performance. The project team typically monitors these dynamics:

- Schedule performance
- Abnormal increases in server utilization
- Changes in the mesh network

- Log analysis tools if required for troubleshooting

If Honeywell identifies upgrades, our team will communicate them to the Utility, as well as provide support and guidance for alternative or corrective actions.

**Requesting Changes** - All requested changes should be in writing between the Utility's Project Manager and the Honeywell Project Manager when the change affects NetSense Server scope and AMI meter shipments. Under the procedures, no other individual, including those to whom the Project Manager reports, is authorized to make changes to the contract.

As the Utility requests changes to the contract, the Utility Project Manager and Honeywell Project Manager will manage and schedule those changes including their influence on costs, if any.

**Project Review Meetings** - Honeywell's project management philosophy includes continual customer participation throughout the project, which our experience has shown contributes to the overall success. Part of this involvement is through project review meetings that will normally cover a wide range of topics, including: status and schedule reviews, coordination of the Utility's and Honeywell's scope activities, exchange of technical information, and design reviews of future work to be performed by the project teams.

During the early phases of the project, more-frequent meetings will be required, and we anticipate that many of these early project meetings will mainly relate to technical and logistics issues regarding which installation or geographical areas to approach first.

These meetings will include Utility and Honeywell personnel as required to address issues. Our experience has also shown that alternating meeting sites between the customer location and the factory is often beneficial, allowing customer personnel to meet and interact with Honeywell personnel that might not be otherwise available.

**Steering Committee Review Meetings** - On a quarterly or semi-annual basis, Honeywell prefers to hold executive steering committee meetings to review the overall status of the project and to address issues that need senior management attention. These meetings typically happen at the customer's offices and Honeywell will work with the Utility to schedule these meetings as a part of Utility's AMI rollout.

As a matter of practice, Honeywell has a formal escalation process relative to resolving matters of concern for all of our customers. The chart below illustrates that process. Our objective is to provide a path to the senior executives for both organizations. However, our preference is to only escalate those concerns that are relevant to the Executive Steering Committee.

**Problem Tracking & Resolution** - Honeywell AMI projects typically have three phases: Project Phase, Transition Phase, and Support Phase. Each of these phases has a slightly different problem tracking and resolution approach.

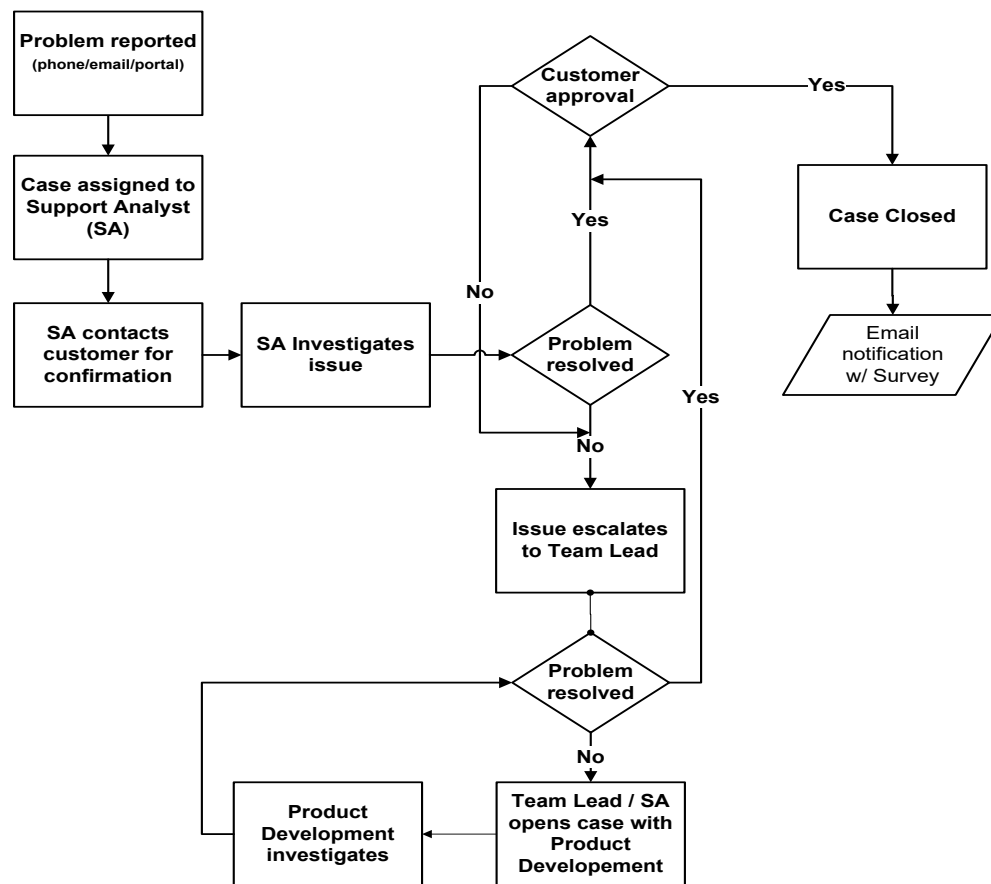
- **Project Phase** - During the project phase, the Project Manager tracks problems in an action register. It is his or her responsibility to clear problems from this list expeditiously to keep the project on schedule and within scope. Review of the action register is an agenda item of the project-review meetings.

This project phase normally lasts only until the initial installation of meters, the installation of the head end system and the system training has occurred. At that time, the support group joins the project team and the system starts operating under the system maintenance agreement.

- **Transition Phase** - During the transition phase (which can last from months to years depending on project scope), project related issues continue to be tracked by the Project Manager in an action register. Additionally, we track and manage system related matters. This tandem process (directed by the Project Manager) continues until the completion of the active project with the entire system rolled out and operational. At that time, the system continues to receive support on a yearly basis under the agreement.
- **Support Phase** - After the network is functioning as a Production System, the problem-resolution process moves to the Honeywell System Support team. The system user or administrator can open tickets and cases via a web portal or through email notification. A Phone Support Hotline will be available to the Utility with a designated support person and a personal identification number (PIN).

The flow diagram below documents the process of problem resolution in the Production System by the System Support team.

**Honeywell Problem Resolution Process**



**Technical Project Documentation Reviews** - Honeywell assumes that the Utility will review all submitted project documents within five (5) calendar days of submittal. After review, the Utility will formally transmit any comments to the Honeywell Project Manager. If there are no discrepancies, both parties are to assume the document is correct and approved. If errors, omissions, or format discrepancies exist, the Utility will transmit comments indicating the nature of these difficulties to the Honeywell Project Manager.

The Honeywell team will evaluate the comments and make the required corrections and or respond with its analysis of the requested changes.

This project documentation review and approval process will be coordinated with the overall program management control procedures implemented by the Utility. It does not apply to standard product documentation.

## Honeywell Risk Management Methodology

Honeywell's project-risk-management activities are an embedded aspect of its Project Management methodology. Honeywell works to manage all elements of project risks including financial, technical, schedule, and other solution delivery risks, through a comprehensive Project Management methodology that continues throughout the project execution lifecycle.

### Tracking Project Risks

The project manager and the project team continuously review project issues throughout the project life cycle to avoid unwanted risk in the project. Using a Risk Log tool, we systematically tackle risk assessment. In performing its risk assessment, the project team works to identify potential risks early and works with appropriate stakeholders to develop a strategy to deal with the risk.

### Description of the Risk Log Tool

**Risk Number** – The sequential number assigned to each identified risk

**Risk** – The detailed description of the identified risk

**Risk Level** – We use two measures, "Impact" and "Likelihood" to define the risk level. A two dimensional matrix categorizing Impact and Likelihood into three levels—low, medium, high—is used to graphically represent risk level. See Figure 1 below.

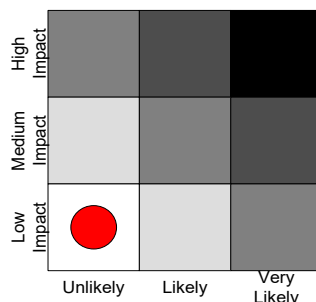


Figure 1

The chart above represents a risk of low impact and low likelihood.

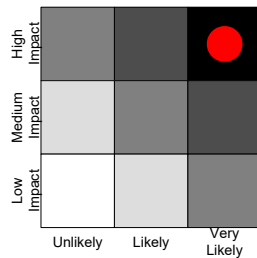


Figure 2

This chart represents a risk of high impact and high likelihood.

The appropriate chart depicting risk level is a part of the risk log to provide a quick visual representation of the threat the risk poses to the project.

**Currently Assigned Owner** – The name of the individual assigned to track and resolve the risk. The owner may be a member of the Honeywell project team, customer team member, subcontractor, or other party as agreed between by the Honeywell project manager and Utility project manager. The owner of the risk may change over the course of the project.

**Risk Strategy** – Upon identification of a risk, the Honeywell and Customer project team members choose the strategy option to deal with the risk. Strategy options and their typical uses are below:

- **Accept** – With this strategy, the project team has either decided not to alter the project to avoid the risk, or there are no alternatives to dealing with the risks. The financial ramifications, project schedule, or other impact is noted and the project budget or contingency or other mechanism steps in to deal with and accept the risk.
- **Avoid** – This strategy includes changing the project plan so that we can avoid the risk. Risks identified early on in the project will more likely be able to use this strategy.
- **Mitigate** – Mitigation includes taking additional actions to lessen the impact that a risk may have on a project.
- **Transfer** – Transfer is the ability to move the risk from the project team to a third party that will own the risk and the response.
- **Exploit** – For risks that may produce positive results for the project, the project team may decide to make the likelihood of the risk increase so that the project team can capitalize on the results.
- **Share** – This strategy is the positive opportunities of a project with a third party.
- **Enhance** – This strategy increases the impact of an opportunity as well as the likelihood that the opportunity will happen. Doing so generally requires the project team to alter the project plan to make sure that the identified opportunity is a reality and increases the benefits of the full project.

## Risk Plan

The risk plan identifies the specific steps that we will take to deal with the risk. This will include an elaboration of the strategy and how the team intends to implement the plan. If necessary, we will add additional tasks to the project plan. If the plan is lengthy, then the project manager may create a separate report outlining the risk in detail and the proposed solution.

Once the identified risk either has been resolved, or has passed, we move it to the avoided sheet of the spreadsheet. Using this approach, allows users and reviewers of the log to get a quick view of the potential risks

that continue to face the project. Observing breaks in the sequential numbering of active risks also provides a means of assessing progress made in resolving all identified risks.

Review of the Risk Log is a part of each Project Review Meeting and Steering Committee Meeting.



## Data Security and Compliance Strategy

### Honeywell Security Framework and Protocols:

Honeywell's security posture begins with a comprehensive approach within our security policy that addresses not only the product security, but involves our own corporate systems, resilience practices, ongoing employee and contractor training and assessment, and business continuity exercises.

The Honeywell Security Framework is based on a multi-tiered approach with security built into all layers of the architecture. Honeywell has IT security framework consisting of policies and standards that are under review on a timely and adhoc basis. Honeywell is aligned to industry-standard compliance frameworks, including but not limited to, National Institute of Standards and Technology (NIST) SP 800-171 and NIST SP 800-53, the International Organization for Standardization/ISO 27001, Payment Card Industry (PCI), and Sarbanes-Oxley (SOX). Honeywell Cloud - Currently the Honeywell Cloud conforms to ISO 27001 and commissions an annual audit.

The Honeywell Security Framework is based on a multi-tiered, defense-in-depth approach with security built into all layers of the architecture, and security features including: identity management, private IP LTE network security, hardware-based code signature verification and secure key stores, device authenticity verification, FIPS-mode cryptographic module operation, and a horizontally scalable and highly available server architecture. A secure VPN tunnel is used to transport IPv6 over IPv4 leveraging openVPN software. It supports both encryption and authentication.

**Authentication and encryption** are provided through whitelist files for network join from Honeywell manufacturing to LPC and loaded into the HES by the Admin. Over the network, Honeywell utilizes AES-128 and TLS encryption, with C12.22 for seed/key management.

The SynergyNet Routers support **access control**, or network "whitelist" that contains the MAC addresses for authorized devices as well as a unique access cipher key. Any device with a MAC other than what's in the whitelist is denied access and this is logged.

The Honeywell AMI-HES can utilize Microsoft Active Directory or SAML 2.0 services for Single Sign-On (SSO) to manage access and **device authentication**.

System security is provided through multi-level passwords at each device, the hierarchical command structure of the EnergyAxis system, logging of all successful and unsuccessful device communications, as well as physical tamper and **intrusion detection** and reporting capabilities of all network devices.

With a track record of more than 20 years, the EnergyAxis AMI solution continues to provide measurable business value and risk mitigation for both our single and **multi-utility** customers. The solution makes use of open, standards-based technologies that preserve utilities' existing capital investments and allows for future changes in utilities' business models and objectives.

### Future-Ready Security Capabilities

Honeywell participates and leads across our industrial footprint in cybersecurity. Within Honeywell, we have a dedicated cybersecurity team, independent of any of the business units who must review every line of code for every change we make in our systems as part of our Secure Software Development Lifecycle. Additionally, we are providing the option through a business that Honeywell has invested in, Quantinuum, to provide quantum key generation which means that we provide true randomness rather than pseudo-randomness in key generation,

which makes any cipher harder to break. This is just an example of Honeywell continuing to push the boundaries of forward for cybersecurity.

For more information, please refer to: Attachment 02 - EnergyAxis Security by Design.

## Training and Knowledge Transfer Plan

The training program designed for Greenville Utilities Commission (GUC) staff will be comprehensive, ensuring that employees are skilled in the operation and management of the Advanced Metering Infrastructure (AMI) system. The program will consist of several tailored modules.

### Recommended Resources

Connexo NetSense users can have several different roles in SynergyNet system operation. A sample description of possible roles is described below. Every utility is different and will assign personnel based on their own organization. Honeywell recommends that at least two people be able to perform the tasks for each role. All roles apply whether in an on-premise or hosted solution.

**System Administrator-** responsible for managing NetSense and NMS user accounts, and system configuration. Required Tasks include:

- Setting up user accounts in NetSense and the NMS
- Modifying system configuration parameters

**Security Administrator-** responsible for managing NetSense and NMS security. Optional. Training areas include:

- Managing WAN encryption

**Meter Shop** - responsible for creating and applying meter programs, meter installations, and meter troubleshooting. Training in areas such as Metercat and meter installation. Tasks include:

- Meter troubleshooting, including on request reads and data collection
- Updating meter configuration from NetSense using files created by Metercat

**Customer Service** - responsible for answering customer questions and performing connects/disconnects. Note that these functions may be integrated with CIS or MDM systems instead of using the NetSense UI. Tasks include:

- Viewing meter readings and interval data
- Performing on request read
- Performing remote service connects and disconnects

**Billing** - responsible for making sure NetSense is set up to get billing readings correctly, and monitoring that billing readings are available as needed. Tasks include:

- Setting up Billing Cycles and monitoring Billing Cycle Performance
- Using on request read for move in/move out reads

**NetSense Administrator** - responsible for monitoring NetSense on a daily basis to ensure system is operating correctly. Tasks include:

- Setting up new meters in NetSense or monitoring automated integration process
- Monitoring system performance
- Creating custom notification schedules and assigning meters to them for special meter populations with specific requirements

**Network Administration** - responsible for installing and setting up SynergyNet routers, and monitoring WAN network issues between NetSense and the routers. Tasks include:

- Setting up routers in the NMS
- Monitoring routers and network performance

**Distribution Engineering** - uses data from NetSense to maintain and improve the distribution system and manage outages. Tasks include:

- Understanding outage and restoration reporting with SynergyNet
- Viewing voltage threshold alarms and events

The table below provides input on recommended Connexo NetSense training modules for each role. Note that these are the minimum recommendations, and each utility is unique in terms of how tasks are assigned. In addition, Meter Shop personnel would attend FieldSense training.

	Security Administrator	Security Administrator	Meter Shop	Customer Service	Billing	NetSense Administrator	Network Administration	Distribution Engineering
<b>NetSense User Administration</b>	X							
<b>NMS User Administration</b>	X							
<b>SynergyNet WAN Security Administration</b>		X						
<b>System Overview</b>	X	X	X	X	X	X	X	X
<b>Connexo NetSense Navigation</b>	X	X	X	X	X	X		X
<b>NMS Navigation</b>	X		X				X	
<b>Configuration Profiles</b>			X			X		

<b>Router Provisioning</b>							X	
<b>Electric Device Provisioning</b>						X		
<b>Data Collection and Reporting</b>			X	X	X	X		X

	Security Administrator	Security Administrator	Meter Shop	Customer Service	Billing	NetSense Administrator	Network Administration	Distribution Engineering
<b>On Request Read</b>			X	X	X	X		X
<b>Alarms, Events, and Metrics</b>			X	X	X	X		X
<b>Jobs and Tasks</b>			X	X	X	X		X
<b>SynergyNet System Monitoring and Troubleshooting</b>			X			X	X	
<b>Device Monitoring</b>			X			X		
<b>Advanced Configuration Profiles</b>			X			X		
<b>Billing Cycles and Demand Reset</b>					X	X		
<b>Disconnect/Connect Service</b>			X	X		X		
<b>Smart Grid</b>						X		X

## Connexo NetSense SynergyNet User Training Overview

Connexo NetSense user training is designed to provide a core set of modules for all users and optional modules for specific roles or features of the system. Honeywell trainers utilize both interactive lecture and targeted hands-on exercises to give students an immediate opportunity to practice what they have just learned, with the instructor available to answer any questions. The training is divided into two sessions delivered several weeks apart. The first session is 2 ½ to 3 days, focusing on basic knowledge to set up, operate, and troubleshoot the system. The second session is 1 ½ to 2 days, discussing more advanced topics including reviewing system

performance and answering questions that have come up since the initial training. By breaking the training into two sessions, students are not overwhelmed with too much information at one time. By the second training session, they are comfortable with the basic operation of the system and can focus on more advanced topics.

To maximize participant learning, there is a limit of nine students per class. The training uses the utility's Connexo NetSense EnergyAxis system, including routers and meters, so students see real world issues as they go through the training. By the end of the initial training, the system should be set up and operational.

Honeywell provides the following:

- Training documentation for each student
- Preload NetSense software with routers and meters to be used in training

The utility provides:

- Connexo NetSense Servers
- Up to three sets of routers and devices to be used by the students in training
- SynergyNet and whitelist files for the meters to be used in training
- At least three workstations for the students that can connect to the Connexo NetSense User Interface that meet the following minimal requirements:
  - Microsoft Edge or Google Chrome
  - Minimum monitor resolution of 1024 x 768
- One additional workstation for the instructor that connects to Connexo NetSense, has PowerPoint installed, and meets the above requirements (or instructor's Laptop connected to the network)
- One Projector or large screen TV for classroom display of PC
- Lunch to be provided for each full day of training

## Example Connexo NetSense EA User Training Schedule – Session 1

Training would typically be held Tuesday through Thursday, allowing Monday and Friday for travel days for the trainer. If the training is electricity only, training should be done by noon Thursday. If the training includes Water and/or Gas, training will be done by the end of the day Thursday. The exercises for the modules listed below are conducted using meters identified by the utility specific for the week of training. The goal is that by noon Friday, utility has routers and meters set up in Connexo NetSense and is receiving data from them.

The first hour Tuesday morning is for System Administrators. The rest of the day is for any user.

### Tuesday Morning first hour – Connexo NetSense Administrator Training

- Connexo NetSense User Administration

### Tuesday Morning and Afternoon – Connexo NetSense User Training Day 1

- System Overview
- Connexo NetSense Navigation
- Data Collection and Reporting
- On Request Read
- Basic Events and Alarms



## Wednesday: User Training Day 2

- Connect/Disconnect Service \*
- Billing Cycles (Demand Reset) \*
- Provisioning Routers and Electric Meters
- Smart Grid
- SynergyNet Water and Gas (optional)

## Thursday: User Training Day 3

- Basic System monitoring and troubleshooting
- Review system performance, alarms, and events
- Review day to day checks and operations

\* Optional modules – depends on utility interests and contract (water/gas).

### Example Connexo NetSense EA User Training Schedule – Session 2

The second training session is typically held a few months after the initial training and lasts 2 days. By this time, people have been using the system and are comfortable with the basic operation and are ready to learn more advanced topics. The training would typically be held Tuesday and Wednesday, or Wednesday and Thursday. The example has training starting on Tuesday.

#### Tuesday morning – Advanced System Administrator Training

- Advanced System Administration
- WAN Security Administration (optional)
- Advanced Alarms and Events

#### Tuesday afternoon: Advanced User Training Day 1

- Device Configuration Profiles
- Creating and Using EER files

#### Wednesday: Advanced User Training Day 2

- Advanced Troubleshooting
- Review system performance, alarms, and events
- Review day to day checks and operations
- Q&A

\* Optional modules – depends on utility interests and contract (water/gas).

## Connexo NetSense Modules

Module Name	Intended Audience	Topics covered
Connexo NetSense User Administration	Connexo NetSense Administrators who manage user accounts	Understand user security profiles in Connexo NetSense and manage Connexo NetSense Users
System Overview	Everyone who uses the system	Understand SynergyNet system, including SynergyNet network, routers, and devices
Connexo NetSense Navigation	Everyone who uses Connexo NetSense	Log onto Connexo NetSense, Navigate the menus, Use Device Search, and Use Axis Detect
Data Collection and Reporting	Everyone who uses the system	Understand how data is pushed from devices to Connexo NetSense and how to View meter readings and interval data in Connexo NetSense

Module Name	Intended Audience	Topics covered
On Request Read	Everyone who use the system	Use Jobs and Tasks to perform on request reads, including register and interval data
Basic Alarms and Events	Everyone who will monitor the system.	Understand and view alarms and events in Connexo NetSense
Disconnect/ Connect Service	Anyone who connects or disconnects service through Connexo NetSense.	Connect and disconnect service and Report disconnected devices
Billing and Demand Reset	Anyone who needs to manage Billing Reads	Manage Billing Cycles and monitor their performance in Connexo NetSense and Understand demand resets in the SynergyNet network
Smart Grid	Anyone interested in outages/restorations and other distribution information	Understand available outage and restoration information, Use Power Status Check, and View outages in Axis Detect
Electric Device Provisioning	Everyone who sets up SynergyNet routers and devices in NetSense	Understand device provisioning process from installation in field to being set up and ready to read in NetSense
SynergyNet Water and Gas	Everyone who will be setting up and managing SynergyNet water/gas devices in NetSense	Understand how SynergyNet water and gas devices communicate, how to provision them in NetSense, how to obtain readings and monitor performance
SynergyNet System Monitoring and Troubleshooting	Those responsible for monitoring system performance	Monitor the system for communication or device problems, Troubleshoot communication and device issues,

## Connexo NetSense Modules – Advanced Training

Module Name	Intended Audience	Topics covered
Advanced System Administration	Connexo NetSense administrators who configure the system	Configure settings in Connexo NetSense and Axis Detect

Module Name	Intended Audience	Topics covered
WAN Security Administration	Person responsible for setting up and maintaining WAN security.	Manage WAN Seeds.
Advanced Alarms and Events	Those who set up alarm and event filters	Review setting up alarm and event filters and how to use them, and how to customize the columns shown. Review existing alarm and event filters set up on the system.
Configuration Profiles	Everyone who sets up configuration profiles for REXU and A3 devices	Understand Device Configuration Profiles – creating, reporting, and assigning devices.
Creating and Using EER Files	Anyone who needs to understand how to change A3 or REXU components from Connexo NetSense	Create EER files in Metercat and use them to create Device Configuration Profiles in NetSense. Assign meters to EER Device Configuration Profiles. Report on EER Device Configuration Profiles and assignments.
Advanced Troubleshooting	Those responsible for troubleshooting communication issues.	Review advanced troubleshooting techniques. Be able to troubleshoot device health issues and understand device temperature threshold events.
Review System Performance, Alarms, and Events	Anyone responsible for monitoring or troubleshooting the system	Now that the system has been running for a few months, take another look at communication performance. Look for devices that aren't communicating. Review system alarms to determine which ones are important and what actions to take.
Review Day to Day Checks and Operations	Those responsible for day-to-day operations of the system	Now that the system has been running for a few months, review daily and weekly checks to be made in NetSense. Determine if any modifications should be made.
Q&A	Anyone who has been using the system and has questions	After using the system for a few months, users often have new questions. Time is allotted to review and answer any questions that may come up.

## Connexo FieldSense Training Overview

Honeywell provides a comprehensive two-day, 12-hour course using our meter configuration and test software to improve user efficiency and ensure utilities get the results they need from Honeywell meters. Connexo FieldSense training is designed to be interactive, with students learning about the setup and use of the software for creating user groups, functions, passwords, and meter programs to configure ALPHA A4 C&I meters and residential meters. We also show users how to gather and interpret meter diagnostic readings.

The training program covers both Metercat and Inspector training:

- Metercat training is designed for field service personnel who will use an Android handheld (HH) device to access meters with an Optical Probe.
- Inspector training is designed for field service personnel who will use an Android handheld (HH) device to communicate with devices using Inspector's Beltclip RF Radio.

## Training Schedule

### Day 1

- Metercat server
- Administration stations
- Synchronization to MeterSense and Inspector
- General operation
- Meter diagnostic reads

### Day 2

- Overview of A4 meter options
- Program development for A4 meters and routers
- Development of Endpoint Execution Request (EER) files

Honeywell provides:

- Training materials for each student

The utility provides:

- Server with Metercat server installed on it, provided by IT
- Administration Station (laptop) in class with access to server
- Optical probe (USB or Bluetooth for MeterSense HH)
- Beltclip Radio (Bluetooth) with purchase of Inspector
- Android HandHeld Device (HH)

## Connexo FieldSense Modules

Module Name	Intended Audience	Presentation	Topics covered	Time (min)
FieldSense Introduction	Everyone who will use Metercat or Inspector and needs and overview	PPT and interface with instructor's Metercat software	<ul style="list-style-type: none"> <li>FieldSense solution</li> <li>User roles</li> <li>Tasks of admin station user</li> <li>Main window</li> <li>MeterSense and Inspector</li> </ul>	90
Metercat Administration	System Administrators who set up multiple user groups on network server	PPT and interface with customer's instance of Metercat software and Android tablets	<ul style="list-style-type: none"> <li>Installation decisions</li> <li>Stand-alone use vs. network server system</li> <li>Creating groups</li> <li>Privileges</li> <li>Viewsets</li> <li>Group functions</li> <li>Programs</li> <li>Access levels</li> <li>Inspector Manager</li> <li>Synch with Android tablets</li> </ul>	120
MeterSense and Inspector Meter Connection Setup	Everyone who will use Metercat, MeterSense and Inspector HH devices	PPT and use of the HH	<ul style="list-style-type: none"> <li>Using the MeterSense App to communicate with A4</li> </ul>	30
Inspector Setup and meter communications	Everyone who will use Inspector HH devices	PPT and use of the HH	<ul style="list-style-type: none"> <li>Using the Inspector App to investigate meter's radio communications</li> </ul>	30
Metercat Connections and Phonebook	System Administrators setting up a Multiple user instance	PPT and interface with student's Metercat software	<ul style="list-style-type: none"> <li>Meter connection methods</li> <li>Setting up connection definitions</li> <li>Creating Phonebook</li> </ul>	30
Functions and Viewsets	Everyone who will use Metercat or MeterSense	PPT and interface with student's Metercat software	<ul style="list-style-type: none"> <li>Function management</li> <li>Functions and Tasks</li> <li>Viewset management</li> <li>Viewset during activities</li> <li>Sample Viewsets</li> </ul>	90
Passwords	System Administrator or everyone who will be using or modifying passwords	PPT	<ul style="list-style-type: none"> <li>Three levels of passwords</li> <li>Password management</li> <li>Changing passwords</li> <li>Defining meter passwords used from the HH</li> </ul>	30



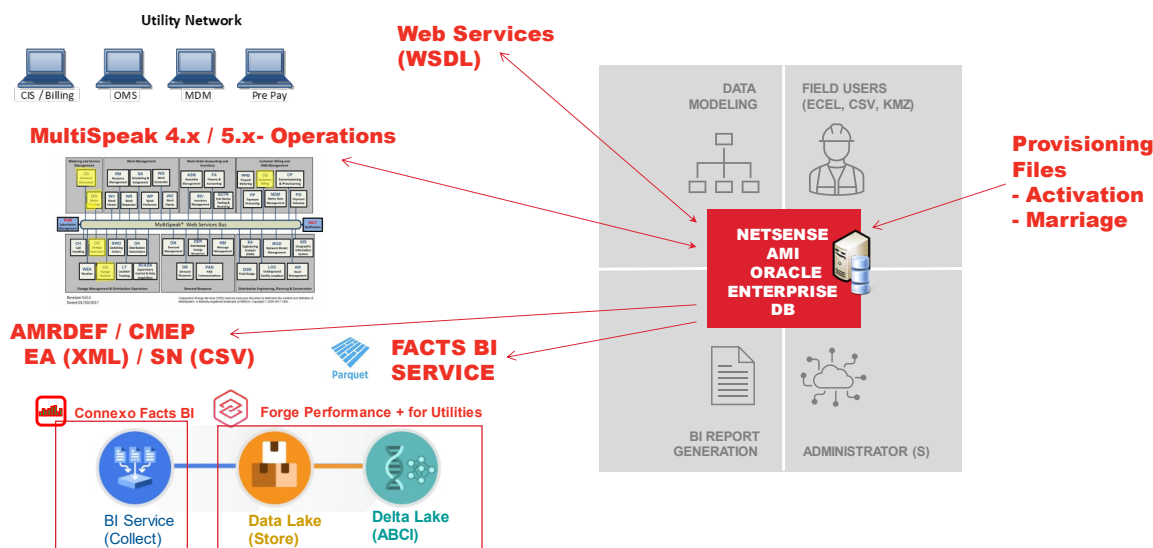
Module Name	Intended Audience	Presentation	Topics covered	Time (min)
Reading Meters and Reports	Everyone who will use Metercat or MeterSense to read meters	PPT, Optical probe reading of meters from student's PC	<ul style="list-style-type: none"> <li>• Connection</li> <li>• Functions Task and Viewsets</li> <li>• Reading meters</li> <li>• Troubleshooting reading a meter (A4)</li> <li>• Stored reading management</li> <li>• Re-sync with Metercat server</li> <li>• Reports</li> </ul>	60
Programing A4	Everyone who will use Metercat to "create" meter programs	PPT and interface with student's Metercat software	<ul style="list-style-type: none"> <li>• Working together to create sample programs for A4.</li> <li>• Program identification</li> <li>• Copying a Program or Component</li> <li>• Naming conventions</li> <li>• Transferring</li> </ul>	180
Configuring A4 with Endpoint Execution Request (EER)	Everyone who will use Metercat to remotely modify A4 meter program settings or create EER files	PPT and interface with student's Metercat software	<ul style="list-style-type: none"> <li>• A4 component remote updates</li> <li>• Development of EER files</li> </ul>	60
Introduction to Metering (if needed)	Everyone unfamiliar with utility terminology and metering	PPT	<ul style="list-style-type: none"> <li>• Review of electric utility metering quantities and terms</li> <li>• Review of Honeywell meter types</li> </ul>	30
				Total: 12.5 hours

## Data Analytics and Predictive Capability

### Honeywell Data Management and Analytics Approach

Honeywell's approach to data management is to provide the right information to the right location at the right time. Our approach considers the devices, the telecommunications networks, the head end and delivery of information to other systems. Our electric meters store information in the ANSI C12.19 tables and communicate via ANSI C12.22 protocols (as is the case with our water and gas modules). Our smart gas meters communicate via DLMS. Once the data reaches the head-end system, we use a variety of methods to move the information from the head-end to other target systems – e.g. MDM, CIS, OMS, SCADA. These methods depend on the receiving systems needs. The figure below shows several of the data formats / protocols that we use.

### NETSENSE DB – SINGLE SOURCE OF TRUTH



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Honeywell's Data Analytics and Business Intelligence solutions target the utility's entire ecosystem—from utility end user, utility operations to field smart grid management.

Honeywell will also be able to offer a vast array of additional capabilities via our next generation Utility Digitalization Platform. Honeywell is developing a cloud-based data unification and digital transformation platform that seamlessly enables unified collection, validation, and curation of data with real-time visualization and analysis; delivering value extraction through a continually growing set of capabilities from operational reliability, compliance monitoring, capital planning.

This platform will allow the City of Greenville to monitor, visualize, report, and analyze unified and curated data from Greenville's AMI smart meters, other MDM and CIS systems. We believe that Honeywell's upcoming Utility Digitalization Platform delivers on all The City of Greenville business objectives and requirements. This next-generation unification and analytics suite is being built on the Honeywell Forge platform, where we have already deployed this concept for building management (Honeywell Sustainable Building Manager and Smart Power) and smart cities (Honeywell CitySuite).

Honeywell's Utility Digitalization Platform, Honeywell Forge Performance+ for Utilities, is evolutionary in nature, but also continually growing in functionality and capability. Specifically, new analytics modules will be introduced based on prioritization from our strategic clients through regular "voice of customer" and customer advisory board meetings.

Honeywell Forge Performance+ for Utilities is a digital platform that enables utilities to plan and operate more efficiently, reliably and cost-effectively.

For more information see Attachment 03 - Honeywell-Forge-Performance-for-Utilities-Brochure.

## Required Forms

- **RFQ Acknowledgment Form**
- **Insurance Acknowledgement Statement**
- **E-Verify Form**

## RFQ Acknowledgement and Signature Form

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### RFQ No.: 25-10, Advanced Metering Infrastructure (AMI) Vendor Selection

The undersigned having carefully examined the location of the proposed work, the local conditions of the place where the work is to be done, the Invitation, the General Conditions, the Specifications and all of the documents for this project, proposes to enter into a contract with Greenville Utilities Commission in Greenville North Carolina perform the work listed in this RFQ, including all of its component parts, and to furnish any and all required labor, materials, equipment, insurance, bonding, taxes, transportation and services required for this project in strict conformity with the plans and specifications prepared, including any Addenda, within the time specified.

#### Addendum Acknowledgement:

The following addendum (addenda) is (are) acknowledged in this RFQ: N/A

#### Acknowledgement and Signature:

1. No Proposal is valid unless signed in ink by the person authorized to make the proposal.
2. I have carefully read, understand and agree to the terms and conditions on all pages of this RFQ. The undersigned agrees to furnish the services stipulated in this RFQ.

#### Respondent's Name and Title:

Company Name: Elster Solutions, LLC a Honeywell Company

Address: 208 South Rogers Lane, Raleigh, NC 27610

Telephone: 289-242-5940 Fax: Email is preferred

Email: tim.kowdys@honeywell.com Cell Number: 289-242-5940

Contractor License # (if applicable): \_\_\_\_\_ Expiration Date: N/A

Federal Tax Identification Number by: FEIN 16-1636768

Authorized Signature: Tim Kowdys Date: March 11, 2025  
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#### Decline RFQ:

We **do not** wish to submit a RFQ on this Project. Please state your reason below. Please also indicate if you would like to remain on our Supplier list.

Reason: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Company: \_\_\_\_\_ Address: \_\_\_\_\_

Name: \_\_\_\_\_ Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)  
03/27/2024

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

**IMPORTANT:** If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

<b>PRODUCER</b> Aon Risk Services Northeast, Inc. New York NY Office One Liberty Plaza 165 Broadway, Suite 3201 New York NY 10006 USA	<b>CONTACT NAME:</b> <b>PHONE</b> (A/C. No. Ext): (866) 283-7122 <b>FAX</b> (A/C. No.): (800) 363-0105 <b>E-MAIL ADDRESS:</b>														
<b>INSURED</b> Honeywell International Inc. 855 S. Mint Street Charlotte NC 28202 USA	<table><tr><th>INSURER(S) AFFORDING COVERAGE</th><th>NAIC #</th></tr><tr><td>INSURER A: XL Insurance America Inc</td><td>24554</td></tr><tr><td>INSURER B: XL Specialty Insurance Co</td><td>37885</td></tr><tr><td>INSURER C: Greenwich Insurance Company</td><td>22322</td></tr><tr><td>INSURER D:</td><td></td></tr><tr><td>INSURER E:</td><td></td></tr><tr><td>INSURER F:</td><td></td></tr></table>	INSURER(S) AFFORDING COVERAGE	NAIC #	INSURER A: XL Insurance America Inc	24554	INSURER B: XL Specialty Insurance Co	37885	INSURER C: Greenwich Insurance Company	22322	INSURER D:		INSURER E:		INSURER F:	
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INSURER C: Greenwich Insurance Company	22322														
INSURER D:															
INSURER E:															
INSURER F:															

Holder Identifier :

**COVERAGES****CERTIFICATE NUMBER:** 570104640771**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS												
C	<input checked="" type="checkbox"/> <b>COMMERCIAL GENERAL LIABILITY</b> <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> <input type="checkbox"/> GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC <input type="checkbox"/> OTHER:			RGC943763011	04/01/2024	04/01/2025	<table><tr><td>EACH OCCURRENCE</td><td>\$5,000,000</td></tr><tr><td>DAMAGE TO RENTED PREMISES (Ea occurrence)</td><td>\$5,000,000</td></tr><tr><td>MED EXP (Any one person)</td><td>\$50,000</td></tr><tr><td>PERSONAL &amp; ADV INJURY</td><td>\$5,000,000</td></tr><tr><td>GENERAL AGGREGATE</td><td>\$5,000,000</td></tr><tr><td>PRODUCTS - COMP/OP AGG</td><td>Included</td></tr></table>	EACH OCCURRENCE	\$5,000,000	DAMAGE TO RENTED PREMISES (Ea occurrence)	\$5,000,000	MED EXP (Any one person)	\$50,000	PERSONAL & ADV INJURY	\$5,000,000	GENERAL AGGREGATE	\$5,000,000	PRODUCTS - COMP/OP AGG	Included
EACH OCCURRENCE	\$5,000,000																		
DAMAGE TO RENTED PREMISES (Ea occurrence)	\$5,000,000																		
MED EXP (Any one person)	\$50,000																		
PERSONAL & ADV INJURY	\$5,000,000																		
GENERAL AGGREGATE	\$5,000,000																		
PRODUCTS - COMP/OP AGG	Included																		
C	<b>AUTOMOBILE LIABILITY</b> <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> NON-OWNED AUTOS ONLY			RAC943764211	04/01/2024	04/01/2025	<table><tr><td>COMBINED SINGLE LIMIT (Ea accident)</td><td>\$1,000,000</td></tr><tr><td>BODILY INJURY (Per person)</td><td></td></tr><tr><td>BODILY INJURY (Per accident)</td><td></td></tr><tr><td>PROPERTY DAMAGE (Per accident)</td><td></td></tr></table>	COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000	BODILY INJURY (Per person)		BODILY INJURY (Per accident)		PROPERTY DAMAGE (Per accident)					
COMBINED SINGLE LIMIT (Ea accident)	\$1,000,000																		
BODILY INJURY (Per person)																			
BODILY INJURY (Per accident)																			
PROPERTY DAMAGE (Per accident)																			
C	<input type="checkbox"/> <b>UMBRELLA LIAB</b> <input checked="" type="checkbox"/> OCCUR <input checked="" type="checkbox"/> <b>EXCESS LIAB</b> <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION			RA0943764511 EXCESS AUTO ONLY	04/01/2024	04/01/2025	<table><tr><td>EACH OCCURRENCE</td><td>\$4,000,000</td></tr><tr><td>AGGREGATE</td><td></td></tr></table>	EACH OCCURRENCE	\$4,000,000	AGGREGATE									
EACH OCCURRENCE	\$4,000,000																		
AGGREGATE																			
A	<b>WORKERS COMPENSATION AND EMPLOYERS' LIABILITY</b> ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N N	N/A	RWD943540311	04/01/2024	04/01/2025	<table><tr><td><input checked="" type="checkbox"/> PER STATUTE</td><td><input type="checkbox"/> OTHER</td><td></td></tr><tr><td>E.L. EACH ACCIDENT</td><td></td><td>\$5,000,000</td></tr><tr><td>E.L. DISEASE-EA EMPLOYEE</td><td></td><td>\$5,000,000</td></tr><tr><td>E.L. DISEASE-POLICY LIMIT</td><td></td><td>\$5,000,000</td></tr></table>	<input checked="" type="checkbox"/> PER STATUTE	<input type="checkbox"/> OTHER		E.L. EACH ACCIDENT		\$5,000,000	E.L. DISEASE-EA EMPLOYEE		\$5,000,000	E.L. DISEASE-POLICY LIMIT		\$5,000,000
<input checked="" type="checkbox"/> PER STATUTE	<input type="checkbox"/> OTHER																		
E.L. EACH ACCIDENT		\$5,000,000																	
E.L. DISEASE-EA EMPLOYEE		\$5,000,000																	
E.L. DISEASE-POLICY LIMIT		\$5,000,000																	
B	Excess Workers Compensation			RWE943540411 XS WC (AZ, OH, WA) SIR applies per policy terms & conditions	04/01/2024	04/01/2025	<table><tr><td>EL Each Accident</td><td>\$5,000,000</td></tr><tr><td>EL Disease - Ea Emp</td><td>\$5,000,000</td></tr></table>	EL Each Accident	\$5,000,000	EL Disease - Ea Emp	\$5,000,000								
EL Each Accident	\$5,000,000																		
EL Disease - Ea Emp	\$5,000,000																		

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Evidence of coverage . Blanket Additional Insured where required by written contract endorsement is included on the General Liability and Automobile Liability policies . Blanket contractual Liability is included on the General Liability and Auto policies per the policy coverage forms. A waiver of subrogation where required by written contract is included on applicable policies shown above. Honeywell will provide the General Liability ISO endorsement form numbers where required by written contract upon request.

**CERTIFICATE HOLDER****CANCELLATION**

Honeywell International Inc. 855 S. Mint Charlotte NC 28202 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.  AUTHORIZED REPRESENTATIVE  <i>Aon Risk Services Northeast, Inc.</i>
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Certificate No : 570104640771



**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,**  
**FORM NUMBER:** ACORD 25 **FORM TITLE:** Certificate of Liability Insurance

<b>ADDITIONAL POLICIES</b>	If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.
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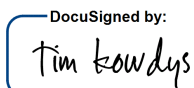
## E-Verify Form

Letter of Compliance to E-Verify for Greenville Utilities Commission. Please complete the form below.

1. I have submitted a bid for contract or desire to enter into a contract with the Greenville Utilities Commission;
2. As part of my duties and responsibilities pursuant to said bid and/or contract, I affirm that I am aware of and in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
3. ☒ After hiring an employee to work in the United States I verify the work authorization of said employee through E-Verify and retain the record of the verification of work authorization while the employee is employed and for one year thereafter; or
4. ☐ I employ less than twenty-five (25) employees in the State of North Carolina.
5. As part of my duties and responsibilities pursuant to said bid and/or contract, I affirm that to the best of my knowledge and subcontractors employed as a part of this bid and/or contract, are in compliance with the requirements of E-Verify, Article 2 of Chapter 64 of the North Carolina General Statutes, to include (mark which applies):
6. N/A After hiring an employee to work in the United States the subcontractor verifies the work authorization of said employee through E-Verify and retains the record of the verification of work authorization while the employee is employed and for one year thereafter; or
7. N/A Employ less than twenty-five (25) employees in the State of North Carolina. Specify subcontractor: N/A

Elster Solutions, LLC a Honeywell Company (Company Name)

By: Tim Kowdys (Typed Name)

DocuSigned by:  
  
88130490610B4F3... (Authorized Signatory)

Sales Director, North America (Title)

March 11, 2025 (Date)



It is certified that this proposal is made in good faith and without collusion or connection with any other person bidding on the same above listed items. It is also certified that this proposal is made in good faith and without collusion or connection with any GUC employee(s).

Certified check or cash for N/A or bid bond for N/A attached.

Firm Name: Elster Solutions, LLC a Honeywell Company Phone: (289) 242-5940

Address: 208 South Rogers Lane

City Raleigh State North Carolina Zip Code 27610

Fax ( ) Email is preferred E-mail tim.kowdys@honeywell.com

Authorized Official Tim Kowdys Title Sales Director, North America

Typed Name

DocuSigned by:



Date March 11, 2025

Signature

**Your Proposal should be received no later than March 11, 2025, 2:00PM (EST)**