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# Request for Proposal (RFP)

REF #: HCI\_AMIRFP\_2846

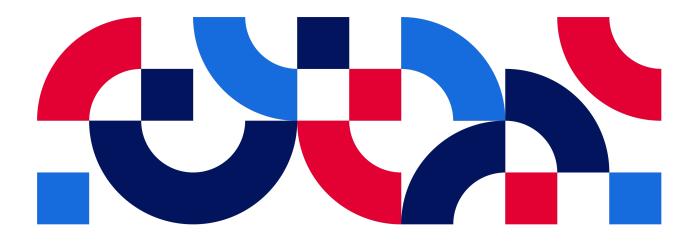
# Advanced Metering Infrastructure Solution

Release Date: February 7, 2020

Deadline for Submission: March 20, 2020

Issued by:

Hometown Connections, Inc. 12081 W. Alameda Parkway, #464 Lakewood, Colorado 80226



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# 1. INSTRUCTIONS TO RESPONDENTS

HCI and its affiliated joint action agencies assume no responsibility for any costs incurred by any Respondent to this RFP. All costs are entirely the responsibility of the Respondent. Good faith responses to this RFP are being solicited without the creation of any obligation between parties, explicit or implied.

# 1.1 RESPONSE REQUIREMENTS

All responses must be received by 4:00 PM on Friday, March 20, 2020 Mountain Time.

**Four** paper copies of Respondent's response shall be submitted to the address below. Please clearly note the RFP Reference number **REF #: HCI\_AMIRFP\_2846** on the outside of the packaging.

ATTN: Tim Blodgett
Hometown Connections, Inc.
C/O American Municipal Power
1111 Schrock Road, Suite 100
Columbus, Ohio 43229

In addition to the above, a single copy of the response in digital form shall be uploaded. Include **REF #: HCI\_AMIRFP\_2846 – Response (Respondent Name)** in the subject line and contact Susan Ryba (sryba@hometownconnections.com) for details.

HCI will acknowledge receipt of Respondent's response via email.

Only those responses that are received by the deadline noted above will be considered. Delivery in any other manner does not constitute proper or adequate delivery. Failure to submit a response to the RFP may eliminate the AMI Respondent from the RFP process, at HCl's sole discretion. Selection will be based upon the ability of each Respondent's respective solution to meet HCl's needs and requirements.

Upon submission, all responses become the property of HCI.

HCI makes no representation or warranty regarding the accuracy or completeness of the information contained in this RFP or any statements made by representatives of HCI during the RFP process. Each Respondent is responsible for making its own evaluation of information contained in this RFP and in preparing and submitting responses to this RFP.

The issuance of this RFP and the receipt of information in response to this RFP shall not, in any way, cause HCl to incur any liability (whether contractual, financial or otherwise) to any Respondent participating in the RFP process, and by submitting a response, the Respondent releases HCl from any and all claims, demands, actions, losses, liabilities, expenses (including reasonable legal fees and expenses) relating to this RFP.

HCl may, in its sole discretion, waive any informalities in a proposal.

#### 1.2 PROPOSAL SUBMITTALS

The proposal shall be concise, yet sufficient in detail to allow for the thorough evaluation of the solution and its actual costs. The following shall be included in the proposal:

- 1. Cover Letter
  - a. Provide legal name of respondent company, including street and mailing addresses.
  - b. Indicate the key contact(s) for this response, including telephone number(s) and email address(es).
  - c. One central point of contact is preferred.
- 2. Responses are to include:

**SECTION 4 – PROJECT OVERVIEW** 

**SECTION 5 – GENERAL REQUIREMENTS** 

<u>SECTION 6 – CYBER SECURITY ASSESSMENT QUESTIONNAIRE</u>

<u>SECTION 7 – SAAS HOSTING QUESTIONNAIRE</u>

**SECTION 8 – QUALIFICATIONS & REFERENCES** 

**SECTION 9 – PRICING** 

**SECTION 10 – ATTESTATION / SIGNATURE PAGE** 

**EXHIBIT A -REQUIREMENTS MATRIX** 

**EXHIBIT B – PRICING FORM** 

#### **Vaporware Clause:**

All components proposed by Respondent (e.g. AMI head-end system, network equipment, meters) shall be available and in production as of the date of the response. If specific components are not yet available/in production and Respondent wishes to propose them then Respondent must clearly state the future date of availability for each specific component.

# 1.3 QUESTIONS ABOUT RFP

Questions regarding this RFP must be received according to the date shown below in **Section 1.4**, **Table 1 – Procurement Schedule**. Send all questions via email to Susan Ryba (<a href="mailto:sryba@hometownconnections.com">sryba@hometownconnections.com</a>) and include **REF #: HCI\_AMIRFP\_2846 - Questions** 

(Respondent Name) in the subject line. HCl will endeavor to answer all questions in a timely manner. However, HCl reserves the right to not answer specific questions as HCl sees fit not to answer.

In consideration of the busy schedules of HCI owners and their members, those entities may not be contacted with questions about the RFP. They will not answer questions, and inquiries to them will disqualify the inquiring Respondent. Questions should be directed as stated above.

#### 1.4 PROCUREMENT SCHEDULE

Estimated schedule for completing the evaluation and selection:

Table 1: Procurement Schedule				
Activity	Date	Time MT		
RFP Release Date	2/7/2010	Noon		
Mandatory Pre-Proposal Conference Call	2/20/2020	Noon		
Last Date to Submit Written Questions or Requests for Clarification	3/10/2020	4pm		
Proposal Due	3/20/2020	4pm		
Notification of Respondent Shortlist	4/20/2020	4pm		
Respondent Short List Meetings	5/4/2020 through 5/8/2020	TBD		
Notification of Successful Respondent	6/5/2020	4pm		

# 1.5 PROJECT SELECTION CRITERIA

Proposals will be rated based on the following criteria in no particular order:

- 1) Ability of proposed AMI system to provide all desired features
- 2) Strength of solution for electric, water, and natural gas AMI
- 3) Ability to support optional requirements
- 4) Respondent stability and strength

- 5) Strength of project management and implementation plan
- 6) Strength of on-going support
- 7) Price (total cost of ownership)
- 8) System interface capabilities & support provisions
- 9) Strength of partnering relationships if needed to meet objectives

HCI reserves the right to request clarifications of technical proposals or to conduct discussions or request presentations for the purpose of clarification with any or all of the Respondents. The purpose of such discussions will be to ensure full understanding of the proposal. If clarifications are made as a result of the discussion, the Respondent shall promptly submit such clarifications via email and send to Susan Ryba (<a href="mailto:sryba@hometownconnections.com">sryba@hometownconnections.com</a>) and include REF #: HCI\_AMIRFP\_2846 – Proposal Clarification (Respondent Name) in the subject line.

Selection of successful Respondent's solution does not guarantee a specific number of customers or an exclusive relationship with HCI or its owners or customers. Each potential HCI customer will be able to select a successful Respondent's AMI and/or MDMS to implement.

#### 1.6 **SELECTION COMMITTEE**

A Selection Committee consisting of the AMI Project Team and other individuals will evaluate proposals. This committee will review all proposals and evaluate them on the basis of overall responsiveness to requirements, completeness, thoroughness of presentation, and the criteria described above.

Respondents who submit a proposal in response to this RFP may be required to attend an interview (short-list meeting) to give an oral presentation of their proposal to the Selection Committee. This provides an opportunity for the Respondent to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. HCI will schedule the time and location of the interview or presentation if requested.

Following its evaluation, the Selection Committee will rank the firms and their programs in order considered most capable of meeting HCl's overall needs. HCl will select the firm(s) considered most capable. Negotiations will begin with firm(s). If a mutual agreement can't be reached in a reasonable time, HCl will reject the proposal(s) and begin negotiations with the next firm(s) considered most capable and so forth, until a mutual agreement is reached.

# 2. DEFINITIONS

- Vaporware software or hardware that has been advertised but is not yet available to buy and deploy, either because it is only a concept or because it is still being written or designed.
- 2. AMI Advanced Metering Infrastructure
- AMI Head-End System that communicates with endpoints in the field through some type of wireless network. Collects device reads, issues commands to devices (disconnect, on-demand read, etc.), and pulls in device alerts (i.e.... last gasp, meter tamper).
- 4. MDMS Meter Data Management System. Typically, a system that can store data for a longer period of time than an AMI headend and has advanced analytics features and integrations. It is understood that MDM and AMI Head-end functionality and features can sometimes overlap.
- 5. **NOC** Network Operations Center
- 6. **SOC** Security Operations Center

# 3. HCI OVERVIEW

# 3.1 HCI BACKGROUND

Hometown Connections, Inc. (HCI) is a national, non-profit utility services organization specializing in the unique challenges facing community-owned utilities. Over more than 20 years, our expert team has helped more than 900 utilities to modernize their processes and systems. Using a collaborative, community-focused approach, Hometown Connections provides innovative solutions without the private industry price tag.

Facilitating access to technology and services from industry-leading companies for utilities of all sizes, Hometown Connections offers solutions to develop each area of the utility business:

- Operations
- Cybersecurity
- Business Strategy

- Customer Care
- Finance
- Workforce

HCI serves exclusively the approximately 2,000 public power utilities located across the U.S. Six public power joint action agencies have invested in HCI. Each agency is an equal share member of Hometown Connections, Inc. and collectively represent 316 utilities in 15 states. The full marketing/sales network of HCI includes additional affiliated joint action agencies, state associations, and regional representatives across the U.S., for a total of 28 relationships covering 38 states or 78% of all public power utilities. For more information, visit www.hometownconnections.com.

HCI is governed by its Board of Directors, which is composed of representatives from the American Public Power Association and each of HCI's six joint action agency members:

- Alabama Municipal Electric Authority (AMEA)
- American Municipal Power (AMP)
- Great Lake Utilities (GLU)
- Missouri Public Municipal Alliance (MPUA)
- Northern California Power Agency (NCPA)
- Vermont Public Power Supply Authority (VPPSA)

Management of HCI is under the direction of its President & CEO.

One of HCI's long-term goals is to provide a diversified portfolio of options for technology systems, and HCI understands that no single AMI solution or technology can address every municipality's needs. The market has made it clear that there are multiple best of breed solutions that can each fit a specific need. Therefore, HCI is releasing this RFP for the acquisition of additional AMI and/or MDMS solutions to add to our suite of products and services and provide additional alternatives to public power utilities. HCI envisions that a utility may choose either our existing solution or a solution resulting from this RFP. HCI also expects that we could pair our existing MDMS to a proposer's AMI head-end and network and/or we could pair our existing AMI head-end to a proposer's MDMS.

# 4. PROJECT OVERVIEW

#### 4.1 **SCOPE**

The following section provides a general overview of the requirements of HCl's AMI System. These requirements are not intended to be all-inclusive and Respondents are encouraged to describe additional product capabilities where appropriate.

HCI, its members, and their municipal utility members are seeking an Advanced Metering Infrastructure (AMI) solution compromised of meters, network equipment, and an AMI Headend. Meter Data Management System (MDMS)-only responses will also be considered. HCI intends to help community-owned public power utilities modernize their meter reading and data management operations and to create an infrastructure that will meet the needs of a changing industry. Elements of this improvement will include a Smart Cities approach. Respondents shall fully address the information requested throughout this document, relating to the solution proposed.

HCI's primary objective is to partner with qualified Respondent(s) to deploy a single multi-tenant or several individual advanced metering infrastructure (AMI) endpoints networks and systems and/or meter data management systems (MDMS) for municipalities and provide hosting and support for system(s) for a period of 10 years.

HCI's project requirements are described in this <u>Section 4 – Project Overview, Section 5 – General Requirements, and Exhibit A – Requirements Matrix</u>. HCI has bulk pricing on meters, network equipment software and services from our existing providers. Respondents shall provide goods and services pricing that keeps with this bulk pricing model. HCI currently has a pipeline of approximately 100,000 endpoints that could utilize this solution. However, HCI cannot and will not guaranty specific quantities to secure bulk pricing.

One of HCI's long-term goals is to aggregate non-AMI and MDMS project efforts among a broad array of utilities as an alternative to improve operating efficiencies and reduce costs. These Smart Cities add-ons may include Smart lighting, local generation, electric vehicles, and the like.

This RFP addresses a system-wide fixed network AMI implementation for electric, water, and gas meters and modules and a Meter Data Management System (MDMS).

A summary of required hardware, software, and service shall be included in the proposal. Detailed requirements and pricing are addressed in the remainder of this RFP and in Exhibits.

#### **AMI Communications Network.**

The Respondent will design and bid a multi-use AMI communications network that will support the following types of utilities:

- Electric Only
- Electric, Water
- Electric, Water, Gas

About 80% of our Public Power utilities operate both electric and water systems, or electric, water and gas systems. As such, the metering system must be able to accommodate large water and gas-only areas. Please show how the metering network will handle this diversity in service type. It is also requested, but not required, that Respondent show how their network would support a water-only or gas-only utility and remain competitively priced in this regard. The network should be able to deliver 15-minute interval data for all electric meters and 1-hour interval data for all water and gas meters. The network must also support encrypted communications between devices and back to the head-end.

Respondent should describe how their network supports current and smart city use cases such as street lighting control, traffic control, environmental monitoring, and EV charging stations.

The proposal shall include costs for network deployment including data collector and relay, configuration, post-deployment testing, and training. Installation is not in scope.

The performance of this network will need to be backed by service level agreement guarantees that have clearly defined financial consequences for non-compliance.

#### **Electric AMI Meters with integrated communications modules.**

The Respondent will bid electric AMI meters with integrated communications modules (NICs) to meet HCI's requirements in this RFP. All meters are required to have the NIC installed and tested prior to leaving the meter manufacturer's facility.

#### Water Meters and AMI Modules.

The Respondent will bid water meters with an integrated register/communications module (NIC) or with a register and separate 3-wire attached communications module. Integrated registers need to support, at a minimum, leak alarms, reverse flow alarms, low battery alarms, and a tamper alarm. 3-wire attached communications modules need to support, at a minimum, low battery alarms and cut wire tamper alarms. The respondent is also asked if their solution

supports 2-wire a communication module. This is important where touch pads are wired with 2-wires.

#### Software.

The Respondent will propose solutions that will be hosted for each of the components listed below:

- AMI Head-end Software. Multitenant is preferred.
- Meter Data Management System (MDMS) and Integrations.
- Customer Web Portal. This software shall support electric, water, and gas customers.

For MDMS Respondents a proposal of just the MDMS software is acceptable.

#### Other Software and Services.

The Respondent shall include the following in their proposal:

- Necessary Software. All software necessary for the field configuration and maintenance
  of the AMI network and meters. 10 years of support is required to be included with the
  price of this software.
- All costs for project implementation services to include project management, system design and configuration, testing, and training for all bid components.
- Integration services for the following types of integrations between a utility's CIS:

#### One-Way Flat File Integration:

- Head-end or MDMS to CIS files- delimited file (tab, comma, etc.) delivered via automated transfer for import into utility cis system. Files include billing determinate, meter exchange, and others as necessary to provide meter to cash functionality.
- If MDMS is included the AMI to MDMS must be two-way as necessary to facilitate device activation and provide data.

#### Two-Way integration:

 File exchange: formatted files exchanging AMI/MDMS and CIS data in an automated fashion.

#### MultiSpeak (Web Services) Integration:

 Data exchange of AMI/MDMS and CIS data in an automated fashion using MultiSpeak protocols.

#### Other Integration types:

Please explain (CIM, etc.)

The Respondent shall address, in its response to the RFP, how it plans to manage the following areas:

- 1. Project Management
- Configuration/design meetings (include meeting cadence)
- 3. Training
- 4. Testing
- 5. Documentation / Scope of work / Time-Line of deployment with milestone time line
- 6. Support for both software and hardware
- 7. Software licensing & maintenance
- 8. Software integration (interface to CIS)

The successful Respondent must provide a system that is scalable from several thousand meters to over 1 million end-points, with expansion into other areas that include, but are not limited to, smart lighting, electric vehicles, distributed and micro generation, load control management and Demand Response, Distribution Automation, home area network (HAN) devices, Conservation Voltage Reduction (CVR), pay-as-you-go/prepay, and more.

Upon reviewing responses, HCl and its owners will select those Respondents that will be invited to participate in the resulting short-list meeting, based upon the suitability of the proposed solution to meet the customer needs.

# 5. GENERAL REQUIREMENTS

Respondents must answer all questions below related to the overall AMI and MDMS solution and Respondent's experience. If Respondent provides more than one AMI and/or MDMS solution, please provide information on all the solutions offered.

In addition to this section, Respondent is required to answer all questions in **Exhibit A** – **Requirements Matrix**.

#### 5.1 SALES CHANNEL / PARTNER RELATIONSHIP

HCI realizes that respondent could have existing relationships with distributors and/or channel partners. However, HCI expects to deliver a solution nationally to public power utilities. It is important to understand that the HCI solution is a comprehensive long-term solution

1. Will HCl be able to provide all parts of your solution (meters, network gear, software, services, etc.) to all municipal utilities within the United States without having to go through a distributor or channel partner? If not, please explain.

- 2. Will the pricing you provide to HCl as part of this RFP response remain consistent regardless of location of municipal utility within the U.S. and regardless of which channel partner's footprint they fall under? If not, please explain.
- 3. How will you handle existing channel partner relationships and messaging to them regarding HCI offering your solution in their footprint and in cases where they might have been the incumbent meter provider up to this point?

#### 5.1.1 OWNER MEMBER RFPS

In certain instances, municipalities will require an RFP prior to selection of a solution.

 Explain how your organization will clear the path for HCI to be able to respond to these RFPs as the sole proposer of your solution and not have to compete with channel partners or distributors offering the same product/service? If this will not be possible, please explain your approach and how you expect HCI to be competitive in this scenario.

#### 5.1.2 POST DEPLOYMENT ORDERS & DELIVERY

After the initial system is sold and delivered, HCI anticipates customers may need to order additional equipment such as meters and network gear on a regular basis to ensure optimal use of their system and/or to account for customer growth. These customers may also want to deploy additional software modules to expand capabilities of the system.

1. Explain how your organization will support these customers on additional equipment and software orders. For example, if an HCI customer wanted to see a demo of a new meter or software product that would work with their system, who would go onsite and perform this demo for the customer?

# 5.1.3 SALES/MARKETING MATERIALS, TOOLS & TRAINING

Unlike a traditional AMI customer, HCI plans to manage a continuous sales and delivery cycle. In order to advise, sell and deliver effectively, HCI will need to have expert-level knowledge about the equipment, software and services available to potential customers.

1. What marketing materials and tools will you provide to HCl to assist us in quoting and delivering your solution to municipalities? Examples could include: product

- brochures, demo equipment, pricing/quoting tools, product and solution training, etc.
- 2. What training will you provide to HCI to ensure that we have expert-level knowledge about all the components of your solution? What if HCI provides the first level of support?
- 3. How will you keep HCI updated on your product roadmap so that we know when new products will be released?
- 4. Please identify if there is a cost to any of the above items in Section 5.1.3 and if you have included that in the pricing provided with this response?

# 5.2 **GENERAL SOLUTION**

- 1. Does respondent provide an electric, water, and gas AMI or MDMS solution?
- 2. Is the electric, water, and gas AMI solution all part of the same network, or is there an alternative system or overlay?
- 3. Describe the AMI solution options Respondent provides. Include all software solutions and partner solutions available, e.g. MDMS, outage, pay-as-you-go, electric vehicles, micro or co-generation, etc.
- 4. Describe the MDMS solution options Respondent provides. Include all software solutions and partner solutions available, e.g. MDMS, outage, pay-as-you-go, electric vehicles, micro or co-generation, etc.
- 5. How does Respondent's solution support electrification initiatives? Please describe.
- 6. Describe Respondent's background and experience with AMI and/or MDM. How long and what types of systems has Respondent deployed? Does Respondent have a history of supporting public power and, if so, how?
- 7. If Respondent has more than one solution, which solution(s) are you suggesting/recommending for public power utilities through HCI?
- 8. Does Respondent have a solution that could be shared by many public power utilities and centrally operated? Do you require individual instances per utility requiring each utility to maintain separate servers?
- 9. Describe Respondent's communication and network constraints or limitations.

- 10. Describe Respondent's ability to deploy edge devices for future network enhancements, and the ability to support non-metering data and communications. Please answer from both an AMI and MDMS perspective.
- 11. Is the solution network IP based? Please describe.
- 12. Are RF communications provided via a licensed or unlicensed frequencies or both. Please describe and list frequencies.
- 13. Outline Respondent's contract negotiation process and timeframe to execute a contract.
- 14. Has respondent made any acquisitions of products or companies in the last 6 years? If so, describe how they have been integrated into Respondent's AMI and/or MDMS solution and how long that integration took to complete. Are they commercially available in Respondent's overall solution?
  - If the products/services acquired have not been integrated as of this time, please provide the integration plan and target date of completion.
- 15. What is the expected life of Respondent's proposed AMI or MDMS solution? Please specify each component of the solution and its expected lifespan.
- 16. Describe the project management and professional services available with Respondent's solution.
  - a) Describe your project management experience.
- 17. Does Respondent anticipate having a dedicated project management team that would be assigned to HCI?
- 18. Specify the lead-time for ordering products in Respondent's solution related to the hardware and software components.
- 19. Does Respondent manufacture its own meters? If yes, please list.
  - a) What additional meters does Respondent's solution support for:
    - i) Electric
    - ii) Water
    - iii) Gas

- b) Please list all the meter manufactures Respondent's solution supports. If Respondent's solution includes an AMI head-end, please list models and manufactures supported.
- 20. Describe the utility support required to implement the solution. Assume HCl will be hosting the AMI Head-end and possible MDMS in our facilities. If that is not an option, please explain and provide details as to how our needs will be supported.
- 21. Initial Pilot Describe Respondent's interest in and ability to support an initial pilot project or a field trial via a joint action agency or individual utilities.

#### 5.3 **SOFTWARE RELEASES**

Describe any new functions and features of the solution software that are planned for release over the next 36 months and the projected release dates.

Describe the upgrades or enhancements that have been made to the AMI and/or MDMS software products over the 24 months. Please include a list of standard system interfaces that are currently supported for billing, outage management, home area networks, GIS, load control and other systems, along with future plans over the next 24 months.

Describe Respondent's definition of a system upgrade vs. a maintenance release, and Respondent's policy on providing product upgrades, patches, and future version releases to customers such as HCI. Please define when releases are included in the existing license and maintenance fees vs. charging extra for future upgrades.

# 5.4 **CUSTOMIZATION**

HCI is seeking to reduce both deployment and long-term support costs by implementing a solution that is configurable, scalable, and requires minimal customization. This includes the use of standardized (e.g. MultiSpeak/Web Services) vs. custom interface designs where possible.

Please describe in detail the following:

- 1) The extent of AMI and MDMS functionality that can be configured to HCl's requirements without resorting to the development of customized extensions.
- 2) HCl desires that the software and its associated database management system allow for open access to the databases to generate reports using standard industry reporting and query tools.

- a) Are direct queries allowed into the database for the purposes of HCl and/or end customer being able to write custom reports. If so, please describe how Respondent keeps these queries from impacting the performance of the system (e.g. providing a copy of data in another reporting database or cube).
- 3) Provide a listing and description of standardized reports that show as a minimum system read performance, recorded events and alarms, customer account status, system diagnostics, and operating status.
- 4) Describe capabilities that allow customer to customize billing schedules, alter read schedules, add new accounts and addresses, change a customer's billing rate, and create and implement new customer rate schedules.
- 5) Please provide Respondent's definition of configuration vs. customization. Are screen designs, header changes, and new data fields considered within scope or performed at additional cost?
- 6) Please describe how Respondent's proposal accounts for the design of interfaces between AMI and MDMS. Is an MDMS needed and if not how does the customer interface to the system?
  - a) For the AMI head-end system, what MDMS systems has Respondent already integrated with?
  - b) For the MDMS, what AMI head-end systems has Respondent already integrated with?
  - c) For both AMI and MDMS, what CIS systems has Respondent already integrated with and what type of integration corresponding to the integration types defined in **Section 4.1 Scope** of this document.

#### 5.5 **CURRENT METER READING PRACTICES**

These will vary widely among public power utilities. Being flexible in this regard is essential. As a minimum, HCI expects all electric meters to be read 6x per day (every 4 hours) and capture 15-minute interval data. HCI expects water and gas meters to be read every 6-12 hours (2-4x per day) and capture 1-hour interval data.

Can Respondent's AMI Head-end integrate seamlessly into multiple CIS systems from a single instance of the head-end?

#### 5.6 **PROJECT MANAGEMENT & TRAINING**

HCI anticipates that each utility deployment will include training on how to use Respondent's system and field deployment project planning.

 Respondent should provide an example project plan and Gantt chart for the implementation of the AMI head-end and/or MDMS for a typical utility of 15,000 meters (34% electric / 33% water / 33% gas). This should include a narrative and

- identify anticipated work items and milestones along with theoretical dates of progress. Include any support required from HCl or utility staff
- 2. Identify any apparent challenges or resource constraints that may occur due to managing deployment for multiple utilities concurrently.
- 3. Please present a sample training outline and describe training structure. Both initial and ongoing.

# 5.7 **INFORMATION SYSTEMS**

Public power utilities use a wide variety of customer Information and billing systems. They range from sophisticated to basic, including legacy systems. While a full two-way integration (as defined in **Section 4.1 - Scope**) is always preferred, some utilities may not be able (or prefer) to accommodate it from the on-set. Can Respondent's solution provide such flexibility?

Does respondent's AMI solution support MultiSpeak, CIM, web service API and the like? Please explain, and list those that are supported.

What is respondent's pre-integration approach? For example, some respondents may have pre-built interfaces already developed for specific CIS systems, GIS, System, AMI Head-ends, etc.

# 6. CYBER SECURITY ASSESSMENT QUESTIONNAIRE

#### 6.1 **GOVERNANCE & ORGANIZATION STRUCTURE**

- 1. Who is responsible for cybersecurity within the organization?
- 2. Have you participated in a cybersecurity exercise with your senior executives?
- 3. How do you prioritize your organization's most critical assets?
- 4. How do you specifically protect customer information?
- 5. How are cybersecurity incidents reported?
- 6. Do you have an incident response plan? Describe it?
- 7. How often do you exercise your incident response plan?

- 8. Does your incident response incorporate the entire company or is it limited to Information Technology only?
- 9. What is the threshold for notifying executive leadership about cybersecurity threats?
- 10. Has your organization adopted a cyber-security policy framework (examples: NIST, ISO 27001)?
- 11. Have you ever experienced a significant cybersecurity incident? Please define and describe it.
- 12. When was the last time you had a cybersecurity assessment performed by a third-party organization? What were the results of that?
- 13. What were the results of your most recent vulnerability assessment or penetration test?
- 14. Describe the experience and expertise of your IT security staff.
- 15. Do you outsource any IT or IT security functions to third-party service providers? If so, who are they, what do they do, and what type of access do they have?
- 16. What types of cybersecurity policies do you have in place in your organization today?
- 17. How frequently are your employees trained on your IT security policies, and do you use automated assessments?

# 6.2 **SECURITY CONTROLS & TECHNOLOGY**

- 18. Has your organization adopted a cybersecurity technical framework (example: CIS Critical Security Controls)?
- 19. How do you inventory authorized and unauthorized devices and software?
- 20. Have you developed secure configurations for hardware and software?
- 21. How do you continuously assess and remediate your organization's cyber vulnerabilities?

- 22. How do you assess the security of the software that you develop and acquire?
- 23. What processes do you use to monitor the security of your wireless networks?
- 24. Do you have a data recovery capability?
- 25. How do you securely configure your network infrastructure?
- 26. Do you have automated tools that continuously monitor to ensure malicious software is not deployed?
- 27. Describe the processes and tools you use to reduce and control administrative privileges.
- 28. Do you blacklist or whitelist communications?
- 29. How do you analyze security logging information?
- 30. How do you monitor privileged accounts?
- 31. What processes do you have in place to prevent the exfiltration of sensitive data?
- 32. How do you plan for and train for a cybersecurity incident? What processes do you have in place to respond to an incident? Do you regularly practice those things?
- 33. Do you conduct regular external and internal tests to identify vulnerabilities and attack vectors, including penetration testing, red team exercises, or vulnerability scanning?
- 34. Do you have a disaster recovery plan? Describe it.
- 35. How often do you exercise your disaster recovery plan?
- 36. From whom do you receive cyber threat and cyber vulnerability information and how do you ingest that information?
- 37. What types of physical protection do you have in place to prevent unauthorized access to data or infrastructure assets?
- 38. How do you manage remote access to your corporate network?

- 39. How do you employ network segregation?
- 40. Do you have a removable media policy and controls to implement the policy?
- 41. Have you identified any third parties who have access to your network or data? How do you oversee their security initiatives?
- 42. How do you monitor your network to alert to cybersecurity events?
- 43. How do you monitor your third-party service providers?
- 44. How do you monitor for unauthorized personnel, connections, devices, and software?
- 45. What measures have you employed to mitigate insider threats?
- 46. Describe the process you have in place to communicate to us security incidents affecting our data or our customer's data.

# 7. SAAS HOSTING QUESTIONNAIRE

# 7.1 PRIMARY HOSTING ENVIRONMENT

- 1. Where is this hosting environment located?
- 2. Please describe availability and redundancy of the environment and datacenter. Feel free to use industry standard terms (e.g.... Tier 3 datacenter).
- 3. Please describe what Service Level Agreements (SLAs) are in place regarding this hosting environment overall availability. What uptime metrics are measured and shared with customers?
- 4. Please describe what customer facing SLAs are in place regarding the availability and performance of the application(s).
- 5. What is your data retention policy. How, much data is retained in this environment?
- 6. What monitoring is in place on this environment, both from a NOC and SOC standpoint?
- 7. What certifications does this environment maintain? Examples could include SOX, NIST, ISO27001.

# 7.2 DISASTER RECOVERY HOSTING ENVIRONMENT

- 8. What type of Disaster Recovery environment is this (Hot standby, Warm, Cold)?
- 9. Where is this hosting environment located?
- 10. Please describe availability and redundancy of the environment and datacenter. Feel free to use industry standard terms (e.g.... Tier 3 datacenter).
- 11. Please describe what Service Level Agreements (SLAs) are in place regarding this hosting environment overall availability. What uptime metrics are measured and shared with customers?
- 12. Please describe what customer facing SLAs are in place regarding the availability and performance of the application(s).

- 13. What is your data retention policy? How, much data is retained in this environment?
- 14. What monitoring is in place on this environment, both from a NOC and SOC standpoint?
- 15. What certifications does this environment maintain? Examples could include SOX, NIST, ISO27001.

# **7.3 OTHER**

- 16. Are there any other environments not described above that would apply to the solution you have proposed. If so, please list and describe.
- 17. Can the environment be hosted in HCI facilities? What other options are there?

# 8. QUALIFICATIONS & REFERENCES

# 8.1 RESPONDENT QUALIFICATIONS

HCI's preferred AMI solution will be multitenant. By this HCI means that one instance of the proposed AMI solution can be implemented and used by several utilities, many additional utilities can be added to that solution while keeping data and information for each utility separate and private from other participating utilities.

While our preferred AMI-head solution would be a true multitenant application, it does not mean HCI will not entertain alternative options. If an alternate option is being offered, please explain why this solution would be better than the above intended approach.

Only qualified Respondents that have been actively engaged (for at least five years) in the design, manufacture, integration, configuration and installation of utility AMI Systems similar to those required in these specifications will be considered.

The Respondent should furnish evidence demonstrating that the Respondent has at least **five years** of successful experience in the design, integration, configuration, manufacture, testing and implementation of AMI Systems of similar type, size and configuration. Proposals may be rejected from Respondents that have less than the requisite number years of successful experience.

#### The Respondent must provide:

- Information on background, products, and services.
- Number of years in business.
- Location of offices.
- Experience and qualifications in the AMI industry.
- Evidence of successful combined AMI and MDMS installations.
- Evidence of successful combined electric, water, and gas installations.
- List of current utilities using proposed AMI solution.

Respondent should also provide available information about its User Group.

# 8.2 **RESPONDENT QUALIFICATIONS FORM**

Name of Entity:	
Contact:	Title:
Address:	
Telephone:	
Email:	
Number of Years in Business:	
Office Locations:	

Experience and qualitifications in industry:

Experience with public power, specifically municipal utilities:

Experience with water only and/or gas only utilities:

# **User Group Information\***

How often does user group meet?

What are the typical activities?

How is the feedback from Users Group meetings factored into future product development?

<sup>\*</sup>Please attach agenda or other dated materials from most recent user group meeting as proof of actual user group.

#### 8.3 **CUSTOMER REFERENCES FORM**

Name of Entity:

Provide references from at least three (3) customers who have deployed and are operating the system being proposed. HCl prefers references where you may have integrated AMI or MDMS with multiple CIS, smart lighting, prepay, load control, distribution automation functions, and home area network (HAN) applications. More recent deployments preferred. Electric & Water or Electric, Water & Gas Deployments preferred.

Contact:	Title:			
Address:				
Telephone:	Length of Business Relationship:			
Email:				
Deployment Type (Electric/Water/Gas/MDN	1):			
Total # of Endpoints:				
Total Duration of Deployment (in Months):				
Name of Entity:				
Contact:	Title:			
Address:				
Telephone:	Length of Business Relationship:			
Email:				
Deployment Type (Electric/Water/Gas/MDN	1):			
Total # of Endpoints:				
Total Duration of Deployment (in Months):				
Name of Entity:				
Contact:	Title:			
Address:				
Telephone:	Length of Business Relationship:			
Email:				
Deployment Type (Electric/Water/Gas/MDN	1):			
Total # of Endpoints:				
Total Duration of Deployment (in Months):				

If additional space is needed, please list on a separate sheet and include in the Proposal.

# 9. PRICING

From a pricing perspective, HCI is a looking for pricing that reflects multiple aggregated utilities as we provide these projects and host them for our customers and affiliated organizations. We request that Respondent provide pricing in this regard. Please note that HCI cannot guarantee specific quantities or orders.

For implementation purposes, HCI would like to begin implementation when the first customer signs up.

Please provide all pricing in **Exhibit B – Pricing Form** 

Notes on pricing response:

- 1. Respondent should provide pricing for the implementation of the AMI head-end and/or MDMS for a typical utility of 15,000 meters (34% electric / 33% water / 33% gas).
- 2. Electric Meters: Provide pricing by meter type, form factor or any other price category. We are looking for Respondent's best quantity breakdown.
- 3. Water Meters and Endpoints: Provide pricing by meter type (residential, commercial meters positive displacement, turbine, magnetic resonance, ultrasonic) and/or any other price category Respondent believes appropriate. Separate pricing for AMI RF retrofit module(s) shall be provided as well. We are looking for Respondent's best quantity breakdown.
- 4. Gas Meters and Endpoints: Provide pricing by meter type (residential, commercial meters) and/or any other price category Respondent believes appropriate. Separate pricing for AMI RF retrofit module(s) shall be provided as well. Include any price breakpoints based on quantity purchases of meters and radio modules. We are looking for Respondent's best quantity breakdown.
- 5. Network Devices: Provide pricing for every type of network device available for the AMI solution. Detail any configuration variations noting price differences.
  - a) Please include and unit details pricing for battery backup.
- 6. Software pricing should cover the following components:

- a) AMI head-end system and any software components needed to operate the system.
- b) If applicable, Meter Data Management System available from the respondent or partners, or detailed MDMS pricing from provider.
  - a. For MDMS providers, please include base-level MDM, optional modules, integration costs, as well as one-time and annual or recurring costs, etc.
- a) Describe the delivery options for the software including a hosted service, managed service, on-premise or any other option.
- 7. Other components: Provide pricing for any add-on products available with Respondent's AMI solution.

# 10. ATTESTATION / SIGNATURE PAGE

We hereby certify that the information contained in this document is complete, true and accurate. We further certify that our Proposal has been prepared without any communication, exchange or comparison of answers or agreement having taken place with any other person, company or corporation submitting a response to the RFP, and that our Proposal is fair and has resulted in no secret agreement or deceit. We also agree to hold our proposed pricing firm for 180 days from the due date of this RFP.

# Company Name:

Company Name.
Street and Post Office:
PERSON PRESENTING THE RESPONSE
Name:
Title:
Telephone:
Fax:
Email:
Street and Post Office:
AUTHORIZED SIGNATORY
AUTHORIZED SIGNATORT
Name:
Title:
Signature:
WITNESS TO THE SIGNATURE
Name:
Title:
Signature: