

# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

1175 Elm St., Concord, MA 01742

## Consulting Services for a Metering and Communication System(s) Specification and Selection

**RFP 416**

**Responses Due by:  
January 7, 2021 at 2:00 PM EST**

**Proposals are due by 2:00 PM on Thursday, January 7, 2021 at Concord Municipal Light Plant, 1175 Elm Street, Concord, MA 01742.**

Project inquiries:

Carole Hilton  
Customer Service Administrator  
Cell: 508-479-8465  
Email: [chilton@concordma.gov](mailto:chilton@concordma.gov)

Project Submission:

ATTN: Carole Hilton, Customer Service Administrator  
Concord Municipal Light Plant  
1175 Elm St  
Concord, MA 01742

## Project Description

Concord Municipal Light Plant (CMLP) is seeking a qualified consultant (Consultant) to assist in the development of specifications for and selection of a system(s) to replace its existing obsolescing meter systems with a system to allow two-way communication with customers for improved billing and improved town-wide conservation and management (the System(s).) The System(s) shall include the entire measurement and communication system for metered services, including two-way communicating meters at the customer location; communication networks to transmit meter information from the customer location to the utility headend; and data processing and storage systems.

The minimum scope and elective work items are described in Attachment A of this RFP. The System(s) will be for electric meters and shall be capable of adding water meters in the future. The System(s) must be able to interface with CMLP's existing enterprise utility software system and potentially other Town of Concord business software applications. Required integrations include Meter Data Management Systems (MDMS), Financials, electronic bill presentment and payment, asset management/work order, Geographic Information Systems (GIS), Outage Management Systems (OMS), Distribution Automation (DA) and other applications that may leverage the wireless communication system.

## Project Approach

Refer to Attachment A: Scope of Work for a detailed description of the project goals, tasks, and timeline desired by CMLP in completing this project.

The consultant should provide a written proposal of how the consultant will complete the tasks identified in the Scope of Work in the timeline required. This should include a description of how the consultant will provide staffing, resources, and expertise to complete the project on time, on budget, and to meet CMLP's needs. The proposal should also include links to sample work.

## Preparation of the RFP Package

The preparation of the RFP Response shall be at the expense of the prospective consultant. It is the sole responsibility of the prospective firms to fully examine this RFP's addenda (if any).

The proposal shall be in the following format:

1. Introduction: Maximum of five (5) pages.
2. Project Approach: Describe how you will develop each Scope of Work item described in Attachment A §3. Not to exceed a total of seven (7) pages.
3. Firm Qualifications: Describe how your firm meets the qualifications outlined in Attachment A §5, paying particular attention to *§5.13: Consultant must be able to provide five (5) references for similar and recent (last three years) procurements for systems similar to what CMLP is seeking.*
4. Project Team: Describe the members of the project team, their role on the project, and the percentage of time they will be dedicated to the project. Please include resumes.
5. Price Proposal (To be placed in a separate, sealed Price Proposal Envelope): On page 23, there is a Price Proposal Sheet with 10 separately identified tasks that should be costed out. The price for a task shall include all hardware costs, software costs, associated labor costs, expenses, overhead and profit. All of these tasks should have a fixed price associated with them. For Item 10 – Advise and Assist with Vendor

Contract, since the exact number of hours for this task is unknown, the Town is estimating that it will take 200 hours. The number of hours requested may change depending on the circumstances and the needs of the Town and the Town asserts its right to change the number of hours – up or down – at the Town’s sole discretion. To calculate the fixed price for Item 10, the proposer should establish an hourly rate for this task and multiply this rate by 200 hours to arrive at a total for Item 10.

6. Schedule: Include a detailed project schedule to accomplish all of the scope items. CMLP is anticipating selecting and contracting with the selected Consultant by March 8, 2021.

All questions must be submitted in writing to Carole Hilton, Customer Service Administrator, Concord Municipal Light Plant, 1175 Elm St., Concord, MA 01742; [chilton@concordma.gov](mailto:chilton@concordma.gov). Questions may be received via email or mail and will be accepted up to seven (7) days before the closing date of this RFP.

All proposals submitted become the property of CMLP and will be subject to applicable Public Record Laws.

## Proposal Schedule

The following is a list of key dates in the procurement and implementation process:

RFP Issued	November 12, 2020
Virtual Pre-Proposal Webinar Meeting	December 1, 2020
Questions Due to Carole Hilton at CMLP	December 10, 2020
Responses to Questions/Addenda Issued	December 17, 2020
Proposals Due to CMLP	January 7, 2021
Oral Presentations (if requested)	Between January 25-February 2, 2021
Consultant Selection	February 5, 2021
Consultant Contract Execution	March 8, 2021
Consultant Begins Work	March 10, 2021

## Evaluation Criteria and Rule for Award

### 1. Minimum Criteria

- 1.1. Proposer must demonstrate proven experience and ability 1) documenting System(s)-related organizational business processes and interface design requirements; 2) identifying and quantifying town-wide System(s) benefits by Enterprise Fund using a net present value methodology; 3) organizing and facilitating informational stakeholder meetings that solicit feedback; 4) developing and producing electric and water System(s) Requests for Proposal; 5) evaluating vendor responses, and 6) negotiating System(s) vendor sale, installation and maintenance contracts.
- 1.2. Proposer must be able to demonstrate vendor independence with no financial ties to any System(s) vendor.

- 1.3. Proposer must have successfully completed at least five (5) comparable projects within the last ten (10) years.
- 1.4. Proposer must have completed at least one (1) System(s) Request for Proposal for a municipal or government client.
- 1.5. Proposer must have at least ten (10) years of experience working in the electric, water and telecommunications industries specific to the System(s) as evidenced by past work, speaker engagements and publications.
- 1.6. Proposer must exhibit an understanding of the Project, CMLP's goals, and concerns.
- 1.7. Proposer must confirm the ability, capacity, skill and financial resources to complete the project timely. Selected proposer will be required to provide financial statements, a letter from their bank, or their Dunn and Bradstreet credit rating.
- 1.8. CMLP may make such investigations as CMLP deems necessary and the proposer shall furnish to CMLP all such information and data for this purpose as requested.
- 1.9. Proposer must have completed Certificate of Non-collusion (see Appendix).
- 1.10. Proposer must have completed Statement of State Tax Compliance (see Appendix).
- 1.11. Proposer must have completed the Price Proposal Sheet (see Appendix).
- 1.12. Proposer must have a list of References for all projects similar in scope within the last three (3) years.
- 1.13. Proposer must have followed, completed, and produced any of the required materials as required in this Request for Proposals.

## **2. Comparative Evaluation Criteria**

- 2.1. Proposals will be evaluated based on their responsiveness to the following weighted criteria:
  - 2.1.1. Experience working in the electric, water and telecommunications industries specific to the System(s) as evidenced by past work, speaker engagements and publications (20%)
  - 2.1.2. Demonstrates technical and financial expertise and knowledge of electric and water utilities including meter reading, rates, utility billing, electric distribution system and substation planning, MDMS, DA, CVR, SCADA, OMS, mesh and point to point communications networks, fiber optic systems and networks, and Smart City features associated with the System(s) software applications as well as a thorough understanding of future trends in these utilities. For the System(s), Proposer must have the ability to evaluate the communications infrastructure recommended by vendors and consider how that infrastructure meets or overlaps the needs of CMLP and the Town in the short and long-term as well as taking into consideration ongoing maintenance requirements. Understand the role fiber-to-the-premises may or may not play in supporting a System(s) deployment (20%)
  - 2.1.3. Number and quality of previous System(s) benefit quantification studies (20%)

- 2.1.4. Number and quality of System(s) installations that supported demand response to include thermostats, switches, conservation voltage reduction, electric vehicles, and solar support for electric utilities (10%)
  - 2.1.5. Number of negotiated System(s) contracts that were executed (15%)
  - 2.1.6. Experience Engaging Stakeholders on the Topics of metering and communications (10%)
  - 2.1.7. Effective reporting and presentation skills (5%)
- 2.2. The Committee will assign a rating of Highly Advantageous, Advantageous, Not Advantageous, or Unacceptable to the previously listed criteria based upon the follow details:

**Factor 1:** *Experience working in the electric, water and telecommunications industries specific to AMI (20%)*

**Highly Advantageous:** Proposer clearly demonstrates successful experience working in the electric, water and telecommunications industries specific to the System(s).

**Advantageous Proposer:** Proposer demonstrates some experience working in the electric, water and telecommunications industries specific to the System(s).

**Not Advantageous:** Proposer’s experience working in the electric, water and telecommunications industries specific to the System(s) is limited or unclear.

**Unacceptable:** Proposer has no experience working in the electric, water and telecommunications industries specific to the System(s).

**Factor 2:** *Demonstrates technical and financial expertise and knowledge of electric and water utilities (20%)*

**Highly Advantageous:** Proposer clearly demonstrates expertise in all areas described in §5 “Qualifications” of the Attachment A: Scope of Work and has a strong multidisciplinary team.

**Advantageous:** Proposer demonstrates a strong understanding in most areas described in §5 “Qualifications” of the Attachment A: Scope of Work.

**Not Advantageous:** Proposer demonstrates some understanding in the areas described in §5 “Qualifications” of the Attachment A: Scope of Work.

**Unacceptable:** Proposer demonstrates no understanding in the areas described in §5 “Qualifications” of the Attachment A: Scope of Work.

**Factor 3:** *Number and quality of previous System(s) benefit quantification studies (20%)*

**Highly Advantageous:** Proposer has authored many excellent System(s) benefit quantification studies, some of which have been published.

**Advantageous Proposer:** Proposer has authored some good System(s) benefit quantification studies.

**Not Advantageous:** Proposer has authored at least one System(s) benefit quantification study.

**Unacceptable:** Proposer demonstrates no experience preparing System(s) benefit quantification studies.

**Factor 4:** *Number and quality of System(s) installations that supported demand response (10%)*

**Highly Advantageous:** Proposer has clearly detailed and documented experience negotiating System(s) installations that supported demand response.

**Advantageous:** Proposer has some demonstrated experience negotiating System(s) installations that supported demand response.

**Not Advantageous:** Proposer demonstrates little experience negotiating System(s) installations that supported demand response.

**Unacceptable:** Proposer demonstrates no experience negotiating System(s) installations that supported demand response.

**Factor 5:** *Number of negotiated System(s) contracts that were executed (15%)*

**Highly Advantageous:** Proposer has clearly detailed and documented experience negotiating contracts for System(s) that were ultimately executed by multiple utilities.

**Advantageous:** Proposer has some demonstrated experience negotiating contracts for System(s) that were ultimately executed by more than one utility.

**Not Advantageous:** Proposer demonstrates little experience negotiating contracts for System(s) that were ultimately executed by a utility.

**Unacceptable:** Proposer demonstrates no experience negotiating contracts for System(s) that were ultimately executed by a utility.

**Factor 6:** *Experience Engaging Stakeholders on the Topics of Metering and Communications (10%)*

**Highly Advantageous:** Proposer has clearly detailed and documented experience engaging the public and stakeholders with diverse technical backgrounds on the topics of metering and communications.

**Advantageous:** Proposer has some demonstrated experience engaging stakeholders and the public on the topics of metering and communications.

**Not Advantageous:** Proposer demonstrates little experience engaging stakeholders on the topics of metering and communications.

**Unacceptable:** Proposer demonstrates no experience engaging stakeholders on the topics of metering and communications.

**Factor 7: Effective Reporting and Presentation Skills (5%)**

**Highly Advantageous:** Proposer’s comparable reports and presentations are neatly organized, visually engaging, and informative to clearly convey complex information, allowing readers of all levels to digest the information as presented.

**Advantageous:** Proposer’s comparable reports and presentations effectively use graphics to present the requisite information.

**Not Advantageous:** Proposer’s comparable reports and presentations are somewhat effective in conveying complex information or lack engaging presentation.

**Unacceptable:** Proposer’s comparable reports and presentations are ineffective in conveying complex information or lack engaging presentation.

### 3. Evaluation Process

- 3.1. CMLP will determine the most advantageous proposal from a responsible and responsive proposer who meets the minimum criteria by taking into consideration price and all of the evaluation criteria.
- 3.2. Proposals will be evaluated by a team of reviewers selected by the Town Manager.
- 3.3. The evaluation process will take place with three steps:
  - 3.3.1. Proposals submitted will be ranked in terms of their responses to the comparative evaluation criteria.
  - 3.3.2. The price proposal envelopes will be opened and the proposals will be judged by taking into consideration each price along with evaluation criteria rankings.
  - 3.3.3. The reviewers will report their recommendations to the Town Manager, who will make the final decision.
- 3.4. CMLP reserves the right to schedule interviews with any responsive and responsible firms to gather additional information and/or to award a contract.
- 3.5. In these matters, the judgment of the Town Manager will be binding, conclusive, and final.

### 4. Awarding of Contract

- 4.1. The Town Manager will make the final decision on the contract after receiving the recommendations of the review team.
- 4.2. In these matters, the judgment of the Town Manager will be binding, conclusive, and final.

- 4.3. CMLP anticipates that the contract will be awarded within 90 days after the RFP opening unless the time for the award is extended by mutual consent of the parties. The contract shall specify the start date.
- 4.4. CMLP may make any inquiries regarding this process.

## **5. CMLP's Right to Reject Proposals**

- 5.1. The Town Manager reserves the right to reject any or all proposals if it is in CMLP's interest to do so.
- 5.2. The Town Manager may consider informal any proposal not prepared and submitted in accordance with the provisions hereof and may waive any informality or reject any and all proposal, should the Town Manager deem it to be in the CMLP's interest.
- 5.3. The Town Manager may reject proposals which in its sole judgment are incomplete, conditional, obscure, or not responsive; or which contain additions not called for, erasures not properly initialed, alterations or similar irregularities, or the Town Manager may waive such omissions, conditions or irregularities, if considered minor.

## **CMLP's Liability**

The Town of Concord's liability under this Contract shall be limited to the payments due thereunder. In no event shall CMLP be liable for any additional amounts, including without limitation, any indirect, special or consequential damages.

Protection Against Liability: The Proposer acknowledges and agrees that he is responsible as an independent Consultant for all operations under this Contract and for all acts of employees and agents thereunder, and agrees that he will indemnify, exonerate and hold harmless the Town of Concord and its officers, boards, employees, agents and officials, from and against any and all loss, damage, cost, charge, expense and claim, which may be made against it or them or to which it or they may be subject by reason of any alleged act, action, neglect, omission or default on the part of the Consultant or any of their agents or employees and will pay promptly on demand all costs and expenses of the investigation and defense thereof, including attorneys' fees and expenses. If any such claim is made, the Town of Concord may retain out of any payments, then thereafter due to the Consultant, a sufficient amount to protect it completely against such claim, costs and expenses.

## **Certificates of Insurance**

1. Certificates of Insurances shall be filed with the Town of Concord within ten (10) business days of the signing of a contract in the following categories and amounts:
  - i. General Liability of at least \$1,000,000 Bodily Injury and Property Damage Liability, Combined Single Limit with a \$3,000,000 Annual Aggregate Limit. The Town of Concord should be named as an "Additional Insured".
  - ii. Automobile Liability (applicable for any contractor who has an automobile operating exposure) of at least \$1,000,000 Bodily Injury and Property Damage per accident. The Town of Concord should be named as an "Additional Insured".
  - iii. Workers' Compensation Insurance as required by law.

- iv. Professional Liability of at least \$1,000,000/occurrence, \$3,000,000 aggregate. The Town of Concord should be named as an “Additional Insured”.
- v. Umbrella Liability of at least \$5,000,000 per occurrence, \$5,000,000 in aggregate. The Town of Concord should be named as an “Additional Insured”.
2. The Certificates of Insurance shall be from an insurance company that is an admitted carrier in Massachusetts and has an A.M. Best rating of “A” or better.
3. The Contractor and all Subcontractors shall waive subrogation rights against the Town of Concord for all losses
4. The Contractor shall notify the Town of Concord within ten (10) days in the event that any or all of these Certificates of Insurance are cancelled.

## Instructions to Proposers

### 1. Submission Deadline

Proposals will only be accepted up until 2:00 PM on Thursday, January 7, 2021 and opened that same day. Mailed or hand-delivered proposals will be accepted, and must be in the possession of CMLP by the above-noted deadline. No proposals will be accepted after that time.

CMLP will review all proposals received in response to this RFP timely and reserves the right to accept and to conduct interviews with the parties it deems most qualified. All Consultants who submit proposals in response to this RFP will be notified of the results of the selection process.

Interested Consultants shall provide five (5) hard copies and one electronic (PDF) copy of the proposal to:

Carole Hilton, Customer Service Administrator  
Concord Municipal Light Plant  
PO Box 1029  
1175 Elm Street  
Concord, MA 01742-1029  
[chilton@concordma.gov](mailto:chilton@concordma.gov)

### 2. Documents Required

- 2.1. Each proposal shall contain two sealed envelopes inside one larger envelope. The two envelopes shall contain the following:

**Envelope 1 - Technical Proposal** (include one (1) original and four (4) copies of the documents listed below):

- Letter of Transmittal - The letter must be signed by an individual(s) authorized to bind the prospective firm contractually.

This letter must state that the price proposal sheet quoted in response to the RFP will remain valid from the date of submission until the award of the contract.

The transmittal letter shall include the name, title, address, email address, and telephone number of one or more individuals who can respond to requests for additional information and also, of one or more individuals who are authorized to negotiate and execute a contract on the prospective consultant's behalf, if applicable.

- Resumes - The Proposer must provide resumes and professional qualifications of all employees who will be assigned to work on the project. The Proposer must declare the percentage of the Project that will be performed by each employee.
- List of Work Experience - Proposer must provide a list of five (5) other similar projects undertaken within the last ten (10) years. Past municipal experience is given greater weight.
- Certificate of Non-Collusion - Proposer must provide signed copies of this form attached in the Appendix.
- Statement of State Tax Compliance - Proposer must provide signed copies of this form attached in the Appendix.
- List of References - Proposer must submit all references from the last three (3) years in which similar work as is requested in this RFP was performed. The list shall include the following information:
  - Client name, title, address, telephone number, and email address;
  - Description of work performed;
  - Amount of the contract;
  - Dates of performance;
  - Scope of work performed.
- Statement - Proposer must submit a statement affirming that the Proposer's proposal is a firm offer for a period of at least 90 days, and that the Proposer will comply with the terms of this RFP.
- The following label shall be placed on the outside of the **Technical Proposal**:

Technical Proposal

Request for Proposal 416 – System(s) Specification and Selection

Consultant name, address, and telephone number

Consultant contact name

**Envelope 2 - Price Proposal** (include one original):

- Price Proposal Sheet - Proposer must provide a copy of the form attached in the Appendix in a **sealed envelope**.
- The following label shall be placed on the outside of the **Price Proposal**:

Price Proposal

Request for Proposal 416 – System(s) Specification and Selection

Consultant name, address, and telephone number

Consultant contact name

**3. Questions**

- 3.1. An optional virtual pre-proposal webinar meeting will be held on Tuesday, December 1, 2020 via Zoom. The purpose of the pre-proposal conference is to allow an open forum for discussion and questions regarding the RFP with all having an equal opportunity to hear and participate.

Interested parties may participate by video or audio conference, and those indicating an interest in participating will be sent a Zoom invitation with the meeting details. To participate in the pre-proposal conference, participants should indicate their interest in attending by sending an email to: Carole Hilton, [chilton@concordma.gov](mailto:chilton@concordma.gov) by Monday, November 30, 2020.

After the pre-proposal conference, any important clarifications, modifications, and/or amendments to the RFP shall be issued via a written addendum to the RFP which will supersede anything conveyed orally.

- 3.2. Any questions related to the RFP shall be made in writing by email and sent to: Carole Hilton, [chilton@concordma.gov](mailto:chilton@concordma.gov).

- 3.3. Written responses will be emailed to all Proposers on record as having received these specifications. Every interpretation made to a Proposer will be sent as promptly as is practicable to all persons to whom the specifications have been issued.

#### **4. Postponed Opening Due to Uncontrolled Events**

- 4.1. If at the time of the scheduled RFP opening, the CMLP Operations Center is closed due to uncontrolled events such as pandemic, fire, snow, ice, wind, or building evacuation, the RFP opening will be postponed until 2:00 PM on the next business day. Proposals will be accepted until that date and time.

#### **5. Modifying or Withdrawing a Proposal**

- 5.1. A proposer may correct, modify or withdraw a proposal by written notice received by CMLP prior to the time and date set for the RFP opening. Proposal modification must be submitted in a sealed envelope clearly labeled "Modification Number X". Each modification must be numbered in sequence and must reference the original RFP number.
- 5.2. After the RFP opening, a proposer may not change any provision of the proposal. Minor informalities may be waived or the proposer may be allowed to correct them, at the discretion of the Town's Chief Procurement Officer (CPO) or the CPO's designee.

## **Appendix**

The Appendix to RFP 416 contains the following documents:

- Attachment A: Scope of Work
- Certificate of Non-collusion
- Statement of Tax Compliance
- Price Proposal Sheet

# Appendix

## Attachment A

### Consulting Services for System(s) Specification and Selection

#### Scope of Work

#### 1. Background

- 1.1. The Town of Concord, Massachusetts is located approximately 20 miles northwest of Boston with a total area of 25.9 square miles. Concord Municipal Light Plant (CMLP) is a municipal utility that owns, operates, and maintains electric and broadband distribution systems serving a population of approximately 17,000 located within the Towns of Concord and Acton, Massachusetts. The Town of Concord also provides water, sewer, and solid waste services to its citizens under separate Town departments. Below are some highlights of Concord’s Systems.

Concord Statistics	
Number of utility customers	Electric (7,004 Residential; 1,287 Non-Residential) Water (5,202 Residential; 405 Non-Residential) Broadband (1435 Residential; 121 Non-Residential)
Enterprise software system	National Information Solutions Corporation; Modules used: CIS, ABS, MapWise, OMS
Billing cycles	Currently 3 monthly billings
Electric distribution system	Service provided by CMLP; two substations with 13- 13.8kV distribution circuits, approximately 5290 poles
Water distribution system	Service provided by the Concord Public Works (CPW)
Broadband distribution system	Service provided by CMLP. 105 miles of fiber optic cable traversing all major roads which is attached to CMLP poles and is partially underground. The fiber optic network is connected to Town administrative buildings, electric substations, Fire Stations, the Police Station and public schools.

CMLP operates as an enterprise fund of Town government and functions under the specific statutory authority contained in Chapter 164 of Massachusetts General Laws. CMLP is managed under the operational authority of the Town Manager pursuant to Section 9 of the Town Charter and designation in the Light Department Administrative Code as Manager of the Municipal Light Plant. The Town Manager appoints the five-member Light Board, the department head (the CMLP Director) and all CMLP staff. The CMLP Director supervises the department staff and reports to the Town Manager.

All CMLP operating expenses, capital investments, and debt service are paid from electric and broadband revenues. In addition, CMLP contributes to the Town via a Payment-in-Lieu-of Taxes (PILOT). For 2020, this formula-based payment was \$478,000.

- 1.2. CMLP implemented the National Information Solutions Corporation (NISC) utility billing/customer information system software application in 2019. CMLP uses the following modules: Customer

Information System (CIS), Accounting and Business Solutions (ABS), MapWise (GIS), and OMS (Outage Management System). NISC also offers a Meter Data Management System (MDMS) that CMLP is not yet using. CMLP's NISC application is hosted in the Cloud.

- 1.3. The majority of CMLP's single-phase, residential meters are radio read of various manufacturers, including GE, Itron, Focus, and Landis & Gyr. There are about 8,450 single phase residential meters.

In 2010, CMLP installed an AMI system consisting of approximately 800 AMI Meters and fiber-optic cabling using a Zigbee mesh network. CMLP's objectives were as follows:

- Technology Assessment -
  - Field test meters and communications
  - Assess infrastructure needs
  - Effect on business processes
- Solar net metering capability
- Load control capability

An RFP was issued in 2009 for the AMI system and proposals were received from Milsoft Utility Solutions, Itron, MUnet, Carina Technology, US Energy Company, SimpliHome, and NexGrid. NexGrid was awarded the CMLP implementation.

CMLP installed the new AMI meters at locations with solar generation and/or load-controlled heating and hot water heating. CMLP also hoped to offer load control for thermostats, but physical incompatibilities with the wiring in many older Concord homes prevented the American thermostats supplied by NexGrid from operating with the new meters. More AMI meters have been purchased over time to accommodate more solar generation, changes in load control customers, and to enhance the quality of the partially-deployed mesh network. The AMI system is hosted in the cloud by NexGrid's EcoOne product.

CMLP is open to maintaining the NexGrid system for the premises that already have AMI meters and acquiring new AMI meters for the balance of the town or replacing all meters with new AMI meters. If all existing meters are replaced, CMLP will need some way to perform load control for those customers on load control rates. The Consultant will be expected to compare the costs and benefits of maintaining the Nexgrid meters with the 100% replacement option and determining the alternative that best suits the Utilities' needs.

For water meters, CPW deploys approximately 5,600 meters. This total includes about 4,150 Sensus meters, 465 Neptune meters, 230 Invensys meters, 175 Badger meters, 75 Elster meters, with the balance from a variety of other manufacturers. About 20% of the installed meters are less than five years old, 20% are between five and ten years old, with the remaining 60% over ten years old.

All 5,600 meters use Itron endpoints. Most of these endpoints are Itron 60 watt units, with a small number of Itron 40 watt units still in use, with a growing number of Itron 100 watt units.

- 1.4. The current meter reading system is mostly manual. The radio read meter readings are read using a handheld or truck-mounted radio receiver in three cycles over each month. Due to holidays and other factors, CMLP is sometimes challenged to maintain a uniform number of billing cycle days. The AMI meter readings are downloaded from a NexGrid-hosted server to the NISC billing system.
- 1.5. CMLP has historical records of completed field job orders, including finals, out-of-cycle readings, meter change outs, and disconnects for non-payment. These field jobs total approximately 1,500 orders per year.

## 2. Objectives

CMLP expects the System(s) to:

1. Enable time-of-use rates that will: lower customer bills through the improved utilization of infrastructure; promote fairness in revenue recovery; enhance the economics of battery installations; and encourage the charging of electric vehicles during low cost time periods.
2. Provide more timely, broader information about the real-time, quantitative system demand that will allow CMLP to optimize its transformer configuration, thereby reducing energy waste.
3. Reduce the frequency and duration of outages by allowing CMLP to isolate outages faster, dispatch repair crews more precisely, and detect equipment in need of repair or replacement.
4. Facilitate the measurement and billing of net metered customers with distributed generation.
5. Enable Direct Load Control, automated load control, and customer-driven load control of heating systems, hot water heaters and electric vehicles. CMLP wants to be able to offer new energy management tools to its customers, enabling them to control Smart Devices in their homes using cell phones.

CMLP desires to leverage the existing fiber optic network in order to minimize the duplication of physical infrastructure and to offer a wired solution to those customers who want one.

## 3. Scope of Services

Scope of Work Summary	
1	Prepare data request to CMLP and collect required background data.
2	Conduct a review of existing utility goals, concerns, systems and applications.
3	Quantify the expected benefits of a system-wide System(s) implementation.
4	Determine optimal System(s) hardware and software procurement strategy.
5	Develop RFP specifications, procurement documents and evaluation criteria.
6	Prepare presentation material and conduct stakeholder engagement on the RFP plan.
7	Project manage the RFP process.
8	Evaluate vendor responses.
9	Write a recommendation summary.
10	Advise and assist CMLP with vendor contracting.

- 3.1. Data Request and Collection – Prior to initial site visits, CMLP will provide relevant information requested. Lists of meters, engineering maps of the territory including fiber optic locations will be provided. The Consultant is encouraged to read CMLP’s Strategic Plan 2018-2025.
- 3.2. Systems, Applications, Goals, and Concerns review – It shall be the responsibility of the Consultant to investigate and document CMLP’s existing procedures and systems as they relate to the creation of the System(s) business case; and to understand the goals CMLP wants to achieve with the System(s).
- 3.3. System(s) Industry Overview - The selected Consultant should be able to provide an introductory overview of current System(s) product and service offerings to educate the CMLP Team, including current state of the market, equipment and software availability. The following topics, at a minimum, should be addressed:
  - Meter Communication Technologies; RF Mesh and Point to Point; fiber, or other based on how those technologies work in CMLP’s climate and environment
  - Metering Technology (latest features available)
  - Backhaul Technologies; Cellular, Fiber, other
  
  - CIS (Customer Information System) Software Interface
  - GIS Interface
  - Meter Data Management (MDM), Advanced Data Management (ADMS), MDM with Analytics, etc.
  - Troubleshooting Customer Quality Complaints, High Bill Complaints, etc.
  - Outage Management Systems (OMS)
  - Distribution Automation, Utility Equipment and Customer Equipment
  - System(s) performance acceptance criteria
  - Rate Design/Analysis and value of interval data
  - Communication plan to Customers and standard literature from technical sources CMLP could use to explain benefits and safety of the System(s)
  - Capability of energy management with the System(s)
- 3.4. CMLP Systems, Applications and Goals - The Consultant shall facilitate discussions with Customer Service/Billing, Information Technology, Engineering, Finance, Rates/Load Control, Metering, and the Water Department to gain a thorough understanding of CMLP’s current systems, applications, and the main features and functions desired from the System(s) and software for the next 10 years. The Consultant shall consider the desired functionality in light of what is standardly available in the market, advising CMLP of potential ramifications that could be encountered by specifying features that are not typical for the industry. Understand what the NISC enterprise system can do with the data provided by the System(s). Discuss lessons learned with the existing AMI deployment.
- 3.5. CMLP Concerns - A concern has been raised about the potential for negative health impacts from the implementation of AMI meters using radio frequency communications technology and a suggestion was made to offer a wired-only service to those customers who request it. The wired-only service would not use wireless technology for any communication pathways, nor would it expose opt-in customers to electric and magnetic fields. The Consultant shall conduct a meeting with stakeholders to

hear their concerns and take those concerns into consideration when evaluating possible AMI equipment and communications protocols.

- Financial – Avoided infrastructure builds / reduced personnel needs
- New Services – Time of use / energy management / outage Information
- Future Compatible – Distributed energy resources / Internet of everything / flexible architecture
- Security - Cybersecurity best practices / physical overrides

3.7. System(s) Procurement Strategy - It shall be the responsibility of the Consultant to work with CMLP to create the most efficient and effective way to procure the required labor, materials, and equipment, services to implement, install, and integrate the System(s) components. The Consultant shall consider the potential to use CMLP staff in the deployment process in addition to outside contractors.

3.7.1. Determine whether CMLP should install the meters, contract separately for meter installation, or obtain a turnkey supplier for the System(s) and meter installation.

3.7.2. Strategize the optimal way to structure the RFP to obtain results most beneficial to CMLP.

3.8. RFP Specifications and Vendor Evaluation Criteria

3.8.1. The Consultant shall develop specifications for the System(s) taking into account the Systems, Applications, Goals and Concerns identified in 3.2 and the Consultant's typical specifications. The identified requirements should incorporate the Consultant's expert industry knowledge and ensure future-proofing as requirements evolve. These specifications will be used to purchase hardware and software for the System(s). CMLP shall work with Consultant to review and approve the specifications.

3.8.2. AMI vendor qualifications shall be developed that will limit those bidding based on experience with vendors' equipment and personnel, deployed systems in similar sized utilities, presence in the region, and other critical factors.

3.8.3. Specification format may follow the Consultant's typical format and will include the following topics and possibly others not listed;

- Vendor Equipment and Software Specifications
- Communications protocols and emissions statistics
- Hardware functions
- Acceptance Criteria
- Cyber Security
- Vendor qualifications
- Software / MDM / Analytics specifications and optional proposals
- Cloud/Onsite software specifications

3.8.4. The Consultant shall develop evaluation criteria to compare the proposals on an apples-to-apples basis. The criteria shall be clearly explained and included in the RFP with definitions of what constitutes good, fair, poor, etc. Weighting factors shall be assigned to each criterion so that a composite score may be calculated for each proposer. Some criteria may be quantitative in nature, such as total cost of ownership over the life of the proposal term. Other criteria may be qualitative. CMLP shall work with Consultant to review and approve the evaluation criteria.

The Consultant's industry knowledge of what has been successful and what has been unsuccessful in similar System(s) deployments will be a key factor in the determination of CMLP's final system requirements and evaluation criteria based on the experience of the selected Consultant.

- 3.9. RFP Plan Presentation – Prepare presentation material and conduct stakeholder engagement on the RFP draft, proposed schedule and evaluation criteria.
- 3.10. RFP Project Management
  - 3.10.1. Procurement documents preparation – Draft the System(s)-specific portions of the RFP<sup>1</sup> including a proposed schedule. Allow all viable technologies. Structure meter installation as a separate, optional offering. Include a clear explanation of how the respondents will be evaluated and a scoring system. Ensure that the response requirements and format will enable an apples-to-apples comparison of the response features as well as implementation and operational costs of each proposed solution. Draft an RFP for the field labor to be used to install the meters. Provide a list of suggested vendors to request proposals from based on the developed RFP and the Consultant's experience. Consider including an executable contract in the RFP. Vendor's willingness to sign the contract, as is, would be a factor in the evaluation criteria.
  - 3.10.2. Lead a pre-response vendor teleconference meeting. Prepare written responses to vendor questions and create addenda as needed subject to CMLP review.
- 3.11. Vendor Response Evaluation
  - 3.11.1. Consultant shall perform a comprehensive review of vendor responses. Each response shall be scored according to the evaluation criteria specified in the RFP. The review shall include a total cost of ownership comparison and a comparison of the features offered.
  - 3.11.2. The Consultant shall prepare a recommendation for short-listing of responses.
  - 3.11.3. If vendor demonstrations are advisable, the consultant shall prepare a script and evaluation criteria for such demonstrations. The Consultant shall schedule and lead interviews with the short-listed vendors.
  - 3.11.4. CMLP will review the Consultant's recommendation and retains the right to make the final vendor selection.
- 3.12. Recommendation
  - 3.12.1. Consolidate all findings into a comprehensive written recommendation, including estimated costs, risks, health impacts, recommended concurrent systems/processes, project deployment timeline, network security, vendor product warranty, proposed future staffing, future opportunities available, any opportunities CMLP will have to forego with the selected vendor, analysis of the different meter and communication vendor proposals, and a justification for the ultimate recommendation.
  - 3.12.2. Make a presentation to the CMLP Light Board and other stakeholders on the Recommendation.
  - 3.12.3. Create public relations materials to communicate the benefits to consumers of the new system.
- 3.13. Contracting

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<sup>1</sup> CMLP will provide customary RFP process and legal language. CMLP will release the RFP and receive bids.

- 3.13.1. Support contract development.
- 3.13.2. Offer insights to CMLP legal team to ensure the total cost of ownership calculated in 3.11 is what CMLP pays for the life of the equipment and services purchased.
- 3.13.3. Provide a strategy if CMLP is unable to obtain acceptable contract terms with the preferred vendor.
- 3.13.4. Consultant shall be required to assist CMLP until a final contract is executed by CMLP and the vendor.

#### **4. Deliverables**

- 4.1. Data Request per 3.1.
- 4.2. Diagram documenting all CMLP System(s)-related business processes and interface design requirements per 3.2.
- 4.3. Onsite or virtual workshop pursuant to 3.3 and additional communications with CMLP as needed to develop System(s) specifications fitting CMLP's needs per 3.4. Consultant shall facilitate meetings with broad questions to assist CMLP in determining the main features and functions required from the System(s) and software for the next 10 years.
- 4.4. Onsite meeting with stakeholders to hear their concerns about the System(s) and answer questions per 3.5.
- 4.5. Financial Excel model of the costs and benefits of fully implementing the System(s) using a net present value methodology over a 10 year time horizon, along with a written summary describing the inputs and outcomes of the model per 3.6.
- 4.6. Word version of the summary report of justifications for each System(s) RFP feature to be included in the RFP per 3.8. This report may consist of a table of issues addressed in meetings and how the results of meetings lead to prioritizing (or weighting) each issue of the System(s). The priorities developed will be used in evaluation of vendor proposals.
- 4.7. Word version of the System(s) RFP including the proposed schedule, Excel version of the evaluation criteria scoring matrix, Word version of the RFP for the field labor to be used to install the meters and a list of suggested vendors with email addresses to request proposals all per 3.10.1.
- 4.8. Arrange a pre-bid teleconference call at Consultant's expense; prepare Word version written responses to vendor questions and addenda as needed subject to CMLP review per 3.10.2.
- 4.9. Excel versions of 1) the evaluation criteria matrix with scores filled in for each vendor; 2) the 10-year total cost of ownership comparison and 3) a comparison of the features offered per 3.11.1.
- 4.10. Word version for the recommendation for short-listing of responses per 3.11.2.
- 4.11. A script and evaluation criteria for vendor demonstrations if needed per 3.11.3.
- 4.12. Word version of a comprehensive report consisting of the vendor evaluations and the recommendation for the System(s), including hardware, MDM, and any optional items proposed. This report shall include estimated life cycle costs for the entire system, risks, recommended concurrent systems/processes, punch list for hardware and software implementations, project deployment

timeline, network security, vendor product warranty, proposed future staffing, future opportunities available, any opportunities CMLP will have to forego with the selected vendor, analysis of the different meter and communication vendor proposals, and a justification for the ultimate recommendation per 3.11.4.

- 4.13. Onsite presentation to the CMLP Board and other stakeholders on the System(s) procurement recommendation using PowerPoint or other graphic media per 3.12.2.
- 4.14. Public relations materials such as web graphics, PowerPoint presentation, pamphlets, etc. to communicate the benefits to consumers of the new system per 3.12.3.

## 5. Qualifications

- 5.1. Consultant must have expert knowledge of municipal electric utilities, water, communications and fiber systems, utility operations and customer services associated with System(s) software applications as well as a thorough understanding of future trends in these utilities. Municipal electric experience is preferred. This knowledge includes, but is not limited to, customer management, meter reading, AMI for both electric and water, utility billing, MDMS, DA, CVR, SCADA, OMS, mesh and point to point communications networks, fiber optic systems and networks, and Smart City features applicable to electric and water utilities.
- 5.2. Consultant must have a complete and expert understanding of how the System(s) interface with other business software systems.
- 5.3. Consultant must have expertise in best practices for leveraging and quantifying System(s) benefits.
- 5.4. For the System(s), Consultant must have the ability to evaluate the communications infrastructure recommended by vendors and consider how that infrastructure meets or overlaps the needs of the utility and the Town in the short and long-term as well as taking into consideration ongoing maintenance requirements. Understand the role fiber-to-the-premises may or may not play in supporting the System(s) deployment.
- 5.5. Consultant must have experience in the negotiation of contracts with System(s) vendors.
- 5.6. Consultant must have experience in preparing technology (SCADA, GIS, IVR, AMI, OMS, Customer Billing (CIS), other) work plans for electric utilities.
- 5.7. Consultant must have experience in electric utility rates.
- 5.8. Consultant must have experience in demand response to include thermostats, switches, conservation voltage reduction, electric vehicles, and solar support for electric utilities.
- 5.9. Consultant must have experience in support of electric distribution system and substation planning.
- 5.10. Consultant must have experience in financial planning to include developing capital and operations expense allocations across enterprise funds, specifically electric and broadband businesses.
- 5.11. Consultant must have experience in understanding and planning for Distribution Automation (DA).
- 5.12. Consultant must have the experience in understanding and planning for Outage Management Systems (OMS).
- 5.13. Consultant must be able to provide five references for similar and recent (last three years) AMI and MDM procurements.

## **6. Project Schedule**

- 6.1. Consultant will propose a time schedule incorporating the scope of work proposed for this project.
- 6.2. Identify all planned virtual meetings (or onsite should the COVID-19 pandemic restrictions on office opening and in-person meetings be lifted).
- 6.3. Identify all planned project coordination calls.
- 6.4. The Selected Consultant will need to commit to completing the scope on schedule as listed in this RFP. CMLP will provide resources and make personnel available to meet the schedule requirements.

# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

1175 Elm Street, Concord, MA 01742

## CERTIFICATE OF NON-COLLUSION

The undersigned certifies under penalties of perjury that this bid or proposal has been made and submitted in good faith and without collusion or fraud with any other person. As used in this certification, the word “person” shall mean any natural person, business, partnership, corporation, union, committee, club, or other organization, entity, or group of individuals.

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(Signature of person signing bid or proposal)

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(Typed name of person signing bid or proposal)

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(Name of business)

# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

1175 Elm Street, Concord, MA 01742

## STATEMENT OF STATE TAX COMPLIANCE

Pursuant to MGL Chapter 62C, S. 49A, as amended, I \_\_\_\_\_  
*Name & Title*

as the authorized signatory for \_\_\_\_\_  
*Contracting Party*

whose principal place of business is at \_\_\_\_\_  
*Address, State, Zip code*

do hereby certify under the pains and penalties of perjury that \_\_\_\_\_  
*Contracting Party*

has complied with all laws of the Commonwealth of Massachusetts relating to taxes, reporting of

employees and contractors, and withholding and remitting child support.

\_\_\_\_\_  
**CONTRACTING PARTY'S SOCIAL SECURITY  
OR FEDERAL I.D. NUMBER**

\_\_\_\_\_  
**AUTHORIZED SIGNATURE**

\_\_\_\_\_  
**DATE**

# CONCORD MUNICIPAL LIGHT PLANT

ELECTRIC | BROADBAND | ENERGY MANAGEMENT

1175 Elm Street, Concord, MA 01742

## PRICE PROPOSAL SHEET

Business/Firm Name: \_\_\_\_\_

Proposer Address: \_\_\_\_\_

Telephone Number: \_\_\_\_\_ Email: \_\_\_\_\_

### **Estimated Cost to Complete Each Task:**

Task Description	Cost
1 Prepare data request to CMLP and collect required background data.	\$
2 Conduct a review of existing utility goals, concerns, systems and applications.	\$
3 Quantify the expected benefits of a system-wide AMI implementation.	\$
4 Determine optimal AMI hardware and software procurement strategy.	\$
5 Develop RFP specifications, procurement documents and evaluation criteria.	\$
6 Prepare presentation material and conduct stakeholder engagement on the RFP plan.	\$
7 Project manage the RFP process.	\$
8 Evaluate vendor responses.	\$
9 Write a recommendation summary.	\$
10 Advise and assist CMLP with vendor contracting.	\$
Hourly Rate (\$_____) X 200 Hours * =	
(*) The number of hours is an estimate and may change depending on needs.	\$

TOTAL PRICE

Total Price in Words (*written*): \_\_\_\_\_

Acknowledge of receipt of the following Addenda (please list): \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_ Date: \_\_\_\_\_