

REQUEST FOR PROPOSAL

for

CITY OF CONCORD ELECTRIC SYSTEMS DEPARTMENT

Computer software to provide an:

**EXTENSION FOR EDITING, MODELING, MAINTAINING and
MANAGEMENT of ELECTRIC FACILITIES in an ESRI GEOGRAPHIC
INFORMATION SYSTEM GEODATABASE;**

**INCLUDING ENGINEERING DESIGN STAKING, PROJECT COST
ESTIMATES and WORK ORDER MANAGEMENT**

Due Date (Opening Date): March 13th, 2014
Time: 10:00 AM
Place: Alfred M. Brown Operations Center
850 Warren C. Coleman Blvd.
P.O. Box 308
Concord, NC 28026

Conference room "C"

Bid number: 2233

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Scope

City of Concord is seeking to deploy a state of the art Geographic Information System (GIS) extension application to improve procedures and to enhance system reliability and efficiency. This extension will provide tools for editing, modeling, maintenance and management of electric facilities in an ESRI Geographic Information System (GIS) geodatabase. It will include engineering design staking (to make changes to the model) and project cost estimates. It will also provide work order management that incorporates engineering, operations, warehouse and accounting/bookkeeping departments. This software must support multiple concurrent viewing and editing users.

The idea of keeping an engineering analysis model, GIS data, and outage management model all synchronized is a daunting task that takes many hours of checking and correcting differences. Our goal is to enter the data once, in the Engineering or GIS application, and automatically update or share that information behind the scenes to the other applications.

City of Concord – Facts and Figures

The City of Concord Electric System was established in 1904 with the Purchase of the Concord Electric Company from J.W. Cannon.

The system distributes over 921,000,000 kilowatt-hours annually with a peak summer demand of 209,000,000 watts.

- Include:
 - > 30,000 meters
 - Sixty four (64) distribution circuits
 - Located in Concord, NC just north of Charlotte, NC

Notice

This Request for Proposal (RFP) does not commit the City of Concord to pay any cost incurred in the preparation or submission of any proposal or to contract for any services. City of Concord will, at its discretion, award a contract to the responsible vendor submitting the best proposal that complies with the requirements stated in the RFP. The City of Concord may, at its sole discretion, reject any or all proposals received or waive minor defects, irregularities, or informalities therein. The City of Concord will award to the lowest responsive, responsible bidder, taking into consideration quality, performance and the time specified in the proposal for the performance of the contract.

Concord NC Licenses and Taxes

ALL BIDDERS SHOULD BE IN COMPLIANCE WITH THE CITY OF CONCORD PRIVILEGE LICENSE TAX ORDINANCE AND AWARD OF BID WILL BE CONTINGENT UPON RECEIPT OF COPY OF LICENSE.

Proposal Guidelines and Schedule

Questions

Any questions associated with this RFP must be submitted to:

City of Concord – Electric Systems Department
850 Warren C. Coleman Blvd.
Concord, NC 28026
Attn: David A. Dobbins dobbinsd@concordnc.gov
704-920-5303

Please note, all questions and responses will be shared with all respondents to this RFP.

Format of Response

Proposals must follow the following outline.

<i>Proposal Section Number</i>	<i>Description</i>
1	Response to page 6 – Company Information
2	Response to page 7-15 – Functional Requirements
3	Response to page 17 – Product Configuration Capabilities
4	Response to page 18– System Infrastructure Requirements
5	Response to page 19 – System Deployment
6	Response to page 20 – Resource and Training Requirements
7	Response to page 21 – Product Information
8	Response to page 22-23 – Pricing
9	Response to page 24 - References

Response packages to this RFP must contain the following:

1. Two (2) printed copies of your organization's proposal.
2. An electronic copy of the proposal on a CD, in Microsoft Word format.
3. Any other materials, in electronic format only, which your organization feels may be of value to City of Concord.

The proposal package must arrive at the following address on or before the submittal deadline.

City of Concord – Electric Systems Department
Attn: David A. Dobbins
850 Warren C. Coleman Blvd.
Concord, NC 28026

Schedule

<i>Item</i>	<i>Date</i>
RFP issued to prospective bidders. (Announcement Date)	FEB. 14, 2014
Deadline for submitting written questions. <i>The City will answer all questions at one time on the City Web Site.</i>	FEB. 28, 2014
Deadline for submitting proposal. (Bid Opening Date)	MAR. 13, 2014
Following review of proposals, the City may request interviews and on-site product demonstrations through date listed	MAR. 28, 2014
Notification of intent to award.	APR. 1, 2014

Additional Information

The evaluation and selection of proposed solutions and any subsequent contract award will be based on the information submitted in the vendor's proposal. Failure to respond to each of the requirements in the RFP may be the basis for rejecting a response.

Please note: In order to effectively evaluate each proposed solution vendors are encouraged to present a proposal that is both concise and free of excessive “boiler plate” materials.

Company Information

Please provide the following information about your company.

1. Legal company name.
2. Location of headquarters and satellite offices that may be utilized during the project.
3. Brief description of company history, in particular in the electrical utility marketplace.
4. Number of employees.
5. Number of employees dedicated to the development and deployment of the products being offered as part of the proposed solution.
6. Annual revenue for most recent fiscal year.
7. Describe any mergers and/or acquisitions that your company has been party to within the last three years.

Indicate the proposed applications compliance or non-compliance with each requirement, and provide comments.

Geographic Information System Extension Requirements

1.00	GENERAL AND TECHNICAL REQUIREMENTS	Response - Y / N	Description
1.01	Provide a detailed diagram of your proposed solution. All hardware and software components should be identified and points of interface to existing systems identified.		
1.02	Specify the minimum and recommended <u>server hardware</u> and software configuration requirements.		
1.03	Specify the minimum and recommended end user computer configuration for all classes of end user being proposed.		
1.04	Provide recommended <u>database</u> schemas for all solutions.		
1.05	List the Relational Database Management System(s) (RDBMS) certified to run with proposed product(s) and their licensing requirements.		
1.06	Describe how the vendor proposes to interface to existing applications. List any <u>middleware</u> or standards to be employed.		

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1.07	Is the system easily <u>configurable</u> with regards to adding or modifying tabular information, map display text and symbology? Please describe the configuration tools provided.		
1.08	Can a user manage graphic and tabular data using native SQL tools provided by the RDBMS vendor or is an API provided?		
1.09	Describe the scalability of the proposed system. As the numbers of users or workload grow, how would the hardware need to be expanded? Is there an impact on software performance?		
1.10	How do <u>new version releases</u> of the system (i.e. ESRI, Oracle, SQL Server, and Windows) affect any user configurations or customizations?		
1.11	Describe your software <u>upgrade delievery schedule with respect to releases in operating system</u> platforms (i.e. ESRI, Oracle, SQL Server, and Windows) and RDBMS. What is the typical time lag for your solution after such platform upgrades?		
1.12	Provide a copy of your standard <u>Maintenance and Support Agreement(s)</u> .		
1.13	Describe your process for receiving, <u>evaluating</u> , and implementing requests for <u>enhancements</u> or <u>bug fixes</u> after the system is installed and in use.		
1.14	Identify existing <u>users groups</u> for your solution. Describe these meetings and conferences, their typical attendance, venue and registration costs.		

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1.15	Provide a detailed description of your <u>training plan</u> and approach for this project. Also list onsite and vendor-provided classroom training schedules and standard costs.		
1.16	Describe what is provided for the <u>annual maintenance fees</u> on all software and whether the fees are subject to <u>escalation</u> . If so, is there a percentage increase limit on such?		
1.17	<u>Identify</u> the number of U.S. electric company sites that are installed with the proposed software and the estimated number of seats licensed for the proposed system.		
1.18	Provide a copy of your standard <u>Software License Agreement</u> .		
1.19	Provide complete <u>warranty</u> information on the system. If you use a separate Software Warranty Agreement, include a copy.		
1.20	Describe your mechanism for providing <u>remote system</u> support. What software do you use?		
1.21	Is the vendor and/or the products being proposed <u>MultiSpeak compliant</u> ? If so, what version?		
1.22	What <u>programming language(s)</u> was/is used by the vendor to develop the proposed solution? Include a response for each module/application being proposed		

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1.23	List any software <u>customization tools</u> provided with the system and describe their function. Are any proprietary languages required? List any type of API provided. List development environments supported.		
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2.00	GIS AND FACILITIES MANAGEMENT FEATURES AND REQUIREMENTS	Response - Y / N	Description
2.01	GIS solution provides user friendly, intuitive input for view, query and editing of facilities and land base elements.		
2.02	All data, geometry, topology, attributes, and metadata are stored in a central, relational DBMS.		
2.03	Solution is able to support <u>multiple concurrent viewing and editing users.</u>		
2.04	All graphic and tabular data is managed and updated in a single, corporate, versioned (non-locking) <u>spatial database</u> environment.		
2.05	The vendor's primary business is developing, delivering and supporting AM/FM/GIS systems or applications specifically for the utility industry. Vendor personnel are experienced in the areas of system development, installation, training and support.		

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2.06	Product is user extensible using multiple programming languages (e.g., .NET, VB, C#, SQL, etc).		
2.07	The system has the ability to change background color scheme without hampering software tools or visibility of text or symbols (inverting colors if necessary).		
2.08	The proposed solution(s) can be <u>interfaced to / integrated</u> with the existing systems.		
2.09	The system has a <u>parent/child relationship for connectivity</u> framework that accurately models a live electrical network with the ability to trace electric network elements and report on connected data elements (i.e., conductors and equipment).		
2.10	The system can <u>work natively</u> with, or <u>seamlessly import data</u> provided by other systems, from <u>cities and counties</u> within the service territory, or from systems such as: NorthStar, ESRI, Milsoft Outage Management, Porche IVR and Diversified Data Systems' Warehouse Inventory Network System.		
2.11	The system is <u>capable of combining GIS and CAD data</u> if necessary; CAD data objects are easily converted to GIS features.		
2.12	The system allows users to create, modify, and maintain metadata on all layers / feature classes.		
2.13	The system will allow the user to <u>easily add data fields</u> to the data model (schema) or modify the format or length of existing data fields.		

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2.14	The system supports standard <u>raster formats</u> and is able to incorporate various image files, such as MrSID, TIFF, Tiled TIFF, JPEG 2000, etc., as a background layer to the core vector map layers.		
2.15	The system is “phase-aware” and will allow a user to “swap” phases (i.e., by changing the phase of an upstream device or conductor, all downstream conductors and devices will automatically be changed to the new phase).		
2.16	The system supports scale ranges, whereby the user can designate a range of scales that features are visible (turned on) or not (turned off).		
2.17	The system has a <u>find tool</u> in which any attribute within a specified layer (feature class) can be easily searched upon by the user, yielding a list of database elements meeting the searched text string. The system must be able to immediately zoom to the desired feature.		
2.18	The system has the ability to search for features using SQL statements and to assist the user to create such statements through the use of a SQL query builder tool.		
2.19	The system has the ability to store hyperlinks, within a feature object, which will automatically open the appropriate application to view/edit the stored file. (e.g. a Word document, image, or spreadsheet is stored with its database element.		
2.20	The system provides standard layouts for printing and plotting of map output as well as providing the user the ability to customize the output by placing North arrow, legends, and title blocks.		

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2.21	The system is able to trace upstream from any point to its source or downstream from any specified point to the extent of its connection and highlight any trace graphically (visually) as well as include the traced elements in a selection set.		
2.22	The system must allow users to check how electricity is flowing through a network of connected features by phase.		
2.23	The system must allow the user to open or close switches or protective devices and the system's connectivity must reflect those changes automatically.		
2.24	The system must be able to distinguish which circuit a given piece of electrical equipment belongs to (based on its source).		
2.25	The system must be able to provide all connectivity logic (e.g., network topology) and provide updates to engineering models and outage management databases. This includes the ability to create a selection set by individual phase as well as entire circuit.		
2.26	The system must be able to generate a circuit map to locate/select and visually highlight all features associated with a selected circuit including all tie devices.		
2.27	The edits to the database must require versioning or a functional equivalent.		

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2.28	When edits are to be posted to the parent version, or default database, the application must perform a check to ensure that the features edited in the user version have not been altered by a different user. If features have been edited by other users, the features must be displayed in a conflict resolution dialog box.		
2.29	The user must be able to choose the feature to use to resolve the conflict (the user's edits or the edit from a different user).		
2.30	Once all conflicts have been resolved, the user must be able to post their edits into the parent version.		
2.31	Ability to permit a user to insert a feature into the map and having it automatically place the feature at the user's chosen location in such a way that appropriate connectivity is maintained and established.		
2.32	The workflow must allow for an <u>approval process</u> before a version can be posted to the parent or default database.		
2.33	Map production must accommodate map insets to be placed within plots so that details of <u>enlarged areas</u> of the map can be shown separately.		
2.34	The system has the ability to display <u>outage data</u> that have been imported from the outage management system, by customer and by device.		

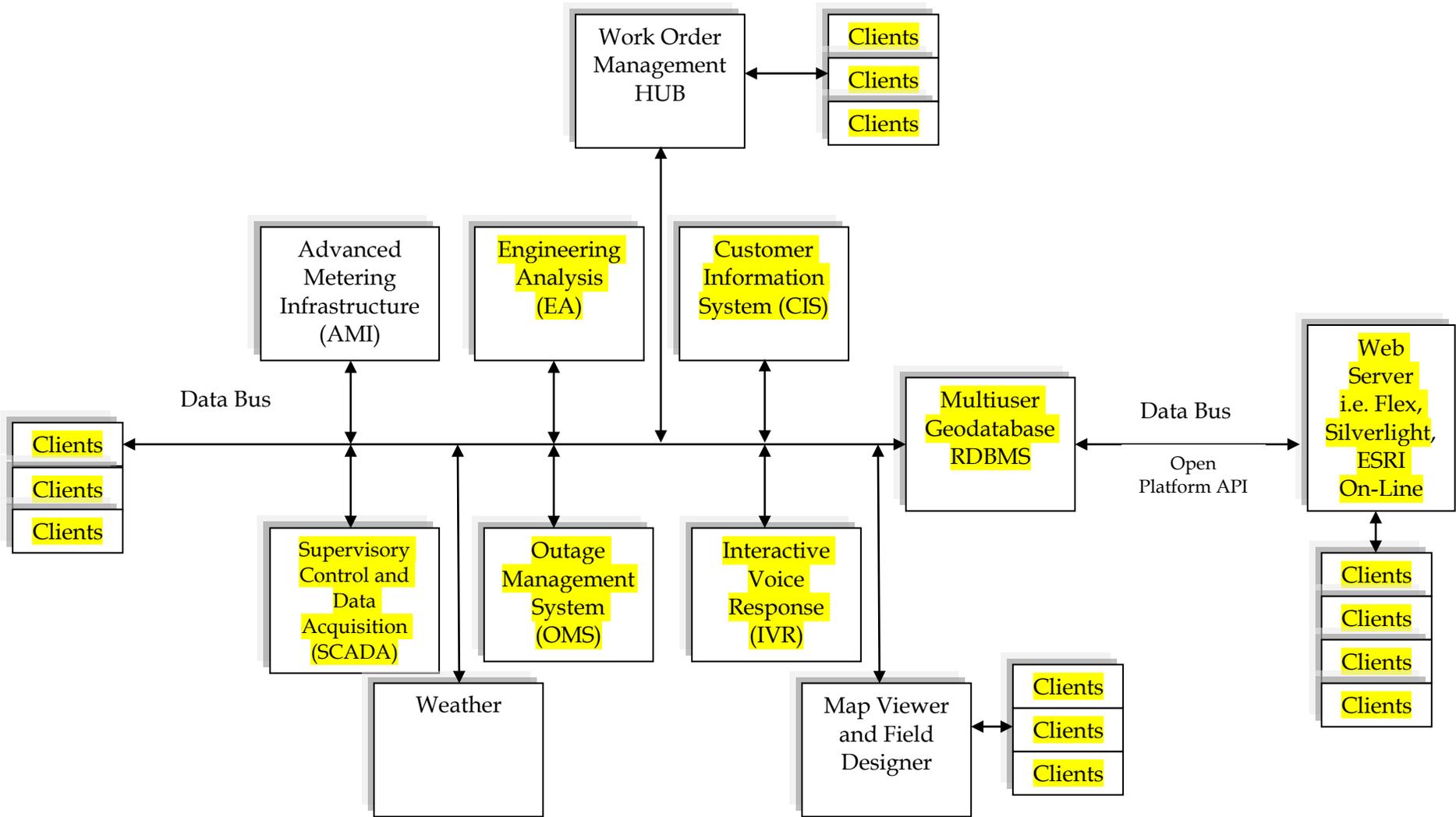
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2.35	The system has the ability to store and make available for view, <u>property record/right-of-way/easement data</u> and to access scanned documents stored in a document management system via hyperlinks.		
2.36	The system has the ability to easily record, modify and report on facilities or other features within political boundaries (by polygons) such as school districts, <u>county and city limits</u> as well as by <u>operational, substation or service center areas</u> .		
2.37	The system has the ability to display on the map in real-time or near-real-time, the output of an Automated Vehicle Locating (AVL) system (i.e., the location of individual vehicles). List all the AVL systems supported by your solution.		
2.38	The system has the ability to provide optimal routing of vehicles based on shortest distance and/or shortest time and will display results on map and provide step-by-step directions.		

System Integration Requirements

The following diagram illustrates the system integration requirements for the City of Concord. This software must support multiple concurrent viewing and editing users.

Yellow highlight indicates existing.



Product Configuration Capabilities

City of Concord is seeking to reduce both deployment and long term support costs by implementing a solution that is configurable and requires minimal custom code development.

Please describe in detail the following:

1. The extent of functionality that can be tailored to City of Concord requirements without resorting to the development of customized extensions.
2. The software tools utilized to facilitate product configuration.
3. How custom application functionality can be incorporated into the core product.
4. How the City of Concord specific configuration and any custom components would be impacted by product upgrades.

System Infrastructure Requirements

Please provide a description the system infrastructure requirements for the proposed products including:

- 1) Client and server hardware requirements and recommended specifications (please refer to **System Integration Requirements** on page 16.)
 - a) The number of actual editors with permission to approve changes before posting to the parent or default database will be five (5).
 - b) The number of field engineering design editors, whose user version will require approval before posting to the parent or default database, will be unlimited.
 - c) This software must support multiple (unlimited) concurrent viewing and editing users.
- 2) All third party software requirements including Operating System and Relational Database Management System.

System Deployment

Please provide a summary of your organizations approach to product deployment and a project schedule that includes an estimated time frame for each of the phases.

Resource and Training Requirements

Please provide a description of the City of Concord resources required to support both the deployment and system maintenance and support activities. For each resource list the following:

1. Resource type, e.g. Project Manager.
2. Estimated percent of time required for deployment phase and post deployment (support) phase.
3. Required technical skills, e.g. SQL.
4. Training requirements.

Product Information

Please provide a brief description of the proposed product. Include with the description the following information.

1. Number of year's product has been in development.
2. Current version number.
3. Number of major upgrades to product in past two years.
4. Number of sites in production.
5. Description of user group activities, e.g. annual meetings.

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Pricing

Please provide pricing as follows:

<i>Project Phase/Component</i>	<i>Cost</i>	<i>Comments</i>
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System design and core product configuration

Customizations to core product

Development and testing

System deployment

Travel expenses

Software and Maintenance

Please provide pricing for all software products required including software to support five (5) full editor seats and an unlimited number of viewer seats.

<i>Product Name</i>	<i>Quantity</i>	<i>Unit Price</i>	<i>Total Price</i>	<i>Warranty Period</i>

Please provide a five year schedule for software support/maintenance fees.

<i>Product Name</i>	<i>Year 1</i>	<i>Year 2</i>	<i>Year 3</i>	<i>Year 4</i>	<i>Year 5</i>

Training

Please provide pricing of all recommended training courses. Please indicate the location of the training in the description field.

<i>Course Name</i>	<i>Description</i>	<i>Cost</i>

References

Provide three references for electric utilities that have deployed a similar solution to that which is being proposed. For each reference please provide:

- Company Name
- Contact Name
- Contact Phone Number and E-Mail Address
- Name and version of deployed products
- Brief description of system interfaces
- Years in production