FOR BOARD ACTION

Agenda Item # 7 **Meeting Date:** 4/24/12

SUBJECT:

CONSIDERATION OF PROPOSALS
Engineering Services, SCADA Replacement Project

PREPARED BY:

Scott Nickels, Manager of System Operations/Reliability

ITEM DESCRIPTION:

On March 16, 2012, three engineering consultants submitted proposals to perform the engineering services outlined in RPU's Request for Proposal (RFP) entitled "RFP-2012 SCADA Replacement" relating to RPU's SCADA Replacement Project. Six engineering consulting firms were contacted, and three provided proposals.

The RPU SCADA project team is recommending the proposal from KEMA as offing the best value to RPU on a cost basis as well as providing the best overall technical proposal in regards to understanding of the project scope, SCADA engineering experience, and KEMA's on-site presentation held on February 28, 2012.

The proposed contract for the engineering services between the City of Rochester and KEMA is attached entitled "Engineering Services Agreement - 2012 SCADA Replacement – KEMA." Dave Goslee from the City Attorney's office has reviewed the contract and has given his approval.

FOR CAPITAL PURCHASES/BIDS/MAJOR PROJECTS:

The cost for the Engineering Services for the SCADA Replacement Project is budgeted within Core Services. KEMA's proposal is below the budgeted cost of $250,000.

Proposal Summary

Engineering Services Provider	Proposal Amount
KEMA	$228,500
ECI	$320,026
Power System Engineering	$340,800
Burns and McDonnell	No Proposal
Kerns & Associates	No Proposal
Black and Vetch	No Proposal

UTILITY BOARD ACTION REQUESTED:

Management recommends that the Utility Board approve enter into a contract with KEMA for engineering services for the 2012 SCADA replacement in the amount of $228,500, and request the Mayor and City Clerk to execute the contract.

Larry Koshiol
General Manager

4/20/12
Date

ROCHESTER PUBLIC UTILITIES

Engineering Services Agreement

2012 SCADA Replacement Project

THIS AGREEMENT made and signed this ___ day of ___, ___ by and between the City of Rochester, Minnesota, acting through its Public Utility Board, hereinafter called the "City", and KEMA, Inc. hereinafter called "Engineer".

WHEREAS, the City has solicited a proposal from the Engineer for engineering services outlined in the City's Request For Proposal (RFP) entitled "RFP-2012 SCADA Replacement_final"; and

WHEREAS, the Engineer has expressed its willingness to perform said work; and

WHEREAS, the City desires to engage the services of the Engineer in accordance with the terms and conditions of the City's RFP for Engineering Services and the Engineer's proposal thereto, commencing upon a signed contract and notice to proceed.

NOW, THEREFORE, in consideration of the above premises and of the terms and conditions contained herein, the parties hereto agree as follows:

Article I. Project Description. The Engineer shall provide engineering services spanning the Supervisory Control and Data Acquisition (SCADA) System Replacement project phases of scoping, specification, procurement, factory acceptance testing, site installation, site acceptance testing, implementation, and change-over support as outlined in KEMA Inc.'s proposal Entitled "Rochester Public Utilities (RPU), Response to Request for Proposal dated February 16, 2012".

Article II. Scope of Engineering Services. The Engineer will provide the necessary trained personnel to complete the project as described in Article I and attached Exhibit A.

Article III. Payment. The City (RPU) agrees to pay the Engineer for performance of the above services, upon completion of the project milestone tasks one (1) through eight (8) as documented within KEMA Inc.'s proposal Entitled "Rochester Public Utilities (RPU), Response to Request for Proposal dated February 16, 2012" sections 3.1 through 3.8 at the firm, fixed prices detailed in Section 8, excluding travel expenses. The City also agrees to pay the Engineer for project milestone task nine (9) in Section 3.9 upon submission of monthly invoices, at the firm, fixed prices detailed in Section 8, excluding travel expenses. The City also agree to pay the Engineer for work outside of the Proposed Project scope, upon approval of the City's Project Manager, an amount equal to the actual hours of service furnished, billed in accordance with Exhibit B, Hourly Rate Schedule, excluding travel expenses. The City also agrees to reimburse the Engineer each month at cost for all out-of-pocket expenses directly chargeable to the project, including travel and lodging. On the basis of the services outlined in this Agreement, the firm not to exceed total amount to be paid by the City is $209,000 with an estimated travel expense of $19,500. Payment by the City under this Agreement shall not exceed said amount without prior written consent of the City. The City agrees to pay the Engineer within 35 days of date of receipt per Minnesota State Statute #471.425 subd 2a. "Date of receipt" means the completed delivery of the

goods or services or the satisfactory installation, assembly or specified portion thereof, or the receipt of the invoice for the delivery of goods or services, whichever is later. All invoices shall be sent to:

Accounts Payable
Rochester Public Utilities
4000 East River Road NE
Rochester, MN 55906-2813

If the Engineer is more than 30 days past due on any account due to the City (RPU), the City may apply payments due to the Engineer under this Agreement to the Engineer's overdue account in lieu of payment directly to the Engineer. The application of payments to the overdue account shall be deemed payments due under this Agreement

Article IV. Term. The term of this Agreement shall commence on the date of this Agreement and shall continue until deliverables are completed and accepted by the City.

Article V. Compliance with Appropriate Regulations. The Engineer shall comply with all federal, state, county, and municipal laws, ordinances, regulations and codes relating or applicable to the services to be performed under this Agreement.

Article VI. Independent Contractor. The Engineer is deemed an independent contractor for purposes of this Agreement and any and all persons employed by the Engineer in the performance of any work or services required or provided for in this Agreement shall not be considered employees of the City for any purpose whatsoever, including, but not limited to, worker's compensation coverage, unemployment insurance benefits, social security coverage, or retirement membership or credit, and any and all such claims shall be the sole obligation or responsibility of the Engineer.

Article VII. Liability. In no event shall either party be liable to the other for any indirect, consequential, exemplary, special, incidental or punitive damages including, without limitation, lost profits or revenues even if such damages are foreseeable or the damaged party has been advised of the possibility of such damages. The liability of the Engineer for any claim whatsoever related to or arising under this Agreement, excluding claims arising under Article XXII of this agreement but including any cause of action in contract, tort or strict liability, shall not exceed $500,000.

Article VIII. Insurance. The Engineer shall obtain at its own expense, as a minimum, the following described types and limits of insurance coverage. All policies called for herein shall become effective before the Engineer undertakes any work under this Agreement and shall remain in full force and effect for a minimum of 1 year after closing of this Agreement. Further, the Engineer shall furnish the City with an insurance certificate or certificates at the time the Agreement is consummated between the parties, evidencing such insurance coverage prior to work commencing on said project. Any insurance maintained by the City (RPU) will not contribute with insurance provided by the Engineer. **The insurance certificate holder shall be listed as "The City of Rochester acting through its Rochester Public Utilities Board" and the project name.** Each of said certificates shall provide the following:

A. Insurance shall not be canceled, limited in scope of coverage, or non-renewed until after Thirty (30) days written notice has been given to:

Scott Nickels
Manager of System Operations/Reliability
Rochester Public Utilities
4000 East River Road NE
Rochester, MN 55906-2813

B. Commercial General Liability - The Engineer shall procure and maintain a general liability insurance policy naming the City of Rochester as an additional insured, with bodily injury limits of at least $1,500,000/$3,000,000 and property damage limits of at least $500,000, and shall file such policy of insurance, or a certificate of such insurance, with the City Clerk. The Engineer shall further maintain insurance on all vehicles in the performance of the contract with bodily injury limits of at least $1,500,000/$3,000,000 and property damage limits of at least $500,000, naming the City of Rochester as an additional insured, and shall file a certificate or certificates of such automobile insurance with the City Clerk. The Engineer's liability coverage shall be primary as to any liability insurance coverage maintained by the City.

C. Statutory Worker's Compensation insurance including occupational disease coverage. Employer's liability insurance with limits of not less than $500,000 per person. Workers Compensation coverage carried by the Engineer shall include Minnesota or all states endorsement. The Engineer shall also file with the City Clerk a certificate indicating insurance is in effect for workers' compensation

D. Professional liability insurance covering the Engineer against claims for damages arising out of professional errors or omissions, which limits not less than $1,000,000 each occurrence and aggregate, or project specific.

Article IX. Termination. Upon 30 days written notice, the Engineer or the City (RPU) may terminate this Contract, with or without cause, by notifying the authorized representative. The City may, by written notice of default to the Engineer, terminate the whole or any part of this contract if the Engineer fails to make delivery within the time specified herein or any extension thereof. The City may, by written notice of default to the Engineer, terminate the whole or any part of said contract if the selected Engineer fails to perform any of the other provisions of said contract or so fails to make progress as to endanger the performance of said contract in accordance with its terms; and, in either of these two circumstances does not cure such failure within a period of 10 days (or such longer period as the City may authorize in writing) after receipt of notice from the City specifying such failure. If this Agreement is so terminated, the City shall compensate and reimburse the Engineer according to the terms hereof to the date of such termination.

Article X. Assignability. The Engineer shall not assign this Agreement or any part thereof without the prior written consent of the City.

Article XI. Disposition of Documents. It is agreed that any reports, drawings, specifications, and other data compilations developed or created as a result of the services performed by the Engineer pursuant to this Agreement shall be and remain the sole property of the City. Upon completion of these services to be performed hereunder, the Engineer shall deliver to the City the original of all drawings, specifications, and other data compilations as are described under Article II Scope of Engineering Services. Any reuse of such documents without written verification or adaptation by the Engineer for the specific purpose intended will be at the City's sole risk and without legal exposure to the Engineer.

Notwithstanding the above, the Engineer shall retain and may use the general knowledge acquired as a result of its creation of the work product or the performance of services hereunder, for its general reference, enhancement of its technical capabilities, and for other purposes. All information and material which is owned by the Engineer and used by the Engineer in the performance of the Agreement shall remain the exclusive property of the Engineer whether or not such information or material was incorporated in or used to produce any of the work products delivered under this Agreement.

Article XII. Governing Law. This Agreement shall be governed by the laws of the State of Minnesota.

Article XIII Merger Clause. This agreement constitutes the final expression of the parties' agreement, and the complete and exclusive statement of the terms agreed upon. This agreement supersedes all prior negotiations, understandings, agreements and representations. There are no oral or written understandings, agreements or representations not specified herein. Furthermore, no waiver, consent, modification, or change of terms of this agreement shall bind either party unless in writing and signed by both parties.

Article XIV Professional Responsibility. The Engineer shall be responsible for the accuracy of the work and must promptly make necessary revisions or corrections resulting from the Engineer's errors, omissions or negligent acts without additional compensation. Acceptance of the work by the City will not relieve the Engineer of the responsibility for subsequent correction of errors or omissions, or for clarification of ambiguities.

The Engineer will perform services under this Agreement with the degree of skill and diligence normally practiced by professional engineers or consultants performing the same or similar services. No other warranty or guarantee, expressed or implied, is made with respect to the services furnished under this Agreement and all implied warranties are disclaimed.

Article XV. Data Privacy. The Engineer agrees to be bound by the Minnesota Data Privacy Act and any regulation thereto as per Minnesota State Statute Section 13.05, Subdivision 6. The Engineer also agrees to keep records relating to this contract for a period of 6 years and agrees to an audit if ordered by the State, as per Minnesota State Statute Section 16c.05, Subdivision 5.

Article XVI. Contract Documents. The contract documents shall consist of the following:

1. Signed Agreement
2. Technical and General Conditions of Proposal
3. Engineer's Proposal
4. Insurance Certificate

Article XVII. Dispute Resolution. In the event of a dispute between the Engineer and the City (RPU), the parties shall engage in mediation of the dispute. The Engineer and the City shall select an independent, mutually acceptable third party to mediate the matter. This independent third party shall mediate the dispute, and, failing to reach an agreement, shall have exclusive and final jurisdiction to render a decision in a dispute with a monetary value not to exceed $25,000. In a dispute in excess of this amount, the parties may submit the dispute to Olmsted County District Court. The Engineer and the City will split the cost of mediation with each party paying half the cost.

Article XVIII. Waiver of Terms and Conditions. The failure of the City (RPU) or the Engineer to enforce one or more of the terms or conditions of the Contract or to exercise any of its rights or privileges, or the waiver by the City of any breach of such terms or conditions, shall not be construed as thereafter waiving any such terms, conditions, rights, or privileges, and the same shall continue and remain in force and effect as if no waiver had occurred.

Article XIX. Assignment of Contractual Rights. It is agreed that the Engineer will not assign, transfer, convey or otherwise dispose of the contract or its right, title or interest in or to the same, or any part thereof, without previous written consent of the City (RPU) and any sureties.

Article XX. Interpretation, Jurisdiction, and Venue. All contractual agreements shall be subject to, governed by, and construed and interpreted solely according to the laws of the State of Minnesota. The Engineer hereby consents and submits to the jurisdiction of the appropriate courts of Minnesota or of the United States having jurisdiction in Minnesota for adjudication of any suit or cause of action arising under or in connection with the contract documents, or the performance of such contract, and agrees that any such suit or cause of action may be brought in any such court.

Article XXI. Severability. To the extent that this contract may be executed and performance of the obligations of the parties may be accomplished within the intent of the contract, the terms of this contract are severable, and should any term or provision hereof be declared invalid or become inoperative for any reason, such invalidity or failure shall not affect the validity of any other term or provision hereof.

Article XXII. Hold Harmless. The Engineer agrees to protect, defend, indemnify and hold the City of Rochester, RPU, its officers, employees and agents, to the extent reimbursed by its liability insurance coverage, which will not exceed the minimum insurance limits as stated in Article VIII of this Agreement, free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities of every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character (hereinafter collectively

"claims") in connection with or arising directly or indirectly out of the contract or the performance hereof by the selected Engineering Consulting Firm or any subcontractor. Without limiting the generality of the foregoing, any and all such claims, relating to personal injury, infringement of any patent, trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The Engineer further agrees to investigate, handle, respond to, provide defense for, and defend any such claims, at its sole expense and agrees to bear all other costs and expenses related thereto, whether or not it is alleged or determined that the Engineer was negligent, and without regard to whether such claim is groundless, false, or fraudulent.

IN WITNESS WHEREOF, the parties have executed the Agreement on the date and year first above written.

Dated:_____

ROCHESTER PUBLIC UTILITIES

_____
General Manager

KEMA, Inc.

_____

_____
Title

CITY OF ROCHESTER

_____
Mayor

Attest:

_____
City Clerk

Reviewed By:

_____
City Attorney

EXHIBIT A

I. PROJECT DESCRIPTION

Rochester Public Utilities (RPU), a department of the City of Rochester, intends to replace the existing electric and water Supervisory Control and Data Acquisition (SCADA) system. The Engineer shall provide the services outlined in the "RFP-2012 SCADA Replacement_final" so that RPU can purchase, implement, and fully integrate an "off-the-shelf," fully redundant, industry standard SCADA system from a reputable vendor. The new SCADA system will meet the current and future requirements of RPU and, if possible and practical, utilize all existing RTU's and PLC's. The Engineer shall provide services spanning the project phases of scoping, specification, procurement, factory acceptance testing, site installation, site acceptance testing, implementation, and change-over support.

RPU's existing SCADA system and service territory consists of:

1. Electric
    a. 22 SCADA RTU's located within 161/13.8 kV Substations, Generation Resource Installations, Customer Sites, and Building Alarm Systems.
    b. A main System Operation Control Center located at the RPU Service Center.
    c. A Generation Resource Control Center located at the Silver Lake Power Plant, that also serves as RPU's System Operations Back-up Control Center.
    d. 42.42 miles of 161 kV Transmission.
    e. 741.64 miles of 13.87 kV Distribution.
    f. 48,219 electric customers.
    g. A peak demand of 292.1 MW.

2. Water
    a. 50 PLC installations that control 28 well sites, 20 towers, and 15 lift stations.
    b. Water Operations Center located at the RPU service center, with cellular interface capabilities.
    c. 37,613 water customers.
    d. 4.5 Billion gallons of annual water usage.
    e. 569.3 miles of infrastructure.

II. SCOPE OF SERVICES, DELIVERABLES, and WORK PLAN

The project scope and deliverables for the Engineer consists of the following, as listed within the City's RFP entitled "RFP-2012 SCADA Replacement_final":

1. Provide assistance with the scoping of the project, which includes but not limited to:
    a. Assess RPU's existing electric and water SCADA system, SCADA infrastructure, and communication system.
    b. Facilitate discussions with the RPU project team regarding SCADA system operating functionality needs and technical requirements.
    c. Provide guidance to available Smart Grid, Distribution Automation, Outage Management, and AMI functionality within SCADA systems currently available from vendors.
    d. Assess and recommend whether the water and electric SCADA functions should remain in one system or be separated into multiple systems.
    e. Recommend SCADA systems that meet RPU's requirements.
    f. Recommend a current technology to replace RPU's existing Map-Board in the System Operation Control Center.
    g. Recommend upgrades to RPU's communication system linking RPU's electric and water systems master station to its remote RTU's and PLC's.
    h. Provide guidance regarding RPU's off-site Back-Up Control Center and Back-Up SCADA System location and requirements.

2. Prepare, with assistance and coordination of the RPU Project Manager, the following:
    a. The Procurement Specifications for the new SCADA system and related equipment compliant with all applicable NERC, IEEE, AWWA, and Department of Homeland Security standards. Specifications will conform to RPU requirements and draw from previous RPU procurement documents of similar equipment.
    b. Any required Request for Proposal (RFP) and Request for Information (RFI) for potential vendors.
    c. Evaluation criteria and documents to support vendor prequalification. Evaluation methods must be approved by the City Attorney. Evaluation processes will be integrated with the SCADA system RFP processes.
    d. Evaluation criteria and documents to support ranking of vendor proposals.
    e. Evaluation criteria and documents to support detailed system acceptance testing at the factory and at the RPU site. Evaluation methods must be approved by the project technical team.
    f. Maintenance Service Agreements between RPU and the vendor for ongoing technical support, if required by either the vendor or RPU.
    g. Assist the RPU Project Manager with information needed to obtain RPU Board and Rochester City Council approval.
    h. Prepare and maintain a basic project management schedule through the new SCADA system change-over, including key engineering, procurement, and construction milestones and significant project cash flows. The provided project management plan will be used to amend, if required, the schedule for tasks seven (7) through twenty (20) in the Tentative Project Event Calendar documented

below as agreed to by both RPU and the Engineering Consulting Firm. Implementation may begin upon procurement approval from the RPU Board and Rochester City Council. The schedule shall be prepared using Microsoft Project software.

i. Develop, with assistance of RPU personnel, a Training Plan that outlines required training that must be supplied by the SCADA vendor for Water Operators, System Operators, Generation Operators, Engineering, and SCADA Technicians for inclusion into the SCADA Procurement Specification.

3. Perform vendor evaluations and pre-qualification analysis for all SCADA systems to verify each meet RPU operational functionality requirements, technical requirements, and project goals.

4. Develop an approved vendor list.

5. Develop draft scripts to support any potential vendor site meetings and/or vendor customer visits or phone calls.

6. Review all vendor proposals to verify each meets the SCADA system specification documents. Utilize a structured evaluation criteria process to rank vendor proposals. Document any discrepancies discovered and approve all Exceptions taken by the vendor. Assist the RPU Project Manager in the vendor proposal evaluation process and make recommendations for contract award.

7. Participate in SCADA vendor contract negotiations if required by RPU.

8. Act as an RPU/vendor technical interface and provide vendor contact information upon request.

9. Witness and act on behalf of RPU during all factory and on-site functional and performance acceptance testing. Document and coordinate resolution of all discrepancies.

10. Review and approve manufacturer's equipment drawings to ensure they are compatible with the intent of the specification.

11. RTU installation work, if necessary, will be performed by RPU. Field inspection of construction work is outside the scope of this project for the Engineering Consulting Firm.

12. Provide an estimate and Hourly Rate Schedule to oversee the resolution of outstanding operational issues of the new SCADA system.

13. Prepare a written cost estimate for the project by July 1, 2012 for RPU 2013 budgeting purposes.

14. Provide an Hourly Rate Schedule quote for all work that may be performed outside of the Engineering Contract scope as authorized by the RPU Project Manager.

15. Coordinate with the vendor(s) to provide to RPU all necessary project designs and drawings to accomplish the project as listed in this agreement. Drawings shall follow RPU standards concerning AutoCAD conventions, drafting methods, similarity to other RPU project drawings, layer control, font selection, symbology, etc. RPU drawing standards documents are available to the Engineering Consulting Firm and will be followed. All drawings are to be prepared and exchanged in AutoCAD ".dwg" file format compatible between RPU and the Engineering Consulting Firm.

16. Assist, as requested by RPU, in the preparation and approval of procurement change orders if needed.

17. Prepare, or coordinate with the vendor, "as built" drawings for the project. Complete all drafting and file delivery within 3 months of receipt of annotated field drawings.

18. Schedule trips to RPU's office as required for scoping meetings, SCADA proposal review, design review, implementation management, change-over/go-live, and training as needed.

19. All official project correspondence should be done through RPU's project manager in Microsoft Office file formats for MS Word, MS Excel, MS Project, etc. Conversion to Adobe PDF will not be accepted.

20. All drawings, documents, spreadsheets, and analysis data files, along with project calculations are to be included in the deliverables of this agreement. All deliverables will become the property of Rochester Public Utilities for its ongoing internal use only.

21. Communicate all informational needs through the RPU Project.

The work plan and milestone tasks to be performed by the Engineer necessary to complete the Scope of Services and deliverables previously outlined consist of the following, as documented within DNV KEMA Energy and Sustainability, Inc.'s proposal Entitled "Rochester Public Utilities (RPU), Response to Request for Proposal dated February 16, 2012", Sections 3.1 through 3.9:

Task 1: Mobilization and Kickoff Teleconference

Objectives

a. Achieve agreement on the project objectives, key milestones, and scope of work.
b. Achieve complete understanding of the work plan including deliverables, team member roles and participation, project schedule, and meeting times and locations.
c. Establish project protocols and inter-company project administration procedures.

DNV KEMA Team Participation

a. Prepare the draft project objectives to be reviewed and revised during the kickoff teleconference to ensure that the project team understands and agrees to the overall goals of the project.
b. Discuss the work plan in detail and make required modifications or additions.
c. Draft project protocols and suggested administration procedures in consultation with the project manager.
d. Produce meeting notes and action items.

RPU Participation

a. Review and discuss the project objectives to ensure that RPU's goals are addressed.
b. Review and discuss the work plan and propose any suggested modifications or additions.
c. Identify staffing availability to meet project team roles and responsibilities and address any constraints.
d. Review, modify as needed, and approve project protocols and inter-company project administration procedures.

Workshops and Meetings

a. One teleconference

Deliverables

a. Teleconference agenda
b. Teleconference notes and action items

Task 2: Information Gathering and Requirements Definition

Objectives

a. Understand RPU's strategic objectives, functional needs, and information sharing needs, implemented technology standards, financial constraints, and staffing capabilities.
b. Discuss existing infrastructure, including electric and water SCADA, communications and RTUs, to ensure the control system will function properly and identify areas where RPU may want to consider changes or enhancements.
c. Document electric and water SCADA system requirements including procurement strategy. In particular the following components will be identified:
   - Master Station
     - SCADA functional Requirements
     - Electric system
     - Water system
     - UI requirements
     - Data Storage
     - Alarm and Event collection and storage
     - Trending

- Implementation, documentation, training, and testing requirements
- SCADA communications requirements and constraints
  - Current RTU and system technology and architecture
  - Past performance history
  - Vendor support forecast
  - Capacity, latency, availability, reliability and resilience and maintainability requirements
  - Network management requirements
- Cyber security requirements including NERC CIP requirements
- Disaster recovery requirements associated with RPU's off-site Back-up Control Center and Back-up SCADA system location and EOP-008 requirements

d. Identify functionality related to Smart Grid, Distribution Automation, Outage Management, Distribution Management, and AMI functionality available in SCADA system supplier products.
e. Identify current technology to replace RPU's existing mapboard in the System Operation Control Center.
f. Prioritize RPU's functional needs and requirements for the SCADA system replacement.
g. Develop a project management plan that will include a project schedule of the activities for the project including key milestones and deliverables. In addition, once the requirements are defined, a budgetary cost estimate for the SCADA system purchase will be developed with anticipated cash flows.
h. Identify preliminary vendor bid list.

DNV KEMA Team Participation

a. Prepare the draft information gathering questionnaire; review with RPU staff; and submit final version in advance of information gathering workshop. The questionnaire will include questions to ensure a thorough understanding of the items included in the Objectives section above.
b. Prepare and facilitate a workshop at RPU's site to review questionnaire results, to gather and discuss relevant technical information, and to identify any issues for resolution.
c. Identify the technical and business requirements that will ensure that the SCADA system upgrade is aligned with RPU's business objectives and technical needs.
d. Develop a procurement strategy in consultation with RPU staff and management.
e. Develop the project management plan and cost estimate.
f. Prepare a preliminary list of potential bidders.
g. Organize the SCADA system upgrade requirements into core and unique requirements.

RPU Participation

a. Review and respond to questionnaire and discuss information gathering results.
b. Collect and provide technical and organizational documentation relevant to the SCADA

system upgrade objectives.

c. Attend and participate in the information gathering workshop and interviews, review results, and completed agreed actions items.
d. Provide recommended priorities for functional requirements of SCADA system replacement.
e. Arrange for RPU venues and participation in the workshop, interviews, meetings, and conference calls.
f. Discuss and agree to a procurement strategy covering vendor evaluation, contract scope, and approval to award.
g. Review and comment on the project management plan and schedule.
h. Review and comment on the preliminary list of potential bidders.

Workshops and Meetings

a. One 2-day data-gathering workshop, attended by DNV KEMA, will be conducted at RPU.
b. Follow-up discussions as required via teleconference.

Deliverables

a. SCADA System Upgrade Information Gathering Questionnaire.
b. Meeting agenda.
c. List of potential vendors.
d. Workshop notes and action items.
e. Draft and Final Requirements Definition.
f. Project Management Plan and SCADA system cost estimate.

Task 3: Evaluation of SCADA Alternatives

Using the information gathered in Task 2, DNV KEMA will work closely with RPU to evaluate whether RPU should continue with a combined SCADA for water and electric operations, or to move forward with a dedicated SCADA for the electric department and one for the water department.

Objectives

a. Determine if RPU should transition to a dedicated SCADA for electric operations or have a combined SCADA for electric and water.

DNV KEMA Team Participation

a. Review the data collected in Task 2 and results from discussions from the various RPU operations groups.
b. Develop draft criteria to be used in the analysis of the alternatives.
c. Facilitate a meeting and process to score the alternatives.
d. Evaluate the criteria and recommend the best evaluated alternative for the future SCADA.

RPU Participation

a. Provide additional input as needed to support the evaluation criteria.
b. Comment on the draft evaluation criteria.

c. Participate in scoring the alternatives against the defined criteria.

Workshops and Meetings

a. A 1-day meeting will be conducted at RPU.
b. Follow-up discussions as required via teleconference.

Deliverables

a. Draft evaluation criteria.
b. Evaluation model.
c. Draft and Final Evaluation Executive Summary presentation with recommendations.

Task 4: RFI Development and Vendor Prequalification

DNV KEMA will assist RPU with the development of a Request for Information (RFI) that will be used to assist in narrowing the list of potential vendors to those whose systems and services are best positioned to meet RPU's needs. The objectives of the RFI and pre-selection process include:

a. Gain knowledge of the vendors' current offerings, budgetary costs, and ability to provide a system that meets RPUs needs.
b. Minimize time and cost required to evaluate full proposals by limiting the number of bidders to those who are best qualified to meet the requirements with available products.
c. Establish an evaluation methodology that allows RPU to make value judgments on the vendors' SCADA systems.
d. Ensure an impartial and objective prequalification process.

DNV KEMA will begin with our baseline RFI. We will include questions regarding RPU's unique requirements to ensure we collect all information needed to evaluate the responding vendors.

DNV KEMA Team Participation

a. Develop an RFI that includes RPU's unique requirements identified in Task 2.
b. Review the responding vendors' responses and ensure adequate information has been provided by the vendors to ensure we can evaluate their SCADA system solution.
c. Develop the prequalification criteria upon which each vendor will be judged.
d. Develop the evaluation model using our AHP tool.
e. Develop and guide the team on the prequalification process using the AHP tool to initially weigh the criteria then score each vendor against those criteria.
f. Develop an Evaluation Report that describes the process used to select the prequalified vendors.

RPU Participation

a. Review and approve the RFI document.
b. Review the vendor responses to the RFI.
c. Participate in the establishment of the prequalification evaluation criteria.
d. Participate in the weighing the criteria and scoring each vendor against that criteria.

Workshops and Meetings

a. A one-day meeting will be required to assign weights to the criteria and score each responding vendor against that criteria.

Deliverables

a. Draft and Final RFI Document.
b. Draft evaluation criteria.
c. Evaluation Model.
d. Evaluation Report.

Task 5: Communications Study and RTU Analysis

Using the information gathered in Task 2, DNV KEMA will work closely with RPU to evaluate the current SCADA communications systems and RTU technology to determine if they are adequate for the future needs of RPU.

Objectives

a. Determine if the technology and network architecture alternatives for SCADA communications is adequate to support RPU's requirements.
b. Evaluate existing RTUs for future suitability

DNV KEMA Team Participation

a. Review the data collected in Task 2 and results from discussions with the various RPU operations groups.
b. Develop any gaps in the existing communications infrastructure to meet the needs of the 'to be' SCADA system and suggest mitigation approach to close the gaps
c. Evaluate the existing RTU and PLCs and provide recommendations for any required upgrade or replacement
d. Evaluate the current RTU and PLC protocols and determine suitability in 'to be' system.

RPU Participation

a. Review the recommendations for communications and RTU improvements

Workshops and Meetings

a. A 1-day meeting will be conducted at RPU to discuss recommendations for RTU improvements. This meeting will be coordinated with the Task 3 meeting.
b. A 1-day meeting will be conducted at RPU to discuss requirements and KEMA recommendations for any required changes or replacement of the RTUs and/or PLCs.
c. Follow-up discussions as required via teleconference.

Deliverables

a. Summary report on communication infrastructure gaps and recommended improvements
b. Summary report and recommended RTU improvements.

Task 6: Preparation of SCADA Technical Specification

Objectives

a. Develop a complete set of contract documents for the SCADA system procurement including: Vendor Bidding Instructions, Technical Specification; General Terms and Conditions, and Special Terms and Conditions.
b. Develop a defined procurement process including: procurement plan and schedule, evaluation methodology, selection criteria and weighting, and protocol for proposal review.
c. Gain management commitment and approval for the SCADA system upgrade procurement.
d. Develop a request for proposal (RFP) that identifies the core and unique requirements of RPU that enables vendors to submit a comprehensive proposal, and allows RPU to select a vendor and assess the cost and risk associated with purchasing the required system.

DNV KEMA Team Participation

a. Develop a draft procurement process.
b. Prepare the draft Technical Specification of the core and unique requirements in sequential installments by functional area for RPU review and comment. This shall include specifications to ensure that all applicable NERC standard CIP requirements for RPU are met. The results of the information gathering workshop in Task 2 and decisions reached in Task 3 will be the basis for the draft of the SCADA system upgrade specification.

The technical procurement documents will contain requirements to ensure cyber security of the SCADA. The NERC CIP standards will be used as the baseline for cyber security of the SCADA. The vendor will be required to demonstrate cyber security through testing. DNV KEMA will ensure that factory tests will be properly planned so that the system is protected and the NERC CIP standards are satisfied.

c. Develop a procurement plan with RPU project staff and purchasing personnel including: contract approach, evaluation and selection methodology, selection criteria and weighting, proposal review protocol, and designated evaluation team.
d. Develop draft contract documentation with RPU project staff and purchasing personnel including: Vendor Bidding Instructions, Technical Specification, General Terms and Conditions, and Special Terms and Conditions. DNV KEMA will provide our baseline commercial terms if needed by RPU. RPU may modify the terms as necessary.

RPU Participation

a. Provide RPU-specific information (e.g., data sizing, configuration parameters, legacy systems, functional details, etc.) for inclusion in the specification.
b. Review and comment on the draft Technical Specification, including all applicable NERC standard CIP requirements.
c. Contribute to the preparation of contract documentation including RPU standards for form of contract, procurement requirements, vendor proposal requirements, and General

Terms and Conditions.

d. Contribute to the development of a procurement plan.
e. Designate resources for participation in the proposal evaluation team.
f. Manage the controlled release of contract documentation to vendors.
g. Attend scheduled meetings and provide draft responses to vendor questions within agreed formal standards.
h. Review and approve formal responses to all vendor questions for inclusion as a supplement to the Contract Document set.

Workshops and Meetings

a. A two-day workshop attended by DNV KEMA, conducted at RPU to review the draft Technical Specification, Procurement Strategy and Plan, Contract Document Set.
b. Additional follow-up calls will be conducted via teleconferencing with RPU, as necessary.

Deliverables

a. Draft Technical Specification.
b. Final Technical Specification.
c. Procurement Plan.

Task 7: Evaluation of Bids and Vendor Selection

Objectives

a. Rank the vendors that best meet RPU requirements for the SCADA system upgrade.
b. Evaluate the differentiating characteristics of each vendor SCADA system and the extent of customization required to meet RPU's requirement.
c. Thoroughly assess and evaluate the preferred vendor capabilities, products, and performance considering the vendor proposal, technical compliance, and commercial conditions, and any other factors relevant to RPU.
d. Produce a defensible ranking of vendors based on a balanced evaluation of proposals using predetermined criteria and weightings and an impartial and objective evaluation and selection methodology.
e. Report final ranking of vendors based on evaluation and testing and recommended vendor and next steps.
f. Obtain hands-on experience with each of the proposed offerings.

DNV KEMA Team Participation

a. Develop and guide the team on the evaluation technique, use of proposal evaluation criteria, and protocols for evaluation team.
b. Develop the vendor system demonstration scripts for hands-on demonstrations to be conducted at RPU (Note: Typically, DNV KEMA does not attend these demonstrations, however, we can provide on-site support as an option if required).
c. Develop the evaluation guide worksheets for the team to use during the witnessing of the system demonstrations.
d. Evaluate vendor proposals and identify any questions regarding proposals.

e. Prepare with RPU a list of written questions for each vendor to clarify any problems or misinterpretations with vendor proposals.
f. Coordinate with RPU on the distribution of vendor questions.
g. Evaluate the vendor responses to written questions.
h. Produce a summary of the evaluation of the differentiating characteristics of each preferred vendor SCADA system and the extent of customization required to meet RPU's requirements.
i. Apply proposal evaluation criteria and weightings and facilitate an impartial and objective evaluation of the proposals by RPU using evaluation methodology to select the best- evaluated vendor.
j. Produce a summary of the detailed evaluation of the preferred vendor capabilities, products, and performance covering the vendor proposal, technical and commercial compliance, and customization requirements, and any other factors relevant to RPU.
k. Identify and document any unresolved issues with the preferred vendor.

RPU Participation

a. Dedicated evaluation team familiarization with the evaluation technique, use of proposal evaluation criteria, and protocols for evaluation team.
b. Review and comment on the demonstration scripts.
c. Participate in the hands-on vendor system demonstrations at RPU.
d. Evaluate vendor proposals and identify any questions regarding proposals.
e. Prepare a list of written questions for each vendor to clarify any problems or misinterpretations with vendor proposals.
f. Distribution of vendor questions to vendors.
g. Evaluate the vendor responses to written questions.
h. Participate in application of evaluation criteria by evaluation team using evaluation methodology to produce an impartial and objective evaluation of the proposals and a preferred ranking (short-list) of vendors for detailed evaluation.
i. Review and comment on a summary of the detailed evaluation of the preferred vendor capabilities, products, and performance.
j. Review evaluation report and approve preferred vendor.

Workshops and Meetings

a. Teleconference to establish criteria and review selection process.
b. A one-day meeting at RPU to score each responding vendor against the predetermined criteria and select the best-evaluated vendor.

Deliverables

a. List of questions on vendor proposals for each vendor.
b. Hands-on demonstration scripts and evaluation guide.
c. Evaluation methodology and use of evaluation software.
d. Draft and final evaluation report.
e. Documentation of unresolved issues with the preferred vendor.

Task 8: Contract Negotiations and Award

Objectives

a. Confirm final contract adjustments, clarify non-complying technical and commercial aspects and finalize design requirements, implementation plan, and ongoing support and development.
b. Prepare final contract documents for selected vendor.
c. Control and maintain negotiating position and commercial advantages during contract negotiations.
d. Resolve issues with the vendor in a mutually agreeable manner.
e. Award contract.

DNV KEMA Team Participation

a. Prepare list of required contract revisions, non-complying technical and commercial requirements, and unresolved issues.
b. Advise RPU on negotiating issues, tactics, and details.
c. Participate and document negotiations with vendor including final design requirements, implementation plan, and ongoing support and development.
d. Assist RPU develop final contract document set.
e. Prepare recommendation for award of contract.

RPU Participation

a. Review and comment on list of required contract revisions, non-complying technical and commercial requirements, and unresolved issues.
b. Participate in contract negotiations, final design meetings, implementation plan, and ongoing support and development, and the negotiation of any unresolved issues.
c. Review and approve final contract document set.
d. Review recommendations and approve award of contract.
e. Award contract.

Workshops and Meetings

a. Teleconference with DNV KEMA to review list of negotiations items and issues and to prepare for negotiations.
b. Negotiation meeting, attended by DNV KEMA and with vendor will be conducted at RPU to negotiate final contract and to produce final design, implementation plan, and ongoing support and development.

Deliverables

a. List of negotiations items and issues.
b. Updated contract documents including pricing forms.
c. Final contract document set.
d. Recommendation for award of contract.

Task 9: Project Implementation Support

DNV KEMA will assist RPU with the implementation, testing, and cut over of the new SCADA.

Objectives

a. Ensure that the SCADA Project is efficiently and effectively planned and executed towards procuring an SCADA that best meets RPU's current and future needs.
b. Provide the RPU SCADA Project Manager with project management assistance, advice, and support as required to expedite the procurement process and ensure a good result.
c. Function as RPU's technical interface to the vendor.
d. Ensure Vendor documentation and drawings are accurate and compliant.
e. Achieve scope of work completion within time and budget and receive advance notice of any changes to scope, additional costs, or delays.
f. Provide Factory and Site Testing support including Performance Testing.

DNV KEMA Team Participation

Following award, DNV KEMA will act as project and technical advisor to RPU including the following:

a. Plan, monitor, and assess project activities and performance and provide updates and regular reports of project activity.
b. Attend project meetings and prepare minutes and action items.
c. Advise on technical and commercial issues as required.
d. Advise RPU on contract-related issues and concerns.
e. Assist in the preparation of procurement change orders as needed.
f. Review custom documentation and drawings and provide comments.
g. Review vendor test plans and procedures and provide comments.
h. Participate in factory and site testing and document and coordinate resolution of all discrepancies.
i. Participate in cutover/go-live discussions.

RPU Participation

a. Provide technical and project management direction.
b. Review and comment on project reports and updates.
c. Participate in project meetings and teleconference calls.
d. Monitor project schedule and activities against approved budget.
e. Review factory test procedures.
f. Participate in factory testing.
g. Review site test procedures.
h. Participate in site testing.
i. Perform and oversee field construction and SCADA system installation.
j. Participate in cut over discussions.

Workshops and Meetings

a. Regular project meetings and/or conference calls (assume every 6 weeks) will be attended by DNV KEMA, the RPU SCADA Project Manager, and by appropriate members of SCADA Project Team for discussion and review of project activities, raising and assigning actions, and reporting progress on actions. Project meetings will be held as required and will generally be scheduled to occur in association with other project activity.
b. Teleconference calls will be held during implementation as deemed necessary.
c. Participation at Factory Testing
   Note: KEMA has assumed 2 weeks on-site to support the FAT
d. Participation at Site Testing
e. Site Testing at RPU's site.
   Note: KEMA has assumed 1 week on-site for SAT
f. Other meetings may be held at the discretion of RPU.

Deliverables

a. Agenda for project meetings
b. Project meeting notes and action items
c. Monthly Project Progress Reports
d. Participation at Factory and Site Test
e. Comments on custom documentation
f. Comments to Factory procedure and plan
g. Comments to Site procedure
h. Comments to Cutover Plan

EXHIBIT B

Hourly Rate Schedule – 2012

KEMA Inc. Rates

Billing Title	Standard Bill Rate
Sr. Principal Consultant II	$ 290
Sr. Principal Consultant I	$ 275
Principal Consultant III	$ 260
Principal Consultant II	$ 235
Principal Consultant I	$ 210
Consultant IV	$ 185
Consultant III	$ 170
Consultant II	$ 140
Consultant I	$ 120
Analyst III	$ 90

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we pledge, we deliver

RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve a contract agreement with KEMA, and request the Mayor and the City Clerk to execute the agreement for

Engineering Services - 2012 SCADA Replacement

The amount of the contract agreement to be TWO HUNDRED TWENTY-EIGHT THOUSAND FIVE HUNDRED DOLLARS AND NO/100 ($228,500.00).

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 24th day of April, 2012.

_____
President

_____
Secretary