MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Simpson, Brown, Helgeson, Manning, Mital

FROM: Roger Gray, General Manager; Greg Armstead, IT Project Manager;

DATE: February 25, 2013

SUBJECT: Advanced metering infrastructure (AMI) contract with Sensus

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Issue and purpose

On April 17, 2012, the Board directed staff to continue planning for a future Advanced Metering Infrastructure (AMI) system based on Alternative 3 (AMI for both electric and water utilities with demand response and other features).

The purpose of this backgrounder is to update the Board and seek approval for the General Manager to enter into a contract for delivery of an AMI system to be completed by 2017 and is subject to additional Board approval for bond authorization or other financing options. The remainder of this backgrounder summarizes the key elements of the negotiated terms.

Background

In March, 2011, a cross-functional EWEB team issued a multiple phase public solicitation for an AMI system. Fourteen original statements of qualification were received. Eight submissions were eliminated in that phase as lacking minimum qualifications to perform the work requested. Technical and cost proposals were sought from the six top ranked (qualified) proposers. Through the end of 2011, the EWEB team evaluated and scored the technical proposals, sought and received clarifications, hosted on-site demonstration of the top ranked systems and conducted site visits at other utilities. Based on all of the information collected and evaluated, the EWEB team recommended to management that Sensus USA's FlexNet AMI system best met EWEB's requirements. Sensus USA was determined to be the Highest Ranked Proposer, and Intent to Enter Negotiations notice was issued. In February 2012 EWEB commenced negotiating a complete contract with Sensus USA. The negotiated terms of that contract are presented to the Board at this time.

Commercial Terms of the Contract

- Length The contract term is 5 years, beginning March, 2013 and concluding February, 2018. Several key parameters of the contract "survive" the expiration of the contact in 2018, including a perpetual license to use the software, a 15 year warranty on equipment, software and intellectual property escrow and equipment price agreements.

- Amount The not to exceed limitation is $26,320,000. The amount is within the budget parameters for AMI established in the water and electric capital improvement plans (CIP) as last amended by the Board.

Risk Provisions

Given the length and amount of the contract, EWEB management negotiated a number of items to help EWEB manage cost and technology risk associated with this contract. These are in addition to the standard terms and conditions EWEB customarily issues with contracts, such as indemnification, access to records, remedies and other provisions.

- **Off-ramps** In addition to having the right to terminate the contract without cause, EWEB negotiated work slowdown, work stoppage and work demobilization clauses that provide additional tools to manage unexpected or negative occurrences without having to move to termination. These off ramps are in direct response to various challenges incurred by other utilities who have proceeded with AMI roll out ahead of EWEB.

- **Hold Back** EWEB negotiated a hold back provision of approximately 10% of the total contract payment ($2.28m). This hold back will be paid only when the system is fully installed and has been tested and satisfies EWEB's pre-defined Final Acceptance Criteria, to be verified at the conclusion of the project.

- **Payment Terms** Payment terms are milestone based, where EWEB pays for meters and IT service after installation and pre-defined acceptance are met, pays for network equipment upon receipt and pays project management services "pay as you go". Most payments are subject to hold back as mentioned above.

- **Equipment Warranty** EWEB negotiated an extended 15 year warranty on the major equipment items in the system (meters and data collectors). The warranty is designed to protect EWEB in the case of unusually high rates of equipment failure (>1% per year). If equipment fails at the expected rate of .5% - 1% per year, EWEB will be responsible for replacing the items, as we are today with existing meter equipment. If failure rates rise about 1%, Sensus will bear a proportion of repair/replacement cost that starts at 100% and declines on a pro-rata basis over 15 years.

- **System Warranty** In addition to an equipment warranty, EWEB negotiated a system wide warranty that provides once the system has passed Final Acceptance Testing (FAT), Sensus will repair, at their expense, any issues that arise that would cause the system to perform at less than the FAT criteria. This warranty extends for a period of 12 months following acceptance.

- **Cost Controls** The major elements of the system (RF network, meters, installation services and IT work to integrate with other EWEB systems) are all firm, fixed price from now until 2 years after final acceptance of the system. Annual software fees increases are capped at 3% per year. Upgrade fees for major upgrades are capped at $50,000 per occurrence, not to exceed $250,000 for the life of the system. The contract contains a provision for up to $250,000 (total) in change orders upon agreement of both Sensus and EWEB project managers. Additional changes would require contract amendment.

- **Performance and Payment Bond** The installation services portion of the contract (the meter deployment) is considered a public works construction project under BOLI criteria. As such, Sensus will post performance and payment bonds equal to the amount of installation services to insure that EWEB is protected from loss if the project is not completed or if subcontractors are not paid.

- **Field Tests** The contract contains options for EWEB to select electric metering equipment from more than one manufacturer. EWEB retains the right to and intends to conduct a lengthy field test of the various equipment options prior to determining final equipment selection. Test and acceptance criteria will be determined by EWEB.

Timing

The contract includes a statement of work which describes in detail both Sensus and EWEB responsibilities in construction of the AMI system. System construction will begin with EWEB issuing a Notice to Proceed. Current plans call for four major phases of the implementation project:

- Network construction to occur in 2014
- IT setup and integration work begins mid 2014 and ends mid 2015
- Small scale acceptance test in early 2015
- Full scale rollout to begin very late in 2015 and go through 2016.
- Final acceptance test, close out in 2017

Key Concerns and Questions

As the number of installed AMI meters approaches 50 million in the USA, the risks and concerns associated with such a project get illuminated by the experience of others. Questions/concerns that have been raised during the planning and selection of the selected AMI technology include:

- **Meter Quality** Sensus has not been in the electric meter manufacturing business as long as other proposers, and appears to be encountering growing pains associated with being new to this market. EWEB management will continue to monitor how Sensus meters perform. The contract provides EWEB the choice of choosing an alternate meter manufacturer if EWEB is not satisfied that Sensus has resolved electric meter manufacturing concerns by the time we roll out.

- **Timing** A common question that arises takes the form of "should we wait until closer to implementation to award a contract?" Might a superior technology emerge between now and then? Do we commit prematurely? And other variants. Given EWEB management's decision to defer AMI out into 2015, these are appropriate questions to examine. Our assessment of the marketplace is that there are no "new" technologies emerging that might make it worth waiting, and re-doing the competitive solicitation process. Given the time and cost of the planning/procurement process, it does not appear that EWEB would gain from deferring and repeating the procurement process later.

  Entering into the contract now allows both the electric and water meter shops to prepare for the future and begin deploying AMI compatible meters as they conduct routine maintenance on the system. Between electric and water, EWEB replaces between 3,000 and 5,000 meters per year. Management believes it is prudent to begin utilizing the technology we would deploy in the smart meter roll out, so that we are not placing new meters today that would be displaced in just a few years.

  In addition, this contract provides significant price advantages over current pricing. For example, after this contract goes into effect, the water utility will buy AMI compatible water meters at ~$70 per unit, where today the price is ~$105 per unit.

- **IT Risk** A repeating theme of the AMI planning process has been to make sure we are ready from an IT standpoint to be successful with an AMI rollout. Deferring until 2015 allows time for critical IT infrastructure and governance work to mature. Likewise, EWEB has negotiated terms where much of the risk regarding critical integration with back-end systems is taken on by Sensus, as they have greater experience and capability in integrating AMI. Also, EWEB retains the option of "hosting" the AMI system with Sensus, if that proves to be an advantageous technology choice. Time, and these risk measures, should be a sufficient buffer for this project.

- **Supplier/Technology Risk** The AMI/smart meter marketplace is mature and appears poised to evolve into an era of consolidation. ARRA grant funded projects approach completion and many of the largest utilities are nearly fully deployed. Providers are left to compete for smaller slices of the AMI market. While Sensus is considered in the top 5 (based on numbers of smart meters deployed) in this market with a technology advantage over their nearest competitors, their financial position is

not ideal. Their most recent Moody's credit rating was poor (B2). Staff utilized Moody's risk modeling system to review the 2011 unaudited financial information. Results indicated that if an updated Moody's rating was issued, the rating would be "C" which means that obligations are the lowest rated class of bonds. Additionally, the expected default frequency which provides the probability that a company will default within a given time frame was over 10% within five years. While the contract contains numerous provisions to reduce EWEB's financial exposure, there is some risk if Sensus did go bankrupt. Initial payments for network equipment and FCC radio licenses total approximately $1.3 million. If the project were abandoned prior to completion, these assets would retain some value, but not as much as the original cost. Additionally, Sensus' commitment to provide 15 year warranty service would be at risk. The AMI business case was based on a 15-year meter life. If the warranty is unavailable and if equipment life is not as long as anticipated, the business case benefits (total anticipated net present value of $20 million as presented to the Board in Spring, 2012) could potentially be diminished by approximately 15%.

Risk Summary

The risk assessment described above can be a bit gloom and doom and leave the reader wondering why EWEB would ever do such a project. An honest, eyes-open risk assessment is a necessary part of good technology project management. There is no technology project of this size without risk and there is no perfect vendor immune to market forces. A complete risk assessment allowed us to build in reasonable controls into the contract (discussed above) and also allows us to move forward knowing what we need to actively monitor and manage. Management recommends moving forward because we believe that we have sufficient risk coverage built into the contract to deal with possible unfavorable outcomes, should they materialize.

Board Action

Management recommends the Board authorize the General Manager to enter into the proposed contract with Sensus.

It should be noted that authorizing the contract is NOT the final Board action prior to an AMI roll out. Further Board action will be required before the project proceeds to that step. These future actions are anticipated to include: review and approve a financing approach (e.g. mix of bond and rate funded capital), review and approval capital budget expenditures in the appropriate fiscal year budget, adoption of various customer related policies (e.g. opt-out, privacy, TOU rate tariffs, others). In addition to these formal steps, the Board will receive regular updates on the planning and design aspects of the project as it proceeds.

EWEB BOARD AGENDA ITEM ACTION REQUEST

For Contract Awards, Renewals, and Increases generally over $1 million

The Board is being asked to approve a new contract with **Sensus, USA** for **Advanced Metering Infrastructure (AMI) Implementation.**

Backgrounder ("See backgrounder information") Yes

Board Meeting Date: March 5, 2013

Project Name/Contract#: Advanced Metering Infrastructure Implementation

Primary Contact: Roger Gray Ext. 7130

Secondary Contact: Greg Armstead Ext. 7734

Purchasing Contact: Guy Melton Ext. 7426

Action Requested:

- X Contract Award
- ___ Contract Renewal
- ___ Contract Increase
- ___ Other

Contract Amount:

Original Contract Amount: $26,320,000

Additional $ Previously Approved: $0

Invoices over last approval: $0

Percentage over last approval: 0 %

Amount this Request: $26,320,000

Resulting Cumulative Total: $26,320,000

Funding Source:

- X Budget
- ___ Reserves
- ___ New Revenue
- ___ Bonding
- ___ Other

Contracting Method:

Method of Solicitation: Formal RFP

If applicable, basis for exemption: N/A

Term of Agreement: March 6, 2013 – March 5, 2018

Option to Renew? No

Approval for purchases *"as needed"* for the life of the contract? No

Form of Contract:

- ___ Single Purchase
- X Services
- X Personal Services
- X Construction
- ___ IGA
- X Price Agreement
- ___ Other

Narrative:

The Board is being asked to approve a new contract with **Sensus, USA** for **Advanced Metering Infrastructure (AMI) Implementation.**

In March 2011, staff issued a multi-phase Request for Proposals (RFP) for AMI Implementation. In the first phase, Request for Qualifications, (RFQ) staff received and evaluated fourteen Statements of Qualifications from AMI firms. Six firms were determined as Qualified. In July 2011, staff issued the second phase, Request for Technical and Cost Proposals, to the six qualified firms. Staff received and evaluated four responses to the request for technical and cost proposals. After evaluation of the four proposals, the three highest-ranked firms were invited to present scripted demonstrations of their AMI systems. In January 2012, staff completed the evaluation process and Sensus, USA was determined to be the highest-ranked proposer.

In February 2012, staff entered contract negotiations with Sensus, USA to obtain written agreement on the statement of work and the final contract. Details of the negotiated contract are contained in the attached backgrounder.

ACTION REQUESTED:

Staff requests Board approve a new contract with **Sensus, USA** for **Advanced Metering Infrastructure (AMI) Implementation.** Funds for these services are included in the capital improvement plan (CIP) for both water and electric utilities in 2014-2017, and will be budgeted annually.

SIGNATURES:

Project Coordinator: _____

Assistant General Manager: _____

Purchasing Manager: _____

General Manager: _____

Board Approval Date: _____

Secretary/Assistant Secretary verification: _____