



**London
Hydro**

Energy Management Department

To: Vinay Sharma

Date: November 28, 2008

From: Gary Rains

Re: Project Manager for Data Management – Smart Meter Deployment Project
Our RFO Reference: Q2008-N-22

This memorandum reviews the selection process and recommends a candidate to complement our core Smartmeter project team under a professional services contract for a nominal one year duration.

Background:

In developing a core project team for the Smartmeter project, there was recognition of a resource gap when it came to a project manager that could assume responsibility for strategic planning activities associated with the integration of the new AMI Master Station computer into other corporate computer systems and the provincial MDM/R. London Hydro certainly has the internal talent to carry out this task, but these individuals are fully committed to the new SAP CIS system and other corporate computing projects. A decision was made to look to the marketplace for a suitable resource.

Request for Quotation:

A Request for Quotation (reference: #Q2008-N-22, *Project Manager for Data Management for Smart Meter Deployment Project*) was issued by our Purchasing Department to seven (7) firms. By the closing date of October 26th, proposals had been received from only three (3) companies, namely: Genos Consulting, IBM Canada Ltd, Sky Business Consulting Inc.

The Genos and Sky proposals were deemed to be lacking from both a skill set and experience perspective.

The IBM Consulting proposal, on the other hand, was based on a team approach – their proposed project manager has just completed a 3-year assignment at Ottawa Hydro of a similar nature; and this individual would be complemented by a team of four (4) subject matter experts (SME's) claiming direct experience with the MDM/R and other relevant Ontario electricity marketplace projects.

This IBM candidate was subject to a face-to-face interview with London Hydro's core project team to assess his abilities, ascertain that he could work well with the project team, and that there was a common understanding of the work assignment. The general consensus of the London Hydro core project team was that *IBM's proposed project manager has well rounded experience, and in those areas where we believe there may be gaps, the IBM SME's (that are an integral part of their proposal) will more than adequately fill these voids.*

Note: As an aside, concurrent with this process, London Hydro was also advertising to fill key vacancies in its IT Department. Telephone interviews were conducted for a couple of individuals that a first glance appeared to possess some of the qualifications and experience sought for this assignment.

Recommendation:

It is recommended that London Hydro retain IBM Consulting for a one-year professional services contract (with both exit and extension clauses) at an hourly rate of ~~52.00~~. The estimated value of this contract for

2009 is \$225,000 (plus an estimated 15% for travel and accommodation expenses). The actual contractual terms are still under negotiation with IBM.

The attached "*Statement of Work Expectations for Project Manager – AMI Master Station (contract position)*" has been developed so London Hydro's expectations of deliverables is clearly stated.

This expenditure is clearly an "incremental Smartmetering cost" that (as per OEB Instructions) would be tracked under Account #1556.300 for recovery in the Smartmetering rate rider.

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Statement of Work Expectations for Project Manager – AMI Master Station (Contract Position)

London Hydro's Smartmeter Implementation Project Office is structured to have (i) a Project Manager responsible for revenue meter deployments, (ii) a Project Manager responsible for the communications systems that interconnect the revenue meters with the master station, and (iii) a Project Manager responsible for the AMI master station, the development of strategies for its integration with other computer-based systems both inside and outside the corporation, transition strategies for both the workforce and technology, and finally reporting progress on a regular basis.

This document sets forth the work expectations for the latter project manager in four (4) general areas as identified below:

Project Management & Status Reporting -

Participation on the London Hydro SM/AMI project management team that meets once per week to exchange project status information, review strategic and resource business plans, deal with contract administrative matters, manage issues as they arise, review project spending in comparison to budget estimates, and ensure regulatory compliance.

Participate in the AMI contractor's monthly project status meetings.

Review AMI contractor's Phase I acceptance test plan and prepare companion London Hydro resource plan for participation in this phase. Develop test and resource plan covering the full integration of AMI into other corporate computer systems.

Strategic Planning –

As an integral part of this assignment a number of strategic planning reports need to be created, each structured to explicitly state the problem and assumptions or restrictions, set forth the prevailing conditions or environment, describe the alternative approaches or candidate solutions, provide a critical assessment of alternatives, and finally recommend a particular course of action or roadmap that is best suited to London Hydro's circumstances. The specific planning works envisioned include:

- Oversee the internal development of a RFP/RFQ/RFI for a third-party metering data warehouse (if required), participate in bidder meetings and the evaluation of proposals and contract negotiations with successful bidder, determine resource and staff training requirements for system implementation, and provide project management services throughout contract execution / system implementation phase. Ensure staffs receives appropriate training, internal procedures are reviewed and modified as necessary, and maintain comprehensive and organized project records.

Note: Outside of this engagement, London Hydro intends to retain the expert services of a data systems architect (a specialist at translating technical needs into an overall computer system architecture that creates the best operational capability at the most affordable cost) to obtain a definitive assessment of whether the Energy Data Management (EDM) module within the SAP system can fulfill the performance expectations for a metering data warehouse, or whether a third-party middleware product is required and the conceptual integration strategy for that third-party product.

Statement of Work Expectations for Project Manager – AMI Master Station (Contract Position)

- Develop a comprehensive strategic master plan covering the two discrete aspects of meter data management (i.e. what meter readings and definitions reside in the AMI Master Station, the Itron MV-90 data collection system, the SAP CIS system, an operational database, a metering data warehouse {whether EDM or third-party middleware}, the EBT hub, and the provincial MDM/R) namely:
 - Metering data process flow, from raw metering data collection through a VEE process and ending up as billing determinants.
 - Synchronizing meter attribute definitions across various computer systems to reflect changes to the Smartmeter population, the exchange of meters, etc.
- Develop a phased implementation / realization plan (including cost estimates and approximate time frames) for the meter data management strategic master plan to progress from the current state to the desired end state of highly integrated computer systems. The realization plan should also identify all interfaces that need to be developed to realize the plan.
- Develop internal procedures to ensure electronic security of AMI Master is in accordance with NERC Standards CIP-005-1 and CIP-007-1 as they apply to a “load serving entity” and develop disaster recovery procedures (that are to be executed at least once).
- Develop a roadmap (including a rough cost estimate) for the phased introduction of effective field workforce automation technology that supports the initial deployment of Smartmeters and later meter exchange activities (in a manner that preserves the integrity of measurements from both the old and new meters) associated with seal expiry and collections activities.
- Develop performance-based specifications for workforce automation technology to form an integral part of an RFP, oversee an internal group of stakeholders in the evaluation of alternative proposals, and prepare a purchasing recommendation. Develop a plan for system integration (including process documentation and acceptance testing) and user training, and oversee the execution of the contract.
- Develop a plan covering the transition period from today’s conventional meter reading and billing practices to full Smartmeter interval data collection, synchronization with the MDM/R and TOU billing. This transition plan is to identify any issues (and corresponding solutions) associated with the concept of initially treating deployed Smartmeters with connection to the AMCC as an AMR meter (with monthly bill cycle register reads into CIS for billing as a conventional meter).
- Review the existing services contract (covering both electric and water meters) with London Hydro’s meter reading contractor, and develop a plan (in concert with London Hydro’s MDMS supervisor) for adjusting the terms of the existing contract (or a new contract) for contracted manual meter reading activities that occur throughout the transition period. The plan shall include a validation phase approximately six months after Smartmeter installation that confirms that the manual register read and the AMR path yield identical energy consumption data.

Registration with Provincial MDM/R –

Manage and lead London Hydro enrolment and certification with the IESO MDM/R through to signing of all required agreements, systems testing and “go live” system synchronization.

Change Management –

Lead all change management activities including process documentation and training.

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