



REQUEST FOR PROPOSALS

METER DATA MANAGEMENT SYSTEM (MDMS)

RFP # 546

Proposal Closing Time: November 2nd, 2010 at 11:00:00 a.m. (PDT)

**Delivery Address: 535 Hamilton Street
Vancouver, B.C., V6B 2R1**

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SUMMARY OF RFP

RFP TITLE	The title of this RFP is: Request for Proposals Meter Data Management System (MDMS) RFP # 546 Please use this title on all correspondence.
CONTACT PERSON	The Contact Person for this RFP is: Xavier Serrano Email: xavier.serrano@bchydro.com Please direct all enquiries, in writing, to the above named Contact Person. No telephone enquiries please.
ENQUIRIES DEADLINES	Enquiries received after 11:00 a.m. (PDT) 5 days before the Final Closing time may not be processed and may not receive a response.
PRELIMINARY RELATIONSHIP DISCLOSURE FORM SUBMISSION	Proponents should submit their completed Relationship Disclosure forms by: October 26th, 2010 At 11:00:00 a.m. (PDT)
INTERACTIVE SESSIONS	October 12th – 15th, 2010
PROPOSAL CLOSING TIME	The Proposal Closing Time is: November 2nd, 2010 At 11:00:00 a.m. (PDT)
DELIVERY ADDRESS	The Delivery Address is: BC Hydro 535 Hamilton Street Vancouver, B.C. V6B 2R1
PRODUCT DEMONSTRATIONS	November 18th – 28th, 2010
DELIVERY HOURS	Deliveries will be accepted at the Delivery Address on weekdays (excluding Statutory Holidays) from 8:30 a.m. to 4:00 p.m. (local time in Vancouver), but no later than the Proposal Closing Time.

1. INTRODUCTION

1.1 Procurement Background

In 2008, BC Hydro initiated a procurement process, whereby a single Solution Integrator firm (SI) would be selected to provide and implement the full end-to-end scope of Smart Metering and Infrastructure Program (SMI or the Program). All SMI technology components, including the meters, metering communications, software applications, deployment services, implementation services, and customer experience (including In Home Feedback (IHF), conservation rates, and customer service) would be sub-contracted through the SI to third-party technology vendors and service providers. After a detailed evaluation of the proposals, BC Hydro determined the proposed end-to-end; turnkey approach to implementing SMI was not in the company's best interest.

In March 2010, BC Hydro received approval to proceed with a modified and "disaggregated" procurement approach. Under this modified procurement, BC Hydro continued with the SI procurement but only for project management and information technology components and BC Hydro would contract directly with a metering system contractor, a meter data management system (MDMS) software vendor, and a meter deployment services contractor.

In August 2010, Capgemini was selected as the SI for the Project.

Currently, BC Hydro is proceeding with three immediate procurements including:

- a) Smart Metering System: a single contractor to provide the full end-to-end metering system which includes smart meters for residential and commercial customers, collectors to start consolidating meter reading data in the field, telecommunications cards in the meter to enable meter reading data to be transmitted to a customer's home as well as back to BC Hydro, and the Automated Data Collection System software application.
- b) Meter Deployment Services: a single contractor to complete in-field deployment of meters. This contractor will also help support BC Hydro's customer engagement plan during deployment.
- c) Meter Data Management System: a packaged software application that stores the large volumes of meter reading data and ensures that data is accurate, complete, and useable before sending the data into BC Hydro's corporate systems.

In addition to the streams of work mentioned above, BC Hydro anticipates pursuing future streams of work related to SMI, such as IHF and theft detection.

1.2 Purpose of this RFP

The purpose of this RFP is to invite eligible Proponents short-listed in the RFQ stage of the competitive selection process to prepare and submit competitive Proposals for the delivery of a Meter Data Management System. Under the Competitive Selection Process, BC Hydro is seeking to enter into an Agreement with a qualified entity ("Contractor") to supply, install and configure a Meter Data Management System (the "Project").

1.3 Eligibility to Participate in this RFP

Through a request for qualifications (RFQ) issued May 12, 2010 by BC Hydro, the following Proponents are qualified to participate in this RFP:

- a) Ecologic Analytics, LLC;
- b) Itron Canada, Inc.;
- c) Siemens Canada Limited; and
- d) Aclara Software Inc..

Only these four Proponents, subject to changes in Proponent team membership as permitted by this RFP, may submit Proposals or otherwise participate in this RFP.

1.4 Procurement Team

- a) BC Hydro

BC Hydro is one of North America's leading providers of clean, renewable energy, and the largest electric utility in British Columbia, serving approximately 95 per cent of the province's population and 1.8 million customers. BC Hydro's goal is to provide reliable power, at low cost, for generations.

As a provincial Crown Corporation established in 1962 under the Hydro and Power BC Hydro Act, BC Hydro reports to the Minister of Energy, Mines and Petroleum Resources, and is regulated by the British Columbia Utilities Commission (BCUC).

BC Hydro's various facilities generate between 43,000 and 54,000 gigawatt hours (GWh) of electricity annually, depending on prevailing water levels.

Electricity is delivered through a network of 18,336 kilometres of transmission lines and 55,705 kilometres of distribution lines. The transmission and telecom assets are owned and operated by BC Hydro.

Additional information about BC Hydro is available at: www.bchydro.com

- b) Partnerships BC

Partnerships BC was established by the Province to evaluate, structure and implement partnership solutions which serve the public interest.

BC Hydro has engaged Partnerships BC to manage the procurement for the Smart Metering Program.

Additional information about Partnerships BC is available at www.partnershipsbc.ca.

1.5 Administration of this RFP

Partnerships BC is managing this RFP on behalf of BC Hydro.

1.6 Definitions

Refer to Section 11.1 for the defined terms used in this RFP.

2. SMART METERING AND INFRASTRUCTURE (SMI) PROGRAM OVERVIEW

2.1 Legislative Context

The 2007 B.C. Energy Plan: A Vision for Clean Energy Leadership strategy document outlined 55 policy actions focused on energy self-sufficiency, conservation, and development of renewable alternative energy sources. Several policy actions were relevant for the SMI Program, including:

- a) Acquire 50 per cent of BC Hydro's incremental resource needs through conservation by 2020;
- b) Ensure a coordinated approach to conservation and efficiency is actively pursued in British Columbia (B.C.);
- c) Encourage utilities to pursue cost effective and competitive demand side management opportunities; and
- d) Explore with BC Utilities Commission new rate structures that encourage energy efficiency and conservation.

In 2008, the Province of British Columbia (Province) released a Climate Action Plan which outlined a series of strategies and programs which were calculated to take B.C. approximately 73 per cent towards meeting the goal of reducing provincial Green House Gas (GHG) emissions by 33 per cent by 2020. The Climate Action Plan identified smart meters as an integral component to achieving these GHG reductions, specifically as related to energy savings in the building sector.

Subsequently, the Province has supported smart metering through the introduction of:

- a) Amendments to the Utilities Commission Amendment Act in 2008 which required BC Hydro to install smart meters by the end of the 2012 calendar year; and
- b) The 2008 Energy Efficient Buildings Strategy: More Action, Less Energy which called for BC Hydro to introduce real time, in-home displays to help to reduce overall energy consumption in residential units.

In April 2010, the Province introduced a new Clean Energy Act which expects BC Hydro to:

- a) Meet 66 per cent of our future incremental electricity demand from conservation and efficiency improvements by 2020, an increase from the previous target of 50 per cent; and
- b) Proceed with the Smart Metering & Infrastructure Program that will allow ratepayers to better manage their electricity use and save on power bills. Note that, within this new Act, the overall SMI Program is further defined as a Smart Metering Program focused on smart meters, in-home feedback, communications infrastructure, and conservation rates; and a Smart Grid Program focused on advanced metering strategies to reduce the theft of electricity, and advanced telecommunications infrastructure.

2.2 SMI Program Objectives

In addition to meeting the Province's objectives with respect to energy efficiency and conservation, the SMI Program is one of BC Hydro's key strategic initiatives in support of our grid modernization vision, which is to: "Enable customers to actively manage their energy choices, adopt new energy and conservation solutions and benefit from an electric grid that is modern, reliable, safe and cost-effective."

SMI's key strategic objectives include:

- a) **Improve Customer Service:** provide real-time and detailed information on consumption and cost, and enable better customer communication around outages.
- b) **Achieve Conservation and Energy Efficiency:** energy and capacity savings achieved through time-based rates, effective communication and incentives to customers, customer direct control of energy use, and grid operational improvements.
- c) **Achieve Operational Efficiencies:** improved reliability and lower operating costs in areas such as meter reading, distribution system maintenance, and outage management.
- d) **Protect Revenue:** reduced revenue loss due to the theft of power directly from the distribution grid and tampering with the meters, as well as revenue "leakage" in some customer processes.
- e) **Keep Customer Bills Low:** achieving the conservation benefits, operational efficiencies, and revenue protection lead to utility rate reductions which translate directly into customer savings.
- f) **Achieve Environment and Social Benefits:** facilitating customer conservation, energy efficiency, reduced greenhouse gas emissions, and improve safety for employees and the public.
- g) **Support Advanced Customer Applications:** provide a substantial portion of the foundational infrastructure required to modernize the grid in support of advanced customer applications such as distributed generation, electric vehicles, demand response, microgrids, and future applications. SMI is a key, but not sole, enabler of these advanced applications.
- h) **Economic Development:** contribute to economic development and innovation in British Columbia, through employment opportunities in the deployment of meters, creation of more information-based jobs, significant energy savings that can be used for other purposes, and support for BC-based businesses where appropriate.

2.3 SMI Program Scope

The SMI Program will deliver against the strategic objectives outlined in Section 2.2 through the following scope components. Each of these scope components will be managed as specific, but integrated, work streams in a single, overall SMI project delivery plan.

- a) **Smart Metering System:** implement a full function smart metering system for all BC Hydro customers. Scope elements include:
 - (i) **Smart Meters** – these multi-channel meters, capable of two-way communications, which capture both the amount of power consumed and when it is being consumed.
The SMI Program will:

- deploy smart meters for approximately 1.95 million residential and commercial customers, with a target completion date of December 2012.
 - deploy Field Area Network (FAN) collectors (data aggregation devices) and other telecommunication devices to collect meter data.
 - Provide a service disconnect switch, in the majority of the self contained meters, to enable safe and secure remote customer connection, disconnection and reconnection.
- (ii) Metering Communication System – the communications network that provides a complete solution to collect meter reading data and also manages the smart meter assets.
- Devices to be included within a meter are a FAN network interface card (NIC) and a Home Area Network (HAN) gateway.
 - The Automated Data Collection System (ADCS) software which manages the metering system and processes the high volume of interval-based meter reads.
 - The metering communication system will be operational for all installed meters, based on the same target date of 2012.
- b) IHF Solutions: with the availability of detailed usage data from smart meters, SMI will implement communication channels to provide up-to-date energy consumption and price information directly to customers. Scope elements for this IHF work stream in SMI include:
- (i) IHF HAN Device – BC Hydro will provide all customers with the option to acquire a basic, market-available IHF HAN device.
 - (ii) Product Testing & Eligibility Process – to ensure IHF HAN devices operate correctly, safely, and securely within a home, BC Hydro will establish criteria for IHF HAN functionality and performance. Any products meeting the established criteria will be tested in lab and field environments as part of the SMI Program.
 - (iii) IHF HAN Device Pairing Application – to enable an IHF HAN device, it must be securely and reliably paired with its associated smart meter. The SMI Program will design and develop a highly secure, IHF HAN device pairing application.
 - (iv) Web-based Conservation Portal – by implementing interactive and informative applications designed to help customers better understand their energy usage and change their behaviour to conserve more. These portals will use consumption information collected from smart meters, and will be implemented in two phases; 1) “basic” capability based on daily register reads and 2) “advanced” capability based on hourly interval reads. There will typically be a one day lag in the presentment of this usage data.
- c) Conservation Rates: with the availability of hourly energy usage information, BC Hydro will design and implement new rate structures designed to incent conservation behaviour at the customer level. The SMI team will be responsible for implementing the technology infrastructure to support these rates – specifically implementation of the MDMS application (key dependency) and modifications to the current SAP Billing system.

Rates included in SMI scope include:

- (i) Inclining Block Rate – ensure the smart metering and in-home feedback solutions can support real-time calculation of customer's usage cost, based on the existing Inclining Block Rates.
 - (ii) Time of Use Rate – enable new voluntary Time of Use (TOU) rates, which apply different rates structures depending specifically on when power is being consumed.
 - (iii) Critical Peak Pricing Rate – enable new voluntary Critical Peak Pricing (CPP) rates, which apply different rate structures to power being consumed during critical periods of load on the system.
- d) Theft Detection Solution: BC Hydro is experiencing a significant level of energy diversion which shows up in higher than expected distribution line losses, because BC Hydro does not have the measurement devices, analytical tools and modeling methods needed to quickly and accurately identify where theft is occurring.

BC Hydro is a thought leader with our proposed approach of using system meters and theft analytics software to pinpoint theft through electricity balancing.

Scope elements of the Theft Detection Solution include:

- (i) Transformer and Feeder Meters – new meters will be installed at key points on the distribution grid to measure electricity supplied to localized areas, thus enabling evaluation against electricity recorded downstream at the customer meters.
 - (ii) Theft Analytics Software – an application that consolidates data from transformer and feeder meters, customer smart meters, Geographical Information System (GIS), Distribution Management System (DMS), and security databases to identify areas of theft.
 - (iii) Operational Enhancements – new processes and work flows, Customer Information System (CIS) enhancements, and system changes will be implemented to enhance the efficiency of field investigations to rapidly shut down thefts and prevent reoccurrence.
- e) Telecommunications Infrastructure: refers to the communications infrastructure that enables the two-way transmission of data between the FAN collectors and the head end ADCS.

Scope elements include:

- (i) Wide Area Network (WAN) Connections – the Chief Information Officer (CIO) is responsible for all enterprise-wide telecommunications. Working with the CIO, and leveraging Network BC as appropriate, SMI will connect all FAN collectors to a WAN.
 - (ii) Advanced Telecommunications – design and deployment of advanced and redundant communication devices and infrastructure to support advanced smart grid and customer applications. Specific requirements and timing of the implementation of such advanced telecommunications are still to be defined, and will likely continue beyond 2012.
- f) Information Technology (IT) Infrastructure: develop, install, and implement the software applications and data infrastructure required to support the full scope of the SMI Program.

This systems integration work involves three broad categories: new software applications, modifications to existing corporate applications, and interfaces between new and existing systems.

2.4 Scope Summary

By the target date of 2012, the SMI Program will:

- a) install 1.95 million residential and commercial smart meters;
- b) deploy field telecommunications required to transmit metering data;
- c) implement infrastructure to support in-home feedback options including:
 - (i) a web portal which provides feedback to all customers; and
 - (ii) an in-home display option, for customers who choose to use them;
- d) implement the infrastructure to enable conservation rates (specifically the MDMS); and
- e) start installing transformer and feeder meters and advanced telecommunications.

2.5 Schedule

The high level schedule for the four work packages is as follows:

Solution Component	2010							2011		
	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Professional Services (System Integrator)										
Procurement	■	■								
Contract Finalization and Execution			■	■	■	■	■	■	■	■
Implementation										
Smart Metering System										
Procurement		■	■	■	■	■	■			
Contract Finalization and Execution								■	■	■
Implementation										
Meter Deployment Services										
Procurement		■	■	■						
Contract Finalization and Execution						■	■	■	■	■
Implementation										
MDMS Applications										
Procurement	■	■	■	■	■	■				
Contract Finalization and Execution							■	■	■	■
Implementation										

Key upcoming milestones for the overall Program include:

- a) Systems Integrator selected – August 2010
- b) Smart Metering System Contractor selected – December 2010
- c) Commence telecom installation – June 2011
- d) Expected installation of first production meter – July 2011
- e) Meter installation complete – December 2012

3. THE PROJECT

3.1 Meter Data Management System (MDMS)

The Contractor will supply a MDMS solution and provide the MDMS software licenses, annual maintenance and support, and associated services to support the MDMS's implementation and transition to operations. The Contractor will also be required to provide the interface adapters and implementation services required to support the integration of the MDMS with BC Hydro's TIBCO corporate Enterprise Service Bus (ESB). The MDMS should include an appropriately scaled data mart as part of the product to support storage and management of the large volume of meter data that will be generated.

In addition to the licensed software components, the Contractor has to bring its expertise, methodologies, and tools to support the installation, design, configuration, build, integration, testing, and deployment of the MDMS and any adapters. BC Hydro will procure and provision all hardware required to support the Project.

In addition to the core MDMS functionality, BC Hydro is interested in exploring whether the Contractor's MDMS Solution could provide value added functionality that is required for overall program success. Such value added functionality could include revenue protection, advanced customer data presentation via a portal, outage management, and anything the Contractor believes could be value-added to BC Hydro.

3.2 General Scope of Responsibility

The general scope of responsibility under the Agreement will be for a Contractor to provide the following elements:

1. Base Solution Supply:
 - (a) MDMS Software and License and associated maintenance agreement; and
 - (b) MDMS Interface Adaptors and License and associated maintenance agreement.
2. Base Solution Services:
 - (a) MDMS design, build, install, configure, and deployment;
 - (b) Perform functional, performance, integration, security and privacy testing of the MDMS; and
 - (c) MDMS user and system administration training.
3. Release Specific Scope:
 - (a) Release 1 – Mass Meter Deployment;
 - (b) Release 2 – Register Read Billing;
 - (c) Release 3 – In Home Display Feedback and Portal;
 - (d) Release 4 – Conservation Rates;
 - (e) Release 5 – Advanced Operational Support (optional); and
 - (f) Release 6 – Advanced Theft Detection (optional).
4. Documentation:
 - (a) Product documentation;

- (b) Training documentation; and
 - (c) Process documentation.
5. Value Added Optional Software & Services:
- (a) Value added components; and
 - (b) Value added services.

A more detailed explanation of the scope of the Contractor's responsibilities can be found in Appendix A.

BC Hydro anticipates the Project schedule to be as follows:

Milestone	Expected Date
Requirements & Design	December 2010 – February 2011
Install and Configure	February 2011 – April 2011
Integrate and Test	April 2011 – August 2011
Stabilize and Transition to Operations	August 2011 – October 2011
Ongoing Business Systems Releases	October 2011 – December 2012
Project Work Complete	December 2012

3.3 Collaboration

The Contractor will work in a cooperative and collaborative manner with BC Hydro's program manager, the SI, who is responsible for the overarching integration of the systems including the MDMS, metering system head end (ADCS), billing (SAP) and portal.

3.4 Key Commercial Principles

The scope of services performed by the Contractor will be governed by the terms and conditions of the Agreement. The anticipated key commercial principles of the Agreement are summarized below for the convenience of Proponents but should not be considered to be an exhaustive listing and should not be formally relied on without reference to the original documents.

The Agreement is a supply and services agreement that anticipates attaching both the Contractor's software license agreement and the Contractor's maintenance services agreement to form the full Agreement between BC Hydro and the Contractor. However the Final Draft Agreement will set out provisions which will supersede certain provisions in the license and maintenance services agreements provided by the Contractor.

Contract Term

The expected timeframe for the various components of the Contract are as follows:

- The services component of the contract are expected to last through the duration of the project (until the end of 2012 or early 2013);

- The maintenance will continue for at least five years, with elections from BC Hydro to extend that annually thereafter; and
- The license will continue in perpetuity.

Performance Security

The performance security requirement calls for a parental guarantee (appendix Q of the draft contract) of all of the obligations of the contracting entity.

Payment

The work is comprised of a mixture of fixed price elements (license fee, maintenance fee, and implementation and integration work) and time and materials work (design and planning work). Fees for the software, software license and the maintenance will be paid in USD while all of the other services fees are in CDN.

A 20% holdback will be applied to payments made for the MDMS design, build, install, configure, and deployment (subsection 2a in Appendix A – Scope of Work). The holdback will be released upon successful completion of Release 4 work (subsection 3d in Appendix A – Scope of Work).

Payments for the MDMS software and license are structured as follows:

- 10% upon delivery of the software;
- 50% upon completion of the Base Solution Services (subsection 2 in Appendix A – Scope of Work) and associated testing (appendix G of the draft contract); and
- 40% upon completion of Release 4 work and associated testing (appendix G of the draft contract).

Software License

This will be a perpetual license that cannot be terminated that allows BC Hydro to use the MDMS software and associated Interface Adapters. The license will be an enterprise wide license for unlimited users.

Maintenance Agreement

The maintenance agreement will be for all maintenance and support services. The initial term is for five years, with BC Hydro having the option to elect additional 1 year terms thereafter.

4. COMPETITIVE SELECTION PROCESS

4.1 Overview

This section describes the process that BC Hydro expects to use in the selection of a Preferred Proponent through this RFP competitive selection process.

4.2 Interactive Sessions

Prior to the Proposal Closing Time, BC Hydro will make available certain of its personnel, consultants and advisors (BC Hydro Representatives) to participate in Interactive Sessions with the Proponents. The Interactive Session will take place in accordance with the following:

- a) the purposes of the Interactive Sessions include:
 - (i) providing BC Hydro Representatives with comments on the Initial Draft Agreement;
 - (ii) providing Proponents with comments and feedback from BC Hydro on the general acceptability of particular technical solutions; and
 - (iii) providing an opportunity for each of the Proponents to present aspects of their Proposal;
- b) five days in advance of the Interactive Session, each Proponent will provide BC Hydro with a list of issues it would like to discuss. Three days in advance of the Interactive Session BC Hydro will provide each Proponent with a finalized agenda which in addition to the issues put forward by the Proponent will include any issues BC Hydro would like to raise;
- c) BC Hydro will determine which BC Hydro Representatives will be present at any Interactive Session;
- d) at each Interactive Session, a Proponent may have up to twelve officers, directors, employees, consultants and agents of the Proponent present;
- e) to facilitate free and open discussion at the Interactive Session, Proponents should note that any comments provided by or on behalf of BC Hydro during any Interactive Session, including in respect of any particular matter raised by a Proponent or which is included in any documents or information provided by a Proponent prior to or during the Interactive Session, and any positive or negative views, encouragement or endorsements expressed by or on behalf of BC Hydro during the Interactive Session to anything said or provided by Proponents will not in any way bind BC Hydro and will not be deemed or considered to be an indication of a preference by BC Hydro even if adopted by the Proponent. Prior to the commencement of each Interactive Session, Proponents will be required to acknowledge, in writing, the non-binding nature of the comments provided by or on behalf of BC Hydro during each Interactive Session;
- f) if a Proponent wishes to rely upon anything said or indicated at an Interactive Session, then the Proponent must submit an Enquiry describing the information it would like to have confirmed and request that BC Hydro provide that information to the Proponent in written form and, if such information relates to a clarification, explanation or change to a provision of the RFP or the Contract, request an Addendum to the RFP clarifying and amending the provision in question;

- g) BC Hydro will use reasonable efforts to distribute to all Proponents any new information provided by BC Hydro to any Proponent during an Interactive Session, save and except that information which may be related to items raised by a Proponent in an Enquiry on the basis that such item would be treated as “Commercial in Confidence” and where, under Section 6.5, BC Hydro considered it would be dealt with on that basis; and
- h) an anticipated schedule for the Interactive Sessions is set out in Table 1 – Anticipated Schedule. However, following the release of the RFP, BC Hydro will consult with each Proponent to confirm specific dates. If one or more Proponents requests additional or fewer Interactive Sessions, or if BC Hydro considers it desirable or necessary to schedule additional or fewer Interactive Sessions, BC Hydro in its sole discretion may amend the anticipated schedule.

4.3 Comments on the Initial Draft Agreement

Each Proponent should review the Initial Draft Agreement for the purpose of identifying any issues or provisions that the Proponent would like to see clarified or amended. Following such review:

- a) BC Hydro will invite Proponents as part of the Interactive Session process to discuss possible clarifications or amendments to the Initial Draft Agreement;
- b) at least five Business Days in advance of the Interactive Session at which the Proponent wishes to discuss the Initial Draft Agreement, each Proponent should provide BC Hydro with a prioritized list of requested changes, if any, to the Initial Draft Agreement using the Proponent Comments Form attached as Appendix G; and
- c) BC Hydro will consider all comments and requested clarifications or amendments received from the Proponents in the Interactive Sessions and will amend the Initial Draft Agreement as BC Hydro may determine in its discretion.

Prior to the Proposal Closing Time, BC Hydro intends to issue by Addendum one or more revised drafts of the Agreement, including one that will be identified as the Final Draft Agreement. The Final Draft Agreement will form the common basis for the preparation of all Proposals.

Proponents will in their proposals include a Final Draft License Contract and Final Draft Maintenance Contract. Required Provisions identified in the Final Draft Agreement will supersede elements of these contracts. BC Hydro will provide the terms for the Final Draft Agreement and Proponents should not in their Proposal make any modifications, changes or additions to the Final Draft Agreement.

4.4 Closing

If BC Hydro selects a Preferred Proponent, the Preferred Proponent should anticipate that the Final Draft Agreement will not be amended except as agreed by BC Hydro and provided in Section 8.1.

4.5 Proponent Demonstrations

Prior to the selection of a Preferred Proponent, BC Hydro will make available certain of its personnel, consultants and advisors to participate in a Proponent Demonstration. BC Hydro reserves the right, in its sole and absolute discretion, not to seek a Proponent Demonstration from any one or more Proponents. The Proponent Demonstration will take place in accordance with the following:

- a) the purpose of the Proponent Demonstration includes:
 - (i) demonstrate to BC Hydro how a proposed MDMS solution addresses certain of the response content requirements described in Appendix B; and
 - (ii) demonstrate to BC Hydro other functionality described in a Proposal; and
 - (iii) for the purposes of Proposal evaluation, BC Hydro may take into account any or all of the information received from a Proponent in the course of the Proponent Demonstration.
- b) three days in advance of a Product Demonstration, each Proponent will be provided by BC Hydro with a list of criteria BC Hydro would like demonstrated;
- c) BC Hydro will determine which BC Hydro Representatives will be present at any Proponent Demonstration;
- d) at each Proponent Demonstration a Proponent may have up to six officers, directors, employees, consultants and agents of the Proponent present;
- e) each Proponent Demonstration is anticipated to take a maximum of eight hours;
- f) Proponents should note that any comments provided by or on behalf of BC Hydro during any Proponent Demonstration, including in respect of any particular matter raised by a Proponent or which is included in any documents or information provided by a Proponent prior to or during the Proponent Demonstration, and any positive or negative views, encouragement or endorsements expressed by or on behalf of BC Hydro during the Proponent Demonstration to anything said or provided by Proponents will not in any way bind BC Hydro and will not be deemed or considered to be an indication of a preference by BC Hydro. Prior to the commencement of each Proponent Demonstration, Proponents will be required to acknowledge, in writing, the non-binding nature of the comments provided by or on behalf of BC Hydro during each Product Demonstration; and
- g) An anticipated schedule for the Proponent Demonstration is set out in Table 1 – Anticipated Schedule. However, BC Hydro will consult with each Proponent to confirm specific dates. BC Hydro in its sole discretion may amend the anticipated schedule.

4.6 Competitive Selection Process Estimated Timelines

Table 1. Anticipated Schedule

MAJOR ACTIVITIES	
RFP issued to Proponents	September 20, 2010
Interactive Sessions	October 12 – 15, 2010
Final Draft Agreement Addendum Issued	October 22, 2010
RFP Closing	November 2, 2010
Product Demonstrations	November 18 – 28, 2010
Selection of Preferred Proponent	December 6, 2010
Execute Agreement	Early December

The above anticipated schedule is subject to change at the sole discretion of BC Hydro.

4.7 Data Room

BC Hydro has established a web site to be used as an electronic data room (Data Room) in which it has placed documents that may be useful to Proponents. BC Hydro does not make any representation as to the relevance, accuracy or completeness of any of the information available in the Data Room except as BC Hydro may advise with respect to a specific document. Proponents will be given access to the Data Room upon receipt by BC Hydro of the executed Participation Agreement.

The information in the Data Room may be supplemented or updated from time to time. Although BC Hydro will attempt to notify Proponents of all updates, Proponents are solely responsible for ensuring they check the Data Room frequently for updates and to ensure the information used by the Proponents is the most current, updated information.

Data Room information includes, but is not limited to:

- a) RFP Data Room documents index that provides an index of the Data Room documents;
- b) Pricing Template – Includes a section, to be completed by the Proponent, to provide price information;
- c) Pricing Template Instructions – Provides additional information on the use of the Pricing Template;
- d) Initial Draft Agreement; and
- e) Various reference documents.

4.8 Compensation for Participation in Competitive Selection Process

BC Hydro will not provide any compensation to Proponents for participating in the Competitive Selection Process.

5. PROPOSAL REQUIREMENTS

5.1 Participation Agreement

As a condition of participating in this RFP each Proponent must sign and deliver to the Contact Person a participation agreement (Participation Agreement), substantially in the form attached as Appendix H or otherwise acceptable to BC Hydro in its discretion. Proponents will not be provided with access to the Data Room (including the Initial Draft Agreement) or Interactive Sessions or participate further in the Competitive Selection Process unless and until they have signed and delivered a Participation Agreement as required by this Section.

5.2 Proposal Form and Content

Proposals should be in the form and include the content described in Appendix B.

5.3 Pricing Schedules

Proposals should include completed Pricing Templates.

6. SUBMISSION INSTRUCTIONS

6.1 Closing Times and Delivery Address

Proposals must be received at the Delivery Address before the required Proposal Closing Time. Proposals received after the Proposal Closing Time will not be considered and will be returned unopened.

6.2 No Fax or Email Submission

Proposals submitted by fax or email will NOT be accepted.

6.3 Language of Proposals

Proposals should be in English. Any portion of a Proposal not in English may not be evaluated.

6.4 Receipt of Complete RFP

Proponents are responsible to ensure that they have received the complete RFP, as listed in the table of contents of this RFP, plus any Addenda. A submitted Proposal will be deemed to have been prepared on the basis of the entire RFP issued prior to the Proposal Closing Time. BC Hydro accepts no responsibility for any Proponent lacking any portion of the RFP.

6.5 Enquiries

All enquiries and communications regarding any aspect of this RFP should be directed to the Contact Person by email (each, an "Enquiry") using the form attached to the RFP as Appendix I, and the following applies to any Enquiry:

- a) if the Contact Person responds, the response will be in writing;
- b) all Enquiries, and all responses to Enquiries from the Contact Person, will be recorded by BC Hydro;
- c) a response to an Enquiry by BC Hydro will not be distributed to all Proponents if it is of a minor or administrative nature that BC Hydro, in its sole discretion, considers to relate only to the Proponent who submitted the Enquiry and as not material to other Proponents;
- d) BC Hydro may respond to an Enquiry from one Proponent by way of a circular to all Proponents. If a Proponent does not want a response to its Enquiry to be shared with other Proponents, the Enquiry must be clearly marked "Commercial in Confidence" by the Proponent. If BC Hydro in its sole discretion considers that BC Hydro should respond to the Enquiry on a confidential basis, then BC Hydro will do so. However, if BC Hydro in its sole discretion considers that BC Hydro should not respond to the Enquiry on a confidential basis, BC Hydro will notify the Proponent who submitted such Enquiry of BC Hydro's decision and the Proponent will have the opportunity to withdraw the Enquiry. If the Proponent does not withdraw the Enquiry, then BC Hydro may provide its response to all Proponents;
- e) if BC Hydro identifies that there is a need for general clarification on an issue or if BC Hydro identifies a matter of substance which BC Hydro considers should be formally brought to the attention of all Proponents, whether or not such issue or such matter has previously been covered by an Enquiry marked "Commercial in Confidence" and a confidential response by BC Hydro, a letter of clarification will be sent to all Proponents at the same time; and

- f) without limiting Section 6.5 e), if there are subsequent Enquiries made by one or more other Proponents on the same or similar topic, which was previously covered by an Enquiry marked "Commercial in Confidence" and a confidential response issued by BC Hydro, BC Hydro reserves the right to respond to such subsequent Enquiries by way of a circular to all Proponents.

Information offered from sources other than the Contact Person with regard to this RFP is not official, may be inaccurate, and should not be relied on in any way, by any person for any purpose. In respect of communications from the Contact Person, Proponents may rely only on Addenda and formal written responses to an Enquiry.

6.6 Electronic Communication

Proponents should not communicate by fax, and the Contact Person may not respond to any communications sent by fax.

The following provisions will apply to any communications with the Contact Person, or the delivery of documents to the Contact Person by email where such email communications or delivery is permitted by the terms of this RFP:

- a) BC Hydro does not assume any risk or responsibility or liability whatsoever to any Proponent:
 - (i) for ensuring that any electronic email system being operated for BC Hydro or Partnerships BC is in good working order, able to receive transmissions, or not engaged in receiving other transmissions such that a Proponent's transmission cannot be received; or
 - (ii) if a permitted email communication or delivery is not received by BC Hydro or Partnerships BC, or received in less than its entirety, within any time limit specified by this RFP; and
- b) all permitted email communications with, or delivery of documents to, the Contact Person will be deemed as having been received by the Contact Person on the dates and times indicated on the Contact Person's electronic equipment.

6.7 Addenda

BC Hydro may, in its absolute discretion through the Contact Person, amend this RFP at any time before the Closing Time by issuing a written addendum. Written addenda are the only means of amending or clarifying this RFP, and no other form of communication whether written or oral, including written responses to Enquiries as provided by Section 6.5, will be included in or in any way amend this RFP. Only the Contact Person is authorized to amend or clarify this RFP by issuing an addendum. No other employee or agent of BC Hydro is authorized to amend or clarify this RFP. BC Hydro will send a copy of any Addenda to all Proponent Representatives.

6.8 Inconsistency between Paper and Electronic Form

If there is any inconsistency between the paper form of a document issued by or on behalf of BC Hydro to Proponents and the digital, electronic or other computer readable form, the paper form of the document will prevail.

6.9 Amendments to Proposals

A Proponent may amend its Proposal at any time prior to the Proposal Closing Time by delivering written notice, or written amendments, to the Delivery Address prior to the Proposal Closing Time.

6.10 Validity of Proposals

By submitting a Proposal, each Proponent agrees that its Proposal, including all prices, remains valid and irrevocable from the applicable Proposal Closing Time, until midnight at the end of the 120th day following the applicable Proposal Closing Time, (Proposal Validity Period).

6.11 Material Change after the Proposal Closing Time

A Proponent will give immediate notice to BC Hydro of any material change that occurs to a Proponent after the Proposal Closing Time, including a change to its membership or a change to financial capability.

7. EVALUATION

7.1 Evaluation Criteria

BC Hydro will evaluate Proposals by application of the Evaluation Criteria as set out in Appendix B.

7.2 Proposals Mandatory Requirements

BC Hydro will review Proposals on a preliminary basis to determine whether they comply with the Mandatory Requirements. Proposals which do not, in the sole opinion of BC Hydro, comply with the Mandatory Requirements may be rejected and not considered further in the evaluation process.

BC Hydro has determined that the following are the Mandatory Requirements:

- a) the Proponent must sign, deliver and comply with the Participation Agreement, as set out in Section 5.1;
- b) the Proposal must be received at the Delivery Address before the Proposal Closing Time;
- c) the Proponent must include a signed Relationship Disclosure Form; and
- d) Mandatory Requirements specified in Table 3 of Appendix B are met.

7.3 Evaluation

To assist in evaluation, BC Hydro may, in its sole and absolute discretion, but is not required to:

- a) conduct reference checks relevant to the Project with any or all of the references cited in a Proposal to verify any and all information regarding a Proponent, including its directors, officers and Key Personnel, conduct any background investigations that it considers necessary, and BC Hydro may rely on and consider any relevant information from such cited references in the evaluation of Proposals;
- b) conduct any background investigations that it considers necessary in the course of the Competitive Selection Process;
- c) seek clarification of a Proposal from any or all Proponents and consider such supplementary information in the evaluation of Proposals;
- d) request interviews or presentations with any, all or none of the Proponents to clarify any questions or considerations based on the information included in Proposals during the evaluation process, with such interviews or presentations conducted in the sole discretion of BC Hydro, including the time, location, length and agenda for such interviews or presentations, and BC Hydro may consider any supplementary information from such interviews or presentations in the evaluation of Proposals; and
- e) BC Hydro may in its sole and absolute discretion rely on and consider any information received as a result of such reference checks, background investigations, requests for clarification or supplementary information and interviews/presentations in the evaluation of Proposals.

BC Hydro may decide not to complete a detailed evaluation of any Proposal if BC Hydro concludes, having undertaken a preliminary review of the Proposal, as compared to other Proposals, that the Proponent is not in contention to be selected as the Preferred Proponent.

8. SELECTION OF PREFERRED PROPONENT AND AWARD

8.1 Selection and Award

It is the intention of BC Hydro that the Final Draft License Contract and Final Draft Maintenance Contract submitted by the Preferred Proponent, together with the Final Draft Agreement provided by BC Hydro will be final and will not be further modified and will be executed by the Preferred Proponent without further amendment, except for changes, modifications and additions:

- a) relating to the Final Draft Agreement that are proposed by the Preferred Proponent and deemed acceptable to BC Hydro in its discretion;
- b) relating to either the the Final Draft License Contract, Final Draft Maintenance Contract, and/ or the Final Draft Agreement that are proposed by BC Hydro that are mutually acceptable to BC Hydro and the Preferred Proponent;
- c) relating to the determination by BC Hydro in its discretion regarding which parts, if any, of the Proposal are to be incorporated by reference or otherwise, into the Agreement or otherwise pursuant to express provisions of the Agreement, or relating to the determination by BC Hydro in its discretion regarding which of the Proponent's comments, if any, on the technical requirements are acceptable to BC Hydro, and modifications, changes and additions as a consequence of or in connection with such incorporations or changes, modifications and additions to the technical requirements;
- d) to those provisions or parts of the Final Draft Agreement which are indicated as being subject to completion or finalization or which BC Hydro determines in its discretion, require completion or finalization, including provisions which require:
 - (i) modification or the insertion or addition of information relating to the Proponent's formation (e.g. corporate, partnership or trust structure) and funding structure; and
 - (ii) modification or the insertion or addition of information in order to reflect accurately the nature of the Proponent's relationships with its principal subcontractors (including each of the Project Contractors)
- e) required by BC Hydro in order to complete, based on the Proposal, any provision of the Final Draft Agreement, including changes, modifications and additions contemplated in or required under the terms of the Final Draft Agreement;
- f) that are necessary to create or provide for a duly authorized and legally complete and binding agreement; or
- g) that enhances clarity in legal drafting.

If for any reason BC Hydro determines that it is unlikely to reach final agreement with the Preferred Proponent, then BC Hydro may terminate the discussions with the Preferred Proponent and proceed in any manner that BC Hydro may decide, in consideration of its own best interests, including:

- a) terminating the Competitive Selection Process entirely and proceeding with some or all of the Project in some other manner, including using other contractors; or
- b) inviting one of the other Proponents to enter into discussions to reach final agreement for completing the Project.

Any final approvals required by BC Hydro, such as from the BC Hydro Board, will be conditions of final execution or commencement of the Agreement.

8.2 Preferred Proponent Security Deposit

Subject to the terms of this RFP:

- a) BC Hydro will invite the Preferred Proponent to deliver the Preferred Proponent Security Deposit on or before the date and time specified by BC Hydro, such date not to be earlier than five Business Days after notification of the appointment of the Preferred Proponent; and
- b) the Preferred Proponent's eligibility to remain the Preferred Proponent is conditional upon the Preferred Proponent delivering the Preferred Proponent Security Deposit to BC Hydro on or before the date and time specified by BC Hydro.

8.3 Return of Security Deposit

Subject to Section 8.4, BC Hydro will return the Preferred Proponent Security Deposit to the Preferred Proponent:

- a) within 10 days after receipt by BC Hydro of notice of demand from the Preferred Proponent, if:
 1. BC Hydro exercises its right under Section 10.1 to terminate this RFP prior to entering into the Agreement for reasons unrelated to the Preferred Proponent; or
 2. BC Hydro fails, within the Proposal Validity Period, to execute and deliver an agreement substantially in the form of the Final Draft Agreement finalized by BC Hydro in accordance with Section 8.1, provided that such failure is not the result of:
 - A. the failure of the Preferred Proponent to satisfy any conditions set out in the Final Draft Agreement; or
 - B. any extensions to the Proposal Validity Period arising from any agreement by BC Hydro to negotiate changes to the Final Draft Agreement pursuant to Section 8.1; or
- b) within 10 days after execution of the Agreement with the Preferred Proponent.

8.4 Retention of Security Deposit

Notwithstanding any receipt by BC Hydro of the notice described in Section 8.3, BC Hydro may, in its discretion, draw on, retain and apply the proceeds of the Preferred Proponent Security Deposit for BC Hydro's own use as liquidated damages, if:

- a) the Proponent is in material breach of any term of this RFP or the Participation Agreement; or
- b) after receipt of written notice from BC Hydro:

1. the Preferred Proponent fails to execute and deliver an agreement substantially in the form of the Final Draft Agreement finalized by BC Hydro in accordance with Section 8.1; or
2. Agreement execution fails to occur within 30 days (or such longer period as the parties may agree) of receipt of such notice from BC Hydro,

unless:

3. any such failure was the result of a significant event which could not have been reasonably prevented by, or was beyond the reasonable control of, the Preferred Proponent; and
4. the Preferred Proponent demonstrates to BC Hydro's satisfaction, acting reasonably, that the occurrence of such significant event would materially frustrate or render it impossible for the Preferred Proponent to perform its obligations under the Agreement for a continuous period of 180 days as if the Final Draft Agreement was in force and effect.

8.5 Debriefs

BC Hydro will, within two months following contract award, upon request from a Proponent, conduct a debriefing for that Proponent. In a debriefing BC Hydro may discuss the relative strengths and weaknesses of that Proponent's Proposal, but BC Hydro will not disclose or discuss any confidential information of another Proponent.

9. CONFLICT OF INTEREST AND RELATIONSHIP DISCLOSURE

9.1 Conflict of Interest Adjudicator

BC Hydro has appointed a conflict of interest adjudicator (COI Adjudicator) to provide decisions on conflicts of interest or unfair advantage issues, including whether any person is a Restricted Party. There is no requirement for all issues to be referred to the COI Adjudicator.

9.2 Relationship Disclosure and Review Process

Proponents should submit a preliminary Relationship Disclosure Form (Appendix F) in advance of their Proposal on the date identified on the covering page of this RFP and disclose all conflicts of interest or unfair advantage. Proponents will also be required to submit a final Relationship Disclosure Form with their Proposal.

BC Hydro reserves the right to disqualify any Proponent that in BC Hydro's opinion has a conflict of interest or an unfair advantage, whether existing now or is likely to arise in the future, or may permit the Proponent to continue and impose such conditions as BC Hydro may consider to be in the public interest or otherwise required by BC Hydro.

Proponents, including all firms, corporations or individual members of a Proponent, will promptly disclose to the Contact Person any potential conflict of interest and existing business relationships they may have with BC Hydro, Partnerships BC or others providing advice or services to BC Hydro with respect to the Project or any other matter that gives rise, or might give rise, to an unfair advantage. At the time of such disclosure, the Proponent will advise the Contact Person how the Proponent proposes to mitigate, minimize or eliminate the situation.

For the purposes of this RFP, references to unfair advantage include references to confidential information that is not, or would not reasonably be expected to be, available to all Proponents.

BC Hydro and the COI Adjudicator may, in their discretion, consider actual, perceived or potential conflicts of interest and unfair advantage.

BC Hydro may provide any decision by BC Hydro or the COI Adjudicator regarding conflicts of interest to all Proponents where BC Hydro, in its discretion, determines that the decision is of general application.

9.3 Use or Inclusion of Restricted Parties

BC Hydro may, in its sole and absolute discretion, disqualify a Proponent, or may permit a Proponent to continue and impose such conditions as BC Hydro may consider to be in the public interest or otherwise required by BC Hydro, if the Proponent is a Restricted Party, or if the Proponent uses a Restricted Party:

- a) to advise or otherwise assist the Proponent respecting the Proponent's participation in the Competitive Selection Process; or
- b) as a Proponent Team member or as an employee, advisor or consultant to the Proponent or a Proponent Team member.

Each Proponent is responsible, and bears the onus, to ensure that neither the Proponent nor any Proponent Team member uses or seeks advice or assistance from any Restricted Party, or includes any Restricted Party in the Proponent Team except as permitted by this Section 9.3.

9.4 Current Restricted Parties

At this RFP stage, and without limiting the definition of Restricted Parties, BC Hydro has identified the following persons, firms or organizations as Restricted Parties:

Enerex L.L.C.	KnowledgeTech Consulting Inc
Everest Group	Borden Ladner Gervais LLP
ISE Consulting Inc	Bit Stew
Enspira Solutions	Ferax Consulting Co.
McKinsey & Company	Quanta Services
Telvent	Accenture Business Services for Utilities
Capgemini	PricewaterhouseCoopers LLP

In addition to the list above, BC Hydro and Partnerships BC, including their former and current employees who fall within the definition of Restricted Party.

This is not an exhaustive list of Restricted Parties. Additional persons, firms or organizations may be added to, or deleted from, the list during any stage of the Competitive Selection Process through an Addendum.

9.5 Request for Advance Decision

A Proponent or a prospective member or advisor of a Proponent who has any concerns regarding whether a current or prospective employee, advisor or member of that Proponent is, or may be, a Restricted Party, or has a concern about any conflict or unfair advantage it may have, is encouraged to request an advance decision in accordance with this section through the following process:

- a) to request an advance decision on whether a person is a Restricted Party, a Proponent or prospective team member or advisor of that Proponent should submit to the Contact Person, not less than ten (10) days prior to the Proposal Closing Time by email, the following information:
 - (i) names and contact information of the Proponent and the person or firm for which the advance opinion is requested;
 - (ii) a description of the relationship that raises the possibility or perception of a conflict of interest or unfair advantage;
 - (iii) a description of the steps taken to date, and future steps proposed to be taken, to mitigate the conflict of interest or unfair advantage, including the effect of confidential information; and

- (iv) copies of any relevant documentation.

BC Hydro may make an advance decision or may refer the request for an advance decision to the COI Adjudicator. If BC Hydro refers the request to the COI Adjudicator, BC Hydro may make its own response to the COI Adjudicator.

Subject to Section 9.5, all requests for advance decisions will be treated in confidence. If a Proponent or prospective team member or advisor becomes a Restricted Party, it may be listed in an Addendum or in subsequent Competitive Selection Process documents as a Restricted Party.

9.6 BC Hydro May Request Advance Decisions

BC Hydro may also independently make advance decisions, or may seek an advance decision from the COI Adjudicator, where BC Hydro identifies a potential conflict, unfair advantage or a person who may be a Restricted Party. BC Hydro will, if it seeks an advance decision from the COI Adjudicator, provide the COI Adjudicator with relevant information in its possession. If BC Hydro seeks an advance decision from the COI Adjudicator, BC Hydro will give notice to the Proponent, and may give notice to the possible Restricted Party so that it may make its own response to the COI Adjudicator.

The onus is on the Proponent to clear any potential conflict, unfair advantage, or Restricted Party, or to establish any conditions for continued participation, and BC Hydro may require that the Proponent make an application under Section 9.5.

9.7 Decisions Final and Binding

The decision of BC Hydro or the COI Adjudicator, as applicable, is final and binding on the persons requesting the ruling and all other parties including Proponents, Proponent Team members and BC Hydro. BC Hydro or the COI Adjudicator, as applicable, has discretion to establish the relevant processes from time to time, including any circumstances in which a decision may be reconsidered.

9.8 Shared Use

A Shared Use Person is eligible to do work for a Proponent, but is required to commit that they will not enter into exclusive arrangements with any Proponent. As of the date of this RFP, no Shared Use Persons have been identified.

9.9 Exclusivity

Unless permitted by BC Hydro in its sole discretion or permitted as a Shared Use Person, a member of a Proponent Team or a Key Individual may only participate as a member of one Proponent Team.

10. RFP TERMS AND CONDITIONS

10.1 No Obligation to Proceed

This RFP does not commit BC Hydro in any way to award a Contract and BC Hydro reserves the complete right to at any time reject all Proposals, and to terminate this RFP and the Competitive Selection Process and proceed with the Project in some other manner.

10.2 No Contract

This RFP is neither an offer nor an agreement to purchase work, goods or services. No contract of any kind for work, goods or services whatsoever is formed under or arises from this RFP, or as a result of or in connection with the submission of a Proposal, including as a result of or in connection with the submission of any part of the Proposal, save and except only if the Agreement is executed and delivered and then only to the extent expressly set out in the Agreement.

10.3 Freedom of Information and Protection of Privacy Act

All documents and other records in the custody of, or under the control of, BC Hydro are subject to the Freedom of Information and Protection of Privacy Act (FOIPPA) and other applicable legislation. Except as expressly stated in this RFP, and subject to FOIPPA or other applicable legislation, all documents and other records submitted in response to this RFP will be considered confidential.

10.4 Cost of Preparing the Proposals

Each Proponent is solely responsible for all costs it incurs in the preparation of its Proposal, including all costs of providing information requested by BC Hydro, attending meetings and conducting due diligence.

10.5 Confidentiality of Information

All information pertaining to the Project received through participation in this RFP is confidential and may not be disclosed without the written authorization from the Contact Person, and in no event will a Proponent discuss the Project with any member of the public or the media without the prior written approval of BC Hydro.

10.6 Reservation of Rights

BC Hydro reserves the right, in its sole and absolute discretion, to:

- a) amend the scope of the Project, modify, cancel or suspend the Competitive Selection Process at any time for any reason;
- b) accept or reject any Proposal based on the Evaluation Criteria;
- c) waive a defect or irregularity in a Proposal and accept that Proposal;
- d) reject or disqualify or not accept any or all Proposals without any obligation, compensation or reimbursement to any Proponent or any of its team members;
- e) re-advertise for new Proposals, call for tenders, or enter into negotiations for this Project or for work of a similar nature;
- f) make any changes to the terms of the business opportunity described in this RFP;

- g) negotiate any and all aspects of Proposals; and
- h) extend, from time to time, any date, time period or deadline provided in this RFP, upon written notice to all Proponents.

10.7 No Collusion

Proponents, Proponent Team members and Key Personnel will not discuss or communicate, directly or indirectly, with any other Proponent or any director, officer, employee, consultant, advisor, agent or representative of any other Proponent (including any Proponent Team member or Key Individual of such other Proponent) regarding the preparation, content or representation of their Proposals.

By submitting a Proposal, a Proponent, on its own behalf and as authorized agent of each firm, corporation or individual member of the Proponent (including a connection arising solely through shareholdings or other equity interests in or of a Proponent or Proponent Team Member), represents and confirms to BC Hydro, with the knowledge and intention that BC Hydro may rely on such representation and confirmation, that its Proposal has been prepared without collusion or fraud, and in fair competition with Proposals from other Proponents.

10.8 No Lobbying

Proponents, Proponent Team members and Key Personnel, and their respective directors, officers, employees, consultants, agents, advisors and representatives will not in relation to the Project, this RFP, or the Competitive Selection Process, engage in any form of political or other lobbying whatsoever, including for the purpose of influencing the outcome of the Competitive Selection Process or the selection of the Preferred Proponent. Further, no such person (other than as expressly contemplated by this RFP) will attempt to communicate in relation to the Project, this RFP, or the Competitive Selection Process, directly or indirectly, with any representative of BC Hydro, the Ministry of Energy Mines and Petroleum Resources, Partnerships BC or, including any Minister or Deputy Minister of Energy Mines and Petroleum Resources, any member of the Executive Council, any Members of the Legislative Assembly, any Restricted Parties, or any director, officer, employee, agent, advisor, consultant or representative of any of the foregoing, as applicable, for any purpose whatsoever, including for purposes of:

- a) commenting on or attempting to influence views on the merits of the Proponent's Proposal, or in relation to Proposals of other Proponents;
- b) influencing, or attempting to influence, the evaluation, scoring and ranking of Proposals, the selection of the Preferred Proponent, or any negotiations with the Preferred Proponent;
- c) promoting the Proponent or its interests in the Project, including in preference to that of other Proponents;
- d) commenting on or criticizing aspects of this RFP, the Competitive Selection Process, the Project, or the Agreement, including in a manner which may give the Proponent a competitive or other advantage over other Proponents; and
- e) criticizing the Proposals of other Proponents.

In the event of any lobbying or communication in contravention of the foregoing, BC Hydro in its sole discretion may at any time, but will not be required to, reject any and all Proposals submitted by that Proponent without further consideration.

10.9 Proponents' Trade Secrets

Proponents should identify any information or records submitted in their Proposals that they are supplying to BC Hydro in confidence and consider to constitute trade secrets or commercial, financial, labour relations, scientific or technical information, the disclosure of which could reasonably be expected to harm significantly their, or a third party's, competitive or negotiating position or result in any undue financial loss or gain. BC Hydro shall not be liable for disclosure, pursuant to a request under FOIPPA, of any information or record submitted by a Proponent that is not so identified by that Proponent.

10.10 Ownership of Proposals

All Proposals, including any documents submitted to BC Hydro by a Proponent in connection with a Proposal or pursuant to the RFP document, become the property of BC Hydro and shall not be returned to Proponents. They will be received and held by BC Hydro in confidence, subject to the provisions of FOIPPA, the RFP document and any other applicable legal or regulatory requirements.

10.11 Disclosure and Transparency

BC Hydro is committed to an open and transparent Competitive Selection Process. To assist BC Hydro in meeting its commitment, Proponents will cooperate and extend all reasonable accommodation to this endeavor.

BC Hydro expects to disclose the following information during this stage of the Competitive Selection Process:

- a) the RFP document;
- b) the number of Proponents; and
- c) the name of the short listed Proponents.

Following execution of the Agreement, BC Hydro expects to disclose:

- a) the Fairness Advisor's report; and
- b) the name of the Contractor.

Each Proponent agrees that:

- a) to ensure that all public information generated about the Project is fair and accurate and will not inadvertently or otherwise influence the RFP, the disclosure of any public information generated in relation to the Project, including communications with the media and the public, must be coordinated with, and is subject to prior written approval of BC Hydro;
- b) it will notify BC Hydro of any and all requests for information or interviews received from the media; and

- c) it will ensure that all of the Proponent Team members and others associated with the Proponent comply with the requirements of this RFP.

10.12 Fairness Advisor

BC Hydro has appointed John Singleton, QC as Fairness Advisor (the Fairness Advisor) to act as an independent observer of the fairness of the implementation of the Procurement process, up to the selection of a Preferred Proponent. The Fairness Advisor will be kept fully informed by BC Hydro of all activities associated with the implementation of the Procurement process, and will have full access to all documents, meetings and information related to the process. The Fairness Advisor will report to the Executive Project Board as to the fairness of the implementation of the process. The reports of the Fairness Advisor will include a report on the process followed leading to the selection of the Preferred Proponent under this RFP, and BC Hydro will make such report public.

Proponents may contact the Fairness Advisor directly with regard to concerns about the fairness of the Procurement process.

10.13 Limitation of Damages

Each Proponent on its own behalf and on behalf of the Proponent Team and any member of a Proponent Team:

- a) agrees not to bring any Claim against BC Hydro or any of its employees, advisors or representatives for damages in excess of an amount equivalent to the reasonable costs incurred by the Proponent in preparing its Proposal for any matter in respect of the RFP or Competitive Selection Process, including:
 - (i) in the event BC Hydro accepts a non compliant proposal or otherwise breaches, or fundamentally breaches, the terms of this RFP or the Competitive Selection Process; or
 - (ii) if the Project or Competitive Selection Process is modified, suspended or cancelled for any reason (including modification of the scope of the Project or modification of the RFP or both) or BC Hydro exercises any rights under the RFP; and
- b) waives any and all Claims against BC Hydro or any of its employees, advisors or representatives for loss of anticipated profits or loss of opportunity if no agreement is made between BC Hydro and the Proponent for any reason, including without limitation
 - (i) in the event BC Hydro accepts a non compliant proposal or otherwise breaches or fundamentally breaches the terms of this RFP or the Competitive Selection Process; or
 - (ii) if the Project or Competitive Selection Process is modified, suspended or cancelled for any reason (including modification of the scope of the Project or modification of the RFP or both) or BC Hydro exercises any rights under the RFP.

11. INTERPRETATION

11.1 Definitions

In this RFP, unless a term is defined in this Section, capitalized terms have the meaning given in the Agreement.

ADCS, means Automated Data Collection System, and is the head end component that manages customer meters, other end point devices, metering system telecommunication networks and data collection process.

Addenda means an amendment to this RFP issued by the Contact Person as described in Section 6.7.

Agreement means a master Meter Data Management System Agreement as executed by BC Hydro and the Preferred Proponent that includes contracts for the provision of a meter data management system and related software, software licencing, maintenance support and other services.

BC Hydro means the provincial Crown Corporation established in 1962 under the Hydro and Power BC Hydro Act.

BC Hydro Representatives has the meaning set out in Section 4.2.

Claim means any claim, demand, suit, action, or cause of action, whether arising in contract, tort or otherwise, and all costs and expenses relating thereto.

COI Adjudicator means the person described in Section 9.1.

Competitive Selection Process means the overall process for the selection of a Preferred Proponent for the Project including, but not limited to, this RFP.

Contact Person means the person identified as such on the cover page of the RFP.

Contractor means the entity that enters into the Agreement with BC Hydro.

Data Room has the meaning set out in Section 4.7.

Delivery Address means the delivery address identified as such on the cover page of the RFP.

DRMS means Demand Response Management System which is a system that coordinates, manages and reports on the demand response programs from the utility including programs such as Critical Peak Pricing and Load Curtailment.

End Point Devices means customer meters, and any other future measurement and/or control devices that may use the same telecommunication networks, as the customer meters, to communicate to the ADCS. They potentially include feeder meters, transformer meters, reclosers, faulted circuit indicators, capacitor banks, voltage regulators etc.

Enquiry has the meaning set out in Section 6.5.

Evaluation Criteria means the criteria referred to in Appendix B.

Fairness Advisor means the person described in Section 10.12.

FAN means Field Area Network and is a secure 2 way telecommunication network between, customer meters, other end point devices, FAN collectors and FAN elements.

FAN Collectors means the field device which aggregates telecommunication traffic from multiple meters, and other end point devices, and interfaces them, via the WAN, to the ADCS.

FAN Elements means telecommunication devices that extend and/or support the FAN only, i.e. they do not perform a distribution system measurement and/or control function. They include repeaters, relays, range extenders etc.

Final Draft Agreement has the meaning set out in Section 4.3.

Final Draft License Contract means a Proponent's proposed contract terms for the provision of the MDMS software license.

Final Draft Maintenance Contract means a Proponent's proposed contract terms for software maintenance services.

Financial Close means the time when the Contract and all financing and other agreements related to the Project have been executed and delivered and all conditions to the effectiveness of the Contract and Project financing agreements have been satisfied.

FOIPPA has the meaning set out in Section 10.3.

HAN means Home Area Network and is a secure 2 way telecommunication network between a HAN gateway in a customers meter and the customers IHF HAN device in their premise.

IHF means In Home Feedback and is used to provide customer feedback of electrical energy usage and demand. It can be provided via an IHF HAN device or via a web based portal.

Initial Draft Agreement has the meaning as set out in Section 4.3.

Interactive Sessions means the meetings, discussions and other communications contemplated by Section 4.2.

Key Personnel means the key Proponent Team members identified as such in the Proponent's Proposal.

Mandatory Requirements has the meaning given in Section 7.2.

Meter, Customer means an advanced electricity meter that registers a customer's bi-directional, energy flow. It includes an integrated FAN (or WAN direct) NIC for two way telecommunication with the ADCS. It also includes an integrated HAN gateway for two way telecommunications into the customer premise. When the term "meter" is used, without further qualification, it is assumed to be a customer meter.

Meter, Feeder means an end point device that registers bi-directional, energy flow, at a point on a distribution system feeder.

Meter, Transformer means an end point device that registers bi-directional, energy flow, on the secondary voltage side of a distribution transformer.

Meter and Networks Tools means any number of potential hardware and/or software tools used to initiate local meter functionality, i.e. not via the ADCS.

Meter Deployment Services has the meaning given in Section 1.1.

NIC means a Network Interface Card which provides either FAN, or WAN direct, telecommunication connectivity to a customer meter or other end point device.

Partnerships BC means Partnerships British Columbia Inc..

Participation Agreement means an agreement substantially in the form of Appendix H, including any amendments, or as otherwise acceptable to BC Hydro.

Required Provision means provisions set out in the Final Draft Agreement which would supersede certain provisions in the the Final Draft License Contract and Final Draft Maintenance Contract provided by a Proponent.

Preferred Proponent means the Proponent selected pursuant to this RFP to negotiate and enter into the Contract.

Preferred Proponent Security Deposit means an irrevocable letter of credit in the amount of \$100,000 in the form set out in Appendix L or in such other form acceptable to BC Hydro in its discretion.

Pricing Template means the pricing template provided in the Data Room to enable Proponents to provide proposal pricing information.

Program Objectives means BC Hydro's objectives for the Program set out in Section 2.2.

Project has the meaning given in Section 3.

Proponent means a party responding to the RFP.

Proponent Comment Form means a form substantially in the form of Appendix G.

Proponent Demonstration means the Proponent demonstration contemplated by Section 4.5.

Proponent's Representative means the person or firm, identified in Appendix E – Proposal Declaration Form, who is fully authorized to represent the Proponent in any and all matters related to this Proposal.

Proponent Team means the entire team as described in the Proponent's Proposal that will prepare the Proponent's proposal under the RFP and will perform the obligations of the Agreement. For clarity, the Proponent Team includes both firms and individuals.

Proposal means the formal response to this RFP by a Proponent.

Proposal Closing Time means the time identified as such on the cover page of the RFP.

Proposal Declaration Form means a form substantially as set out in Appendix E or as otherwise acceptable to BC Hydro.

Proposal Validity Period has the meaning set out in Section 6.10.

Relationship Disclosure Form means a form substantially as set out in Appendix F or as otherwise acceptable to BC Hydro.

Restricted Party means those persons or firms (including their former and current employees) who had, or currently have, participation or involvement in the Competitive Selection Process or the design, planning or implementation of the Project, and who may provide a material unfair advantage or confidential information to any Proponent that is not, or would not reasonably be expected to be, available to other Proponents. Restricted Parties include those identified in Section 9.4.

RFP means this request for proposals.

SLID means Service Location Identifier that is a unique number that identifies a service location point for a BC Hydro customer, address and meter.

Smart Metering System has the meaning set out in Section 2.3.

WAN means Wide Area Network and is a secure 2 way telecommunications network between the FAN collectors and the ADCS.

11.2 References within the RFP

Unless otherwise indicated, in this RFP:

- a) each reference to a section within the RFP is a reference to a section in which the reference is made;
- b) each reference to an Appendix is a reference to an Appendix of this RFP;
- c) each reference to time of day is a reference to Pacific Standard time or Pacific Daylight Saving time, as the case may be;
- d) all monetary amounts dealing with the delivery of goods are to be expressed in American Dollars;
- e) all monetary amounts dealing with the delivery of services are to be expressed in Canadian Dollars; and
- f) the words “include”, “includes” or “including” are to be construed as meaning “include without limitation”, “includes without limitation” or “including without limitation”, respectively.

APPENDIX A – SCOPE OF WORK

SUMMARY

The Contractor will supply a Meter Data Management System (“MDMS”) solution (the MDMS software licenses, annual maintenance and support, and associated services to support the MDMS’s implementation and transition to operations). The MDMS solution shall include an appropriately scaled data mart as part of the product to support the storage and management of the large volume of meter data that will be generated by the Metering System. In addition to the licensed software components, the Contractor will bring its expertise, methodologies, and tools to support the installation, design, configuration, integration, build, testing, and deployment of the MDMS. BC Hydro will procure and provision all hardware required to support the Project.

In addition to the core MDMS functionality which BC Hydro sees as calculating billing determinants, Validation Estimation and Editing (“VEE”) and data storage and management. BC Hydro is interested in exploring whether the Proponent’s MDMS Solution could provide value added functionality that is required for overall program success. Such value added functionality may include revenue protection, advanced customer data presentation via a portal, outage management, HAN management/support and anything the Proponent believes could be value-added for BC Hydro.

The Contractor is expected to design and deploy the Base Solution to meet the requirements outlined in the Meter Data Management System Requirement Specification document. Once the Base Solution has been deployed and configured by the Contractor and accepted by BC Hydro, the contractor will build on this foundation to deliver the functionality required to meet BC Hydro specific business releases.

At BC Hydro’s option, the Contractor may be requested to provide the services required to integrate the MDMS with BC Hydro’s corporate Enterprise Service Bus (“ESB”) (TIBCO).

All optional or value added services and components that are not provided as part of the Base Solution must be clearly identified as optional components and priced separately.

The scope of work for this RFP is comprised of the following elements:

- 1.) Base Solution Supply
 - (c) MDMS Software and License and associated maintenance agreement
 - (d) MDMS Interface Adaptors and License and associated maintenance agreement
- 2.) Base Solution Services

- (d) MDMS design, build, install, configure, and deployment;
 - (e) Perform functional, performance, integration, security and privacy testing of the MDMS;
 - (f) MDMS user and system administration training;
- 3.) Release Specific Scope
- (g) Release 1 – Mass Meter Deployment
 - (h) Release 2 – Register Read Billing
 - (i) Release 3 – In Home Display Feedback and Portal
 - (j) Release 4 – Conservation Rates
 - (k) Release 5 – Advanced Operational Support (optional)
 - (l) Release 6 – Advanced Theft Detection (optional)
- 4.) Documentation
- (d) Product documentation;
 - (e) Training documentation;
 - (f) Process documentation.
- 5.) Value Added Optional Software & Services
- (c) Value added components;
 - (d) Value added services.

BC Hydro has engaged a separate contractor for Project Management and System Integration Services. The Contractor will be expected to work in a cooperative and collaborative manner with the System Integrator.

1. Base Solution Supply

(a) MDMS Software and License

The Contractor will :

- i. Provide the software and license or licenses and any associated maintenance agreement for the MDMS (including the associated data storage solution as defined in the design). The license(s) should allow for multiple instances of the MDMS – in development, testing, production, maintenance and training environments, and any second site backup location.

(b) MDMS Interface Adaptors and License

The Contractor will :

- i. Deliver software and license(s) for any MDMS to ESB Interface Adaptors software available to support MDMS integration.

- ii. Deliver MDMS to AMI Head End Systems (ADCS) Interface Adapters software and license (BC Hydro is in the process of selecting a metering system vendor and BC Hydro intends to perform all integration via TIBCO ESB, however depending on the components and the overall solution design, BC Hydro may wish to implement a direct AMI Head End System to MDMS integration).

The license(s) should allow for multiple instances of the license(s) – in development, testing, production, maintenance and training environments, and any second site backup location. This includes any software in addition to the core adaptors required to support their deployment, configuration and testing.

2. Base Solution Services

(a) MDMS design, build, install, configure, and deployment

The Contractor will :

- i. Provide the appropriately skilled and experienced resources, with supporting methodology and tools, to gather requirements and provide a detailed architecture and design of the Base Solution including an appropriately scaled data mart, working within the overall BC Hydro applications architectural framework (ITDSP). Details of the ITDSP and BC Hydro requirements, standards and policies are provided in the data room. As part of this process the Contractor will develop a set of approved test cases with BC Hydro. The overall design artifacts will be governed by the ITDSP but should cover aspects such as:
 - a) Security architecture and design;
 - b) Privacy assessment and design;
 - c) Infrastructure requirements;
 - d) Integration design;
 - e) Test cases;
- ii. Provide the resources to install, configure, and build the Base Solution as per the detailed design.

(b) Perform functional, performance, integration, security and privacy testing of the MDMS

The Contractor will :

- i. Provide the resources, tools and methodology to test all functionality implemented by the Contractor in accordance with the test cases developed and signed off as part of the design process. Testing will include but are not limited to:
 - a) Functional tests;
 - b) Performance test;
 - c) Integration tests; and
 - d) Security and privacy testing.

- ii. Document all tests performed and results achieved

During this task the Contractor will be responsible for component level and system level testing. BC Hydro will procure and provision all hardware required.

(c) MDMS user and system administration training

The Contractor will :

- i. Provide expertise in training around all aspects of the MDMS System, including recommending and assisting in the delivery of an overall training program for end users and administrators. This will include:
 - a) Assessment of BC Hydro training needs;
 - b) Development of a proposed training plan;
 - c) Development of training materials; and
 - d) Delivery of training based on assessment of needs (e.g. classroom, train the trainer, in the field, on-line).

3. Release Specific Services

BC Hydro has 6 business releases for the Smart Metering as outlined in the SMI Program Business Releases and MDMS Interface Descriptions V0.6 documents. Additional details of the scope and the expected role of the MDMS can be found in these documents. The MDMS will provide various aspects of the functionality required for these releases either as part of the required scope of services or as optional components. For each release there are 4 distinct service categories Planning, Design, Implementation and Integration. The Contractor will be engaged on a Time and Materials basis to perform the Planning and Design scope and produce a statement of work for the required Implementation and potentially Integration services.

For each release the Contractor :

- i. Will work with BC Hydro and the System Integrator in the requirements gathering and design for the release;
- ii. Will provide a proposed statement of work for the Implementation Services (build, install, configure, deployment, testing, training, transition to operations and delivery of all associated documentation);
- iii. Will provide Implementation Services pursuant to a statement of work entered into between the Contractor and BC Hydro;
- iv. May be asked to provide a statement of work for the Integration Services; and
- v. Will provide any Integration Services for which BC Hydro and the Contractor agree upon and execute a statement of work;

Testing Services will include:

- i. Support for the System Integrator who is responsible for the end to end delivery, integration and testing of the entire solution;
- ii. Providing support and partaking in any system wide Security and Privacy Impact assessment performed by BC Hydro or the System Integrator.

Transition to operations will include the:

- i. Development of a migration plan;
- ii. Impact assessment to the business;
- iii. Produce any configuration, sustainment and maintenance plans required for ongoing administration and support of the system;
- iv. Provide any resources required to perform the assessment and planning and to support the migration process.

(a) Release 1 – Ready for Meter Deployment

Release 1 supports the installation and commissioning of new meters. The MDMS will be responsible for completing the provisioning process and maintaining records of meters attached to the network.

Implementation Services

Configuration of the MDMS to support mass deployment of meters. The MDMS will work with the ADCS to register and commissioning meters. The MDMS will be the primary system for interaction between the Utility Enterprise Applications and the metering system (i.e. the ADCS) and will provide all the necessary functions to support meter deployment.

The type of events and interfaces involved in supporting Meter Deployment can include:

- i. Meter registration and commission;
- ii. Meter status check and reports; and
- iii. Meter configuration and updates.

Integration Services (Optional)

The integration services for Release 1 will include Integration to SAP Device Management and ADCS via the TIBOC ESB or potentially a direct MDMS to ADCS integration as well as integration to the ESB. The Contractor will design, develop and configure the integration of the MDMS with the corporate ESB system (TIBCO). The Contractor will be responsible for integrating their MDMS system through pre-built or newly developed adaptors to the BC Hydro ESB. The services will include:

- i. Provide the resources skills and experience to gather the requirements and provide a detailed design for the MDMS to ESB integration solution working within the BC Hydro and System Integrator overall design and architectural framework;
- ii. Install build, configure and test the software as per the detailed design; and
- iii. Upon completion and sign off of the testing the Contractor will perform and coordinate the transition of the final production solution onto operations and sustainment organizations.

During this task the Contractor will work with the System Integrator, SMI team members and other BC Hydro departments including the Office of the Chief Information Officer (OCIO). The work will be performed following the architecture and design standards set by BC Hydro and the development and detailed component standards set by the SI.

The specific details of the integration will be determined during the design phase—such as what systems are responsible for primary communications, cross referencing, and event publication/subscription. The MDMS will integrate with SAP CCS and Device Management to support cross-referencing between meters and Service Location Identifiers as well as ensuring that the SAP Device Management system has complete and accurate records regarding meter assets.

(b) Release 2 – Billing from Meter Reads

Customers with smart meters are able to be billed from scheduled register reads (calculated using the current rate structure). Meter reading routes can start being collapsed.

Implementation Services

Release 2 is part of the overall meter-to-cash process and supports the revenue aspects of the business and will require the MDMS to calculate billing determinants from register meter readings. Release 2 will support the BC Hydro billing cycle using register read information obtained from the metering system and tracked and published by the MDMS. Therefore, the billing cycles for each meter will need to be communicated from SAP to the MDMS and then updated as read schedules on the metering system.

The type of events and interfaces involved in supporting Release 2 may include:

- i. Billing/Meter read schedule;
- ii. Meter read request and meter read; and
- iii. Billing determinants.

Integration Services (Optional)

MDMS to SAP integration

To support billing the MDMS needs to be integrated with SAP to receive the billing route and meter information and to return the billing determinants. The exact integration mechanism that will be used between the MDMS and SAP will be decided at the design stage and will most likely be either via the SAP MDUS framework or a CIM based model.

(c) Release 3 – In Home Feedback

Customers with smart meters are able to access a web portal that displays daily consumption data from register reads (at least one day lag). It is anticipated that this functionality could be provided directly by the MDMS as a part of the core product offering or as a value added module. Alternately the functionality may be provided by a third party product that will utilize the data stored in the MDMS and associated data mart. These customers are also able to pair one Power Smart certified In Home Feedback (IHF) device to a smart meter with help of BC Hydro Customer Service Representative (CSR), on-line via bchydro.com, or through a retailer.

Implementation Services

The MDMS will be required to interface with the web portal either directly or indirectly to support the functionality required by customers and CSR's on the web portal application. If the MDMS core functionality or value added component is utilized it will need to be installed and configured to meet BC Hydro's requirements.

The MDMS may be required to support the device pairing process to support the installation and provisioning of new IHD devices at the customer premise. The MDMS will be required to facilitate the communication required to support the IHD device pairing process including communication with the metering system to place the meter into pairing mode and providing the metering system with the necessary security indicia required for the pairing sequence.

Integration Services (Optional)

The type of integration will be dependent upon final design criteria and will have to consider all security, privacy and performance requirements.

(d) Release 4 – Conservation Rates

For this business release the billing system is capable of supporting Time of Use and Critical Peak Pricing rates based on data supplied by the MDMS. BC Hydro is able to schedule and manage a Critical Peak Pricing event. Customers are able to access a web portal that displays interval data and other tools to help manage their energy use and determine the impact if they choose to move to Time of Use Billing.

Implementation Services

Release 4 will introduce Time of Use (TOU) and Critical Peak Pricing (CPP) rates. A number of new capabilities and interfaces will need to be introduced to support the rate structures and ensure that BC Hydro can effectively manage TOU and CPP. The MDMS will be required to support TOU by configuring the metering system to capture interval data and report the interval data (along with register read data) as part of the regular meter read schedule. The MDMS will also be required to update the tariff rates on the applicable meters identified by their Service Location Identification (SLID) associated with consumers that have signed-up for the new rates.

If the MDMS core functionality or value added component is utilized to provide support for CPP or Demand Response support it will need to be installed and configured to meet BC Hydro's requirements.

The design phase will be responsible for determining the configuration of the meters at deployment as well as during each of the releases. Additionally, the MDMS will be required to support CPP events either directly or indirectly through a Demand Response Management System. The approach for supporting CPP events will be determined during the design phase.

Integration Services (Optional)

Existing integration between SAP, ADCS and the portal will be leveraged and additional integration with systems that manage and control Demand Response and CPP may be required. The exact integration requirements will be determined during design.

(e) Release 5 – Advanced Operational Support (Optional)

Release 5 will enable additional capabilities in the metering system to support operations. This can include additional information being obtained from the meters and published to both the real-time ESB and/or to the corporate ESB (through the MDMS). CSR's are able to do remote connect / disconnect.

Implementation Services

It is anticipated that the additional information may need to be processed by the MDMS and published on the real-time and/or corporate ESB to support other Utility Enterprise processes such as load research, distribution management, outage management and Volt Var optimization. If the MDMS core functionality or value added component is utilized to provide support for any of the functions described it will need to be installed and configured to meet BC Hydro's requirements.

Integration Services

The type of events and interfaces involved in supporting Release 5 will be determined during the design phase. Some of the existing interfaces will be leveraged and expanded and potentially new ones developed.

(f) Release 6 – Advanced Theft Detection (Optional)

In this business release BC Hydro wishes to deploy a theft detection solution involving production scale deployment of equipment (transformer / feeder meters), advance analytical software and topology models. This will allow revenue protection to identify potential theft through a business intelligence solution and to be able to confirm and quantify theft using advanced tools.

Implementation Services

The MDMS may be required to support the commissioning and provisioning of feeder/transformer meters, meter readings, and propagation of the information to the Utility Enterprise Applications. The MDMS may need to be configured to support storage of data from feeder and transformer meters and to store or utilize a topology model of the physical assets. If an MDMS revenue protection module is utilized it will have to be deployed and configured.

Integration Services

The specific integration requirements and specifications will be determined during the design phase and will be dependant on what other components are required to deliver the functionality and where they reside.

4. Documentation

(a) Product documentation

The Contractor will deliver all manuals and documentation relating to the MDMS software and other software products provided as part of the solution. This would include, but not necessarily be limited to:

- i. User product manuals; and
- ii. System administrator product manuals;

(b) Training documentation

The Contractor will provide all documentation relating to the training scope of work. The Contractor will produce and provide:

- i. Training assessment document;
- ii. User training documentation handout and course material; and
- iii. System administrator training handout and course material.

(c) Process documentation

The Contractor will deliver all documentation relating to the services supplied and the process surrounding the MDMS software and any ESB integration. This would include but not necessarily be limited to:

- i. MDMS and data storage requirements and detailed design documentation;
- ii. MDMS and data storage installation and configuration documentation;
- iii. MDMS ESB integration requirements and detailed design documentation;
- iv. MDMS ESB Installation and configuration documentation;
- v. Functional, performance, security and integration test cases; and
- vi. Results from functional, performance, security and integration testing.

5 Value Added Optional Software and Services

At BC Hydro's option, the Contractor may be requested to provide additional services and software including:

(a) Value added components

The Contractor will propose additional software components or modules that may provide additional value added functionality that is required for overall program success. The value added options may include any of the following:

- i. Revenue protection;
- ii. Advanced customer data presentation via a portal;
- iii. Outage management;
- iv. HAN management or support;
- v. Other items identified by the Contractor.

(b) Value added services

The Contractor will propose additional services that they may offer to provide additional value added functionality that is require for overall program success. The value added options may or may not be directly associated with additional modules listed above and may include any of the following:

- i. Revenue protection;
- ii. Advanced customer data presentation via a portal;
- iii. Outage management;
- iv. HAN management or support; and
- v. Other items identified by the Contractor.

APPENDIX B – PROPOSAL GUIDELINES, EVALUATION CRITERIA AND FORMAT

Table of Contents – Appendix B

- 1. Proposal Guidelines**
- 2. Evaluation Criteria**
 - 2.1 Evaluation Criteria
 - 2.2 Disqualification of Proposals
- 3. Proposal Format**

1. Proposal Guidelines

Proposals should:

1. Be in the form and include the content described in Appendix B.
2. Include:
 - a) One soft copy of Package One – Transmittal Package in unsecured standard portable document format, to be delivered on an USB memory stick;
 - b) One soft copy of Package Two – Response Form and Content Requirements in unsecured standard portable document format, to be delivered on an USB memory stick;
 - c) Five hard copies of Package One (Four bound copies numbered 1 through to 4; plus one unbound copy marked as “Master”);
 - d) Seven hard copies of Package Two (Six bound copies numbered one through to six; plus one unbound copy marked as “Master”); and
 - e) All Proposals should be labelled in the following way: “Package One, Copy one of four”; “Package Two, Copy one of six”.
3. Be in accordance with the following style guidelines:
 - a) Font: Arial, point size 11, with the exception of graphics;
 - b) Margins: should not be less than 0.75 inches on any one margin;
 - c) All graphics should be legible (of a resolution size to allow expansion to increase readability),
 - d) Paper stock should be from 100 per cent recycled material; and
 - e) All Proposals should be typed.
4. Be delivered in an envelope/box, clearly marked with the words, “Smart Metering System RFP# 546, Response to Request for Proposals”, to the Delivery Address.
5. Proposals should be split into two Packages (Packages One and Two) and correspond to the section numbers and titles provided in Tables 2 and 3.

2. Evaluation

2.1 Evaluation Criteria

BC Hydro will evaluate Proposals by applying the Evaluation Criteria and weighting described in Table 1, in accordance with each section of the Proposal content requirements outlined in Section 3 of this Appendix.

The evaluation criteria were derived from mandatory business and technical requirements, as well as functionality, technical, services, and commercial criteria.

Table 1. Evaluation Criteria and Weighting

Criteria	Weighting
1. Mandatory Business & Technical Requirements	Pass/Fail
2. Product Functionality	20%
Ability to meet or exceed BC Hydro's Smart Metering business needs in the following areas: a) Validation, Estimation and Editing (VEE); b) Billing; c) Data storage; and d) Reporting, data presentation and analytics. Demonstrated ability to deliver required product functionality to other utilities	
3. Security and Privacy	10%
Demonstrated ability to meet or exceed BC Hydro's corporate and project security and privacy requirements.	
4. Technical Design	15%
Ability to meet or exceed BC Hydro's requirements in the following areas: a) Performance; b) Scalability; c) Business continuity requirements; and d) IT standards and policies. Demonstrated ability to deliver requirements to other utilities	
5. Future Proofing and Value Added	10%
Ability to meet the overall Smart Metering Project's short term and long term goals. Ability to deliver program benefits that will support BC Hydro operational efficiencies.	
6. Services	15%
Strength and demonstrated ability to undertake required services. Key areas include: a) Experience, capacity and commitment of Key Personal and supporting resources; and b) Methodology and tools and their relevance and ability to support the deployment of the solution. Demonstrated ability to deliver similar services to other utilities	
7. Commercial and Pricing¹	30%
a) Impact of the Proponent's solution on the total cost of ownership model. (this includes direct and indirect costs); and b) License and maintenance terms and their impact on BC Hydro's risk, cost and ability to deliver on intended Program benefits.	
TOTAL	100%

1. Pricing will be evaluated according to the output of the Pricing Template estimate of BC Hydro's total cost of ownership (TCO) of the proposed solution. TCO will be scored according to the following formula:

$$(100 - \{100 * [(Proponent's TCO Value - Lowest Proponent's TCO Value) / Lowest Proponent's TCO Value]\}) / 100 * \text{the total points available}$$

2.2 Disqualification of Proposals

Without limitation, BC Hydro may, in its sole discretion, disqualify a Proposal if:

- a) Background investigations reveal any criminal affiliations or activities by the Proponent or a member of the Proponent Team and such affiliations or activities would, in the sole opinion of BC Hydro, interfere with the integrity of the Competitive Selection Process; or
- b) It includes a false or misleading statement, claim or information.

Proponents may be required to undertake a criminal records check to participate in the Program.

3. Proposal Format

For Proposals, Proponents should provide the content described in the following tables using the section numbers and titles provided.

PACKAGE ONE - TRANSMITTAL PACKAGE
Proponents are required to submit the following information with their Transmittal Package.

Table 2: Transmittal Package Requirements

Section No.	Title and Contents Requirements
1	<p>Personal Information Consent Forms</p> <p>Completed Forms, in the form of Appendix J should be completed and signed by each individual for whom the Proponent included a resume, work history, summary of qualifications or other personal information as part of their proposal.</p>
2	<p>Proposal Declaration Form</p> <p>Submit a Proposal Declaration Form as required in the form of Appendix E.</p>
3	<p>Relationship Disclosure Form</p> <p>Submit a Relationship Disclosure Form as required in the form of Appendix F.</p>
4	<p>Proponent Confirmations</p> <p>Proponents are to specifically confirm in their Proposals:</p> <ul style="list-style-type: none"> (a) The Proponent is familiar with the (BC) Freedom of Information and Protection of Privacy Act (the FOIPP Act) and is prepared to track amendments to the FOIPP Act as they may occur from time to time. (b) The Proponent is willing to execute and abide by the terms and conditions substantially in the form of Appendix K – Privacy Protection Schedule.
5	<p>Proposed Proponent Team</p> <ul style="list-style-type: none"> (a) Provide the legal name of the entity for the following: <ul style="list-style-type: none"> 1. Proponent
6	<p>Contact Information</p> <p>Provide the name and contact details for the Proponent's Representative.</p>

Section No.	Title and Contents Requirements
	<p>Please note: The Proponent's Representative will be the only person to receive communication from the Contact Person regarding the RFP.</p> <p>Proponent's Representative:</p> <ol style="list-style-type: none">1. Name2. Employer3. Mailing/courier addresses4. Telephone number5. Email address6. Website address

PACKAGE TWO – RESPONSE FORM AND CONTENT REQUIREMENTS
<p>Based on your understanding of the Project, the scope of work identified in this RFP, and the information outlined in the Data Room, please structure a comprehensive submittal to respond to the requirements provided in the following table. The submittal should be structured with the headings and numbering systems provided.</p> <p>Proponents must confirm their compliance with the mandatory requirements listed in section 1.</p> <p>References to past performance should relate to the Client Sight Reference Information provided in Appendix D.</p>

Table 3: Response Form and Content Requirements

Section No.	Title and Content Requirements
1	Mandatory Requirements
1.1	The MDMS shall be proven and deployed in production in at least two North American Electricity Utilities. At least one of the customer installs shall be over 500,000 meters and reading all 500,000 meter registers on a daily basis by 31st August 2010.
1.2	The MDMS data model and data interchange shall be compliant with the IEC 61968 standard for data models and 61970 for data integration.
1.3	The MDMS shall be able to support multiple metering system head end systems also referred to as Automated Data Collection Systems (ADCS).
1.4	The MDMS shall be able to create billing determinants for BC Hydro's SAP CIS system and the proponent commits to support the SAP MDUS framework if BC Hydro wishes to utilize this integration method;
1.5	The MDMS shall have the ability to store flags and other non consumption meter data and have the ability to store multiple channels with various Units Of Measure data for meters with configurable interval length; and
1.6	The MDMS shall have the ability to support a single population of meters that spans multiple time zones.
	Functionality
2	Product Functionality
2.1	VEE

2.1.1	<p>Describe the process when using historical data for verification and estimation purposes. How is the process set up and configured (include details on tools, processes and standard set of VEE rules or processes used).</p> <p>How will the rules account for aspects such as data seasonality, outages in historical data, historical data covering a critical peak pricing event. When data has a gap in consumption due to a legitimate reason such as an outage or work order describe what information and process the VEE process uses to ensure the gap in consumption is not estimated. For data that is modified, either by the MDMS or user, how is it flagged as modified data and how is this information used in reporting and billing purposes.</p>
2.1.2	<p>Scenario: BC Hydro has deployed the MDMS and it is using a set of heuristics and customer historical profile data to support the VEE process. A customer installs an AC unit and a swimming pool which significantly increasing their summer consumption. As a result any VEE based on previous year's historical data will not provide accurate estimates.</p> <p>Question: Describe how your MDMS can be configured to help us identify where such a significant change in consumption has taken place so we can update the VEE rules or profile accordingly.</p>
2.1.3	<p>Scenario: BC Hydro has deployed for commercial and light industrial customers, smart meters that have multiple channels: typically: kWh, kVAR lag, kVAR lead, other (v2h or other UOM).</p> <p>These meters are programmed in 15 minute intervals, though our billing requires 60 minute intervals.</p> <p>BC Hydro typically net out the kVAR's using LAG – LEAD; and when the result is less than zero we make the kVAR = zero. We do the same for a customer with 2 circuits, totalling the 2 meters.</p> <p>Question: Describe how the calculation would be performed in the MDMS and how the solution would VEE the data and how it would deal with summarizing and storage of that data to 60 minutes.</p>
2.14	<p>Scenario 1: 4 months into deployment, BC Hydro is successfully challenged by a customer who overturns the billing calculations based on the fact that the rates were written for mechanical meters that in fact are detented and therefore our electronic meters are more sensitive than the original mechanical meters and could possibly result in terms of showing negative kVARs.</p> <p>As a result of the ruling BC Hydro is required to ignore leading kVAR's completely for single meters. For multiple meters, we are allowed to net out leading and lagging kvars across 2 circuits and store any positive results and zero any negative results.</p> <p>Question: Show how you would do this calculation and how you deal with VEE and summarizing this to 60 minutes.</p> <p>Scenario 2: BC Hydro is required to recalculate billing for 6 months as part of the ruling.</p> <p>Question 2: How you would deal with a recalculation of all previous results?</p>
2.15	<p>List standard VEE rules that are provided by your product. Which of these can be modified by the user and how does the user modify them or add additional rules? Describe the process and tools and provide details of any skills required to perform the task such as SQL. Does your system have a graphical user interface to support this process?</p>

2.2	Data Storage
2.2.1	<p>BC Hydro wishes to keep up to 24 months of hourly interval and daily register data on line for VEE and other operational uses. For historical data greater than 24 months old we wish to store the data in a separate or associated data mart. Customers must be able to view their usage for the last 5 years via a portal. The customers and BC Hydro resources such as CSR's will require access to both historical and current consumption data simultaneously and have the ability to analyse, view and manipulate the data without impacting the operational performance of the MDMS. Any data used for billing must be retained by the system for at least 7 years.</p> <p>Describe what data storage solution you provide as part of your MDMS offering, what are the limitations in terms of capacity and performance. Describe how your solution will provide the multi tiered data storage and management capabilities described above outlining what data storage mechanisms and software (database vendors, parts of your solution and third party vendors) are used and list any assumptions made and estimated data volumes. Where you propose to use third party offerings to provide the storage provide details of the product and where and how you have deployed the solution and achieved the integration in a previous project.</p> <p>For the data that is stored, raw consumption, VEE'd and event data describe how it is time stamped and how the system will handle a population of meters that span multiple time zones and store them in a single database or how they are handled across your product data storage and a third party data mart data storage?</p>
2.2.2	<p>BC Hydro intends to set up their metering system to immediately report some events such as outages and tamper events, others such as voltage threshold errors retrieved are on a per read basis.</p> <p>Describe how the MDMS would process and store these events. Provide a list of events that are currently supported in your system. How will the MDMS determine if the events are legitimate exceptions or expected events such a scheduled work order?</p>
2.2.3	<p>Scenario 1: BC Hydro purchases your MDMS and the installation goes smoothly. Two months into meter deployment in April, we are informed by our supplier that the meters were programmed incorrectly with the wrong offset for Eastern (-5) rather than Pacific Standard Time (-8) offset.</p> <p>Question 1: How would the MDMS detect and alert on this error condition?</p> <p>(This question assumes the head end system did not send an alert during the install or for some reason this alert wasn't caught).</p> <p>Scenario 2: Furthermore, critical peak pricing which started at Pacific Daylight Time is now in effect and the data for the critical peaks is therefore incorrect. While trying to resolve this issue, it was further discovered that the meter multipliers for one small group of meters was incorrect.</p> <p>Question 2: Describe your process of resolving the situation (the how's and the chronology) from the MDMS system in respect to the impacts on billing and the customer portal.</p>

2.2.4	<p>Describe your process and approach to migrating historical monthly consumption data to the MDMS.</p> <p>If you plan to migrate historical data to the MDMS how much historical data will you import and how will your system deal with a mixture of monthly, daily and hourly data for the same customer? How will this be accounted for in the VEE process and the presentation of data to customers?</p>
2.3	Billing
2.3.1	<p>Scenario: Two months into our Time of Use program, BC Hydro finds a large group of customers whose interval data recording failed due to a meter defect and therefore are missing data for 3 weeks. This defective set of meters had been deployed in parts of the Northern Interior and parts of Metro Vancouver. Thus we only have register reads with no load profile data for these customers.</p> <p>For a subset of the Metro Vancouver customers we have Load Research recorders and we are able to get the full profile and usage which were retrieved through an Itron Mv90 system used by Load Research and Analysis department. We don't have this data for the Northern Interior area affected, but we have data from neighbouring areas.</p> <p>Question: Describe how you would resolve this issue for both populations of meters including populating profile data in MDMS and providing support for BC Hydro's ability to bill for Time of Use over the missing data period. List any assumptions you make in your response.</p>
2.3.2	<p>Scenario: BC Hydro decides that it wants to utilize the SAP MDUS framework for its smart metering integration between SAP and the MDMS.</p> <p>Question: Describe the process involved in the integration of the 2 systems and how synchronization of devices and rate structures are maintained. List any assumptions and requirements in terms of SAP enhancement packs or modules required. Identify where billing determinants are calculated.</p>
2.3.3	<p>Scenario: BC Hydro decides that it does NOT want to utilize the SAP MDUS framework for its smart metering integration between SAP and the MDMS. An IEC 61970 standard based data integration processed is used instead.</p> <p>Question: Describe the process and method of integration of the 2 systems and how synchronization of devices and rate structures is maintained. List any assumptions and requirements in terms of SAP enhancement packs or modules required. Identify where billing determinants are calculated.</p>
2.3.4	<p>Scenario: Assume all data that has already been used to create billing determinants is marked when the billing determinants are sent to SAP. BC Hydro identifies an error in our billing process that requires us to reverse billing charges and re-bill a group of customers for a 6 month period.</p> <p>Question: How will the MDMS allow the marked data to be used again for the billing process? Describe any changes or interaction a user or system administrator may have with the system during this process.</p>

2.3.5	<p>Scenario: A portion of our meters are read manually as we have no telecom coverage but the meters still record hourly interval data and daily registers. Upon reading the data a time drift is detect that resulted in the data being shifted several hours.</p> <p>Question: How would the MDMS cope with time drifts that could result in missing data or incorrect data if we simply shifted the time and date of the data? Describe what processes are automated and what processes are manual and for manual process describe what tools or interfaces the user uses to interact with the data and manipulate the data.</p>
2.4	<p>Reporting, Data presentation and Analytics</p>
2.4.1	<p>What data analytical and reporting capabilities does your system support? Describe what data presentation and reporting features are provided as part of your MDMS product.</p> <p>Where you rely on third party products and tools or specific expertise such as SQL experience describe what is required and how it has previously been deployed. Your response should cover operational reporting as well as customer presentation and include details on:</p> <ul style="list-style-type: none"> • What level of interaction is supported and what level of granularity of data and ‘drill down’ capabilities are provided; • What export and customization functionality are available; and • If the reports and analytics be accessed via a browser or portal.
2.4.2	<p>As part of normal operations, meters are associated with different premises and customers due to sampling for Measurement Canada, maintenance and other procedures. Describe how your MDMS deals with the changes in association between premises and meters when reporting data to the Customer Portal, performing VEE with historical data and how it treats the historical load profile data that may belong to other customers.</p> <p>In particular when a customer moves premise and a new customer is now associated with a meter the new customer should only see their own data and not the previous customers. However if BC Hydro changes a customer meter and replaces it with a new one the customer should have access to the data associated with both their old meter and the new one.</p>
2.4.3	<p>Describe how regular update and status reports can be generated automatically via the MDMS and shared with other systems and the portal. Describe reports that are generated as data changes and reports that are generated on a scheduled timed basis.</p> <p>What consideration is given to time stamped data in reports displaying timed information and how is that handled?</p> <p>For reports that present data that has been modified by either the system or manually what mechanisms do you provide to indicate the difference between actual and modified data.</p>

2.4.4	<p>What advanced analytical tools are provided by your solution? If you rely on third party tools or systems such as database vendors ensure you list the products and third parties you rely on. Describe how you have used these in the past and provided examples of successful deployments at client's sites. Include details on any additional licences or tools that may be required and an indication if additional integration or configuration effort is required.</p> <p>For either core product functionality or third party products describe how existing clients are using the advanced analytical tools.</p>
Technical	
3	Security and Privacy
3.1	Security
3.1.1	<p>Describe the logging and auditing capabilities provided by your solution and describe any associated mechanisms to ensure the integrity and non-repudiation of the data captured. Describe how your proposed solution supports audit and security event reporting across all proposed components.</p> <p>What impact does logging have on the system performance?</p>
3.1.2	<p>Describe how you would setup authentication and access control features of your system and how authentication and access is managed. How are user and role based access supported?</p> <p>If BC Hydro wishes to use single sign on technology how is it supported within your product? For all of the above provide details of any existing corporate polices or systems you would leverage and what input and involvement you would require from BC Hydro or its current IT service provider.</p>
3.1.3	<p>List the industry, national or international standards for security that your system uses, including security frameworks, protocols, algorithms or methodologies.</p> <p>Explain why you chose these particular standards and how they are implemented in the solution as security controls. Describe what subsets or supersets of these standards you use and why.</p>
3.1.4	<p>Describe the process and procedure for identifying, mitigating and reporting vulnerabilities that may arise within a deployment of your system. Describe standards for resolution and rollout of patches (i.e. testing, timing, monitoring effectiveness).</p> <p>Provide details on your overall development and testing capabilities for patches and firmware.</p>
3.2	Privacy

<p>3.2.1</p>	<p>BC Hydro does not intend storing customer names and addresses in the MDMS, but it will contain information about consumption, meter events and other information that could be deemed as sensitive customer data providing a potential profile of their habits and lifestyle. In order to ensure customer privacy BC Hydro may wish to limit who has access to the data and ensure that the customer gives permission when access is required.</p> <p>Describe how your solution can support this requirement and provide the logging and auditing capabilities to help ensure that only authorized users are viewing the data. In your response provide the details of the techniques and functionality you use including masking data, role based access, no reputable auditing, etc.</p> <p>How could the solution support the temporary access to a customer's data by a user who does not normally have access to that data when dealing with a specific customer query?</p>
<p>3.2.2</p>	<p>Describe your functionality provided to implement a data privacy policy include features that provide support for masking or restricting access to personal or private data. Do you support data segregation and access control for different data types?</p> <p>Describe a scenario where viewing access to a specific subset of data is prohibited by a subset of users. Describe the process for setting up the data and the system and describe any of the tools or skills required to do it.</p>
<p>3.2.3</p>	<p>BC Hydro has certain statutory obligations, derived from the Freedom of Information and Protection of Privacy Act (FOIPPA), with respect to protecting personal privacy and the confidential business information of our customers. During the design and deployment of the system the vendor will assume many of the same obligations directly, by statute, and by contract. Describe:</p> <ul style="list-style-type: none"> (a) your approach to the management and protection of personal information and confidential business information; (b) The significance, if any, from a FOIPP-Act and Privacy Protection Schedule (PPS) point of view, of any alternations required to the Privacy Protection Schedule (PPS) (Appendix L) by the Proponent in order to comply with FOIPPA, as a result of: <ul style="list-style-type: none"> I. Vendors jurisdiction; II. Current corporate affiliations; III. Current corporate reporting structure; IV. Existing service provider agreements; V. General IT, or IT security, adjustments; and VI. Data transmission and data storage facilities and capabilities; (c) Training measures the Proponent will introduce in order to ensure their workforce would comply with the FOIPP Act and the PPS.

4	Technical Design
4.1	Solution Architecture and Design
4.1.1	<p>In 8 pages or less provide a detailed architecture for your proposed MDMS solution to meet the functional and non functional requirements outlined in the Meter Data Management Systems Requirement Specification Documents and in the documents provided in the data room.</p> <p>Ensure your response provides details on the infrastructure (number and types of servers) and operating systems, data storage and management aspects, high level data and integration architecture, security and privacy controls, disaster recovery and other environments (e.g. dev, test, production) and any data centre or telecom bandwidth requirements. Include any assumptions you make and any third party systems or solutions you are relying on to deliver your solution.</p>
4.2	Interoperability and Integration
4.2.1	To provide BC Hydro with infrastructure details of your proposed solution fill in the MDMS Infrastructure Data Sheet in Appendix C.
4.2.2	Fill in the details in Client Site Reference Information table in Appendix D so BC Hydro can assess the scale and complexity of your current deployments and compare your past experience to our required solution.
4.2.3	<p>What mechanism can you and do you typically employ when integrating with head end systems and do you use a push or pull method?</p> <p>What is the process for retrieving data outside of the schedule reads (i.e. request a meter to send a window of data required, or perform a specific event or on demand read)</p> <p>How do you handle event codes from metering systems and what is the process for adding to or configuring your systems for events you don't currently support. How do you manage upgrades and releases for your software in relation to event code management?</p>
4.2.4	<p>BC Hydro uses TIBCO as our corporate ESB for integration between our corporate systems. Describe how you would achieve the integration with SAP, Metering System Head End System and a Portal with the ESB based on IEC 61968 standard for data models and 61970 for data integration.</p> <p>Describe to what extent the solution supports general purpose application integration standards out of the box e.g. SOAP based services.</p> <p>For any proposed product components such as adaptors or API's describe where they have used in the past to provide similar functionality. Ensure you provide details of core vs. value added components, configure vs. build or customization and your own vs. other third party components i.e. TIBCO components.</p>

4.3	Performance, Scalability and Availability
4.3.1	<p>Describe the procedure for processing the following data within your MDMS and describe any actions taken or reports produced due to exceptions or reports on data modified. Assume that 1% of the meter reads fail an attempt to complete VEE and 1% of meter reads are either incomplete or missing upon reading.</p> <ul style="list-style-type: none"> • 2 million meters read with a final read at 12 midnight, at the premise location (requiring two different time zones as it will be the customer's time zone) • Each meter returning 24 hourly interval reads and associated registers (up to 4 interval channels). <p>In your experience how long does your application take to process this volume of data and what is the average annual volume of data at will be stored in the MDMS? Include any assumptions you make in your response.</p>
4.3.2	Describe a previous production deployment of your solution in a multi-site deployment with failover, load balancing and redundancy. Describe how you scale up and scale out the solution and indicate any impacts or required changes to the existing footprint to achieve the scaling.
4.3.3	What load balancing, clustering and scaling mechanisms do you support? Describe what mechanisms you propose to use for BC Hydro's solution. How will the proposed solutions impact the architecture of the system as it scales to support "no single point of failure"?
5	Future Proofing and Value Added
5.1	Roadmap, Standards and User Groups
5.1.1	<p>BC Hydro procures your MDMS and has been using it for about a year; we have attended at least one user group conference or reviewed user literature. We identify a feature that is missing and would like to check if you plan to include it in future releases and if not would like to present the idea to you.</p> <p>Describe the process we would go through to establish if the functionality is planned in future releases and the process for requesting the functionality if it is not planned. What information would you provide to us as a client so we could understand what is planned for your future releases.</p>
5.1.2	Describe your involvement in standards organizations and how your representation helps with your product roadmap and product development. When a new standard has been ratified, how do you assess the impact on future product development and existing deployed systems? What mechanism do you used to ensure knowledge transfer between standards representatives, product sales and product development?
5.1.3	Provide a copy of your last user group meeting agenda and any material provided before or after the meeting to your clients.

5.1.4	Provide details of your product roadmap for the next 5 years and next 2 planned releases in alignment with the roadmap. Ensure the response covers details on improved or new functionality, changes to the core application architecture, underlying data management, security, integration and any changes planned to meet future standards.
5.2	<p>Value Added Functionality <i>This section provides BC Hydro with an insight into the value added components you offer and an understanding of how the MDMS can meet other aspects of our overall programme goals. Points are awarded for the technical descriptions but any prices included for the additional components are not scored. For any component, description or module described below ensure you include the cost of the component and any associated services in the value added pricing template – any functionality described here and <u>NOT</u> listed under the <u>value added pricing</u> is assumed to be part of the base functionality and part of the core product and BC Hydro assumes it is included in the price provided for your solution.</i></p>
5.2.1	Describe any advanced data presentation and portal functionality you provide as part of your offering. Where you don't have an offering and have partnered with other vendors to provide this functionality provide details of the third party product its functionality and how you integrated with it. Given your understanding of BC Hydro's required solution provide your recommendation of how to achieve the required functionality with your MDMS.
5.2.2	<p>Describe any Outage Management functionality you provide as part of your offering to support filtering of outage messages, reporting on outage statistics or analysis of data prior to sending notifications to the Outage Management System. Where you don't have an offering and have partnered with other vendors to provide this functionality provide details of the third party product its functionality and how you integrated with it.</p> <p>Describe where have deployed the solution in another utility. Include details of the type of integration, the role the MDMS played in relation the Outage Management System and what outage management system was part of the overall solution if any.</p>
5.2.3	<p>Describe any Theft Detection functionality you provide as part of your offering. Where you don't have an offering and have partnered with other vendors to provide this functionality provide details of the third party product its functionality and how you integrated with it.</p> <p>Describe where and how you deployed the solution in another utility.</p>
5.2.4	<p>Describe any Demand Response Management functionality you provide as part of your offering. Where you don't have an offering and have partnered with other vendors to provide this functionality provide details of the third party product its functionality and how you integrated with it.</p> <p>Describe where you have deployed the solution in another utility. Include details of the type of integration, the role the MDMS played in relation to the DRMS solution management system and what DRMS system was part of the overall solution if any.</p>

5.2.5	<p>Describe any In Home Display or Home Area Network management functionality you provide as part of your offering. Where you don't have an offering and have partnered with other vendors to provide this functionality provide details of the third party product its functionality and how you integrated with it.</p> <p>Describe where have deployed the solution in another utility. Include details of the type of integration, the role the MDMS played in relation the IHD/HAN management.</p>
5.2.6	<p>Describe any other additional value added futures you think the MDMS could provide and would be beneficial to BC Hydro's overall project goals to support the Metering System, Home Area Network and In Home Displays or backend business processes not listed above.</p>
6	Services
6.1	Deployment Services
6.1.1	<p>BC Hydro requires the vendor to provide several resources to support the design, deployment and configuration of the MDMS. Of these resources 2 are seen as key to our project 1) a project manager and 2) a technical architect. The project manager will provide the overall coordination of the MDMS vendor resources and project scope and act as the liaison point and coordination between the Vendor, BC Hydro and our System Integrator. The technical architect will provide the overall skills and expertise required to architect and design the MDMS footprint.</p> <p>Provide names and details of the 2 resources you propose to fill these roles, include details on their past experience and your understanding of their roles and responsibilities.</p> <p>What percentage of their time will they be committed and dedicated to BC Hydro's project and for how long? If they will not be located on site for the duration of their engagement provide details of how much of their time they will spend on site.</p> <p>Provide a list of other team members you would provide to support the engagement with their roles and responsibilities.</p>
6.1.2	<p>Scenario: BC Hydro purchases your MDMS and selects a metering system. During contract negotiations BC Hydro purchases and provisions all the hardware required and upon completion you arrive to deploy your system.</p> <p>Question: Describe the process over the first 30 days, 60 days, 90 days and to completion. Ensure in your description you provide details on the team members deployed during each phase and list any tools and methodologies used, any artefacts produced and any additional resources you require from BC Hydro including its service provider and Solution Integrator.</p>
6.1.3	<p>Scenario: Upon completion of the deployment you assist in the transition of the MDMS from the project to both operations and sustainment.</p> <p>Question: Describe how you would plan the process and what resources, methodologies and tools you use to transition the system. Include details on success criteria, timelines and any resources you require from BC Hydro.</p>

6.1.4	Describe what training material and training resources are available in your organization. How would you support BC Hydro's training needs during the engagement? Assume BC Hydro requires training for a range of roles including system administration and data and database management of the system, end user training and training for billing analysts.
6.1.5	In addition to the Base Project Services, the successful Proponent may be requested to provide services in connection with the integration of the MDMS with BC Hydro's corporate Enterprise Service Bus (TIBCO). In order for BC Hydro to assess your skills and experience in relation to delivering this work, describe your approach to delivering the integration scope of work. Provide details of your methodology, tools and experience. Describe any assumptions you make in terms of components or resources provided by BC Hydro or third parties. Provide details of references where you have performed these services with the proposed tools and methodology.
6.2	Support Services
6.2.1	Scenario: An end user discovers an error and needs to report the issues to the MDMS vendor. A workaround is available in the short term but a fix is required before the next billing cycle in 2 weeks. The user reports the error to our help desk who coordinates the resolution of the issue with the vendor. Question: Describe how the help desk would interact with the MDMS vendor to report, resolve and be kept informed with the progress on the resolution of the issue.
6.2.2	Scenario: A billing analyst discovers an error with the billing determinant calculation which is directly attributable to the MDMS. The billing cycle completes in 2 days and BC Hydro needs to resolve the error and to rerun the incorrect billing calculations. Question: Describe how BC Hydro would deal with the MDMS vendor and be supported for an urgent fix. Include details on the entire process and estimated timings based on other customers' experience.
6.2.3	Provide details on your support organization and type of support models you support, the time and location of available resources and the mechanisms for client interaction. Describe your escalation process for dealing with unresolved issues that need to be escalated.
7	Commercial and Pricing
7.1	Pricing

7.1.1	Proponents must complete and submit a Pricing Template provided in the Data Room in both electronic and hard copy. The Proponent's Pricing Template should be consistent with the following: <ul style="list-style-type: none">(a) produced using the template supplied by BC Hydro with no changes or entries other than as indicated in the Pricing Template instructions; and(b) include no hidden or password protected cells.
7.2	Contractual
7.2.1	Provide a software license and maintenance agreement for the proposed solution.

APPENDIX C – MDMS INFRASTRUCTURE DATA SHEET

Fill in the table below to provide BC Hydro with a better understanding of the requirements and options for deploying your solution. In the table below provide a Y where your solution is compatible and/or supports a technology or N where your solution is not compatible and/or does not support a technology. Where details are requested provide then in the space provided.

Product Name			
Product Version			
Release Date			
Database			
Database supported	Oracle	MS SQL Server	Both
Response - Include Version			
Database supported	Oracle	MS SQL Server	Either
Response - Include Version			
Application			
Hardware	Unix - IBM - P Series	Wintel - IBM X Series	
Response			
Operating System	AIX	Windows server 2008 R2	Linux
Response			
Application Server	J2EE	.NET	
Response			
Platform Architecture	32 bit	64 bit	Both

Response			
Client	Thick	Thin	Both
Response			
Browser	IE	Firefox	Others (List)
Response include version			
Pluggins Required	Y	N	
Response - List Pluggins			
VMWare Support	Y	N	
Response - provide version			
Citrix XenApp 6 Support	Y	N	
Response			
Clustering Technology Support	HACMP	Native Windows Clusering	Other (Specify)
Response			
Web Server	IIS	Apachie	
Response			

APPENDIX D – CLIENT SITE REFERENCE INFORMATION TABLE

For up to 5 (five) of your customers that you believe are the most representative for the BC Hydro project provide the details in the table below.

	Customer Name	Contact Details	Number of Electric or Gas Meters in production	Metering System (e.g. Itron, SilverSprings, Elster, Tantlus)	Year of Deployment	Frequency of Meter reads (weekly, daily, every 8 hours etc)	Interval of reads (e.g. Daily register, hourly, 15 min, 5 min)	Billing System	Number of Channels	Channel Measures (e.g. KW/H, Kvars, Voltage) - list all
1										
2										
3										
4										
5										

APPENDIX E – PROPOSAL DECLARATION FORM

- 1. This Proposal Declaration should be executed by the Proponent and each member of the Proponent Team, excluding Key Personnel.***
- 2. By executing this Proposal Declaration, you agree to the provisions of the RFP and this Proposal Declaration.***

[RFP Proponent's Letterhead]

British Columbia Hydro and Power Authority

9100 Glenlyon Parkway,

Burnaby V5J 5J8

Attention: Xavier Serrano, Contact Person

Capitalized terms have the definitions given them in the RFP.

In consideration of BC Hydro's agreement to consider Proposals in accordance with the terms of the RFP, the Proponent hereby agrees and acknowledges that:

1. Proposal

- (a) this Proposal Declaration Form has been duly authorized and validly executed;
- (b) the Proponent is bound by all statements and representations in its Proposal;
- (c) its Proposal strictly conforms with the RFP and that any failure to strictly conform with the RFP may, in the sole and absolute discretion of BC Hydro, be cause for rejection of its Proposal;
- (d) its Proposal is in all respects a fair Proposal made without collusion or fraud;
- (e) BC Hydro reserves the right to verify information in its Proposal and conduct any background investigations including criminal record investigations, verification of the Proposal, credit inquiries, litigation searches, bankruptcy registrations and taxpayer information investigations or other investigations on all or any of the Proponent Team members, and by submitting a Proposal, the Proponent agrees that they consent to the conduct of all or any of those investigations by BC Hydro.

2. Acknowledgements with Respect to the RFP

- (a) the Proponent has received, read, examined and understood the entire RFP including all of the terms and conditions, all documents listed in the RFP "Table of Contents", and any and all Addenda;

- (b) the Proponent agrees to be bound by the entire RFP including all of the terms and conditions, all documents listed in the RFP “Table of Contents”, and any and all Addenda;
- (c) the Proponent’s Representative identified below is fully authorized to represent the Proponent in any and all matters related to its Proposal, including but not limited to providing clarifications and additional information that may be requested in association with the RFP; and
- (d) the Proponent has disclosed all relevant relationships, in accordance with the instructions and format outlined in the Relationship Disclosure Form; and
- (e) the Proponent confirms that its Proposal is based substantially on the terms of the Final Draft Agreement and acknowledges that the terms of the Final Draft Agreement may be modified by BC Hydro in preparing the Agreement as provided for in section 8.1 of the RFP.

3. Proponent Team consists of:

Name	Address	Key Individual

PROPONENT REPRESENTATIVE

Name Name of Employer

Address E-mail Address

Name of Authorized Signatory Telephone

Signature Fax Number

APPENDIX F – RELATIONSHIP DISCLOSURE FORM

This form should be completed by each Proponent on its own behalf and on behalf of each member of the Proponent Team (including firms and individuals).

The Proponent declares on its own behalf and on behalf of each member of the Proponent Team that:

1. The Proponent has reviewed the list of Restricted Parties.
2. The following is a full disclosure of all relationships that the members of the Proponent Team have with:
 - (a) any Restricted Party or their current or former employees, shareholders, directors or officers; or
 - (b) employees (both current or former) of the Province, or individuals of firms who have been involved in the Competitive Selection Process or the design, planning or implementation of the Project;

that could constitute a conflict of interest or unfair advantage.

Name of Restricted Party/Person	Details of the Nature of the relationship with the listed Restricted Party/Person <i>(e.g. Proponent was an adviser to the Restricted Party from 2005-2006)</i>

(Add additional pages as may be required)

NAME OF PROPONENT TEAM MEMBER:

Name of Firm – Proponent/Key Individual:

Address:

Email Address:

Telephone:

Name of Authorized Signatory for Proponent/Key Individual:

Signature:

APPENDIX G – PROPONENT COMMENTS FORM

BC HYDRO INITIAL DRAFT CONTRACT

Section	Proposed Change (including detailed drafting)	Reasons for Proposed Change

APPENDIX H – PARTICIPATION AGREEMENT

Proponents will be required to sign a Participation Agreement as a condition of participating in the RFP. The agreement will include confidentiality and other provisions as outlined below in this Appendix H.

Month, Day 2010

British Columbia Hydro and Power Authority

9100 Glenlyon Parkway,

Burnaby V5J 5J8

Attention: Xavier Serrano, Contact Person

Dear Sirs/Mesdames:

Re: **Meter Data Management System – Participation Agreement in respect of the Request for Proposals issued by BC Hydro (BC Hydro) on September 23, 2010 as amended or otherwise clarified from time to time, including by all Addenda (the RFP)**

This letter agreement sets out the terms and conditions of the Participation Agreement between ▼ [insert name of Proponent] (the **Proponent**) and BC Hydro, pursuant to which the Proponent agrees with BC Hydro as follows:

1. **Defined Terms.** Capitalized terms not otherwise defined in this Participation Agreement have the meanings given to them in the RFP.
2. **Participation.** The Proponent agrees that as a condition of participating in the RFP, including the Competitive Selection Process, Collaborative Meetings and access to the Data Room, the Proponent and each of its Equity Members will comply with the terms of this Participation Agreement and the terms of the RFP.
3. **Confidentiality.** The Proponent will comply with, and will ensure that all of the Proponent Team members and others associated with the Proponent also comply with, the Confidentiality Conditions attached as Schedule 1 to this Participation Agreement, all of which conditions are expressly included as part of this Participation Agreement.
4. **Terms of RFP.** The Proponent will comply with and be bound by, and will ensure that all of the Proponent Team members and others associated with the Proponent also comply with and are bound by, the provisions of the RFP all of which are incorporated into this Participation Agreement by reference. Without limiting the foregoing the Proponent agrees:
 - (a) that the terms of this Participation Agreement do not limit the Proponent's obligations and requirements under the RFP, any Data Room agreement, or any other document or requirement of BC Hydro; and

(b) to be bound by the disclaimers, limitations and waivers of liability and Claims and any indemnities contained in the RFP, including Section 10.13 (Limitation of Damages) of the RFP.

5. **Amendments.** The Proponent acknowledges and agrees that:

(a) BC Hydro may in its sole discretion amend the RFP at any time and from time to time; and

(b) by submitting a Proposal the Proponent accepts, and agrees to comply with, all such amendments and, if the Proponent does not agree to any such amendment, the Proponent's sole recourse is not to submit a Proposal.

6. **General.**

(a) **Capacity to Enter Agreement.** The Proponent hereby represents and warrants that:

(i) it has the requisite power, authority and capacity to execute and deliver this Participation Agreement;

(ii) this Participation Agreement has been duly and validly executed by it, or on its behalf by the Proponent's duly authorized representatives; and

(iii) this Participation Agreement constitutes a legal, valid and binding agreement enforceable against it in accordance with its terms.

(b) **Survival following cancellation of the RFP.** Notwithstanding anything else in this Participation Agreement, if BC Hydro, for any reason, cancels the Competitive Selection Process or the RFP, the Proponent agrees that it continues to be bound by, and will continue to comply with, Section 3 of this Participation Agreement.

(c) **Severability.** If any portion of this Participation Agreement is found to be invalid or unenforceable by law by a court of competent jurisdiction, then that portion will be severed and the remaining portion will remain in full force and effect.

(d) **Enurement.** This Participation Agreement enures to the benefit of BC Hydro and binds the Proponent and its successors.

(e) **Applicable Law.** This Participation Agreement is deemed to be made pursuant to the laws of the Province of British Columbia and the laws of Canada applicable therein and will be governed by and construed in accordance with such laws.

(f) **Headings.** The use of headings are for convenience only and are not to be used in the interpretation of this Participation Agreement.

(g) **Gender and Number.** In this Participation Agreement, words imputing any gender include all genders, as the context requires, and words in the singular include the plural and vice versa.

(h) **Including.** The word including when used in this Participation Agreement is not to be read as limiting.

Yours truly,

(Name of Proponent)

Authorized Signatory

(Name of Equity Member)

Authorized Signatory

(Name of Equity Member)

Authorized Signatory

[Add signature block for each Equity Member]

SCHEDULE 1

CONFIDENTIALITY CONDITIONS

1. **Definitions.** In these confidentiality conditions:

(a) **Confidential Information** means all documents, knowledge and information provided by the Disclosing Party to, or otherwise obtained by, the Receiving Party, whether before or after the date of the RFP, whether orally, in writing or other visual or electronic form in connection with or relevant to the Project, the RFP, the RFQ or the Competitive Selection Process, including, without limitation, all design, operational and financial information, together with all analyzes, compilations, data, studies, photographs, specifications, manuals, memoranda, notes, reports, maps, documents, computer records or other information in hard copy, electronic or other form obtained from the Disclosing Party or prepared by the Receiving Party containing or based upon any such information. Notwithstanding the foregoing, Confidential Information does not include information which:

(i) is or subsequently becomes available to the public, other than through a breach by the Receiving Party of the terms of this Schedule 1;

(ii) is subsequently communicated to the Receiving Party by an independent third party, other than a third party introduced to the Receiving Party by the Disclosing Party or connected with the Project, without breach of this Schedule 1 and which party did not receive such information directly or indirectly under obligations of confidentiality;

(iii) was rightfully in the possession of the Receiving Party or was known to the Receiving Party before the date of the RFP and did not originate, directly or indirectly, from the Disclosing Party;

(iv) was developed independently by the Receiving Party without the use of any Confidential Information; or

(v) is required to be disclosed pursuant to any judicial, regulatory or governmental order validly issued under applicable law;

(b) **Disclosing Party** means BC Hydro or any of its Representatives;

(c) **Permitted Purposes** means evaluating the Project, preparing a Proposal, and any other use permitted by the RFP or this Participation Agreement;

(d) **Receiving Party** means a Proponent or any of its Representatives;

(e) **Representative** means a director, officer, employee, agent, accountant, lawyer, consultant, financial advisor, subcontractor, Equity Member, Key Individual, Project team members or any other person contributing to or involved with the preparation or evaluation of Proposals or proposals, as the case may be, or otherwise retained by the Receiving Party, BC Hydro or Partnerships BC in connection with the Project.

2. **Confidentiality.** The Receiving Party will keep all Confidential Information strictly confidential and will not without the prior written consent of BC Hydro, which may be unreasonably withheld, disclose,

or allow any of its Representatives to disclose, in any manner whatsoever, in whole or in part, or use, or allow any of its Representatives to use, directly or indirectly, the Confidential Information for any purpose other than the Permitted Purposes. The Receiving Party will make all reasonable, necessary, and appropriate efforts to safeguard the Confidential Information from disclosure to any other person, firm, corporation, or other entity except as permitted in this Schedule 1, and will ensure that each of its Representatives agrees to keep such information confidential and to act in accordance with the terms contained herein.

3. **Ownership of Confidential Information.** BC Hydro owns all right, title and interest in the Confidential Information and, subject to any disclosure requirements under applicable law, and except as permitted by this Schedule 1, the Receiving Party will keep all Confidential Information that the Receiving Party receives, has access to, or otherwise obtains strictly confidential for a period of three years after the date of the RFP, and will not, without the prior express written consent of an authorized representative of BC Hydro, which may be unreasonably withheld, use, divulge, give, release or permit or suffer to be used, divulged, given or released, any portion of the Confidential Information to any other person, firm, corporation or other entity for any purpose whatsoever.

4. **Limited Disclosure.** The Receiving Party may disclose Confidential Information only to those of its Representatives who need to know the Confidential Information for the purpose of evaluating the Project and preparing its Proposal or proposal as applicable and on the condition that all such Confidential Information be retained by each of those Representatives as strictly confidential. The Receiving Party will notify BC Hydro, on request, of the identity of each Representative to whom any Confidential Information has been delivered or disclosed.

5. **Destruction on Demand.** On written request, the Receiving Party will promptly deliver to BC Hydro or destroy all documents and copies thereof in its possession or control constituting or based on the Confidential Information and the Receiving Party will confirm that delivery or destruction to BC Hydro in writing, all in accordance with the instructions of BC Hydro (for this purpose information stored electronically will be deemed destroyed upon removal from all storage systems and devices); provided, however, that the Receiving Party may retain one copy of any Confidential Information which it may be required to retain or furnish to a court or regulatory authority pursuant to applicable law.

6. **Acknowledgment of Irreparable Harm.** The Receiving Party acknowledges and agrees that the Confidential Information is proprietary and confidential and that BC Hydro or Partnerships BC may be irreparably harmed if any provision of this Schedule 1 were not performed by the Receiving Party or any party to whom the Receiving Party provides Confidential Information in accordance with its terms, and that any such harm could not be compensated reasonably or adequately in damages. The Receiving Party further acknowledges and agrees that BC Hydro will be entitled to injunctive and other equitable relief to prevent or restrain breaches of any provision of this Schedule 1 by the Receiving Party or any of its Representatives, or to enforce the terms and provisions hereof, by an action instituted in a court of competent jurisdiction, which remedy or remedies are in addition to any other remedy to which BC Hydro may be entitled at law or in equity.

7. **Personal Information.** To the extent Recipient has access to "personal information", as that term is defined in the Privacy Protection Schedule attached as Appendix K, BC Hydro and Recipient will have the respective rights and obligations applicable to each of them as provided in the Privacy Protection Schedule.

8. **Waiver.** No failure to exercise, and no delay in exercising, any right or remedy under this Schedule 1 by BC Hydro will be deemed to be a waiver of that right or remedy.

APPENDIX I – REQUEST FOR INFORMATION FORM

REQUEST FOR INFORMATION
Meter Data Management System

Raised by:

Individual's Name: _____

Proponent Name: _____

Date Submitted: _____

Request / query: (one request/query per sheet)

Commercial in confidence:

Do you request that this query be treated as “commercial in confidence”?

Yes

No

APPENDIX J – PERSONAL INFORMATION CONSENT FORM(S)

This form should be completed and signed by each individual for whom the Proponent included a resume, work history, summary of qualifications or other “personal information” as part of your response.

Proponents should note that receipt of these consents is important for BC Hydro to meet its obligations under the (BC) Freedom of Information and Protection of Privacy Act. Responses that do not include the necessary consent forms may be rejected at BC Hydro’s discretion.

PERSONAL INFORMATION CONSENT FORM

RFP Reference # 546

Title: BC Hydro Meter Data Management System (MDMS) RFP

With the provision of my signature at the foot of this statement I, _____,
(Print Name)

Consent to the indirect collection from _____
(Print Name of Proponent)

by BC Hydro, of my personal information in the form of a work history, resume or summary of qualifications.

In consenting to this indirect collection, I understand that my personal information, so collected, will be used by BC Hydro for the sole purpose of evaluating the submitted response to the above-noted Competitive Selection Process. I understand further that my personal information, once collected by BC Hydro, will be handled by BC Hydro in accordance with the provisions of the (BC) *Freedom of Information and Protection of Privacy Act*.

_____)
Signature) _____
Date

BC Hydro is collecting this personal information in furtherance of its mandate under the Hydro and Power Authority Act and/or Utilities Commission Act. If you have any questions about how BC Hydro collects, uses or discloses your personal information, you may contact Xavier Serrano at (778) 452-6670.

APPENDIX K – PRIVACY AND PROTECTION SCHEDULE

This Schedule forms part of the agreement between British Columbia Hydro and Power Authority ("BC Hydro") and _____ (the "Contractor") respecting the contract referred to as _____ (the "Agreement").

Definitions

1. In this Schedule,
 - (a) "Act" means the Freedom of Information and Protection of Privacy Act (British Columbia), as amended from time to time;
 - (b) "Contact information" means information to enable an individual at a place of business to be contacted and includes the name, position name or title, business telephone number, business address, business email or business fax number of the individual;
 - (c) "Personal information" means recorded information about an identifiable individual, other than contact information, collected, created or otherwise acquired by the Contractor as a result of the Agreement or any previous agreement between BC Hydro and the Contractor dealing with the same subject matter as the Agreement.

Purpose

2. The purpose of this Schedule is to:
 - (a) Enable BC Hydro to comply with its statutory obligations under the Act with respect to personal information; and
 - (b) Ensure that, as a service provider, the Contractor is aware of and complies with its statutory obligations under the Act with respect to personal information.

Collection of personal information

3. Unless the Agreement otherwise specifies or BC Hydro otherwise directs in writing, the Contractor may only collect or create personal information that is necessary for the performance of the Contractor's obligations, or the exercise of the Contractor's rights, under the Agreement.
4. Unless the Agreement otherwise specifies or BC Hydro, the individual whose personal information is at issue, or that individual's lawful representative otherwise directs in writing, the Contractor must collect personal information directly from the individual the information is about.
5. Unless the Agreement otherwise specifies or BC Hydro otherwise directs in writing, the Contractor must tell an individual from whom the Contractor collects personal information:
 - (a) The purpose for collecting it;
 - (b) The legal authority for collecting it; and
 - (c) The title, business address and business telephone number of the person designated by BC Hydro to answer questions about the Contractor's collection of personal information.

Accuracy of personal information

6. The Contractor must make every reasonable effort to ensure the accuracy and completeness of any personal information to be used by the Contractor or BC Hydro to make a decision that directly affects the individual the information is about.

Requests for access to personal information

7. If the Contractor receives a request for access to personal information from a person other than BC Hydro, the individual whose personal information has been requested, or that individual's lawful representative, the Contractor must promptly advise the person to make the request to BC Hydro unless the Agreement expressly requires the Contractor to provide such access and, if BC Hydro has advised the Contractor of the name or title and contact information of an official of BC Hydro to whom such requests are to be made, the Contractor must also promptly provide that official's name or title and contact information to the person making the request.

Correction of personal information

8. Within 5 business days of receiving a written direction from BC Hydro to correct or annotate any personal information, the Contractor must annotate or correct the information in accordance with the direction.

9. When issuing a written direction under section 8, BC Hydro must advise the Contractor of the date the correction request to which the direction relates was received by BC Hydro in order that the Contractor may comply with section 10.
10. Within 5 business days of correcting or annotating any personal information under section 8, the Contractor must provide the corrected or annotated information to any party to whom, within one year prior to the date the correction request was made to BC Hydro the Contractor disclosed the information being corrected or annotated.
11. If the Contractor receives a request for correction of personal information from a person other than BC Hydro, the individual whose personal information has been requested, or that individual's lawful representative, the Contractor must promptly advise the person to make the request to BC Hydro and, if BC Hydro has advised the Contractor of the name or title and contact information of an official of BC Hydro to whom such requests are to be made, the Contractor must also promptly provide that official's name or title and contact information to the person making the request.

Protection of personal information

12. The Contractor must protect personal information by making reasonable security arrangements against such risks as unauthorized access, collection, use, disclosure or disposal, including any expressly set out in the Agreement.

Storage and access to personal information

13. Unless BC Hydro otherwise directs in writing, the Contractor must not store personal information outside Canada or permit access to personal information from outside Canada.

Retention of personal information

14. Unless the Agreement otherwise specifies, the Contractor must retain personal information until directed by BC Hydro in writing to dispose of it or deliver it as specified in the direction.

Use of personal information

15. Unless BC Hydro otherwise directs in writing, the Contractor may only use personal information if that use is:
 - (a) For the performance of the Contractor's obligations, or the exercise of the Contractor's rights, under the Agreement; and
 - (b) In accordance with section 13.

Disclosure of personal information

16. Unless the Agreement otherwise specifies or BC Hydro, the individual whose personal information is at issue, or that individual's lawful representative otherwise directs in writing, the Contractor must not disclose personal information inside or outside Canada to any person other than BC Hydro, the individual whose personal information is at issue, or that individual's lawful representative or an entity that can legitimately compel disclosure under the laws of British Columbia. BC Hydro will not unreasonably withhold such direction.

17. NOT USED.

Inspection of personal information

18. In addition to any other rights of inspection BC Hydro may have under the Agreement or under statute, BC Hydro may, at any reasonable time and on reasonable notice to the Contractor, enter on the Contractor's premises to inspect any personal information in the possession of the Contractor or any of the Contractor's information management policies or practices relevant to its management of personal information or its compliance with this Schedule and the Contractor must permit, and provide reasonable assistance to, any such inspection.

Compliance with the Act and directions

19. The Contractor must in relation to personal information comply with:
 - (a) The requirements of the Act applicable to the Contractor as a service provider, including any applicable order of the commissioner under the Act; and
 - (b) Any direction given by BC Hydro under this Schedule.

20. The Contractor acknowledges that it is familiar with the requirements of the Act governing personal information that are applicable to it as a service provider.

Notice of non compliance

21. If for any reason the Contractor does not comply, or anticipates that it will be unable to comply, with a provision in this Schedule in any respect, the Contractor must immediately notify BC Hydro of the particulars of the non-compliance or anticipated non-compliance and what steps it proposes to take to address, or prevent recurrence of, the non-compliance or anticipated non-compliance.

Termination of Agreement

22. In addition to any other rights of termination which BC Hydro may have under the Agreement or otherwise at law, BC Hydro may, subject to any provisions in the Agreement establishing mandatory cure periods for defaults by the Contractor, terminate the Agreement by giving written notice of such termination to the Contractor, upon any failure of the Contractor to comply with this Schedule in a material respect.

Interpretation

23. In this Schedule, references to sections by number are to sections of this Schedule unless otherwise specified in this Schedule.
24. Any reference to the "Contractor" in this Schedule includes any subcontractor or agent retained by the Contractor to perform obligations under the Agreement and the Contractor must ensure that any such subcontractors and agents comply with this Schedule.
25. The obligations of the Contractor in this Schedule will survive the termination of the Agreement.
26. If a provision of the Agreement (including any direction given by BC Hydro under this Schedule) conflicts with a requirement of the Act or an applicable order of the commissioner under the Act, the conflicting provision of the Agreement (or direction) will be inoperative to the extent of the conflict.
27. The Contractor must comply with the provisions of this Schedule despite any conflicting provision of this Agreement or the law of any jurisdiction outside Canada.

APPENDIX L – PREFERRED PROPONENT SECURITY DEPOSIT

[Note: The Preferred Proponent Security Deposit should be a Letter of Credit substantially in the following form, issued by a Canadian chartered bank acceptable to BC Hydro in its discretion and be callable at the bank's counters in Vancouver, British Columbia.]

TO: British Columbia Hydro and Power Authority

9100 Glenlyon Parkway,
Burnaby V5J 5J8

<>
(the **Beneficiary**)

RE: PREFERRED PROPONENT SECURITY DEPOSIT

IRREVOCABLE LETTER OF CREDIT NO: _____

Dear Sirs:

At the request of our client, _____ (the **Customer**), we hereby issue in your favour our irrevocable letter of credit No. _____ (**Letter of Credit**) for a sum not exceeding in the aggregate One Hundred Thousand Canadian Dollars (CDN \$100,000) effective immediately.

This bank shall immediately pay to you under this Letter of Credit any amount or amounts claimed, not exceeding in the aggregate the sum of CDN \$100,000 upon your written demand(s) for payment being made upon us at our counter during normal business hours, <> [Note: insert address of Bank in Vancouver, British Columbia], Canada referencing this irrevocable Letter of Credit No. _____ dated _____.

Partial drawings are permitted.

This Letter of Credit is issued subject to Uniform Customs and Practice for Documentary Credits, 2007 Revision, ICC Publication No. 600.

Drawings up to the full amount of the Letter of Credit may be made where the drawing is accompanied by a certificate executed by an authorized signatory of the Beneficiary stating that:

- (a) the person signing the certificate is an authorized signatory of the Beneficiary; and
- (b) the Beneficiary is entitled to draw upon this Letter of Credit.

Any drawings made under this Letter of Credit must be accompanied by the original or certified copy of this Letter of Credit, together with an original certificate complying with the conditions set out above.

We shall honour your written demand(s) for payment on presentation without enquiring whether you have a legitimate claim between yourself and our said Customer.

All banking charges are for the account of the Customer.

This Letter of Credit shall remain in full force and effect and, unless renewed, will expire at the close of business on _____ [insert 180 days after the Financial Submittal Closing Time]

Notice of non-renewal will be provided to the Beneficiary in writing by registered mail by not later than 30 days before the expiry date.

Authorized Signatory

Authorized Signatory