

London Hydro Inc.

Evaluation Plan of Bid Submissions for

"Advanced Metering Infrastructure (AMI) -Phase I Smartmeter Deployment"

December 4, 2007

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1. **INTRODUCTION**

1.1 <u>Background</u>

London Hydro has an accredited meter shop and seals revenue meters for a few LDC's in south-western Ontario. London Hydro often provides technical support to these AMV clients, and the subject of smart-metering is no exception. In the process of preparing London Hydro's document entitled: *Request for Proposal for Advanced Metering Infrastructure (AMI) – Phase I Smartmeter Deployment*, AMV clients were individually asked if they wished to participate in some informal fashion with London Hydro's procurement process. The promise was that each would have a seat at the table during the formal evaluation of the bid submissions, but at the end of the day, whilst London Hydro intended to issue a purchase order for its Phase I smart-meter rollout, there would be no obligation for AMV clients to procure smart-meters for installation within their respective franchise service territories. Interest was expressed by Festival Hydro in Stratford, West Coast Huron Energy in Goderich, and Kitchener-Wilmot Hydro.

Two other events occurred at about this point in time: As word that London Hydro was developing a Smartmeter RFP document spread, some of the neighbouring LDC's approached London Hydro about participating in some fashion in London's smart-meter procurement process; and in a meeting with Ministry of Energy staff in late September 2006, London Hydro was urged to explore expanding the consortium to encompass most or all of Southwestern Ontario.

Since that time, interest has snowballed. The LDC's listed following have expressed interest in various degrees of participation in the smartmeter procurement process.

- Bluewater Power, Sarnia
- Burlington Hydro
- Cambridge & North Dumfries Hydro Inc.
- ENWIN Utilities, Windsor
- Erie-Thames Powerlines, Ingersoll
- Festival Hydro, Stratford
- Guelph Hydro Electric Systems
- Kitchener-Wilmot Hydro Inc
- St. Thomas Energy, St. Thomas
- Tillsonburg Hydro Inc
- Waterloo North Hydro, Waterloo
- West Coast Huron Energy Inc, Goderich
- Woodstock Hydro, Waterloo
- Oakville Hydro Inc
- Peterborough Distribution Inc.

- Greater Sudbury Utilities
- Atikokan Hydro Inc.
- Fort Frances Power Corp.
- Kenora Hydro Electric Corp.
- Sioux Lookout Hydro
- Thunder Bay Hydro
- Note: Although Chatham-Kent Hydro had previously selected Tantalus as their AMI vendor and was in the midst of Smartmeter deployments, an offer was made to support and assist the consortium in any way they could.

Some LDC's such as London Hydro intend to proceed with significant procurements as an outcome of this process, whilst others may use the information gained from their participation in the process as a basis for developing accurate plans and budget forecasts for smart-meter deployments in 2008 and beyond.

1.2 <u>Scope</u>

This Plan sets forth the organizational structure (for a bid evaluation team), methodology and procedures that will be used by representatives of Consortium LDC's to evaluate the submitted proposals for AMI systems, to obtain clarification or additional information from bidders (or their references), to rank these submissions in accordance with LDC-specific criteria, to audit the process for conformity to the plan, to report the findings to Consortium LDC's and the Ministry of Energy, and finally to debrief unsuccessful bidders.

1.3 <u>Purpose</u>

All organizations conduct their business activities in accordance with a defined structure (usually hierarchical), delineated responsibilities for staff members, and a set of defined policies and procedures. Likewise, for meetings and conventions, the publication "*Robert's Rules of Order Newly Revised (RONR)*" provides common rules and procedures for fair and orderly deliberation and debate, placing the whole membership on the same footing and speaking the same language, thereby providing for constructive and democratic meetings.

Although London Hydro is taking a lead role with the preparation of a formal Request for Proposal, the bid evaluation team will have representation from several other electrical distribution utilities that have elected to participate in the consortium.

In a similar vein, this particular publication sets forth the organization, rules and procedures by which representatives from multiple LDC's can evaluate and rank the proposals against LDC-specific criteria, to select the LDC-specific AMI system that provides the greatest value to each LDC.

1.4 <u>References</u>

- [1] London Hydro document entitled: *Request for Proposal for Advanced Metering Infrastructure (AMI) – Phase I Smartmeter Deployment*; August 14, 2007.
- [2] Information Supplement to London Hydro's Request for Proposal for Advanced Metering Infrastructure (AMI) Phase I Smartmeter Deployment; August 14, 2007.
- [3] Ontario Regulation 425/06, *Criteria and Requirements for Meters and Metering Equipment, Systems and Technology*; made: August 10, 2006.

2. ORGANIZATION OF BID EVALUATION TEAM

2.1 <u>Reporting Structure of Bid Evaluation Team</u>

The organization and reporting structure of the AMI bid evaluation team is generally as depicted in Figure 2-1 below.



Figure 2-1, Organization & Reporting Structure of AMI Bid Evaluation Team

The project sponsor is a member of London Hydro's executive management who provides oversight and liaison functions for the tendering and bid evaluation processes.

The technical bid evaluation panel is comprised of technical staff selected from the consortium LDC's,

The financial bid evaluation panel is comprised of purchasing and financial staff selected from consortium LDC's.

2.2 <u>Roles and Responsibilities</u>

The roles and responsibilities of the component groups within the bid evaluation team are identified in the subsections that follow.

2.2.1 London Hydro's Project Sponsor

The project sponsor is a member of London Hydro's executive management who provides an oversight function for the actual bid evaluation process, and is also responsible for apprising both the Ministry of Energy and the CEO's of Consortium LDC's as to the progress and outcomes of the tendering and bid evaluation processes.

2.2.2 Fairness Commissioner

A Fairness Commissioner (from amongst the list of firms pre-qualified by the Province) has been retained to act as a neutral, impartial and independent monitor of the entire request for proposal and AMI bid evaluation process.

Note: In Ontario, government procurement is meant to be conducted in a manner that will stand the test of public scrutiny, encourage competition and reflects fairness in the spending of public funds. To provide the vendor community with the confidence that the contemplated procurement is conducted in a fair manner that is consistent with the above-mentioned principles, the province often retains the services of a Fairness Commissioner to monitor the process and to advise it on matters that pertain to the fairness of the process.

The Fairness Commissioner provides added assurance to all stakeholders that the procurement process established by London Hydro is open, fair and transparent.

Note: The Fairness Commissioner does not address whether the right product or vendor was selected. Rather, it is the process of selection itself that is assessed in terms of whether all participants were evaluated objectively according to approved and required processes.

The Fairness Commissioner shall perform the roles outlined following:

- (i) Prior to release of tendering packages to bidders, review the Request for Proposal (RFP) and companion Information Supplement to ensure that:
 - they are not written in an unduly restrictive manner and not biased toward any particular bidder or type of Smart-metering technology.
 - they describe the complete scope of work, provide proponents with the information necessary to prepare a proposal and price the scope of work, and are written such as to elicit the information required to assess the proposals against the defined evaluation criteria.
 - proponents are given sufficient time to prepare proposals in response to the RFP.
- (ii) During the bid period, if an unusual question or circumstance arises for which an outside independent opinion is considered warranted before rendering a decision to the requesting bidder, the Fairness Commissioner may be so requested to provide another viewpoint.
- (iii) After bid evaluation, but prior to release of any findings, audit the processes (and supporting documentation) to ensure that:
 - All bidders received the same and adequate information about the RFP and the associated process at the same time and in a timely manner.
 - All bidders received the same and adequate notification about changes to the RFP requirements, and if necessary the Closing Date revised to permit bidders to prepare a response in light of the changed requirements.
 - The evaluation team members had the appropriate knowledge and expertise to review and evaluate the proposals.
 - The multi-stage screening process was appropriately applied the grounds for disqualifying a proposal at a particular screening stage is appropriate, The RFP set out a three-stage evaluation process.
 - All proposals and evaluation documents were kept strictly confidential and in a secure location.
 - The methodology established for conducting the procurement and published in the RFP were followed and applied equally to all bidders.

• There is no conflict of interest between the evaluators and the bidders and between the bidders and anyone involved in planning or conducting the procurement.

The Fairness Commissioner is not part of the RFP development process or a participant on the technical or financial evaluation panels.

Note: In broad terms, the role of the Fairness Commissioner is akin to that of an external auditor for organizations that have quality management programs that conform to the ISO-9001 quality system model.

The Fairness Commissioner will submit audit reports directly to London Hydro's Project Sponsor.

2.2.3 Smartmeter Coordinator

Smartmeter Coordinator is an existing administrative position within London Hydro that has responsibility for organizing the activities of both the technical and financial bid evaluation panels. Responsibilities include ensuring bidders receive answers to submitted questions in a timely fashion, scheduling facilities for panel meetings, providing document control for the individual proposals and bid evaluation materials, and maintaining records systems to demonstrate compliance with the evaluation processes described herein.

2.2.4 Technical Bid Evaluation Panel

The Technical Bid Evaluation Panel has responsibility for evaluating all technical and project management aspects of the submitted bids using pre-defined evaluation criteria.

Whilst the technical panel is comprised primarily of technical staff drawn from London Hydro and the consortium LDC's, consultants and technology advisors will be called upon to assist assessment of communications technology, and to provide advice on water meter interfaces.



Figure 2-2, Bid Evaluation Technical Panel

An observer seat on the technical panel is also reserved for an appointee from the Ministry of Energy (should the Ministry elect to exercise this invitation).

2.2.5 Financial Bid Evaluation Panel

The Financial Bid Evaluation Panel has responsibility for evaluating the financial stability and management leadership of the various AMI bidders.

This panel also has responsibility for developing total ownership cost (TOC) models for each proposal based on the initial capital investment cost, and recurring operating and maintenance costs, based on established accounting principles.

3. <u>SELECTION OF THE BID EVALUATION PANELS</u>

3.1 <u>Qualifications of the Bid Evaluation Technical Panel</u>

3.1.1 General

AMI is essentially the telemetry of electrical consumption readings from tens or hundreds of thousands of revenue meters distributed throughout the service territory, across a communications network to a central computer system responsible for the collection and export of telemetry data and the monitoring and control of the telemetry equipment and communications network. The procurement of AMI will be a very significant investment for every LDC, often several times greater than the LDC's usual capital expenditures, so it is imperative that the choice be prudent and well considered.

AMI systems are complex, involve technologies that are continually evolving, in a marketplace that has yet to settle out to a few survivors. Therefore members of the bid evaluation technical panel should preferably have expertise in one or more of the following subject areas:

- Revenue metering;
- Telemetry and control systems, including man-machine interfaces;
- Communications networks and protocols; and
- Computer science, and specifically database management systems and intercomputer communications protocols and techniques.

Other skill sets of value to this undertaking include project management, contracts and contract administration, and logistics.

Note: One doesn't acquire experience without being involved in projects – everyone has to start somewhere – and it is recognized and accepted that a few participants on the technical evaluation panel will have minimal experience, but will derive great benefit from other panel members that will provide a mentorship role.

3.1.2 Profile of London Hydro's Technical Panel Members

London Hydro's professional staff that will actively participate on the technical bid evaluation panel are profiled below:





Gary Rains, P.Eng., Director of Energy Conservation, has had a career in the electric distribution utility sector (Ontario Hydro, Scarborough PUC, Toronto Hydro, and now London Hydro) that now spans some 28 years. His responsibilities have included being project engineer for three (3) SCADA and one (1) Distribution Automation system procurements, the specification of medium-voltage metering systems, and Management Representative for the Electric Metering Shop's ISO-9001 quality management program. Gary also served for many years on the MEA's Metering & Utilitization Technologies Committee, and on the OEB's Smartmeter Working Group.

Joe Lee, P.Eng., MBA, C.Eng., MIET, Manager of Metering Technologies, has responsibility for the communications networks associated with London Hydro's Smart-meter deployment. Prior to coming to London Hydro, Joe's career spanned some 28 years career in computer and communication network engineering, product management, business development, sales and marketing, working for such technology companies as Nortel Networks, Nokia, Newbridge Networks (now part of Alcatel-Lucent), Mitel, NEC and Cable & Wireless.



Tony Vanden Boomen, C.E.T, Meter Department Supervisor, has some 22 years of relevant experience. Tony started his career as a Technical Inspector for Measurement Canada, and later joined London Hydro, initially in the Instrumentation & Controls group, where he was a member of a team responsible for procuring, installing and maintaining a state-of-the-art SCADA system. In later years, Tony accepted a management position in the Electric Meter Shop where he played an important role in successfully attaining ISO-9001 registration and Measurement Canada accreditation to calibrate and seal electric meters on behalf of the federal government.



Bill Milroy, P.Eng., Director of Network Planning, has over 29 years of senior management and engineering experience in the utility industry. Bill has been an active participant on key industry committees and panels including the OEB Smart Meter Initiative (2004) and the OEB Demand Side Management and Demand Response Advisory Group (2003). Before recently joining London Hydro, Bill led the PowerStream Smart Meter team including the development of an RFP for trials. Bill's career has involved metering responsibilities at Ontario Hydro, Markham Hydro, PowerStream and London Hydro.



Madhur Diwan, BSEE, MBA, Manager - Energy Management & Key Accounts, has had a career in Transmission & Distribution systems for over 17 years. Experienced in operations & maintenance, protection & controls, metering and automation of electric systems up to 400 kV. Currently responsible for interval meters, MV90, Meter Data Management, smart meter evaluation, demand response, meter reading, billing and related CIS works. Previous experience in IT consulting and utility IT projects related to billing systems and automation projects.



Stuart Smith, B.Sc (Hons), CIS Supervisor, has worked with London Hydro for the last 4 years, initially as a Business Analyst and more recently as Supervisor of Business Support. Stuart is a Computer Science graduate with a strong background in database systems and network related technologies. In his current role, Stuart is responsible for providing an interface between business and IT resources, helping to define technology requirements and ensure that information systems are meeting London Hydro's business needs. With regards to smart metering, Stuart's focus is on the management and application of smart meter data. Currently, Stuart is also heavily involved in implementation of a new Customer Information System (CIS).

Other participants with a limited role on the technical bid evaluation panel are profiled below:



Scott Koshowski, P.Eng., Environmental Services Engineer for the City of London's Water & Sewer Operations, has 5 years experience in the water and wastewater engineering sector. His responsibilities include water loss, regulatory compliance, maintenance management, and increasing operational efficiencies. Most recently, Scott has been assigned as Project Manager for the City of London's Water Meter Strategy initiative which will be investigating all aspects of London's water metering from maintaining the current practices to implementing a fully functional AMI system.



Michael J Martin, GDM, SCPM, PMP, CBNT is a senior IBM Business and Technical Consultant specializing in broadband inter-networking, rich media and RF systems used for voice, video, and data. Over the past 30 years, he has designed and implemented thousands of RF paths and wireless links based upon microwave, satellite, optical fiber, and coaxial cable technologies. Some of his major projects of note include work for Bell ExpressVu, Rogers Cable, Telus, Bell Canada, Hydro One Telecom, The Sports Network, CTVglobemedia, CanWest Global, CHUM, and various levels of government. Michael is a life-long learner and is currently pursuing an MBA degree with Athabasca University.

Scott will be providing expertise with respect to those aspects of the bids related to interfacing transceiver units to existing domestic water meters, and the automated reading of these water meters.

Michael will be providing expertise with respect to those aspects of the bids related to wireless and power-line carrier communications, and the interfaces to these media.

3.1.3 Profile of Cambridge & North Dumfries Hydro's Technical Panel Members

Cambridge and North Dumfries Hydro's staff that will actively participate on the technical bid evaluation panel are profiled below:



Mike Knox, Director of Customer Information Services and Conservation, has responsibility for Metering, Billing and Settlement Services and Conservation Programs, including the Smart Meter Initiative, at Cambridge & North Dumfries Hydro Inc. He has more than 27 years experience in the electricity distribution sector at Toronto Hydro, Westario Power and, most recently, Cambridge & North Dumfries Hydro. Michael had responsibility for several Integration Projects during the amalgamation of six Metro Toronto electric utilities and helped manage the Integration Program Management Office. Most recently, Michael has been an active participant on the OUSM Working Group studying AMI systems and technologies.



Dominic Longo, Metering Supervisor, brings more than 20 years experience in electrical utility metering. Dominic holds various licenses as an electrician and is a graduate of Conestoga College. He started his career in the utility industry at Guelph Hydro and was a member of their Metering Team for over 17 years. He currently provides direction to Cambridge & North Dumfries Hydro's Metering department. Dominic continues to participate on the Smart Meter Technology Evaluation panel for the OUSM group. He is playing a key role in the testing, evaluation and implementation of Cambridge & North Dumfries Hydro's Smart Metering technologies.

Other staff members within Cambridge & North Dumfries Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel members.

3.1.4 Profile of ENWIN Utilities' Technical Panel Members

ENWIN Utilities' staff that will actively participate on the technical bid evaluation panel are profiled below:



James F. Brown, P. Eng., Director of Engineering for EnWin Utilities Ltd. has been involved with energy utilities (EnWin Utilities, Union Gas) for almost 30 years. Jim has responsibility for EnWin's Engineering, Technical Services and Meter Shop areas and is responsible for EnWin's Smart Meter program. While at Union Gas, Jim had lead responsibility for the design and deployment of a pilot, drive-by AMR system on all gas meters in the City of Sarnia. Jim has also had responsibility for meter shop support and the development of quality system (Measurement Canada Accreditation) programs, SCADA system support and deployment and was a key utility adviser in the development of electronic gas meters.



John Temporal, Manager of Technical Services, has more than 29 years experience in the electrical utility field at Enwin Utilities. A graduate of St Clair College, John began his career in the Meter Department as a Meter Technician and was promoted to Meter Supervisor in 1986. Since 1999 he has been responsible for the Technical Services Department. John was involved in the implementation of the Peoplesoft CIS, the Meter Department Accreditation, & ISO 9001 certification and the implementation of the Motorola Customer Service Request System.



Mark Pearce, C.Tech., B.Comm., Meter Department Supervisor, has more than 20 years experience in the Electrical Meter Department with EnWin Utilities Ltd. Mark is currently an active committee member on the E.D.A. Niagara Grand & Western Districts. Mark helped EnWin Utilities Ltd. attain Measurement Canada accreditation to seal and calibrate meters and maintain an ISO-9001 registration. EnWin Utilities also performs meter services for wholesale customers in which they are registered with the IESO. Mark is also an active member of the Ontario Association of Certified Engineering Technicians and Technologists.

Other staff members within Enwin Utilities will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel members.

3.1.5 **Profile of Greater Sudbury Utilities' Technical Panel Members**

Greater Sudbury's staff that will actively participate on the technical bid evaluation panel are profiled below:



Stephen Costello, CET, Operations Supervisor, has over 20 years of industrial and utility experience with Westinghouse, Waterloo North Hydro, Norfolk Power, Costello & Associates, and now Greater Sudbury Utilities. Stephen has extensive experience in the design and operation of high-voltage transformer stations, revenue metering, SCADA, voice and data communications, and IT security. Major projects include being the lead project manager for five (5) SCADA system procurements as well as numerous new utility transformer stations. Stephen has been actively involved with the Electrical Distributors Association in several technical committees, including being the past Chairman of the Mearie EDIST Conference and Exhibition.

Other staff members within Greater Sudbury Utilities will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel member.

3.1.6 Profile of Guelph Hydro's Technical Panel Members

Guelph Hydro's staff that will actively participate on the technical bid evaluation panel are profiled below:



Matt Weninger, P. Eng., Director of Metering & Communications, has more than 18 years experience in the electrical utility engineering field at Guelph Hydro. He is currently responsible for Guelph Hydro's Metering, Electrical Maintenance, Communications & SCADA as well as GIS departments. His experience in Metering started with the design and implementation of Guelph Hydro's original electronic interval metering recording and data translation system, as well as its eventual upgrade to MV90. Matt currently also has the responsibility for delivering Guelph Hydro's Conservation and Demand Management programs, and the Smart Metering initiative in Guelph.



Hans Paris, Metering Supervisor, brings more than 20 years experience in electrical utility metering at Guelph Hydro Electric Systems Inc. A graduate of Georgian College, Hans has been a member of the Ontario Association of Engineering Technicians and Technologists since 1990. He currently provides supervision to Guelph Hydro's Metering, Customer Service and Maintenance departments, including operational support to the MV90 system. Hans recently participated in an IESO Revenue Metering Subcommittee Working Group, and is playing a key role in the implementation, testing and evaluation of Guelph Hydro's Smart Metering initiative technologies.



Neill Burdett, Communications & Operations Supervisor, has more than 17 years experience in electrical utility Engineering and Operations at Guelph Hydro. A graduate of Mohawk College, Neill has been a member of the Ontario Association of Engineering Technicians and Technologists since 2004. Neill first started his career as a System Planning Technician responsible for the long term design and planning of Guelph Hydro's electrical distribution system and Data Acquisition Systems. In the late 90's his duties expanded to include the design and installation of Guelph Hydro's fibre optic network (Atria Networks). He is currently responsible for Guelph Hydro's Operating, Communications & SCADA systems.

Other staff members within Guelph Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel members.

3.1.7 Profile of Kitchener Wilmot Hydro's Technical Panel Members

Kitchener Wilmot Hydro's staff that will actively participate on the technical bid evaluation panel are profiled below:



Wilf Meston, P.Eng., Operations Manager with Kitchener-Wilmot Hydro Inc. has been with the utility's Operations Department in various project engineering and supervisory roles for 18 years. Wilf's current areas of responsibility include the Control Room, Protection and Control Services, Locate Department, Fleet Services as well as the Metering Department and the Smart Meter Program. He has played an important role in successfully attaining Measurement Canada accreditation and ISO9001 registration of Kitchener-Wilmot Hydro's Meter Shop and continues to act as the Management Representative for the Quality Management System.

Other staff members within Kitchener Wilmot Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel members.

3.1.8 Profile of Oakville Hydro's Technical Panel Members

Oakville Hydro's staff that will actively participate on the technical bid evaluation panel are profiled below:





Bob Myers, Director of Energy Services, acquired his Electronics Technician Diploma from DeVry Institute of Technology and joined Oakville Hydro as a meter technician in 1980. He supervised the Meter Section from 1994 to 2000 and became Director of Oakville Hydro Energy Services Inc. (OHESI) at its inception in 2000. He has been instrumental in developing business ventures within OHESI and achieving Measurement Canada Accreditation. He has been directly involved in revenue metering and billing support functions for most of his career.

Everett Chubbs, Director of Information Technology, has 20 years experience in Information Technology. He has been with Oakville Hydro since 2002 and has been deeply involved in all areas of IT related to the running on a utility in the Ontario market. He successfully completed three years at Memorial University of Newfoundland in 1985 then went on to college where he graduated with an Honours Diploma in Computer Systems Analysis in 1987.

Other staff members within Oakville Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel members.

3.1.9 Profile of St Thomas Energy's Technical Panel Member

St Thomas Energy's staff that will actively participate on the technical bid evaluation panel are profiled below:



Alex Korakianitis, P.Eng., Engineering Supervisor and Smart Metering Project Team Leader for St Thomas Energy Inc. He has over twenty years of distribution engineering and management experience with several LDCs in Ontario and other firms in the electrical industry. His career spans both the public and private sector and includes roles as Manager of Engineering, Dean of Electrical Technology, Director of Engineering and Business Development, and Manager of Marketing.

Other staff members within St Thomas Energy will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel member.

3.1.10 Profile of Waterloo North Hydro's Technical Panel Member

Waterloo North Hydro's staff that will actively participate on the technical bid evaluation panel are profiled below:



Herb Haller, P.Eng., Vice-President of Engineering & Stations, has over 30 years of experience in the electrical power industry, the last 18 years with Waterloo North Hydro. Responsibilities include managing the expansion and re-building of the utility's infrastructure, including overhead and underground distribution systems; transformer stations; SCADA and communication systems; retail and wholesale metering. Herb has also served on a number of committees including the MEA's Metering & Utilization Technologies Committee and was chair of the EDA Niagara Grand & Western Region Metering Workshop.

Other staff members within Waterloo North Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel member.

3.1.11 Profile of Woodstock Hydro Services' Technical Panel Member

Woodstock Hydro Services' staff that will actively participate on the technical bid evaluation panel are profiled below:



Jay Heaman, Manager of Engineering, Growth & Conservation, has over 20 years of experience in the electrical industry. Jay's experience includes SCADA implementation for both water and electrical distribution equipment, power quality and load analysis, and management of utility operations. He recently led Woodstock Hydro through the ISO-9001:2000 certification, with all aspects of the business registering successfully to the ISO standard. Jay is an active member and chairperson of several industry and business committees in and outside of Woodstock, Ontario.

Other staff members within Woodstock Hydro will undoubtedly contribute to the review of the technical proposals (either wholly or in part) and provide their questions, concerns and opinions to the named technical panel member.

3.2 <u>Qualifications of the Bid Evaluation Financial Panel</u>

3.2.1 General

In today's fast-paced era of technology, where technology companies seem to come and go overnight (i.e. a 10-year anniversary is considered an exceptional accomplishment), it is highly desirable that the selected AMI vendor have a market longevity greater than the anticipated service life of the AMI assets. The dissolution of an AMI company, or the evolution of its knowledge and assets into another company, ultimately mean higher costs for London Hydro, either from the earlier than expected replacement of the AMI system, or the higher maintenance costs due to loss of support, spare parts, etc.

There is no such thing as a secret recipe to long-term business success, and as such it is difficult to predict with any degree of certainty which companies will survive well into the future. The objective of this financial analysis is to review corporate financial information from the bidders and assign a risk factor to those firms already of questionable solvency and those whose very survival depends upon events that may not unfold.

Members of the bid evaluation financial panel shall preferably have expertise in corporate organizational structures and financial reporting, discounted cash flow analysis, and procurement principles.

3.2.2 Profile of London Hydro's Financial Panel Members

London Hydro's professional staff that will actively participate on the financial bid evaluation panel are profiled below:



Dave Williamson, CA, Director of Finance & Regulatory Affairs, has over 19 years experience at London Hydro. His responsibilities include the financial reporting activities of the company and all regulatory rate submissions and financial information filings. Dave has been a member on several industry committees including the OEB Cost Allocation Working Group and the OEB/MEA Uniform System of Accounts committee. Prior to coming to London Hydro, Dave's career spanned some 19 years in private industry, including 5 years of public accounting and auditing experience at Touche Ross & Co. (now Deloitte) and 5 years as a Financial Reporting Supervisor at General Motors Diesel Division in London.



Tom Beacock, CPP, Purchasing Coordinator, has over 10 years of experience in the electrical industry, the majority of which has been in the Purchasing/Finance area. Tom's responsibilities have included preparing proposal requests, evaluating proposal submissions and completing service and material contracts for various areas within the corporation. He has served on software application implementation and testing teams, and is London Hydro's representative for the Elgin-Middlesex-Oxford Public Purchasing Co-operative."

3.2.3 Profile of Oakville Hydro's Financial Panel Member

Oakville Hydro's professional staff that will actively participate on the financial bid evaluation panel are profiled below:



Lesley Gallinger, CPA, CMA, Vice President, Finance and Administration, has a Masters of Business Administration degree from York University, and holds the professional designations of Certified Public Accountant (CPA) and Certified Management Accountant (CMA). In her position as Vice President, Finance and Administration Lesley is responsible for the Finance, Customer Services and Regulatory Affairs departments of Oakville Hydro. Lesley has been with Oakville Hydro since September 2006, prior to that she spent 15 years with multi-national companies in the pharmaceutical industry.

3.2.4 Profile of Waterloo North Hydro's Financial Panel Member

Waterloo North Hydro's professional staff that will actively participate on the financial bid evaluation panel are profiled below:



Albert Singh, is the Vice-President, Finance and Chief Financial Officer for Waterloo North Hydro Inc. (WNH). Mr Singh holds an MBA degree and is a Certified General Accountant. He joined WNH in 2003 and was previously the Director of Finance for Hydro Vaughan Distribution Inc. for seven years. Mr. Singh has over 25 years of experience in the public and private sector.

3.3 Administration of the Bid Evaluation Process

3.3.1 Nomination of Chairperson for Panel

The participants on the Technical and Financial Panels shall nominate and elect a member (by simple vote) to serve as chairperson for their respective panels.

The role of the chairperson is three-fold: to develop meeting agendas, to control and direct meeting proceedings to keep order and maintain progress in line with the agenda, and finally to act as spokesperson for the panel.

3.3.2 Smartmeter Coordinator

London Hydro's Smartmeter Coordinator will provide all necessary administrative support to both the Technical Panel and Financial Panel for the efficient and professional management of the evaluation process.



Pat Hewlett, Smart Meter Coordinator, has had a career at London Hydro for 25 years and currently holds the position of Smart Meter Coordinator. Pat's previous responsibilities included confidential administrative support, scheduling and record management, database development and maintenance, inventory system computerization, and working as part of an implementation team that successfully obtained ISO-9002 quality system certification.

This responsibility includes arranging meeting dates and facilities, managing the confidentiality and security of proposal and evaluation documents (including the establishment of a document control process to keep track of documents that may be transported off-site), facilitating structured engagement between the Bid Evaluation Panels and bidders, producing and maintaining project records (as may be required to demonstration compliance with the pre-established evaluation process), and assisting the Project Sponsor and / or Panel Chairpersons with the preparation of presentations and reports.

3.3.3 Ministry of Energy's Appointee

The primary role of the Ministry of Energy's appointee is to serve as the "eyes and ears" for the Ministry of Energy, to advise the Ministry as to the state-of-the-art (and shortcomings) of offered AMI systems, and the progress of the bid evaluation process.



Usman Syed, Senior Advisor, Office of Consumer and Regulatory Affairs, has over 12 years experience in various Information Technology rolls. Prior to joining the Ontario Government in 2005, Usman worked as an IT consultant in the banking and telecom industries where he specialized in project management of large-scale software development and IT infrastructure deployment initiatives. As a Senior Advisor at the Ministry of Energy, Usman provides research and analysis in support of the policy and regulatory development of the government's Smart Meter initiative. Usman holds an Honours B.A. in Economics from the University of Toronto and a Project Management Professional (PMP) designation.

The Ministry appointee is welcome and encouraged to actively participate in panel discussions and deliberations, but will not vote on panel matters.

It is understood at the outset that the Ministry appointee's comments are not to be construed as interpretation or clarification of Ministry regulations and policy. Where such interpretation or clarification is required, it shall be done via the official liaison channel between the Project Sponsor and the Ministry of Energy, as previously depicted in Figure 2-1.

3.4 <u>Quorum for Evaluation Panel Meetings</u>

On account of illness, jury duty or a wide variety of other reasons, one or more of the members of the evaluation panels may be unable to attend formal meetings of the bid evaluation technical panel or bid evaluation financial panel.

Except as noted otherwise herein:

- (i) for the technical panel, quorum shall be at least eight (8) consortium LDC's represented <u>and</u> two-thirds (2/3) of the panel membership in attendance.
- (ii) for the financial panel, quorum shall be at least three-quarters (3/4) of the panel membership in attendance.

A "meeting" includes telephone conference calls and similar forms of electronic communication.

3.5 Evaluation Panel Vacancy

Should a vacancy arise on the technical panel or financial panel during the period that the respective panel is active, a replacement will be sought amongst consortium LDC's with comparable experience and judgment.

3.6 Business Ethics

Even though the process is structured to minimize subjectivity, panel members involved in the AMI bid evaluation process are nonetheless perceived to be in a position to influence the purchase of a significant element of LDC infrastructure. As such, panel members are reminded to exercise usual judgment in receiving business gifts and hospitality prior to and during the evaluation period.

Note: Participating LDC's will have their respective Codes of Conduct that set forth guidelines of what may or may not be accepted. Generally, accepting pens, paper or other reasonable or incidental items or gifts of a promotional nature, or availing oneself to hospitality food and beverage to which a broad range of individuals have unrestricted access, are considered acceptable.

4. <u>Selection of Fairness Commissioner</u>

Selection of a "fairness commissioner" for this procurement was based upon:

- The Ministry of Energy provided London Hydro with contact information for three firms known to provide this service for public procurements;¹
- London Hydro solicited proposals (price, experience, availability, etc.) from the three (3) named companies in accordance with its established purchasing policies, practices, and guidelines.

Proposals were received from only two firms, and based on London Hydro's assessment, the contract was awarded to PRP International Inc of Summerside P.E.I. with Peter Sorensen as the designated Fairness Commissioner.



Peter Sorensen, Fairness Commissioner, owns and operates PRP International, Inc. Prior to pursuing his consulting career, in August 1997, Peter served for 31 years, in five Federal Government departments. His last 12 years were in the executive ranks of three departments. PRP International, Inc. specializes in the provision of Fairness Commissioner / Monitoring services for major transactions, e.g. infrastructure (road/bridge, rail, hospitals, convention and data centres), power sector, military procurements, and Alternative Service Delivery services, etc. Peter is at the forefront of providing Fairness services to federal, provincial and other public sector organizations, such as Ontario Power Authority and BC Hydro, over the past eight (8) years.

¹ E-mail dated March 28th, 2007 to Gary Rains (London Hydro) from Ryan King (Ministry of Energy), re: Contacts for Fairness Commissioner.

5. **BID ANALYSIS**

5.1 <u>Evaluation Process Overview</u>

The overall bid evaluation process is depicted in Figure 5-1 to the right. As can be seen, a multi-step process is involved, involving two distinct evaluation panels.

To maximize objectivity, a "scorecard" methodology (described in Section 5.2 below) is used extensively for the technical evaluation of proposals.

The financial evaluation necessarily involves a subjective element, but the underlying risk assessment will be carried out in accordance with established principles.



Figure 5-1, Bid Evaluation Overview

The activities and responsibilities for each evaluation step are explicitly defined in later subsections.

5.2 Overview of Scorecard Methodology for Technical Assessment

There is no single best method of evaluating bids. Each tender needs to be fully examined and its strengths and weaknesses identified. Scorecards are widely used for this purpose and can provide a practical means of evaluating technical systems.

With the scorecard method, each of the assessment criteria is allocated a maximum mark and each bid is then scored against each criterion. It is important that the weighting of the scorecard is appropriate and that it corresponds to any model that has previously been notified or implied to bidders.

Requirement	Maximum Technical Score	street store store store
Requirement #1	3	
Requirement #2	4	
Requirement #3	2	
Requirement #4	4	
Requirement #5	5	
Requirement #6	6	
Requirement #7	4	
Requirement #8	3	
Requirement #9	4	
	35	

Figure 5-2, Example Evaluation Scorecard

The scorecard will be devised with rankings (weightings) established before bids are evaluated. Such scorecards (i.e. the number of technical points per stated requirement) will not be revealed to the bidders.

Note: Some requirements in the RFP are considered "mandatory" and are not assigned a technical score. Generally such mandatory requirements can be identified by the clause "*It is essential that*" in the RFP or by reference to a regulation or statute.

Although unusual, there are occasions when a scorecard is found to be inappropriate during one of the evaluation stages and needs to be modified (especially in the case where a feature, thought to be common and provided by all systems, is found not to be included by at least one bidder). Careful consideration should be given to the consequences before introducing any new criteria for evaluation.

5.3 Overview of Methodology for Assessment of System Most Probable Cost

Assessments of the "*most probable cost*" of AMI systems are constructed for each participating LDC based upon:

- The initial capital cost elements provided by each bidder (refer to Appendix D.5 of RFP) in conjunction with LDC-specific meter population data and expressed need for certain options and accessories as included in the Information Supplement;
- An assessment of incremental deployment labour costs (in comparison to a benchmark) based on provisioning information (refer to Appendix D.3 of RFP);
 - Note: Given the hypothetical example of two Smartmeter technologies one establishes communications with the master control computer immediately and provides such visual feedback to the installer, whilst the second only establishes and confirms communication at the end of a 15-minute interval. For the latter case, the installer would not be able to retrofit as many meters in a day and as such the effective per unit installation cost would be greater than the former case.
- The recurring leasing and licensing costs provided by each bidder (refer to Appendix D.5 of RFP) in conjunction with LDC-specific needs as expressed in the Information Supplement;
- Other recurring (e.g. maintenance, meter re-sealing, etc.) and fixed costs.

For the purposes of the cost model, a 15-year asset lifetime shall be assumed (based on the OEB's amortization guidelines), and a 6% discount rate shall be applied (consistent with the OEB's 2007 contributed capital model).

5.3.1 Formula for Determination of Cost Points

Cost proposal points will be awarded based on *system most probable cost* (i.e. anticipated system ownership cost). The lowest cost proposal (that passes the screening tests identified in Section 5.5.1 and Section 5.5.3 herein) will be awarded the maximum cost points. Cost proposals with higher predicted ownership costs will be awarded a percentage of the maximum cost points based on the percentage of their cost proposal price relative to the lowest cost proposal price.

 $Cost Score = \frac{Maximum points for cost x low bid}{Bid being evaluated}$

Where "*low bid*" and "*bid being evaluated*" refer to the respective "system most probable costs".

5.4 <u>Consideration of Other Factors</u>

Whilst the analysis of "technical merit" and "most probable cost" are mostly objective in nature, the choice between otherwise similar offerings is often based on consideration of "other factors" such as:

- Information received from the listed references and other clients
- Experience and qualifications of the firm
- The sufficiency of the vendor's financial resources

Many of these "other factors" are inherently subjective in nature. Furthermore, they are usually based on information provided "*in confidence*" by the bidder, an institution, or a previous customer of the bidder.

Given the potential damage to a bidder's reputation should the underlying information and analysis fall into a competitor's hands, all reasonable precautions to safeguard the information and consequent assessment shall be safeguarded. Distribution of the information amongst the consortium shall be subject to a Confidentiality or Non-Disclosure Agreement.

5.5 <u>Description of Technical Evaluation Steps</u>

5.5.1 List of Offerers / Bidders

London Hydro's Purchasing Coordinator will prepare a list of names of the companies who submitted proposals. This list is a public record.

5.5.2 **Preliminary Examination for Completeness of Bids**

The "preliminary examination" step in the process is carried out by London Hydro's Purchasing Coordinator.

The purpose of this step is to examine whether the bids received were complete as required by the RFP before further detailed evaluation. The areas to be covered by the examination are (i) whether required securities have been furnished or not; (ii) whether bid documents have been properly signed or not; and (iii) whether bids are generally in order for further evaluation.

Incomplete bids shall be dealt with in accordance with London Hydro's established purchasing policies, procedures and practices for such matters.

In the event of circumstances where it is uncertain whether the bid is in fact incomplete, London Hydro's Purchasing Coordinator shall prepare a position on the

matter, and also refer the matter to the selected Fairness Commissioner for a second opinion. The final decision will rest with the Project Sponsor.

Letter to Bidders with Incomplete Submissions

London Hydro's Purchasing Coordinator shall write a letter to all bidders (if any) deemed incomplete at this point in the evaluation process. The letter shall clearly state the grounds for the incomplete determination.

5.5.3 Initial Screening – Conformity to Baseline Government Requirements

The second step in the evaluation will be a technical screening phase to verify that each technical proposal is in accordance with the baseline government requirements, specifically:

- The revenue meter element of the proposed AMI is available in a complete range of styles (single-phase, network, polyphase; socket-style; self-contained and transformer-rated) and all such revenue meters have been approved by Measurement Canada pursuant to the federal Electricity & Gas Inspection Act and Regulations.
- The proposed AMI fulfills all requirements given in Ontario government document entitled: *Functional Specification for an Advanced Metering Infrastructure* (July 5, 2007 edition) as referenced within Ontario Regulation 440/07 (which amends the original Ontario Regulation 425/06).
 - Note: Conformity to the above-referenced regulation can be determined from the bidder's entries in Table D.1, *Table of Conformance for Base Ministry of Energy Functional Specification*, in the governing RFP document.

Failure to meet these requirements will cause a proposal to be deemed *non-responsive* and, accordingly, rejected by the bid evaluation technical panel. The exceptions are:

- AMI system offerings that do not meet the installation threshold of 5,000 given in Clause 2.12, *Proven Technology*, of the provincial AMI specification; and
- AMI system offerings without *Notices of Approval* for the complete suite of revenue meters, <u>provided</u> there is evidence that the revenue meter is in the queue at Measurement Canada and is likely to be approved summarily.

For these latter two cases, the proposals shall be marked accordingly, but shall proceed to the next step of the evaluation process.

This "initial screening" will be carried out by a subcommittee consisting of London Hydro's Purchasing Coordinator and at least two (2) members of the Technical Panel. Areas of non-compliance shall be presented to the Technical Panel as a whole for disqualification determination.

Note: If the subcommittee is not absolutely clear regarding the response, written clarification from the offerer/bidder shall be obtained before a determination is made. Pursuant to Section 5.6 herein, the Fairness Commissioner shall be apprised of clarification questions before they are conveyed to a bidder.

Note: The non-compliance must be deemed <u>material</u> by the whole Technical Panel before the proposal is rejected as being non-responsive. Minor technicalities may be and should be waived.

Letter to Non-Responsive Bidders

London Hydro's Purchasing Coordinator shall write a letter to all bidders (if any) deemed non-responsive at this point in the evaluation process. The letter shall clearly state the grounds for the non-responsive determination.

5.5.4 Individual Technical Evaluation and Scoring

The third step in the evaluation will be for the individual members of the bid evaluation technical panel to independently evaluate the series of proposals. This evaluation step will focus on examining how each bidder proposes to deliver the contract against the stated criteria.

To the extent that it is possible and practical, technical panel members shall maintain objectivity by abiding by the following evaluation guidelines:

- Technical panel members shall endeavor to read each response in its entirety before scoring (this gives evaluators the overall context of the bidder's solution or approach, and provides an early identification of areas requiring clarification in order to score a particular section.
- Technical panel members shall refrain from comparing responses against responses. Instead, the evaluation shall be against the common evaluation criteria. Preferably, panel members shall have only one response in their possession at any time, and they complete the scoring and seal that respondent's results in an envelope to be opened at the outlier identification meeting (refer to Section 5.5.5 herein).
- Individual evaluators will not be privy to the roll-up of scores or the impact of weightings on an individual criteria score.
- Note: For the most part, the specified requirements are sufficiently defined to promote objective scoring, i.e. the offering meets the stated requirement, offers an acceptable alternative, or doesn't meet the stated requirement. There will be a few notable exceptions whereby the evaluation is necessarily subjective and based on the experience or viewpoint of the evaluation panel member. As one example, with reference to the man-machine interface, the stated requirement might be the organization and presentation of information on a display is "intuitive" and "conform to one or more referenced human factors guideline publications". The offered product may very well conform to the various human factors design guidelines with respect to colour, font size, etc., but if the significance of the information and means of traversing the display set isn't intuitive to the evaluator, then (in the evaluator's judgment) the offered product has not succeeded as being "intuitive", i.e. the bidder has based their design upon an ineffective paradigm.

Technical panel members may elect to restrict their evaluation to those subject areas of the proposal within their area of expertise. For example, panel members with a corporate computing systems background, may elect to restrict their evaluation to the AMI master control computer and its user interfaces and interfaces to the MDM/R and other in-house corporate computer systems.

Each technical criterion shall be scored by at least five (5) consortium LDC's and one-half (1/2) of the panel membership.

During the technical evaluation process, consultants and technical advisors may be called upon to express their professional opinions on the virtues and deficiencies of some aspect of each bidders design, e.g. the transceiver and antenna designs, and the water meter transceiver unit design. Such consultants and advisors will not fill in an evaluation scorecard; instead their role is simply advisory in nature.

Bonus Technical Points

Evaluators will be permitted a maximum of five (5) additional technical points to be awarded as "bonus" points for cases where the evaluator believes both that the bidder's offering is well beyond the stated minimum requirements or preferences, and also provides some value to the LDC. The awarding of elective bonus points shall be denoted as such on the evaluator's scorecard.

- Note: Bonus points are kept in a separate column on the evaluation scorecard simply to facilitate the identification of "outlier" scores.
- Note: Bonus points assigned by individual evaluators shall be considered in the facilitated session for determining a "group technical score" refer to Section 5.5.6 herein.

5.5.5 Identification and Discussion of Outlier Scores

After the technical panel members have completed scoring each bidders proposal against the stated criteria, a comparison of scores will be carried out and "outlier" scores highlighted.

Note: An *outlier* is a statistical term that refers to observations in a distribution of data that deviates so much from the other observations as to arouse suspicions that it was generated by a different mechanism, and therefore discarding of the observations might be considered.

Outlier scores may arise if a panel member saw something in the proposal that escaped the attention of the other panel members, or conversely if the panel member missed or misunderstood something in the proposal. Alternatively, outlier scores can be symptomatic of an ambiguity in the bidder's proposal – in which case it is imperative that the bidder be formally requested to clarify this element of their proposal.

The panel members having the outlier scores will be given the opportunity to discuss their rationale for assigning a particular score. After the ensuing discussion, the members of the technical panel may revise their scores to reflect the new understandings or information previously overlooked.

Example: For the application at hand, if a subsection within the RFP was worth 9 technical points, suppose most panel members scored 6 or 7 points, but one evaluator scored only 2 points and another scored the full 9 points. The "outliers" would be those that scored the 2

points and 9 points. Each would be given an opportunity to explain their rational for the outlier score that they awarded. Based on the ensuring discussion and possibly new insight, the entire panel could adjust their scores to reflect their new understanding.

Where the outliers result from ambiguity in the proposal, clarification will be sought from the respective bidder in accordance with the process set forth in Section 5.6, *Clarification of Bids*, herein.

In the event that a review of responses reveals that a section of the RFP was unclear and several bidders misunderstood what was intended, and the ambiguity was not identified during the inquiry period (i.e. bidders conference or request for clarification), all bidders that advanced past the screening phases (refer to Section 5.5.1 and Section 5.5.3 above) will be provided the same opportunity to clarify the identified section within the RFP. Normally, the Chair of the Technical Panel will amend the RFP to clarify the section and all screened bidders will be given the opportunity to revise their responses on that section of the RFP. The RFP will not be clarified if only one bidder misunderstood the RFP or if the ambiguity is not a material element of the procurement.

5.5.6 Facilitated Session for Assessing Group Technical Score

The final activity by the Technical Panel is to develop a group technical score, based upon the scores of the individual technical panel members, that all panel members can agree upon.

This session will be organized as a facilitated session, wherein the Fairness Commissioner, Ministry Appointee, Smartmeter Coordinator, Project Sponsor, or outside person will fulfill the role of meeting facilitator.

Generally, by this point in the evaluation process, for a given subsection of the RFP, the panel members will have identical scores, or very close scores (e.g. for the case where a subsection within the RFP was worth 9 technical points, a number of panel members may have scored 6 points whilst the remainder of the panel members scored 7 points). An attempt will be made to obtain consensus on one score or the other, but if each group presents convincing arguments that their score is most appropriate, an average score (in this case $6\frac{1}{2}$ points) can be recorded as the group technical score.

Bonus Technical Points

The Technical Panel will be permitted a maximum of five (5) additional technical points to be awarded as "bonus" points for cases where it is the technical panel's consensus position that the bidder's offering is well beyond the stated minimum requirements or preferences, and also provides some value to the LDC. The awarding of elective bonus points shall be denoted as such on the group technical scorecard.

5.5.7 **Preparation of Overall Evaluation Report**

The overall evaluation report will be formed based on the findings of the technical panel, the findings of the financial panel, and the weighting factors given in Table 7-1, *Proposal Evaluation Weightings*, of the governing RFP document.

Note: Due to differences in service conditions, types and populations of revenue meters, and corporate priorities for enhanced functionality, an expected outcome of this analysis is that differing AMI systems may provide the optimal value proposition for participating LDC's, i.e. the system choices may be different for each LDC, although the choice is optimized for that particular participating LDC.

The chairpersons for each panel, the Smartmetering coordinator, and project sponsor shall cooperatively create the first draft of the overall evaluation report. The technical and financial panels shall then be re-convened to review the evaluation report (and suggest improvements, corrections, etc.).

The evaluation report shall contain the following elements:

- Signatures of all members of the bid evaluation team
- A brief description of why bidders were awarded points in specific factors. The objective is to document verifiable differences between the proposals. The narrative should reflect and document the point difference. The discussion includes both finalists and non-finalists.
- A spreadsheet table of RFP evaluation factors and the points awarded to each bidder for each evaluation factor
- Attach all disqualification letters if any where issued

The report contains the final scores reflecting amendments and points awarded for demonstrations at client sites. Interim and individual scores are treated as confidential evaluation team working papers and are not disclosed.

5.5.8 Audit of Bid Analysis Process

Once the Bid Evaluation Panels have reached a recommendation and prepared the evaluation report, the entire bid analysis process will be subjected to scrutiny by the Fairness Commissioner to ensure equal treatment of bidders, and the award criteria for the award of the contract enables bids to be compared and assessed as objectively as possible. Specifically the bid evaluation records must show:

- Justifiable, fair and equitable analysis
- Comparative information between competing providers
- Comparison of each tender against stated requirements
- Provide a sound basis for de-briefing to potential hostile bidders
- A clear winner
- Robustness of evaluation process
- Decision based on a evidence, e.g. free of opinion and negative bias

Once any shortcomings identified by the independent audit are addressed, the bid evaluation report and recommendations will be disclosed in accordance with the process identified in Section 7 herein.

5.6 <u>Clarification of Bids</u>

For a project of this nature, there will certainly be instances of doubt early in the bid evaluation phase about precisely what the supplier is offering, and it may be necessary to seek clarification. Clarification (seeking a clear understanding by both parties of what is required and what is being offered, and to understand the meaning of the words being used by both parties) can be achieved via interviews and visits to suppliers or suppliers clients.

- Note: Bidders should not be interviewed or site visits arranged for the sake of it both involve costs to the consortium LDC's and suppliers.
- Note: During these sessions (interviews or site visits), information is obtained to clarify the supplier's proposal but not to modify the proposal. These sessions are not an opportunity for the purchaser to change the requirements or the RFP terms, or for the supplier to submit major modifications.

At least two experienced members shall represent the Bid Evaluation Team in interviews or site visits. Novice members may benefit from the experience of participating and can act as minute secretary.

The Fairness Commissioner shall be present for interviews with bidders (and the determination of which bidders are interviewed / visited, if not all are done), and to be advised of all written clarification questions to bidders before they are conveyed to bidders.

5.6.1 Written Clarifications

Occasionally, a specification requirement is poorly worded or confusing to the bidders. That fact may be apparent only after the proposals are submitted and reviewed. If it is obvious that the specification was confusing, the Technical Evaluation Panel may waive the specification for all bidders, and the total points are reduced by the number of points assigned for the confusing specification. The process then continues as before. The Technical Panel may not waive different requirements for different bidders.

Alternatively (for a more vital evaluation component), the Panel may elect to (i) rephrase the requirement, or (ii) prepare a written question for one or more bidders, and request that London Hydro's Purchasing Coordinator formally contact the bidders and request submission of their answers in writing (or facsimile or e-mail).

5.6.2 Interviews (Including Conference Calls)

During the tender evaluation process, suppliers may be invited to give a presentation (or attend an interview or clarification meeting) as part of the evaluation. Interviews should normally be held on an LDC's premises.

Note: Members of the Technical Panel will not be aware of pricing at this point, and as such interviews should not involve any kind of disclosure or negotiations on price.

The Chairperson for the Technical Panel shall prepare an agenda for the interviews (or presentations) outlining the objectives of the interview and any specific requirements. Invited bidders shall be given a copy of the agenda far enough in advance to allow them to prepare properly.

Note: Interviews can also provide information not readily available or easily determined from a written proposal. For example, the project manager for one of the bidders may, in discussing the details of the proposal, demonstrate a depth of knowledge and experience that far exceeds the description in the proposal. Conversely, presentations and interviews provide some suppliers the opportunity to show how little they know about certain specific aspects of the project.

A record shall be kept of questions and responses and their impact, if any, on evaluation scores.

5.6.3 **Reference Checks and Visits to Suppliers Clients**

Visits to suppliers' reference sites are normally to enable members of the bid evaluation technical panel to see first-hand how the supplier has performed in an operational setting.

Standardized questions to be asked of reference clients have been included as Appendix C herein.

When such visits take place, detailed reports should be prepared assessing performance against specific criteria.

Daisy Chaining References

Visits are not confined to those utilities identified on the bidder's supplied list of references. One technique often used for expanding the bidder's list with little effort is to ask each reference for another reference – an expanded list often produces more accurate assessment of the bidder's products and capabilities.

Reference Checks and Site Visits

Reference checks and site visits are notoriously time consuming. Telephone reference checks shall be conducted for all bidders that pass the initial screening process (defined in Section 5.5.3 herein). Site visits will likely be restricted to a client site for those bidders that are contenders as "best value" suppliers – the list of client sites will be determined in consultation with the Fairness Commissioner.

5.6.4 **Records of Clarifications**

Any significant clarification or changes to bids that occur in the course of an interview or site visit should be documented in writing.

It is appropriate to review all evaluation scores after the interviews or site visits based on information contained in record.

5.7 <u>Retention of Evaluation Scorecards</u>

Evidence of the evaluation, including scores derived for each criterion, shall be retained on file by the Smartmeter Coordinator.

6. <u>FAIRNESS COMMISSIONER REPORTING PROCEDURES</u>

The reports for the Fairness Commissioner shall be submitted at pre-determined key points in the procurement process to London Hydro's Project Sponsor.

Where the final report of the Fairness Commissioner affirms adherence to objective and appropriate processes, it will be conveyed to the CEO's of Consortium LDC's and the Ministry of Energy (via London Hydro's Project Sponsor) accompanied by the overall evaluation report (described in Section 5.5.7 herein).

Where the final report of the Fairness Commissioner concludes that a procurement process was poor, London Hydro's Project Sponsor consults with panel chairpersons, legal counsel, etc. with the intent to report to the CEO's of Consortium LDC's and the Ministry of Energy recommending corrective action, termination of the procurement initiative, and / or seeking CEO / Ministry direction.
7. DISCLOSURE OF EVALUATION RESULTS AND RECOMMENDATIONS

This section outlines the order and procedures by which the findings and recommendations of the bid evaluation panel will be disclosed to LDC's within the consortium, the Ministry of Energy, the bidders, and the public at large.

7.1 Advising Consortium LDC's of the Outcome

As indicated in Figure 2-1 herein, London Hydro's project sponsor has sole responsibility for disclosing the final results (technical score, prices, etc.) of the bid evaluation to the CEO's of consortium LDC's. The format (meeting, report, etc.) of this disclosure will be at the discretion of the project sponsor.

7.2 Advising Ministry of Energy of the Outcome

As indicated in Figure 2-1 herein, London Hydro's project sponsor has sole responsibility for disclosing the final results (technical score, prices, etc.) of the bid evaluation to the Ministry of Energy. The format (meeting, report, etc.) of this disclosure will be at the discretion of the project sponsor.

7.3 <u>Notifying Successful Bidders</u>

The onus will be on the individual consortium LDC's to notify the successful bidder for their respective LDC requirements that the bidder's system offering has been selected, and invite the bidder to start negotiations on a Statement of Work (SOW).

Note: Depending on the outcome, LDC's that have selected a common AMI system may elect to band together to develop a common Statement of Work.

7.4 <u>Notifying Unsuccessful Bidders</u>

The onus will be on the individual consortium LDC's to promptly notify the unsuccessful bidders for their respective LDC requirements.

The suggested notification procedure is a telephone call from the procurement manager followed by a written letter of notification, with example text as follows:

This letter is notification that your company's proposal in response to RFP #_____ was not selected as a finalist for [London Hydro's] Smartmeter procurement. On behalf of [London Hydro] and the members of the bid evaluation team, I want to express our sincere appreciation for the time and effort you and your staff have taken to respond to our Request for Proposals.

7.5 <u>Debriefing Unsuccessful Bidders</u>

Bidders that have effective quality management programs (e.g. ISO-9001, or similar) will view the debriefing meeting as an opportunity for continuous improvement, in this case the feedback can be helpful in improving their competitive performance, meaning they stand a better chance of winning future business perhaps in wider

markets. For the LDC's, the debriefing meetings help establish a reputation as fair, open and ethical buyers with whom suppliers will want to do business in future.

Suppliers should be informed that only their own submissions or bids will be discussed and that an opportunity will be given for them to air their views.

At the beginning of the debriefing session, the representatives of the bid evaluation panel (herein referred to as the debriefing team) should make it clear that no formal record should be kept of the meeting, but both parties may keep informal notes for their own records.

The debriefing meeting will normally cover the following:

- Welcome and introductory points;
- Description of the selection / evaluation process;
- Debriefing highlighting strengths and weaknesses with the aim of helping unsuccessful bidders understand why they failed to win the contract. The debriefing team will need to be tactful when referring to perceived weaknesses and wherever possible balance this by references to any perceived strengths. Without discussing competitor's bids, one can indicate the strength of the field, how many were unsuccessful and the supplier's overall placing. It should also be explained how their bid scored against the main evaluation criteria, bringing out any other relevant issues that may have had a bearing on the scores.
- Discussion the debriefing team should always refrain from revealing anything about the other bids where the information is commercially sensitive or has been supplied in confidence. There is no reason to conceal comparative pricing information that is in the public domain.
- Closing statement from bidder the debriefing team will note any points made, and will welcome feedback from the bidder on how the process was seen, but the merits of the decision are not for debate.
- Closing statement from bid evaluation panel representative.

Following the debriefing, an informal note of the meeting should be made for the record. It is as well to be aware that any supplier who remains disgruntled may seek to pursue concerns with senior management or others.

8. <u>CONFIDENTIALITY AND SECURITY OF BID SUBMISSIONS</u>

8.1 <u>Price Proposal</u>

All price proposals and associated evaluation documents shall be kept in secure locations at all times throughout the bid evaluation period. Similarly all deliberations of the financial evaluation panel will be conducted behind closed doors.

8.2 <u>Technical Proposal</u>

On account of the large geographic distances between consortium LDC's and the effort required to review and evaluate the different proposals, it is impractical to assemble the technical panel in one location for numerous weeks. As a result, the consortium will be divided into groups of approximately equal numbers of LDC's, and the technical proposals will be circulated amongst the LDC's in the group. For example, and with reference to Figure 8-1 below, LDC's "A" through "E" would each receive two technical submissions to review and complete an individual technical evaluation (as described in Section 5.5.4 herein). After perhaps four days, the technical proposals would be rotated within the group, i.e. LDC "A" would send by courier their technical proposals to LDC "B", LDC "B" would send by courier their technical proposals to LDC "C", etc.



Figure 8-1, LDC Groups for Technical Proposal Circulation

Note: Distribution of proposals to named consultants or advisors will be handled by London Hydro as though these external resources were London Hydro staff persons.

The Smartmeter Coordinator will be responsible for organizing and overseeing the circulation of technical proposals amongst the LDC's. Within each LDC, one person will be designated as the "custodian" of the technical proposals. The custodian's role is to receive the proposals (and log receipt thereof), ensure that the proposals are made available to that LDC's evaluators (which may include staff beyond those named to participate on the technical panel), are secure while they are on premises, that no copies of any part of the proposals are made, and finally that they are appropriately packaged for shipment to the next LDC.

Group Definitions

Participating LDC Activity Bluewater Power, Sarnia А **Burlington Hydro** А Cambridge & North Dumfries Hydro Inc. Ρ ENWIN Utilities, Windsor Ρ Erie-Thames Powerlines, Ingersoll R Festival Hydro, Stratford A Guelph Hydro Electric Systems Ρ Р Kitchener-Wilmot Hydro Inc Р London Hydro St. Thomas Energy, St. Thomas Tillsonburg Hydro Inc R Waterloo North Hydro, Waterloo R West Coast Huron Energy Inc, Goderich Woodstock Hydro, Waterloo Ρ Oakville Hydro Inc Α Peterborough Distribution Inc Greater Sudbury Utilities Atikokan Hydro Inc. R Fort Frances Power Corp. R Kenora Hydro Electric Corp. R Sioux Lookout Hydro А A Thunder Bay Hydro

The role each participating LDC will play in the proposal evaluation phase is tabulated below:

Legend:

P = participate in panel

A = audit – review proposals but not participate in panels

R = waiting for results from panel to proceed with procurement

London Hydro will ensure that external consultants and advisors are included on the distribution of received proposals.



Appendices

Appendix A

Initial Screening Checklist for AMI Proposals

Location:	3rd Floor Executive Board Room
Time:	3:00 p.m.
Required Attendees:	Purchasing Coordinator Fairness Commissioner C.E.O. (or designate in his absence) Executive Assistant

A.1 <u>Procedure for Public Opening of RFP for AMI – Phase 1 Smartmeter Deployment</u>

All proposals received by 3:00 p.m. on Wednesday, November 14th, will be brought to the Executive Board Room. The C.E.O. or his designate will open each Proposal and announce the Company name. The Executive Assistant will record the Company names. The Company name is the only information that will be announced.

Procedure for Initial Review of the Proposals

This initial review will be completed by the Purchasing Coordinator and the Fairness Commissioner. The Smart Meter Coordinator will be in attendance to provide administrative assistance during this process.

Subsequent to the opening, the Purchasing Coordinator will inspect each proposal package and complete a check list form to verify the required information has been provided. (F-01 Received Proposals Check List Form) The Fairness Commissioner will oversee this process, and both the Purchasing Coordinator and Fairness Commissioner will sign and date each checklist form. These forms will be retained as part of the Smart Meter RFP evaluation records.

After the initial review is completed,

The Purchasing Coordinator will:

- A. Separate out proposals from bidder's who have submitted and requested execution of "Appendix D.9 Supplementary Non Disclosure Agreement". These separated proposals will not be distributed until the Purchasing Coordinator has arranged for both copies of the NDA to be signed, and one signed copy returned to the bidder. Once this is complete, the proposals will be processed in the same manner as the other proposals.
- B. For all proposals but those noted in (A) above, the Purchasing Coordinator will separate the Cost Proposal from the remainder of the proposal (ensuring all cost proposals are clearly labeled)
- C. Store the Cost Proposals in a secured location
- D. Control distribution of the Cost Proposals

The Smart Meter Coordinator will:

- A. Store the Proposals (with the exception of the cost proposals) in a secured location
- B. Control distribution of the Proposals (with the exception of the cost proposals)

A.2 Initial Screening Checklist for AMI Proposals

<u>Received Proposals Check List Form</u>

Company Name submitting Proposal:

* Unique Proposal Number assigned by London Hydro

Received by Due Date:

Yes/No

Sealed package(s):

Cover Letter

Yes/No

B. On Company Letterhead:

Yes/No

- D. Official certifies the following: $\underline{\qquad}_{Yes/No}$

All information is true, accurate and complete, and further certifies that the proposal will remain valid for 180 days from the date submitted, and that upon award of contract all prices shall be firm and valid for the duration of the contract.

Tables of conformance to specifications included:

A.	Table of Conformance to Ontario MoE's Functional Specification (Approximately as depicted in Appendix D.1 of RFP)	Yes/No
B.	Table of Conformance to this RFP (Approximately as depicted in Appendix D.2 of RFP)	Yes/No

Detailed Technical Proposal

A.	Technical Proposal ReceivedYes/No	
B.	**Acceptable Format and(format provided)	
C.	Ten (10) copies receivedYes/No	
D.	Reference list included (see Appendix D.6)	
Cost Pr	roposal	
A.	Received in a sealed envelope separate from the Technical Proposal	es/No
B.	Pricing Sheet included (As depicted in Appendix D.5)	es/No
C.	Reference list included (As depicted in Appendix D.6)	es/No
D.	Company profile information included (As listed in Appendix D.7)	es/No
E.	Ten (10) copies receivedYes/No	
F.	** Acceptable Format and (format provided)	

Non Disclosure Agreement

Bidder has submitted and requested execution of "Appendix D.9, *Supplementary Non Disclosure Agreement*"

Yes/No

Check List Completed by the London Hydro Purchasing Coordinator:

Name (please print)	Signature	Date
Verified by the Fairness Coordinator):	Commissioner (or in his	absence the Smart Meter

Name (please print)

Signature

Date

Notes:

- * A unique number will be assigned to each bid (proposal) beginning with the number 1 for the first proposal opened and continuing consecutively as the bids are opened. (i.e. 1, 2, 3)
- ** Acceptable Formats include the following:

- Hard copy - 8 ¹/₂" x 11" paper (fax or email not acceptable)

OR

- CD, or Memory Stick in one of the following formats:
- Microsoft Office (.doc, .xls, .dbf, .mpp)
- Adobe (.pdf)
- AutoCadTM (.dwg, .dwf)

A.3 Initial Screening – Conformity to Government Requirements



Initial Screening of Proposals Submitted for Advanced Metering Infrastructure (AMI) Request for Proposal – Rev. 0

Conformity to Baseline Government Requirements Checklist

Procedure:

This checklist has been developed to facilitate and provide a permanent record for the "conformity to government requirements" proposal screening described in Section 5.5.3, *Initial Screening – Conformity to Baseline Government Requirements*, within the London Hydro publication entitled: *Evaluation Plan of Bid Submissions for Advanced Metering Infrastructure (AMI) – Phase I Smartmeter Deployment*.

Checklist:

The checklist provides for twenty (20) proposals. Where the number of proposals is less, the excess entries shall simply be crossed out (i.e. receive an "X" symbol) by the evaluation team.

Bidder Number	Summary of Information Submitted in Table D.1 of RFP and AppendixY/ND.10 of Addendum #3
1	Company Name:
	Ministry of Energy Requirements:
	Conformity to <u>all</u> Ministry of Energy requirements?
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?
	• Alternative offered for other non-conforming clauses?
	Revenue Meter Availability:
	• Complete range of revenue meters offered? (see Note below)
	Proposal to be marked:
2	Company Name:
	Ministry of Energy Requirements:
	Conformity to <u>all</u> Ministry of Energy requirements?
	Non-conformity with clause 2.12, <i>Proven Technology</i> , only?
	• Alternative offered for other non-conforming clauses?
	Revenue Meter Availability:
	Complete range of revenue meters offered?
	Proposal to be marked:
3	Company Name:

Bidder Number	Summary of Information Submitted in Table D.1 of RFP and Appendix D.10 of Addendum #3	Y/N
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
4	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
5	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
6	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
7	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	

Bidder Number	Summary of Information Submitted in Table D.1 of RFP and Appendix D.10 of Addendum #3	Y/N
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
8	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
9	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
10	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
11	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	

Bidder Number	Summary of Information Submitted in Table D.1 of RFP and Appendix D.10 of Addendum #3	Y/N
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
12	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
13	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
14	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
15	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	

Bidder Number	Summary of Information Submitted in Table D.1 of RFP and Appendix D.10 of Addendum #3	Y/N
	Proposal to be marked:	
16	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
17	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
18	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	
	• Complete range of revenue meters offered?	
	Proposal to be marked:	
19	Company Name:	
	Ministry of Energy Requirements:	
	• Conformity to <u>all</u> Ministry of Energy requirements?	
	• Non-conformity with clause 2.12, <i>Proven Technology</i> , only?	
	• Alternative offered for other non-conforming clauses?	
	Revenue Meter Availability:	<u>.</u>
	Complete range of revenue meters offered?	
	Proposal to be marked:	
20	Company Name	1



Proposal to be marked:

Note: The provincial government's AMI Functional Specification only covers energy meters (i.e. not combination demand and energy meters). As such, in reviewing the Appendix D.10 tabulation, evaluators shall limit their review to entries in those columns labeled as "energy only" (in contrast to those columns labeled "combination").

Proposal Rejection Criteria:

There are two (2) criteria for declaring a bidder's proposal "non-responsive", namely:

(i) According to the bidder's submission, there are <u>no</u> revenue meters approved by Measurement Canada nor in the queue for type approval; or

Note: A bidder with at least one (1) meter type approved <u>or</u> in the queue for Measurement Canada approval will be eligible for continued evaluation.

- (ii) according to the bidder's Table of Conformance, the bidder has declared non-conformity to a Ministry of Energy functional requirement (with the notable exception of Section 2.12) and further has not offered an "alternative" solution.
 - Note: A determination of whether the bidder's alternative truly fulfills the intent of the functional requirement is not part of the initial screening process. Compliance will be assessed by the technical evaluation panel (in concert with Ministry staff) as part of the proposal evaluation process.

Evaluators:

Upon completion of the checklist, the Purchasing Coordinator shall sign this checklist, and the two (2) members of the technical evaluation panel chosen for this assignment shall each print their name and provide their signature attesting to concurrence with the checklist information.

London Hydro Purchasing
CoordinatorMember #1 of Technical
Evaluation PanelMember #2 of Technical
Evaluation Panel

Tom Beacock

Print name \rightarrow

Print name \rightarrow

Appendix B

AMI Bid Evaluation Scoresheet – Technical Weightings

B.1 <u>AMI Bid Evaluation Scoresheets – Technical Weightings</u>

XXX

Insert Excel spreadsheet here

B.2 User Instructions for the Bid Evaluation Technical Panel

Xx

Evaluators may insert the following acronyms in their scorebooks in place of an actual numeric score.

Acronym Meaning

N/A Not Applicable - For example, where a bidder's communications offering is wireless, those sections of the RFP that pertain to PLC or BPL technology would be scored using the text string "N/A".

R/C Requires Clarification - In instances where an evaluator isn't entirely certain what the bidder is offering and if such offering is compliance with the requirements, those sections of the RFP would be scored using the text string "R/C". The evaluator is requested to include in the "Notes" section a reference to the specific part of the bidders proposal that is causing confusion. Clarification will be formally sought from bidders following the "outliers" meeting.

E/D Evaluation Deferred - There are two sections of the RFP for which advisors with specific expertise have been engaged to assist the technical panel with the evaluation. From a practical perspective, their respective insights into water meter interfaces and RF/PLC design robustness, will be shared with the technical panel as an agenda item at the "outliers" meeting.

Xx

B.3 Template Scorecard for Technical Bid Evaluation

Along with each proposal, each member of the technical evaluation panel will be issued an electronic scorecard similar in format to the example illustrated below. Each evaluator shall assign a score (generally indicating degree of compliance with stated requirements) in Column 6 and optionally commentary or notes (generally indicating a reference to information in the bidder's proposal that formed the basis for the evaluator's score).

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
1	Purpose of this Request for Proposal	1	NRS			
1.1	General Intention	1	NRS			
1.2	Multiple Awards	1	NRS			
1.3	Governing Principle	2	NRS			
1.4	Other Guiding Principles	2	NRS			
2	Introduction	3	NRS			
2.1	Provincial Context for Project	3	NRS			
2.2	Local Context for Project	3	NRS			
2.3	Informal Regional Smart-Meter Purchasing Consortium	4	NRS			
2.4	Accredited Electric Meter Verifier Status	5	NRS			
2.5	Municipal Broadband Wireless Mesh Network	5	NRS			
2.6	Public Wireless Communications Carriers as a WAN Option	6	NRS			
2.7	Glossary of Terms	7	NRS			
2.7.1	AMI Terminology	7	NRS			
2.7.2	Other Terms	7	NRS			
3	Calendar of Events	9	NRS			
4	Contact Information	10	NRS			
4.1	Contact for Contractual Matters	10	NRS			
4.2	Contact for Technical Matters	10	NRS			
4.3	Bidders Conference	10	NRS			
4.4	Requests for Clarification or Additional Information	11	NRS			
4.5	Other Restrictions and Grounds for Disqualification	11	NRS			
5	Project Overview	12	NRS			
5.1	Phase I Smartmeter Deployments	12	NRS			
5.1.1	Apartment Buildings with Individual Tenant Metering	12	NRS			
5.1.2	Townhouse Developments with Load-Shifting Opportunities	13	NRS			

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
5.1.3	Residential Area with Hard-to-Read Meters	15	NRS			
5.1.3.1	Representative Residential Block within Old South	15	NRS			
5.1.3.2	Berkshire / Gardenwood Subsurface Electrical Room	15	NRS			
5.1.4	Expired 600 V Delta Meters in Westmount Mall	17	NRS			
5.1.5	Core Area Services Supplied from Network Grid Distribution System	17	NRS			
5.1.6	Low-Density Rural Meters	18	NRS			
5.1.7	New Development of EnergyStar Homes	19	NRS			
5.1.8	Residential Areas with Voltage Regulation Problems	19	NRS			
5.1.9	Free Issue Single-Phase Self-Contained Revenue Meters (2007 Programs)	20	NRS			
5.1.10	Summary of Phase I Smartmeter Deployments	20	NRS			
5.2	Phase II Smartmeter Deployments	21	NRS			
5.2.1	Apartment Buildings with Individual Tenant Metering	21	NRS			
5.2.2	Shopping Malls and Other Retail Spaces with Individual Tenant Metering	23	NRS			
5.2.2.1	White Oaks Shopping Mall	23	NRS			
5.2.2.2	Argyle Shopping Mall	24	NRS			
5.2.3	Old South Residential Community	24	NRS			
5.2.4	Southcrest Residential Community	25	NRS			
5.2.5	Argyle Residential Community	26	NRS			
5.2.6	Westminster Park Community	26	NRS			
5.2.7	Free Issue Self-Contained Revenue Meters (2008 Programs)	27	NRS			
5.2.8	Summary of Phase II Smartmeter Deployments	28	NRS			
5.3	Optional Supply of Qualified Installation Labour	28	NRS			
6	AMI System Requirements	30	NRS			
6.1	Overview of Application Environment	30	NRS			
6.1.1	Knowledge of Conditions	30	NRS			
6.1.2	London Hydro's Franchise Service Territory	30	NRS			
6.1.3	Issues to Consider for Radio Frequency (RF) LAN Offerings	31	NRS			
6.1.3.1	Installing Regional Collectors / Repeaters on Roadway Lighting Luminaires	31	NRS			
6.1.3.2	RF Absorption Due to Foliage	32	NRS			
6.1.4	Issues to Consider for Private Radio Frequency (RF) WAN Offerings	33	NRS			
6.1.4.1	Licensed Spectrum	33	NRS			
6.1.4.2	Existing Private Radio Communications Infrastructure	34	NRS			
6.1.5	Issues to Consider for Power Line Carrier (PLC) LAN Offerings	34	NRS			

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
6.1.5.1	Distribution System Overview	35	NRS			
6.1.5.2	Loop-Configured Radially-Operated Distribution Feeder Topology	35	NRS			
6.1.5.3	Electrical Substations as Signal Injection Sites	36	NRS			
6.1.5.4	Switched Capacitor Banks in Transformer Stations	37	NRS			
6.1.5.5	Radiated Emission Limits	38	NRS			
6.1.6	Other Service Conditions	38	NRS			
6.1.7	Existing Meter Populations and Installation Densities	39	NRS			
6.1.7.1	Revenue Meters within Scope of Provincial AMI Specification	39	NRS			
6.1.7.2	Revenue Meters beyond Scope of Provincial AMI Specification	40	NRS			
6.2	Technical Requirements for AMI	41	NRS			
6.2.1	General Organization of Requirements	41	NRS			
6.2.2	Purchasing Descriptions for Energy Meters (Level 1)	41	101	See Notes 1a, 1b, 1c & 1d for scoring		
6.2.3	MoE Technical Requirements for Advanced Metering Infrastructure (Level 2)	42	2	2 of 3 stated requirements are mandatory		
6.2.4	Supplementary AMCD Requirements (Level 3)	43	NRS			
6.2.4.1	Antenna & Transceiver Design Objectives for Wireless LAN Offerings	43	17	See Notes 2a, 2b for scoring		
6.2.4.2	Transceiver Design Objectives for Power Line Carrier (PLC) LAN Offerings	44	17	Same scoring rational as Section 6.2.4.1		
6.2.4.3	Low Temperature AMCD Operation	45	2	See Note 3 for scoring		
6.2.4.4	Product RF Certification	45	1	Mandatory / score $1 = available$; $0 = in que$	le	
6.2.5	Supplementary LAN Requirements (Level 3)	45	NRS			
6.2.5.1	LAN Offerings Based on Wireless Mesh RF Technology	45	22	See Notes 4a, 4b for scoring		
6.2.5.2	LAN Offerings Based on PLC or BPL Technology	47	22	Same scoring rational as Section 6.2.5.1		
6.2.6	Supplementary Inter-Device Communications Requirements (Level 3)	48	NRS			
6.2.6.1	General	48	NRS			
6.2.6.2	Communications Network Interface	48	10	See Note 5 for scoring		
6.2.6.3	Data Formats and Structures	49	3	See Note 6 for scoring		
6.2.6.4	Electronic Security	49	6	See note 7 for scoring		
6.2.7	Supplementary Regional Collector Requirements (Level 3)	51	NRS			
6.2.7.1	General	51	3	See note 8 for scoring		
6.2.7.2	Transceiver Design Objectives	51	17	See note 9 for scoring		
6.2.7.3	Loss of Supply Response	51	3	see note 10 for scoring		
6.2.7.4	Low Temperature Regional Collector Operation	52	2	See Note 3 for scoring		
6.2.7.5	Product Certification	52	2	Two basic requirements stated		

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
6.2.7.6	WAN Migration Features	52	5	See notes 11a, 11b for scoring		
6.2.8	Supplementary Master Control Computer Requirements (Level 3)	52	NRS			
6.2.8.1	Preferred Hardware and Operating System Platform	53	1	Basic requirement - score 1 for compliance		
6.2.8.2	Fault Tolerant Redundant Configuration	53	9	Nine (9) basic requirements stated		
6.2.8.3	User Interface Design Requirements	54	24	See note 12 for scoring		
6.2.8.4	Integration with Centralized Meter Data Management / Repository	54	4	See note 13 for scoring		
6.2.8.5	Integration with London Hydro's Corporate Computer Systems	56	3	See note 14 for scoring		
6.2.9	Mandatory Value-Added Functionality (Level 4A)	57	NRS			
6.2.9.1	General	57	NRS			
6.2.9.2	Outage Management System Interface	57	9	See note 15 for scoring		
6.2.9.3	Quality of Supply Voltage Reporting	59	6	Three (3) important requirements stated.		
6.2.9.4	Bi-Directional Revenue Meters	60	4	See note 16 for scoring		
6.2.9.5	Meter Phase Registration Failure Detection	60	2	Two basic requirements stated		
6.2.10	Discretionary Value-Added Functionality (Level 4B)	60	NRS			
6.2.10.1	General	60	NRS			
6.2.10.2	Remote Disconnect of Service	61	6	Six (6) basic requirements stated		
6.2.10.3	Meter Tamper Detection	62	2	Two (2) basic features required.		
6.2.10.4	Automated Reading of Water Meters	62	13	See note 17 for scoring		
6.2.10.5	In-Home Energy Use Displays	63	5	Five (5) basic requirements stated.		
6.2.10.6	Demand Response / Load Management	64	5	Score one (1) point for each device availab	le	
6.2.10.7	Prepayment Metering	64	5	See note 18 for scoring.		
6.2.10.8	Remote Device Diagnostics and Maintenance Functionality	66	5	Five (5) basic requirements stated.		
6.2.10.9	Meter Configuration Management	67	6	Three (3) important requirements stated.		
6.2.10.10	On-Demand Meter Reads	67	2	Two (2) basic features stated		
6.2.10.11	Inter Master Control Computer Communications	67	3	See note 19 for scoring.		
6.2.10.12	Check Meter Discrepancy Reporting	68	2	Two (2) basic requirements stated.		
6.3	Operational Requirements for AMI	69	NRS			
6.3.1	Expandability (Scalability) Requirements	69	1	One (1) basic requirement stated		
6.3.2	System Availability (Reliability) Requirements	69	NRS			
6.3.2.1	General	69	NRS			
6.3.2.2	AMI Master Control Computer Availability	70	2	One (1) important requirement stated		
6.3.2.3	Regional Collector Availability	70	3	One (1) important + one (1) basic requirem	ent	
6.3.3	Maintainability	70	NRS			
6.3.3.1	Revenue Meter Maintainability	70	5	Five (5) basic requirements stated.		
6.3.3.2	Regional Collector Maintainability	71	28	See note 20 for scoring		

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
6.3.4	Response Requirements	71	NRS			
6.3.4.1	Revenue Meter Interrogation	71	2	Two (2) basic requirements stated.		
6.3.4.2	Man-Machine Interface Performance	71	2	Two (2) basic requirements stated.		
6.3.4.3	Disaster Recovery	72	3	Three (3) basic requirements stated		
6.3.5	Spare Parts	72	NRS			
6.3.6	Special Provisioning and Diagnostic Tools	73	5	Subjective assessment of deployment tools		
6.3.7	Backup Interval Data Collection	74	1	One (1) basic requirement stated		
6.4	Documentation Requirements for AMI	74	NRS			
6.4.1	Quick Reference Guides	74	2	Two (2) basic requirements stated.		
6.4.2	Operating and Service Manuals	75	3	Three (3) basic requirements stated		
6.4.3	Software User Manuals	75	5	Five (5) basic requirements stated.		
6.5	Staff Training Requirements for AMI	75	5	Five (5) basic requirements stated.		
6.6	AMI Acceptance Testing	76	5	Five (5) basic requirements stated.		
6.7	Other Requirements	77	NRS			
6.7.1	Warranties	77	NRS			
6.7.1.1	System Level Functional Warranty (12 Months)	77	2	One (1) important requirement stated		
6.7.1.2	Device Level Materials and Workmanship Warranty (5 years - declining share)	77	2	One (1) important requirement stated		
6.7.1.3	Right to Operate Unsatisfactory Equipment	78	1	One (1) basic requirement stated		
6.7.1.4	Long Term Availability of Spare Parts	78	2	One (1) important requirement stated		
6.7.2	Service Maintenance and Support	79	1	Score 1 if support system in-place		
6.7.3	Meter Design for End-of-Life Disassembly and Materials Recycling	79	4	Four (4) basic requirements stated.		
7	Proposal	80	NRS			
7.1	Submittal	80	NRS			
7.2	Requirements	80	NRS			
7.2.1	Cover Letter	81	NRS			
7.2.2	Table of Conformance	81	NRS			
7.2.3	Detailed Technical and Project Management Proposal	81	NRS			
7.2.4	Cost Proposal	82	NRS			
7.3	Proposal Evaluation Criteria	82	NRS			
7.3.1	Review Criteria	82	NRS			
7.3.2	Basis of Award	83	NRS			
7.4	Selection Process	83	NRS			
7.4.1	General	83	NRS			
7.4.2	Use of Fairness Commissioner	83	NRS			

Section	Section Title	Starting Page	Technical Points Available	Evaluator's Guidelines	Assigned Score	Evaluator's Notes
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)
7.4.3	Request for Additional Information	83	NRS			
7.4.4	Proposals for Partial Solutions	84	NRS			
7.5	Instructions and Conditions	84	NRS			
7.5.1	Limitations	84	NRS			
7.5.2	Proposal Submission	84	NRS			
7.5.3	Disqualification of Bidder	85	NRS			
7.5.4	Addenda: Errors and Omissions	85	NRS			
7.5.5	Public Records	85	NRS			
7.5.6	Insurance	86	1	One (1) basic requirement stated		
7.5.7	Period that Proposals Remain Valid	86	0	Not a technical evaluation criterion		
7.5.8	Contract Terms and Conditions	86	1	One (1) basic requirement stated		
7.5.9	Bid Securities	86	NRS	All bidders did this to get to evaluation pha	se	
7.5.10	Milestone Payment Schedule	87	2	One (1) important requirement stated		
7.5.11	Software Licenses	87	NRS			
7.5.11.1	Software Elements	87	1	One (1) basic requirement stated		
7.5.11.2	Future Software Upgrades Delivery	87	1	One (1) basic requirement stated		
7.5.11.3	Non-titled Perpetual Software Licenses	88	1	One (1) basic requirement stated		
7.5.11.4	Software Upgrade License and Documentation	88	1	One (1) basic requirement stated		
7.5.11.5	Title (Software)	88	1	One (1) basic requirement stated		
7.5.12	Prime Contract Responsibility	88	0	Mandatory requirement		
7.5.13	Incorporation of RFP and Proposal in Contract	89	NRS			
7.5.14	Final Contract Negotiations	89	NRS			
7.5.15	News Release by Vendors	89	NRS			
7.6	Debriefing of Unsuccessful Respondents	89	NRS			
	Ν	Maximum Technical Score:	444	=		

B.4 <u>Technical Scoring Guidelines</u>

The following scoring guidelines are referenced in technical bid evaluation scorecard.

Note	Detailed Scoring Guidelines & Instructions	Points
1a	Within the meter nurchasing specifications (included as Appendix A) har coding concurrence with local numbering	4

- 1a Within the meter purchasing specifications (included as Appendix A), bar coding, concurrence with local numbering convention, listed deliverables and concurrence with the provision of quality system records are each basic requirements. Score 1 point for conformance to each requirement (i.e. maximum 4 points).
- 1b With reference to the requisite "*Tabulation of Revenue Meter Notices of Approval*" (see pages 39 and 40 within Addendum #3), compliance with Ministry of Energy requirements implies that the bidder would have an approved meter (or meter in the queue) for each of the nine (9) energy meters. Score 1 point for each energy meter (i.e. maximum 9 points) approved or in the queue.

Service Type			Sir	ngle-Pha	se Mete	15		Netv	vork M	eters				T	hree-Ph	ase Mete	rs			
		Er	ergy O	nly	Con	mbinati	on	En	ergy Or	nly		Er	iergy Oi	ıly			Co	mbinati	on	
Metering Elen	ients:	1	1	1½		1			2		2	2	21/2	3	3	2	2	21/2	3	3
Wires:		2	2	3		2			3		3	3	4	4	4	3	3	4	4	4
Self-contained	or Tx-rated:	SC	Tx	SC		Tx			SC		SC	Tx	Τx	SC	Tx	SC	Tx	Tx	SC	Тx
Current Class	(per CSA C17):	200	10	200		10			200		200	10	10	200	10	200	10	10	200	10
Voltage Class:		120	240	240		240			345		600	345	345	345	345	600	345	345	345	<u>345</u>
ANSI Form N	umbers:	1	3	2		3			12		13	35	36	16	9	13	35	36	16	9
s of Approval Compatible S	Revenue Meter #1	<u>1</u>	1	1		+2			1		<u>1</u>	1	1	1	1	+2	+2	+2	+2	+2
Canada Notice Numbers for C Revenue Meter	Revenue Meter #2	+1	+1	+2		+1			+2		+1	+1	+2	+2	+2	+1	+1	+2	+2	+2
Measurement Reference	Revenue Meter #3	+1	+1	+2		+1			+2		+1	+1	+2	+2	+2	+1	+1	+2	+2	+2
Meters Submitted for Approval	Submission Date & Meter Type	+1	+1	+1		+1			+1		+1	+1	+1	+1	+1	+1	+1	+1	+1	+1

LDC's are interested in choice and interoperability. Score 2 additional points for each additional approved commonly-used energy meter (i.e. ANSI Forms 2, 12, 36, 16 and 9), and 1 additional point for approved less-frequently-used energy

Note	Detailed Scoring Guidelines & Instructions	Poi	nts
	meters (i.e. ANSI Forms 1, 3, 13 and 35). For revenue meters listed as being in the Measurement Canada queue, score only 1 additional point for each meter in the queue.		
	LDC's are also interested in leveraging the AMI system for supporting combination (energy + demand) meters. Score 2 additional points for every approved commonly-used combination meter (e.g. ANSI Forms 36, 16 and 9), 1 additional point for approved less-frequently-used combination meters (e.g. ANSI Form 3, 13 and 35), and 1 point for each combination meter in the Measurement Canada queue.		
	As indicated in the above tabulation, the maximum score available for this section is 82 technical points.	82	
1c	Demonstration of revenue meter interoperability (for Phase I) shall be scored as follows:	12	
	(i) {number of <u>brands</u> of energy meters connected to LAN - 1} x 2 points +		
	(ii) {number of <u>brands</u> of combination meters connected to LAN} x 2 points +		
	(iii) {number of <u>brands</u> of water meters connected to LAN} x 2 points.		
	Example: Bidder will demonstrate a LAN populated with energy meters from 3 different manufacturers, combination meters from 2 different manufacturers, and water meters from 2 different manufacturers. The proposal would then be evaluated at $[\{3-1\}x2] + \{2x2\} + \{2x2\} = 12$ points		
1d	With respect to the final two paragraphs, the "tilt" feature is a basic requirement and scores 1 point. The "green LED" feature is more important from a deployment perspective and scores 2 points for acceptable signaling devices.	3	
			101
2a	The bidder has been asked to provide five (5) pieces of RF performance information (i.e. the bullets on page 43 of the RFP). Fifteen (15) technical points have been allocated for this bulleted list (i.e. 3 technical points per bullet). The identified technical advisor (for RF systems) will be requested to prepare interpretive materials that will permit each member of the technical panel to assign a {0, 1, 2 or 3} score to each bullet. Given the evaluation mechanism and timetable, it is entirely likely that the interpretive materials won't be available for some time, and final scoring for this section will be deferred until the "outliers" identification & discussion meeting.	15	
2b	The external connector requirements is viewed as an important diagnostic tool and scores 2 points for acceptable interfaces, 1 point for "limited" interfaces, and 0 points for no interface.	2	
			17
3	Low temperature operation is scored as per the following tabulation:	2	
	(i) -30 deg C - mandatory minimum requirement of Ministry of Energy specification - score 0		
	(ii) -40 deg C - score +1		

Note	Detailed Scoring Guidelines & Instructions	Points
	(iii) -50 deg C - score +2	
4a	The bulleted list includes six (2) <u>important</u> requirements for LAN features, each scored at 2 points for a total of 12 technical evaluation points.	12
4b	The presentation of performance metrics is gauged as a diagnostic tool using the following (subjective) ranking scheme: 0 = bidder's offering has little or no value as a diagnostic tool;	3
	I = bidder's offering seems awkward to use or provides limited value as a diagnostic tool; 2 = bidder's offering seems awkward to use, but provides value as a diagnostic tool; or	
	3 = bidder's offering seems well designed / organized and provides great value as a diagnostic tool.	
4c	Mesh radio offering will be scored in accordance with the following scheme:	7
	(i) Conformance to draft IEEE Standards? - +2 points	
	(ii) Field upgradable mesh operating system (in radio)? - +1 point	
	(iii) Meter firmware upgradable remotely? $-+2$ points	
	(iv) MTO costing compliant with specified standards? - +2 points	
		22
5	Communications Network Interface shall be scored in accordance with the following items:	10
	 (i) Open standards for overall Communication Network Interface and Formats (IEEE, IETF, ITU-T, IEC, ANSI, BS, etc): +3 points 	
	 (ii) Types, procedures, links and open standard transmission protocol of each Communications Network Interface between AMCD, AMRC and AMCC (via WAN): +3 points 	
	 (iii) Types, procedures, sophistication and open standards of Security and Encryptions between AMCD, AMRC and AMCC (via WAN): +2 points 	
	 (iv) Quality of Services (QoS) and Class of Services (CoS) for overall Communications Network Interface between AMCD, AMRC and AMCC (via WAN): +2 points 	
	This element will likely only be evaluated by those panel members with IT and network communications experience expertise.	
6	The data formats and structures shall be scored in accordance with the following scheme:	3
	(i) ANSI Standard - important requirement - score 2 points for compliance	
	(ii) supply of EDL - basic requirement - score 1 point for compliance	

Note	Detailed Scoring Guidelines & Instructions	Poi	nts
7	End-to-end electronic security is an essential requirement, but there are various levels of sophistication in fulfilling the underlying requirement. Page 50 of the RFP includes a bulleted list of electronic security techniques that are often used in tandem. Although the scale is admittedly subjective, evaluators will be asked to rank each offering on a scale from 0 to 5, where 0 means the security scheme doesn't quite meet the intent, and 5 means that the bidder is proposing a well considered combination of sophisticated and effective measures in their offering. It is expected that those evaluators with IT or specific expertise and knowledge of this subject matter will score this section.	6	
	In cases where a "white paper" has been submitted that evaluators believe provides useful improvements in a credible timeframe, score +1 additional point.		
8	Ruggedness and appearance of regional collector enclosures and suitability of attachment hardware is difficult to quantify in advance, but experienced LDC staff will have little problem identifying issues. Three (3) evaluation points are allocated for what is admittedly a subjective assessment.	3	
9	The transceiver & antenna / coupler for regional collectors is likely different than the under-the-glass transceiver & antenna / coupler employed in the revenue meter, but the scoring methodology is identical to that used previously for Sections 6.2.4.1 and 6.2.4.2.		
10	The battery backup capacity is a basic requirement - score 1 point for compliance with 2X factor on baseline offering. Score one additional point (+1) if baseline offering has a 3X or greater capacity factor. Score additional point (+1) if bidder has optional higher-capacity designs available (that could be deployed in special circumstances).	3	
11a	Score 1 point for each migration option available (i.e. +1 for WiMAX, +1 for fibre-optic, +1 for other) to maximum of 3	3	
11b	Score 2 points for IF / BNC connnector interface; score 1 point for baseband / RJ-45 connector interface.	2	
			5
12	The referenced MITRE Corporation publication contains chapters of specific interest to this project. The bidders offering shall be compared against the guidelines and scored (subjectively) as follows:	24	
	(i) Conformance to Chapter 1, Data Entry, requirements? - 4 points		
	(ii) Conformance to Chapter 2, Data Display, requirements? - 4 points		
	(iii) Conformance to Chapter 3, Sequence Control, requirements? - 4 points		
	(iv) Conformance to Chapter 4, <i>User Guidance</i> , requirements? - 4 points		
	(v) Conformance to Chapter 5, <i>Data Transmission</i> , requirements? - 4 points		
	(vi) Conformance to Chapter 6, Data Protection, requirements? - 4 points		

Note	Detailed Scoring Guidelines & Instructions	Points
	It may not be possible to properly assess compliance based on a review of the bidder's proposals. It may be necessary to formulate a sub-committee of the technical panel to carry out this assessment via remote access to systems.	
13	The interface to the provincial MDM/R is a mandatory requirement. Score 2 points if the bidder's protocol complies with CMEP, score an additional point (+1) if the bidder already has a working and tested interface to the MDM/R, and score an additional point (+1) if the bidder declares that the offer includes all software upgrades as may be necessary to provide a compliant interface to the MDM/R.	4
14	The RFQ identifies three interface methods for external access of the AMI data. Three (3) points are available for a subjective assessment whereby 0 means "the interface method is primitive or will be a headache to maintain (or both)", and the full score of 3 points means "this is the modern way of doing things in a state-of-the-art IS operation". This element will <u>likely</u> only be evaluated by those panel members with IT expertise.	3
15	Scoring of the outage management interface function is based on the following elements:	9
	(i) Support for "loss of voltage" / "restoration of voltage" reporting in meter and upstream - 1 point	
	(ii) Last-gasp functionality in meter? - +1 point	
	(iii) Response time for defined event to master station as follows:	
	> 2 minutes - 0 points	
	> 1.75 minutes < 2 minutes - 1 point	
	> 1.5 minute < 1.75 minutes - 2 points	
	> 1.25 minute < 1.5 minutes - 3 points	
	> 1 minute < 1.25 minutes - 4 points	
	> 45 seconds $<$ 1 minute - 5 points	
	< 45 seconds - 6 points	
	(iv) If function already exists for at least one commercially-available OMS system (and may simply needs minor adjustment for London Hydro), score an additional point (+1).	
16	Score 2 points if the system supports bi-directional revenue meters. If so, score an additional 2 points (+2) for the	4

.....

Note	Detailed Scoring Guidelines & Instructions	Points
	availability of a bi-directional meter / only 1 point if (+1) it is in the Measurement Canada queue.	
17	Score two (2) points if there is a WMTU available, and two additional points (+2) if another brand WMTU is available for demonstration of interoperability.	13
	The Note on page 63 identifies the five features that design adequacy will be gauged against - 5 points in total available:	
	Three (3) basic features are described in the bullets on page 63 - 3 points in total for compliance.	
	One additional point (+1) available for "value added flow information"	
18	With respect to the second set of bullets on page 65, scoring shall be as follows:	5
	(i) bullet #1 - prediction of day credits exhausted -> 1 point; warning chirp> 1 point;	
	(ii) bullet #2 - limiter feature> 1 point; negative credit feature> 1 point:	
	(iii) bullet #3 - customer-friendly disconnect> 1 point	
19	Score one point for export to other systems; score a second point for import from other systems; and score another point if the transfer is based on a standard protocol.	3
20	The referenced maintainability handbook contains 14 chapters. Two (2) technical points are available for compliance with each chapter for a total of 28 technical points, i.e.	28
	(i) Section 2.1, Unitization, modularization and standardization, - 2 points available	
	(ii) Section 2.2, Unit layout, mounting and configuring, - 2 technical points available	
	(iii) Section 2.3, Labeling, marking and coding, - 2 technical points available	
	(iv) Section 2.4, Equipment accessibility, - 2 technical points available	
	(v) Section 2.5, Controls, displays and protective devices, 2 technical points available	
	: (xiv) Section 2.14 Maintenance Safety - 2 technical points available	
	(xiv) section 2.14, <i>internative bujety</i> , - 2 technical points available	
	compliance is best determined with a sample "regional collector" device in-hand. As such, it is impractical for technical panel members to determine compliance based on the written proposals. It may be necessary to establish a sub-panel to physically examine each regional collector design and report on compliance at or following the outliers analysis.	

***** - ***** - *****
Appendix C

AMI Most Probable Cost Model

C.1 <u>xxx</u>

Insert Excel spreadsheet here

Appendix D

Interview Questions for Site Visits

D.1 <u>Reference Check Questionnaire</u>

When checking references, a standardized introduction and set of questions shall be formulated so that responses may be compared accurately. The following is included as reasonable depiction of the reference check questionnaire – the Technical Panel however may elect to alter the wording for a few questions, or add/delete questions prior to the interview phase.

A convenient interview time (approximately one hour) will have been preset with the reference. A copy of the questionnaire will have been sent in advance.

Vendor: _____ Date:

Hello, my name is ______ and I represent a consortium of electrical distribution companies in Ontario. We are evaluating bid responses to an RFP for Advanced Metering Infrastructure, also referred to in the industry as a Smartmeter system. Your name has been provided as a reference by ______ (*company*) and I would like to ask some questions. Let me begin by introducing those from our Smartmeter purchasing consortium that are participating in this reference check.

Consortium Participants:	Name	Representing	
According to(<i>title</i>) and	(vendor) I shoul d you are responsible for	d be talking to	_ (name),
Could you introduce those the	hat are participating in th	is reference check and their roles:	
Reference Participants:	Name	Position / Role	

The Company

[1] Based on your experience with the company, how would you rate them in regard to meeting their development schedules with your system?

Significantly positive	Moderately positive	Neutral	Moderately negative	Significantly negative
------------------------	---------------------	---------	---------------------	------------------------

[2] How many people were involved in the delivery and installation of the product? Was that number sufficient for the effort? Number: _____

Yes		No

[3] Was a prime contact / project manager named? Who: _____

Yes No			Yes				No
--------	--	--	-----	--	--	--	----

[4] Was the prime contact the same person for the duration of the project?

Yes No

[5] Was the project manager easy to work with, organized, and keep the project on schedule?

Yes				No
-----	--	--	--	----

[6] Did the project manager receive good support from the home office, such as the ability to bring in specialists when necessary?

	Yes			No
--	-----	--	--	----

[7] Were there any significant problems with project management?

Yes No	
--------	--

[8] If yes, what were the problems?

	?	
L		

[9] Was the system installed on time?

Yes		No

[10] Were there any significant problems?

Yes		No

[11] If yes, what were the problems? ? Did the vendor provide sufficiently knowledgeable personnel for installation? [12] Yes No [13] Has the company been responsive to **software** problems since the installation? Yes No [14] Has the company been responsive to **hardware** problems since the installation? Yes No How would you characterize the quality of the software support the company has given [15] since the installation? Significantly Moderately Moderately Significantly Neutral negative positive positive negative Would you do business with this vendor again if given the opportunity? [16] Yes No [17] Are you a member of any user groups? Yes No If so, how would you characterize the vendor's responsiveness to requests from the user [18] group? Significantly Significantly Moderately Moderately Neutral unresponsive responsive responsive unresponsive Are there any aspects of your dealings with this vendor that we should be aware of in [19] order to improve our chances of getting an economical, quality, and responsive product? ?

[20] Do you know anyone else using this product that could give us some additional information or insight into the company or the product?

?

The AMI Solution

[1] Based on your experience, how would you rate your satisfaction with the AMI system?

Significantly positive	Moderately positive	Neutral	Moderately negative	Significantly negative
------------------------	---------------------	---------	---------------------	------------------------

[2] When was the AMI system installed?

?			

[3] Is the functionality now available in the AMI system as promised in the contract?

Significantly positive	Moderately positive	Neutral	Moderately negative	Significantly negative	
------------------------	---------------------	---------	---------------------	------------------------	--

[4] Is the performance and response time of the AMI system as promised in the contract?

Significantly positive	Moderately positive	Neutral	Moderately negative	Significantly negative
------------------------	---------------------	---------	---------------------	------------------------

[5] Was the AMI system delivered easy to learn and use?

Significantly positive	Moderately positive	Neutral	Moderately negative	Significantly negative
------------------------	---------------------	---------	---------------------	------------------------

[6] What are the major strengths of this AMI system?

?				

[7] What do you consider to be the major problem or problems with this AMI system?

?

[8] In your opinion, does the solution perform efficiently?

Yes No

- [9] How many modifications to the basic system were required at installation?
 - ?
- [10] Did the vendor use a software "template" that was modified to meet your organization's specific requirements?



[11] Was the functionality delivered satisfactory relative to the requirements stated in the RFP?



[12] Were custom programs written?



[13] How many custom programs had to be written and what was their function?

- [14] Was sufficient documentation provided for your users, system analysts, and technical
 - people?

?

Yes		No

[15] Is the documentation clear, concise, and easy to use?

	Yes				No
--	-----	--	--	--	----

[16] Did the vendor provide sufficient user and technical training, including that for employers if such was requested?

Yes No

[17] After the training, as you began to use the system, did you feel the training was sufficient in depth and of the appropriate kind?

Yes		No

[18] Were you satisfied with the amount of testing done during user acceptance testing?

Very satisfied	Moderately satisfied	Neutral	Moderately unsatisfied	Very unsatisfied
----------------	----------------------	---------	------------------------	------------------

[21] Have the updates and revisions been timely and easy to install?

[22] Is the response time to process or post a typical transaction in the range you had required?

1	1 1	51	ε.	· · · · ·
Yes				No

No

[23] Has your staff made modifications to the solution?

Yes		No

[24] How would you rate the ease of modifying the system?

Significantly Moderately positive positive	Neutral	Moderately negative	Significantly negative
--	---------	------------------------	------------------------

[25] What is your staff's technical level?

Yes

challenged

[26] What is your staff's experience level?

Very strong Moderately st	g Neutral	Moderately challenged	Significantly challenged
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[27] How responsive was the vendor to resolving problems during the warranty period?

Often or always prompt	Sometimes prompt	Neutral	Sometimes delinquent	Often or always delinquent
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[28] Did the vendor request what you might consider an excessive number of change orders during the project?

Yes		No

[29] How effective was the solution provider in controlling "scope creep" and in containing the cost of the implemented solution?

Very effective	Moderately effective	Neutral	Moderately challenged	Significantly challenged
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[30] How accurately did the solution provider estimate the time required from your staff including system requirements review, user acceptance testing, training, and rollout?

Very accurate	Moderately accurate	Neutral	Moderately inaccurate	Significantly inaccurate
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Appendix E

Miscellaneous Instructions & Forms

E.1 Conflict of Interest Declaration Form

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MATERIAL DISCLOSURE – EVALUATION COMMITTEE MEMBERS

Declaration of Material Interests (the "Declaration")

Name:

I am a participant in the process established to review and/or evaluate Responses ("Submissions") from the Bidders in the procurement competition referred to as RFP # T2007-N-6 for Advanced Metering Infrastructure (AMI) – Phase 1 Smartmeter Deployment. As a condition of my participation, the Consortium of LDCs (Consortium), as represented by London Hydro's Project Sponsor (Project Sponsor), on behalf of the Consortium requires me to declare any "Material Interest" (as that term is defined below) that I may have with respect to any of the Bidders, or any owner associated with any Bidder (collectively, the "Bidders"). The Bidders are listed on Schedule "A" to this Declaration.

I understand that the review and/or evaluation of Submissions is to be undertaken by persons who are objective and unbiased, and who can participate in the RFP without being in any actual or perceived conflict between their own interests and those of the Consortium. By signing this Declaration I declare that, to the best of my knowledge:

- 1. I do not, as of the date hereof, have any Material Interest in or with any Bidder, other than as listed in this Declaration;
- 2. I will immediately advise the Project Sponsor, and confirm such advice promptly in writing, if, at any time before the execution of any Agreement by the Consortium (or any individual LDC) with any Bidder resulting from the RFP, I discover or otherwise become aware that I had at the date of this Declaration, or have subsequently acquired, any Material Interest in or with any Bidder, other than as listed in this Declaration; and
- 3. I will offer to withdraw from involvement in the RFP, if in the sole determination of the Project Sponsor, any actual or perceived conflict of interest is deemed to exist between me and any Bidder, whether or not based on the information contained in this Declaration.

For the purposes of this Declaration:

"Immediate Family" means my spouse, dependent child or parent.

"Material Interest" means:

- (a) any ownership or financial interest, directly or indirectly (not including through mutual funds), held by me or by any member of my Immediate Family in a Bidder;
- (b) a personal bias or inclination that would affect my decision, including a financial or other benefit, direct or indirect, to be obtained by me or by any member of my

Immediate Family from the selection or rejection of any Bidder for award of an Agreement pursuant to the RFP;

- (c) a professional or employment relationship between me or any member of my Immediate Family and a Bidder;
- (d) a personal relationship between me or any member of my Immediate Family and a Bidder, or any director or senior officer of a Bidder or any employee of a Bidder who is involved in the preparation of a Submission or otherwise in the RFP.

As of the date of this Declaration, the following are all of the Material Interests of which I am aware (insert "nil" if applicable, or list by name of Bidder and nature of interest – attach additional pages as necessary):

1.			
2.			
3.			
4.			
5			
5.			
DECLA	ARED by me this	_ day of	_, 2007.

(Print Name of Person)

(Signature)

Schedule A

Company #1 Company #2 Company #3

:

:

Company #n

E.2 <u>Objectives, Principles and Process for the Technical Panel</u>

TECHNICAL PANEL – OBJECTIVE, PRINICIPLES AND PROCESS

OBJECTIVE:

To have completed individual scores of a proposal within 3 days (targeting 2 days for evaluation & 1 day for processing & shipping) The completion target date for all proposals to be reviewed is the end of January 2008.

PRINCIPLES:

- 1. Only 1 proposal in possession at any one time
- 2. Each panel member equals 1 score (note: if a panel member feels they do not have the skill capacity to answer a question it should be left blank, not all 300 questions need a score by each panel member)
- 3. Maintain security & confidentiality (No homemade copies or keepsakes)
- 4. Allocation of proposals will be randomly done per Smart Meter Coordinator and Purchasing Coordinator.

PROCESS FOR TECHNICAL PANEL MEMBERS

- 1. Delegate a Lead Contact for your LDC (There are 10 LDCs on the Technical Evaluation Panel) The Lead Contact will be responsible for receipt, in LDC security & access, and return of proposal. (The Lead Contact must sign and return a Transmittal Certificate agreeing to these responsibilities)
- 2. Panel members read the proposals (no marking any proposal, use separate paper. Also no hard copies or electronic copies are to be made)
- 3. Panel members score the proposal using the rating guide. When there is a clear uncertainty, the panel member may record R/C for Requires Clarification)
- 4. Panel members electronically submit their score sheet to Smart Meter Coordinator (Pat Hewlett) using the following naming convention (bidders company name score sheet, panel members name, and date. (i.e. Xerox score sheet, Bob Jones, Nov. 18 2007.xls) Return the proposal to their Lead Contact.
- 5. The Lead Contact confirms completion of that proposal with Pat Hewlett and returns the proposal to Pat Hewlett.
- 6. If a panel member is not available either to do or complete a proposal the panel member passes on that proposal. An evaluation schedule will be provided indicating the dates proposals will be evaluated (it will not include the name of proposing company). Panel members will be asked to review this schedule and confirm with Pat Hewlett any proposals they will have to pass on due to vacation, prior commitments, etc. If a member due to unforeseen circumstances (i.e. sickness) is unable to complete a proposal the Lead Contact will let Pat know that the panel member passes on the proposal.

E.3 <u>Objectives, Principles and Process for the Technical Panel</u>

EVALUATION COORDINATION PROCESS GUIDE

OBJECTIVE:

To assure the administration of the evaluation process results in a defensible & fair result for each LDC to move to a contract or award.

PRINCIPLES

- 1. Single point of contact & control (in confidence and secure)
- 2. All activities auditable (comprehensive tracking & movement of materials)
- 3. No "conflicted of interest" parties involved
- 4. NDA confidentially provisions enforced
- 5. No LDC "internal" retention / processing of weightings (i.e. Individual LDC certificate of weightings)

PROCESS

- 1. Completeness check (passed proposals move to evaluation)
- 2. Conflict of interest check of all Panel members before dissemination of proposals
- 3. Execute NDA's & convey via transmittals to LDCs
- 4. All LDC weightings must be submitted and confirmed by the Purchasing Coordinator and Smart Meter Coordinator before evaluation.
- 5. Prepare distribution of proposals to assigned LDC's Lead Contact panel member (Proposals & score sheets)
- 6. Each Evaluator will receive, secure & return score sheet
- 7. Smart Meter Coordinator and Purchasing Coordinator conduct a "R.C." (Requires Clarification) Capture. (i.e. a request for clarification may be requested if Pat/ Tom see indication that it is required)

Responsibilities of Smart Meter Coordinator / Purchasing Coordinator*

- Random order assigned to proposals
- Managing scheduling and shipping of documentation
- Transmittal activity
- Logging proposals (where/when/who)
- Excel file management

• Record management

* Note: When the Purchasing Coordinator assumes his role on the Financial Evaluation Panel (i.e. cost proposals are opened), then he will not assist with the coordination activities until such time as the cost evaluations are completed.

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