August 27, 2012

Ms. Kirsten Walli,
Board Secretary
Ontario Energy Board
2300 Yonge Street, 27th Floor
P.O. Box 2319
Toronto, ON
M4P 1E4

Attention: Ms. Kirsten Walli, Board Secretary

Dear Ms. Walli:

Re: Parry Sound Power Corporation – Licence #ED-2003-0006
2012 Smart Meter Prudence Review Application

Parry Sound Power is submitting a stand-alone application for Smart Meter Cost Recovery – Final Disposition using the Ontario Energy Boards Guideline (G-2011-0001) and the OEB Smart Meter Model V2.17.

An electronic copy of the application (PDF & excel) will be submitted through the OEB e-filing services and two hard copies via courier. All of the confidential materials submitted will be provided in a sealed envelope with the two hard copies.

If you have any questions, please contact the undersigned.

Yours truly,

Miles Thompson
Vice President, General Manager
Parry Sound Power Corporation
125 William Street
Parry Sound ON.
P2A 1V9
705-746-5866 Extension #24

ONTARIO ENERGY BOARD

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O.1998, c.15 (Sched. B);

AND IN THE MATTER OF an application by Parry Sound Power Corporation for an Order or Orders approving rates for smart meter cost recovery to be implemented January 1, 2013.

APPLICATION

1. The Applicant is Parry Sound Power Corporation ("Parry Sound"). Parry Sound is a licensed electricity distributor operating pursuant to license ED-2003-0006. Parry Sound distributes electricity to approximately 3,467 customers in the Town of Parry Sound.

2. Parry Sound hereby applies to the Ontario Energy Board (the "Board") for an order or orders approving recover of smart meter capital and OM&A costs related to minimum functionality and smart meter capital and OM&A costs incurred beyond minimum functionality, effective January 1, 2013.

3. The cost recovery is based on actual audited costs incurred until December 31, 2011 and forecasted costs to December 31, 2012.

4. The application for recovery of smart meter costs includes the following:

    a. Manager's Summary
    b. OEB Smart Meter Model V2.17
    c. Addendum 1 – Util-assist – CHEC Smart Meter Summary Report August 15, 2011
    d. Addendum 2 – Attestation Letter of the Fairness Commissioner
    e. Addendum 3 – Meter Deployment RFP
    f. Addendum 4 – Operational Data Store RFP
    g. Addendum 5 – Wide Area Network RFP
    h. Addendum 6 – Confidential Materials Filed with the Board

        - Meter Deployment RFP Evaluation
        - Operational Data Store RFP Evaluation
        - WAN RFP Evaluation
        - Meter Disposal RFI
        - Copies of contract with vendors

    i. Addendum 7 – Bill Impacts

Smart Meter Prudence Review Manager's Summary

1. Introduction:

This application is being filed by Parry Sound Power Corporation for smart meter cost recovery for the implementation of smart meters in the LDC's service area. The cost recovery is based on actual audited costs incurred to December 31, 2011 with interest costs, web presentment and other costs forecasted to December 31, 2012.

Parry Sound Power Corporation is specifically requesting the following:

1. Smart Meter Disposition Rate Rider (per metered customer per month) of $1.80 for two years (January 1, 2013 to December 31, 2014) for Residential customers and a Smart Meter Disposition Rate Rider (per metered customer per month) of $5.45 for two years (January 1, 2013 to December 31, 2014) for General Service < 50 kW customers. This rate rider reflects the Net Deferred Revenue Requirement of $190,107.26 being the difference between the Deferred Incremental Revenue Requirement from 2006 to December 31, 2011 and the SMFA revenues collected from 2006 to May 31, 2011.

2. Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month) of $4.01 for Residential customers and a Smart Meter Incremental Revenue Requirement Rate Rider (per metered customer per month) of $10.43 for General Service < 50 kW customers. This rate rider reflects the Incremental Revenue Requirement for 2012.

3. Parry Sound Power Corporation is not requesting recovery of the stranded meter costs. Stranded meter costs have been transferred to a sub-account of 1555 without carrying charges being applied going forward. Depreciation expenses for the stranded meters were not included in 2011 rates going forward. Stranded meters are in sub-account 1555 and will remain there and be dealt with in our next cost of service application.

Bill Impact Summary

Parry Sound Power Corporation has submitted the 2013 IRM3 Rate Application under Board file number EB-2012-0159. Shown in Table #1 below are the results of the distribution rate adjustments and overall bill impacts for Residential and General Service less than 50 kW customers from the IRM3 Application.

Table #1 – Bill Impacts Prior to Smart Meter Rate Riders

Class	kWh	Distribution Impact	Total Bill Impact
Residential	800	-7.16%	-1.91%
GS<50	2000	-10.33%	-2.05%

The bill impacts shown in Table #1 do not take into account the smart meter disposition rate rider and the smart meter incremental revenue requirement rate rider. As such, I have provided Table #2 below to

show the distribution and bill impacts to residential and GS<50 kW customers with the smart meter rate riders included.

Table #2 – Bill Impacts with Smart Meter Rate Riders

Class	kWh	Distribution Impact	Total Bill Impact
Residential	800	10.25%	2.84%
GS<50	2000	18.09%	3.71%

The bill impacts for residential and general service customers are portrayed in more detail in Addendum 7 of the document.

2. Collaboration of LDCs:

Parry Sound Power Corporation participated with LDCs within the Cornerstone Hydro Electric Concepts Association (CHEC) to implement smart meters in a cost effective manner. The collaborative initiative assisted LDCs in the development of project plans, RFPs and contract evaluations. As part of the collaborative effort CHEC LDCs entered into a professional services agreement with Util-Assist Inc., an Ontario consulting firm specializing in metering solutions and technologies, to assist with the development of the project plan, RFPs, evaluations, award of contract, project monitoring, problem solving and reporting. The cost benefit of the services agreement was reviewed and renewed in January of 2010. Review documents are included in Addendum 6 as confidential material.

CHEC is a not-for-profit member owned organization that provides value added services to their Local Distribution Companies (LDC) members. CHEC strives to reduce LDC costs through sharing of knowledge and information as well as providing savings through joint purchasing of goods and services with its members.

The twelve LDCs which form CHEC represent a customer base of approximately 100,000 customers. The existing members in CHEC include the following LDCs:

Centre Wellington Hydro
COLLUS Power
Innisfil Hydro
Lakefront Utilities
Lakeland Power Distribution
Midland Power Utility
Orangeville Hydro
Parry Sound Power
Rideau St. Lawrence Distribution
Wasaga Distribution
Wellington North Power
West Coast Huron Energy.

Cornerstone Hydro Electric Concepts Association (CHEC) is an incorporated body that is governed by a Board of Directors. The Board of Directors and Executive are voluntary positions from staff of the

member Local Distribution Companies (collectively, "LDCs" or "Member LDC's"). CHEC's vision is "to be recognized as the premier LDC Cooperative in the province, by meeting or exceeding member expectations through the sharing of services, opportunities, knowledge and resources." CHEC is built on sharing between LDCs through committees, staff and consultant positions, shared documents, specific working groups, combined projects and informal communications between members and staff. The Smart Meter Project represents one of these combine projects where LDCs working together achieve economies and successful implementation.

3. Status of Implementation of Smart Meters

Parry Sound Power has installed a total of 3357 meters as of December 31, 2011 which represents 100% of total meters. This application seeks the recovery of the revenue requirements in respect of these smart meters as follows:

Table #3 – Smart Meter Capital and OM&A Budget to Actual

Rate Filing	Budget	Actual	Variance
Minimum Functionality - Capital	$862,086.89	$847,551.69	-$14,535.20
Minimum Functionality - OM&A	$349,831.41	$78,047.07	-$271,784.34
Beyond Minimum Functionality - Capital	$120,727.97	$26,463.43	-$94,264.54
Beyond Minimum Functionality - OM&A	$48,990.93	$10,738.75	-$38,252.17
TOTAL	**$1,381,637.19**	**$962,800.94**	**-$418,836.25**

4. Recovery of Smart Meter Funding:

Since 2006 Parry Sound Power Corporation has been collecting funds associated with smart meter implementation. The basis for the recovery is outlined below:

- In the **2006** Decision and Order (EB-2005-0404) absent a specific plan or discrete revenue requirement, the Generic Decision provided $0.30 per month, per residential customer, to be added to Parry Sound Power Corporation's revenue requirement. The increase in the revenue requirement amount was allocated equally to all metered customers and recovered through their monthly service charge. The $0.30 per metered customer per month, effective May 1, 2006, was billed and the proceeds were credited in OEB Account 1555, Smart Meter Capital and Recovery Offset Variance Account.

- In the **2007** Decision and Order (EB-2007-0569), the Board approved an amount of $0.24 per month per metered customer for smart meter costs, effective May 1, 2007. The amount collected through the smart meter rate adder will be booked into the 1555 variance account.
- In the **2008** Decision (EB-2007-0825), Parry Sound Power Corporation requested the continuation of the smart meter rate adder previously approved by the Board in order to provide funding for possible future implementation of smart meter costs and to minimize future rate impacts. The Board approved the continuation of the rate adder of $0.24 per month per

metered customer. The adder revenue was credited to 1555 smart meter variance account, effective May 1, 2008.

- In the **2009** Decision and Order (EB-2008-0378), Parry Sound Power Corporation reported that it was authorized to conduct smart meter activities because it had procured smart meters pursuant to and in compliance with the August 14, 2007 Request for Proposal issued by London Hydro Inc. The Board approved the funding adder of $1.00 per metered customer per month as proposed by Parry Sound Power. This adder was intended for LDC's in the early stages of planning and it effective May 1, 2009.

- In its **2010** Decision and Order (EB-2009-0207), Parry Sound Power Corporation requested the continuation of its standard smart meter funding adder of $1.00 per metered customer per month. The Board approved the funding adder proposed by Parry Sound Power Corporation with rates effective May 1, 2010.

- In its **2011** Rate Order (EB-2010-0140), Parry Sound Power Corporation was required to file a rate mitigation plan for Residential and GS < 50 customers because their bill impacts were greater than 10%, in order to adhere to the Board's 2006 *Electricity Distribution Rate Handbook* (RP-2004-0188). Parry Sound Power Corporation offered in its reply submission dated August 4, 2011 to remove the 2011 smart meter funding adder of $2.50 per metered customer per month that was originally requested, for rate mitigation purposes. The Board accepted the removal of the smart meter funding adder and there were no adders after this point.

5. Project Overview:

Addendum 1 is a project summary prepared by Util-Assist which outlines the various stages of the project and the due diligence undertaken at each step. The report, prepared on behalf of CHEC, outlines the details of each process, the RFPs undertaken, evaluations and the award of contracts.

CHEC LDCs recognized the benefits of collaboration early in the process through participation in the Ontario Utilities Smart Meter (OUSM) working group, to become educated on all aspects of the AMI initiative. Involvement in the OUSM group continued along with the engagement of Util-Assist for specific project management. The details of the implementation project and the prudence reviews are outlined in Addendum 1 and include:

- Participation in Ministry of Energy and Infrastructure authorized London Hydro AMI RFP process (establishing best practice procurement procedures)
- ODS RFP and award of contracts
- WAN RFP and award of contracts
- Meter Disposal RFP
- Installation Service Provider RFP and award of contracts.

The RFPs are included in the addendums however the evaluations for each RFP are included in the confidential materials which have been provided.

6. Project Specifics:

6.1. AMI Selection:

Based on the London Hydro AMI RFP process Parry Sound Power was awarded Silver Spring Networks, as the recommended preferred proponent, based on the highest ranking by the Fairness Commissioner. As a result of the delays that Parry Sound Power encountered since the beginning of negotiations with Silver Spring Networks, August 19, 2008, we decided to declare the negotiations unsuccessful and terminated as of October 27, 2008. As stipulated in the London RFP, vendors would be given two weeks to negotiate. Parry Sound Power Corporation gave Silver Springs more opportunity to respond to the contract negotiation package then provided for in the terms of the RFP.

Successful negotiations were held with the second ranked proponent, Elster Metering (Elster's Energy Axis AMI system), as determined by the Fairness Commissioner. Attached as Addendum 2 are copies of the Attestation of the Fairness Commissioner (AMI RFP) Letter, the letter to Silver Springs Networks terminating the contract negotiations, and a Record of Activities related to Contract Negotiations with Silver Spring Networks.

6.2. Meter Deployment:

Based on the RFP process and financial and technology evaluations it was determined that Trilliant most closely met the requirements for the mass deployment of meters. Addendum 3 contains the RFP for the award of contract.

Shortly after Triliant was selected as the winning proponent, Olameter acquired Trilliant resulting in Olameter providing the deployment services. The impact of this ownership change was evaluated and based on the existing relationship between Olameter and the LDCs and their performance in the industry, awarding the contract was deemed appropriate.

The deployment of meters was planned to start on May 22, 2009 and was scheduled to be completed by February 10, 2010. According to the Smart Meter Installation Contract, Schedule D (Schedule of work) May 25, 2009 to August 5, 2009 is when the mass smart meter installations occurred. By the end of 2009 2,748 Residential and 448 GS<50 kW meters were installed. According to Parry Sounds Project Plan with the MDM/R, the mass deployment was completed by October 14, 2009. In 2010 31 Residential and 64 GS<50 kW meters were installed. In 2011 63 Residential and 3 GS<50 kW meters were installed. Some small commercial and hard to access meters were completed by Parry Sound's staff during 2011. The 2011 meters installed included both new customer installations and replacement meters.

6.3. Operational Data Store (ODS) Functionality:

With the implementation of the AMI system a need was recognized for an application that supported full integration with the MDM/R and enabled staff to audit, validate, interact with and

gain valuable business information from the wealth of meter data that was being collected. The AMI system, while fully capable of collecting meter read data and forwarding that raw data to the MDM/R, does not provide all of the functionality necessary to interpret and/or leverage the information it is providing in an educated and meaningful fashion. The ODS provides the following functions: stores operational data indefinitely, verifies readings, alarm filtering (Tamper, Outage), verifies power quality data, performs data gap analysis, and SLA management of the AMI system. Parry Sound Power decided to procure a system that was an Application Service Provider (ASP) model.

An RFP was issued for an operational data store (ODS) in November 2008. Following the RFP process, shortlisted vendors delivered software demonstrations, leading to the selection of Kinetiq as the preferred vendor with their ODS application. Addendum 4 contains the RFP for the award of contract.

The primary requirements and features of the operational data store (ODS) are:

a) **Dashboard of Field Issues Possibly Requiring Intervention** - Dashboard visibility to the real-time performance of the smart meter system to provide field staff with visibility to troubleshooting priorities such as non-communicating meters, non-communicating tower gateways/collectors, etc.

b) **AMI SLA Audit** - Audit and reporting / real-time notification capabilities to monitor AMI performance and therefore ensure that data collection and submission service-level agreements (SLAs) with the centralized MDM/R are consistently met.

c) **Read Re-submission** - The ODS will provide a data repository to facilitate backfilling reads after a meter installation, front-filling reads after a meter removal, and replacing reads labeled as NVE (Needs Verification or Edit) by the IESO MDM/R system. The ODS will provide a mechanism for meter data editing and VEE (Validation, Estimation and Editing) processes (in keeping with the MDM/R specifications), such data can then be re-submitted to the MDM/R. Features such as "register read validation failure resolution" will be invaluable.

d) **IESO MDM/R Report Integration / Issue Resolution Automation** - The MDM/R produces a large volume of reports on a daily or regular basis each potentially containing large amounts of information. Kinetiq will load the MDM/R reports, and filter the information they provide in order to provide manageable, meaningful action items that can be prioritized, investigated and resolved.

e) **Meter Event Monitoring** - Dashboard visibility to report meter events and indicators such as outages, restorations, tampers, voltage changes, etc., many of which will afford the opportunity to improve the safety and reliability of the distribution system.

f) **Revenue Protection** – LDCs will be able to identify and respond to meter tampers which historically would have resulted in unidentified theft of power.

g) **Outage Reporting** - Real-time outage information to facilitate faster response time, and therefore improved system reliability.

6.4. WAN Vendor Selection Process:

Due to the fact that Parry Sound Power utilized Elster Energy Axis AMI network, there was a requirement to select a Wide Area Network (WAN) vendor to provide the communications backhaul for their AMI networks. CHEC members began the process for the procurement of a WAN solution in Q4 2008 and the objective was to select a WAN solution that would provide a method to enable the AMI to meet the Ministry of Energy and Infrastructure's Functional Specification for the timely delivery and reliable transmission of meter data. The RFP was released by CHEC on December 5, 2008 and a decision was made to select Bell/National Wireless as the provider January 30, 2009, with an anticipated start date of April 1, 2009.

7. Business Process Redesign

Throughout the latter half of 2010, the Util-Assist training team delivered a series of education sessions covering the MDM/R design specifications, meter read data, VEE and other billing processes, and the design of a testing/cutover strategy. LDCs have widely recognized that a number of business processes, including new account setup, meter installations, meter changes, move-in/move-out and final billing all require scrutiny and procedural modifications to ensure that MDM/R integrations are optimized. Actual business process redesign is an ongoing process leading up to and after cutover.

8. System Changes

Modifications or additional modules to the existing billing systems were undertaken as part of the smart meter deployment and implementation of time of use billing. It was fully expected that existing systems could be modified to accommodate as illustrated by the successful implementation of time of use billing in other LDCs. The required add-ons software modules and professional services for the existing system, to ensure the integration was completed in the defined regulatory timelines, were negotiated and implemented.

9. Integration with MDM/R

To assist with the integration to the provincial Meter Data Management Repository (MDM/R) staff attended relevant IESO training sessions as well as further training sessions provided by Util-Assist. Registration paperwork and integration project plan were filed with the IESO on September 15, 2010. AS2 connectivity software to facilitate data integration with the MDM/R was selected and installed in August 5, 2010 and connectivity testing was scheduled with the IESO for December 2, 2010. The project plan called for Unit Testing to be executed in May 25, 2011, and System Integration Testing (SIT) June 17, 2011 and Qualification Testing (QT) July 18, 2011, in preparation for cutover to live data transfer with the MDM/R by July 23, 2011. The ability to meet these targeted timelines was to a large extent contingent upon various software systems delivering the promised functionality and suppliers meeting their contractual obligations. Cutover to production was attained in July 28, 2011.

10. Transition to Time of Use Pricing

In mid-2010, the Ontario Government articulated an expectation that 1 million RPP customers would be billed using TOU pricing by the summer of 2011, rising to 3.6 million customers by June 2012. On June 24, 2011, the Ontario Energy Board issued a proposed determination regarding mandated time-of-use pricing for regulated price plan customers (Board File No. EB-2011-0218), suggesting that distributor-

specific TOU dates would be the most appropriate approach, as it allows for the deadline to logically follow MDM/R enrolment activities.

In a letter dated August 4, 2010 regarding determination under Section 1.2.1 of the Standard Supply Service Code to Mandate TOU Pricing for Regulated Price Plan Consumers (EB-2010-0218), the OEB provided direction to all LDC's on mandated dates by which each distributor must bill RPP customers TOU pricing. Parry Sound Power's mandated date for TOU billing was September 1, 2011 for all residential and GS<50 kW customers. Parry Sound confirms that all of those customers were billed TOU pricing on the first full month of consumption after September 1, 2011.

11. Customer Education

Parry Sound Power hosted two information sessions for interested customers to educate them on how smart meters and TOU rates work; one during the deployment stage and the other session just before cutover to production. In the later part of 2009, Parry Sound held an information session to inform customers of the smart meter regulation and how they will be impacted. After installation customers received welcome packages delivered to their homes containing a welcome letter, a booklet outlining the important aspects of smart meters and TOU rates, resources for more information, and conservation tips and techniques.

On July 18th, 2011 Parry Sound hosted two Smart Meter Initiative Customer Update Meetings at the Bobby Orr Community Centre (morning and afternoon). James Douglas from Util-Assit came to give the presentation to anyone interested in the Parry Sound Area. He discussed what smart meters are, TOU pricing, when Parry Sound is moving to smart meter TOU rates (September 2011). TOU costs were giving for various household appliances. James Douglas explained smart meters, collectors, meter data collection, smart meter data repository, customer information and billing, home energy management, and many conservations tips and websites. The smart meter information session was advertised on MooseFM, Parry Sounds local radio station and also in the local paper inviting anyone interested to come attend.

Parry Sound Power put an article in the local paper regarding smart meters, TOU rates, implementation, conservation, etc. for anyone who could not attend the information sessions as well as bill inserts. Customers received a welcome letter in early August 2011 explaining the TOU periods and TOU rates along with a bill comparison of a billing period using RPP and TOU data. Parry Sound has set up meetings with customers that call in for further smart meter information and clarification.

12. Web Presentment

Parry Sound Power saw web presentment as another opportunity to work in co-operation with other LDC's for the delivery of web presentment for customers at reduced costs. After an extensive RFP process, Harris Northstar was chosen for this web presentment software tool. Parry Sound Power received a contract from Northstar Utilities Solutions on May 7, 2012 for a Customer/Connect – Customer Engagement Suite. The Customer/Connect Suite is a portfolio of modules organized by Platform, Application and Add-ons functionality. It will enable PSP's customers to gain access to high value consumption data, to better understand their usage patterns, to educate themselves on rates and what affects them and for the communication to be better from the utility to the customer. The

implementation fee for PSP is $15,000 for the following modules: Customer/Connect, CSR/Connect, Bill/Connect, CIS/Connect and Home/Connect. In addition to the implementation fee a monthly fee of approximately $257.96 will be incurred on an incremental on-going basis.

The Ministry of Energy has indicated that electricity customers should ideally have web access to their hourly consumption data. This will allow customer to monitor consumption, alter consumption, make informed decision, conserve, budget, etc. To date Parry Sound Power has not signed the contract and will not unless PSP can recover the costs through this smart meter application. Parry Sound has only included the $15,000 in the application.

13. Annual Security Audit:

With the mass deployment of AMI systems, security of the AMI network is critical to prevent utilities from becoming susceptible to new levels of potential security breaches and to ensure customer privacy and acceptance of the network. By installing network infrastructure in the field, there is now a requirement for additional security measures in order to ensure that utility data and equipment are kept secure from manipulation or other forms of control. As networks are deployed throughout the world, cyber security articles and reports with reports of the potential for smart-grid hacking are becoming commonplace in the media. The minimum Functional Specification for an Advanced Metering Infrastructure (AMI) released in July 2006 identified the need for security within the AMI network – Section 2.11 Security and Authentication: "The AMI shall have security features to prevent unauthorized access to the AMI and meter data and to ensure authentication to all AMI elements." Some of the privacy and network security infrastructure concerns that have been raised include:

- Monitoring a consumer's usage;
- Modifying one's own, or another consumer's usage;
- Interrupting the power of one or more consumers; and
- Tampering with demand side management tools which can be controlled through smart meters.

Since early 2009, Ontario utilities have been working with their smart meter providers to understand the security features of the networks, best practices for their deployment and new features that are being developed for future implementation within the smart meter networks. In November 2009 the Information and Privacy Commissioner of Ontario released the report Smart Privacy for the Smart Grid which identified areas of concern to be addressed in the area of smart meter and smart grid devices.

Going forward, annual security audit has been budgeted, as this is a prudent approach to satisfying the due diligence requirements for protection not only of the customer information, but also to ensure that access to the infrastructure is properly protected, thereby securing against unwanted modifications to data collection and/or load-control functionality. Security of the network and ensuring that customer data is protected at all times has resulted in the development of governance standards requiring extensive security measures such as NERC (North American Electric Reliability Corporation). The NERC reliability standards are developed by the electricity industry using a balanced, open, fair and inclusive process managed by the NERC Standards Committee.

For many Ontario LDCs, including Parry Sound Power, completing a security audit at a NERC, NIST (Network Information Security & Technology) or comparable level would be a cost-prohibitive exercise. Therefore a consortium of Ontario Util-Assist LDC customers have worked together in the issuance of the November 2010 "Smart Meter Network Security Audit Services" Request for Proposal.

The objective of the RFP is to select an audit partner who would complete a security audit of the Elster AMI systems for consortium members with Elster technology in place, and to the work with Elster towards the implementation of viable countermeasures to resolve all security concerns. The selected audit firm will first complete an in-depth security review at one participating utility that has the Elster solution. Once this review is complete, the audit firm would then review the technology at all remaining participating utilities to confirm that their Elster AMI systems are configured to the same standard as that declared as the standard for the group audit. Audits are anticipated to include end-to-end from the meter to utility systems and home area network.

N-Dimension Solutions was contracted by a consortium of 18 LDC's in Ontario to perform a detailed Cyber Security Audit of Elster's Advanced Metering Infrastructure (AMI) technology. This cyber security assessment was performed on several areas of Elster's operations. The assessment was based on the NISTIR 7628 document and NERC CIP standards. N-Dimension created a report to Parry Sound Power October 21, 2011 that stated a description of the risks and vulnerabilities identified in the audit process, recommendations were made for both Elster and PSP. With regards to Mesh Network/NAN Integrity it was recommended that PSP upgrade to the latest Elster versions to enable encryption, which is extremely important for the privacy of customer data and to reduce the chances that an attacker can participate on the network. Gatekeeper enclosures should be locked and should be mounted as high as feasible to reduce the likelihood of a malicious attacker obtaining a gatekeeper. Auxiliary encryption mechanisms should be used. HAN technology deployed may increase the overall attack surface of their network.

14. Copies of Agreements

The following agreements are being filed with the Board Secretary on a confidential basis:

Advanced Metering Infrastructure Services Agreement between Parry Sound Power and Elster Inc.;

Smart Meter Installation Agreement between Parry Sound Power and Olameter Inc; and

Operational Data Store Agreement between Parry Sound Power and Kinetiq Inc.;

RFP evaluations which include the pricing from each vendor.

Elster Inc., Olameter Inc. and Kinetiq Inc. are corporations which are engaged in competitive businesses. The disclosure of the terms of these agreements could reasonably be expected to prejudice the economic interests, competitive positions and cause undue financial interests of Elster Inc., Kinetiq and Olameter respectively, since it would enable their competitors to ascertain the scope and pricing of services provided by these companies. The Board's Practice Direction on Confidential Filings (the "Practice Direction") recognizes that these are among the factors that the Board will take into consideration when addressing the confidentiality of filings. They are also addressed in section 17(1) of

the Freedom of Information and Protection of Privacy Act ("FIPPA"), and the Practice Direction notes (at Appendix C of the Practice Direction) that third party information as described in subsection 17(1) of FIPPA is among the types of information previously assessed or maintained by the Board as confidential. Accordingly, Parry Sound Power requests that these Agreements be kept confidential.

Parry Sound Power is prepared to provide copies of the Agreements to parties' counsel and experts or consultants provided that they have executed the Board's form of Declaration and Undertaking with respect to confidentiality and that they comply with the Practice Direction, subject to Parry Sound Power's right to object to the Board's acceptance of a Declaration and Undertaking from any person.

In keeping with the requirements of the Practice Direction, Parry Sound Power is filing confidential unredacted versions of the Agreements under separate cover, in a sealed envelope marked "Confidential".

15. Justification for Functionality that Exceeds Minimum Functionality:

The installed meters and systems do not exceed the minimum functionality as specified in O. Reg. 425/06. Parry Sound Power Corporation has incurred costs beyond minimum functionality for integration with the MDM/R, TOU rate implementation, and forecasted web presentment.

16. Cost Variance:

Table #4 is a summary comparison of actual costs to budgeted costs for Smart Meter Capital and OM&A.

Table #4 – Actual to Budget Cost Comparison for Smart Meter Capital and OM&A

Rate Filing	Category	Budget	Actual	Variance
1.1 Advanced Metering Communication Device (AMCD)				
1.1.1 Smart Meter	1.1.1	$421,073.21	$347,175.15	-$73,898.06
1.1.2 Installation Costs	1.1.2	$65,453.03	$76,830.46	$11,377.43
1.1.3a Workforce Automation Hardware	1.1.3a	$3,192.82	$3,240.00	$47.18
1.1.3b Workforce Automation Software	1.1.3b	$0.00	$0.00	$0.00
1.2 Advanced Metering Regional Collector (AMRC) (includes LAN)				
1.2.1 Collectors	1.2.1	$9,402.45	$16,457.88	$7,055.43
1.2.2 Repeaters	1.2.2	$0.00	$838.47	$838.47
1.2.3 Installation	1.2.3	$20,358.36	$44,767.23	$24,408.87
1.3 Advanced Metering Control Computer (AMCC)				
1.3.1 Computer Hardware	1.3.1	$0.00	$14,544.26	$14,544.26
1.3.2 Computer Software	1.3.2	$91,745.14	$91,389.21	-$355.93
1.3.3 Computer Software License & Installation (includes hardware & soft	1.3.3	$0.00	$53,030.00	$53,030.00
1.4 Wide Area Network (WAN)				
1.4.1 Activation Fees	1.4.1	$0.00	$35,520.92	$35,520.92
1.5 Other AMI Capital Costs Related to Minimum Functionality				
1.5.1 Customer Equipment (including repair of damaged equipment)	1.5.1	$0.00	$0.00	
1.5.2 AMI Interface to CIS	1.5.2	$8,351.70	$8,100.00	-$251.70
1.5.3 Professional Fees	1.5.3	$121,380.00	$113,530.18	-$7,849.82
1.5.4 Integration	1.5.4	$24,756.98	$13,745.93	-$11,011.05
1.5.5 Program Management	1.5.5	$86,524.20	$28,382.00	-$58,142.20
1.5.6 Other AMI Capital	1.5.6	$9,849.00	$0.00	-$9,849.00
2.1 Advanced Metering Communication Device (AMCD)				
2.1.1 Maintenance	2.1.1	$0.00	$0.00	$0.00
2.2 Advanced Metering Regional Collector (AMRC) (includes LAN)				
2.2.1 Maintenance	2.2.1	$0.00	$0.00	$0.00
2.3 Advanced Metering Control Computer (AMCC)				
2.3.1 Hardware Maintenance	2.3.1	$0.00	$1,810.10	$1,810.10
2.3.2 Software Maintenance	2.3.2	$75,096.43	$38,700.94	-$36,395.49
2.4 Wide Area Network (WAN)				
2.4.1 Wide Area Network (WAN)	2.4.1	$10,206.00	$5,343.59	-$4,862.41
2.5 Other AMI OM&A Costs Related to Minimum Functionality				
2.5.1 Business Process Redesign	2.5.1	$0.00	$0.00	$0.00
2.5.2 CustomerCommunication	2.5.2	$7,017.19	$5,476.27	-$1,540.92
2.5.3 Program Management	2.5.3	$20,412.00	$6,404.25	-$14,007.75
2.5.4 Change Management	2.5.4	$10,896.98	$617.57	-$10,279.41
2.5.5 Administration Cost	2.5.5	$135,482.81	$6,321.60	-$129,161.21
2.5.6 Other AMI Expenses	2.5.6	$90,720.00	$13,372.75	-$77,347.25
Costs with the Initiative Not Identified In the OEB Smart Meter Rate Adder Model				
Beyond minimum functionality	2	$169,718.89	$37,202.18	-$132,516.71
	Grand Total	**$1,381,637.19**	**$962,800.94**	**-$418,836.25**
	Difference From Above			

16.1. Capital Cost Analysis:

1.1 Advanced Metering Communications Device (AMCD):
The variance in budget verses actual costs for the smarts meters is a result of Parry Sound having minimal defective meters and therefore additional costs were not incurred for removal and installation of defective meters, in which those costs were included in the budgeted amounts. Installation costs were higher than expected because there were many hard to change meters: very high, inside house, under deck, fenced in, covered, remote location etc. This caused additional costs to be incurred to change those meters.

1.2 Advanced Metering Regional Collector (AMRC):
Installation costs were higher than budgeted because Parry Sound hired Olameter to install the collectors rather than using internal staff due to the level of expertise required to install.

1.3 Advanced Metering Control Computer (AMCC):
The budgeted amount for computer hardware was $0 and the actual amount spent was $14,544.26, which $13,757.04 was for Dell Servers MAS and $787.22 for a Bluetree 6600 Modem from National Wireless. It was a necessity to purchase a backup server and modem due to smart meters and the additional data requirements. Software costs were pretty close to budgeted amounts. A software server and license was purchased for $53,030 which was a requirement but not included in the budget.

1.4 Wide Area Network (WAN):
As mentioned above due to the fact that Parry Sound Power utilized Elster Energy Axis AMI network, there was a requirement to select a Wide Area Network (WAN) vendor to provide the communications backhaul for the AMI networks. It costs $2,120.92 for the installation of WAN from National Wireless and $33,400 for the implementation for private/static IP.

1.5 Other AMI Capital Costs Related to Minimum Functionality:
Program management and other AMI capital were a lot less under budget probably because Parry Sound did not know what costs could be included in these categories and expensed them.

16.2. Operations and Maintenance Cost Analysis:

2.3 Advanced Metering Control Computer (AMCC):
Software maintenance was significantly under-budgeted because some items were expensed that should have been recorded here.

2.4 Wide Area Network (WAN):

Costs were less than budgeted because most of the WAN costs were capitalized.

2.4 Other AMI Capital Costs Related to Minimum Functionality:
Significantly less than budgeted was recorded because every cost was capitalized until Parry Sound Power cut-over to production which was in July 2011. No administration costs were recorded because there was no incremental administration labour costs as new employees were not hired just to complete the additional administration work required for smart meters.

16.3 Stranded Meter Costs

Parry Sound Power Corporation is not seeking disposition of its stranded meter costs. The Board found that the issue of stranded meter costs for Parry Sound be dealt with in a future proceeding as it appeared that the evidence on the issue was not complete, as per Decision and Order EB-2010-0140. As of December 31, 2011, Parry Sound Power Corporation had replaced 3,357 conventional meters with smart meters. The net book value of the stranded conventional meters at December 31, 2010 was $137,359.98. Parry Sound Power has the net book value of the stranded meters in a sub-account of 1555, no longer amortizes the meters, does not record carrying charges, and will be dealt with in the next cost of service application.

17 Smart Meter Rate Rider:

Parry Sound Power Corporation is therefore requesting a two year Smart Meter Disposition Rate Rider of $1.80 per Residential customer per month and a two year Smart Meter Disposition Rate Rider of $5.45 per General Service < 50 kW customer per month. Parry Sound Power is also requesting a Smart Meter Incremental Revenue Requirement Rate Rider of $4.01 per Residential customer per month and $10.43 per General Service < 50 kW customer per month.

Parry Sound Power has completed the Smart Meter Model V2.17 provided by the OEB in accordance with the instructions provided by board staff, a copy of the model is filed in excel and as a pdf with this application. This model provides the SMDR and SMIRR based on all metered customers; Parry Sound would like to allocate the costs in a similar approach to PowerStream's 2010 smart meter application (EB-2010-0209), as suggested by the Board. The methodology for allocating the rate riders to the two different customer classes is provided below:

a. Allocation of the total revenue requirement, using the following cost allocation methodology:
   - Allocation of the return (deemed interest plus return on equity) and amortization based on a CWMC (ie. Customer Weighted Meter Cost) that reflects the average actual cost of installing smart meters for the Residential and General Service < 50 kW classes. As shown in appendix 8, the average Parry Sound Power cost of

installing a smart meter for the Residential class is $84.89 and $294.93 for the General Service<50 kW class.

- Allocate the OM&A based on the number of meters installed for each class
- Allocate PILs based on the revenue requirement allocated to each class before PILs

b. Sum the allocated amounts and calculate the percentages of costs allocated to customer rate classes.
c. Subtract the revenues generated from the smart meter funding adder from the overall revenue requirement.
d. Allocate the amount calculated in part c by using the allocation factors derived in part b.
e. To calculate the smart meter disposition rider, divide the allocated amount by rate class derived in part f.
f. By the number of customers in each class, and then divide by 24 (months).

This allocation method was used to calculate the Disposition Rate Rider (Table #5) and the Incremental Revenue Requirement Rate Rider (Table #6). Table #5 below summarizes the calculation of the Disposition Rate Rider, based on costs to December 31, 2011. The total Revenue Requirement is $311,319.55 and once carrying charges and the Funding Adder from 2006 to May 31, 2011 are applied, the net recovery required is $190,107.26. Based on the calculations referred to above, this would result in a monthly disposition rate rider of $1.80 per Residential customer and $5.45 per GS<50 kW customer for a two year period.

Table #5 – Smart Meter Disposition Rate Rider

Calculated by Rate Class			
	Total	**Residential**	**GS < 50**
Allocators			
Parry Sound's Average Smart Meter Unit Cost	$ -	$ 84.89	$ 294.93
Smart Meter Cost	$ 393,145.33	$ 241,257.38	$ 151,887.95
Allocation of Smart Meter Costs	100.00%	61.37%	38.63%
Number of Meters Installed	3,357	2,842	515
Allocation of Number of meters installed	100.00%	84.66%	15.34%
Total Return (deemed interest plus return on equity)	$ 127,653.42	$ 78,335.74	$ 49,317.68
Amortization	$ 151,173.36	$ 92,768.97	$ 58,404.39
OM&A	$ 43,986	$ 37,238.30	$ 6,747.97
Revenue Requirement before PILs	$ 322,813.05	$ 208,343.01	$ 114,470.04
PILs	-$ 11,493.50	-$ 7,417.88	-$ 4,075.61
Total Revenue Requirement 2006 to 2011	$ 311,319.55	$ 200,925.13	$ 110,394.42
	100%	64.54%	35.46%
Smart Meter Rate Adder Revenues	-$ 117,939.43		
Carrying Charge SMFA	-$ 5,468.52		
Carrying Charge Deferred Expenses	$ 2,195.65		
Smart Meter True-up	$ 190,107.26	$ 122,694.91	$ 67,412.34
Metered Customers	3,357	2,842	515
Rate Rider to Recover Smart Meter Costs	$ 2.36	$ 1.80	$ 5.45

Table #6 displays the calculation for the Incremental Revenue Requirement Rate Rider, which is based on the methodology used in the Disposition Rate Rider calculations (except f. is divided by 12). Parry Sound Power is also requesting recovery of these costs.

Table #6 – Smart Meter Incremental Revenue Requirement Rate Rider

Calculated by Rate Class			
	Total	Residential	GS < 50
Allocators			
Parry Sound's Average Smart Meter Unit Cost		$ 84.89	$ 294.93
Smart Meter Cost	$ 393,145.33	$ 241,257.38	$ 151,887.95
Allocation of Smart Meter Costs	100.00%	61.37%	38.63%
Number of Meters Installed	3,357	2,842	515
Allocation of Number of meters installed	100.00%	84.66%	15.34%
Total Return (deemed interest plus return on equity)	$ 54,500.52	$ 33,444.76	$ 21,055.76
Amortization	$ 80,403.43	$ 49,340.33	$ 31,063.10
OM&A	$ 53,370	$ 45,182.57	$ 8,187.55
Revenue Requirement before PILs	$ 188,274.07	$ 127,967.66	$ 60,306.41
PILs	$ 12,874.34	$ 8,750.54	$ 4,123.80
Total Revenue Requirement 2006 to 2011	$ 201,148.41	$ 136,718.20	$ 64,430.21
Metered Customers	3,357	2,842	515
Rate Rider to Cover Smart Meter Costs	$ 4.99	$ 4.01	$ 10.43

18 CONCLUSION:

Parry Sound Power believes it has achieved great economies of scale and has reduced costs as much as possible through collaboration with CHEC in the RFP processes. Parry Sound Power Corporation respectfully submits all costs incurred are necessary to fulfill the provincial governments mandated smart meter initiative and in accordance with the Board's guideline (G-2011-0001). The proposed rate rider bill impacts are both less than the maximum 10% and are thus just and reasonable. Therefore, Parry Sound Power believes the rate riders outlined to be appropriate for the Board to approve for implementation effective January 1, 2013.

19 Addendum:

19.3 Addendum 1 **Util Assist - CHEC Smart Meter Summary Report August 2011**

19.4 Addendum 2 **Attestation Letter of the Fairness Commissioner**

19.5 Addendum 3 **Meter Deployment RFP**

19.6 Addendum 4 **Operational Data Store RFP**

19.7 Addendum 5 **Wide Area Network RFP**

19.8 Addendum 6 **Confidential Materials Filed with Board**

- Meter Deployment RFP Evaluation
- Operational Data Store RFP Evaluation
- WAN RFP Evaluation
- Copies of contract with vendors.

19.9 Addendum 7 **Bill Impacts**

Residential UPDATE

Consumption	800	kWh
RPP Tier One	600	kWh
Load Factor		
Loss Factor	1.0809	

	CURRENT ESTIMATED BILL			PROPOSED ESTIMATED BILL					
	Volume	Current Rate ($)	Current Charge ($)	Volume	Proposed Rate ($)	Proposed Charge ($)	Change ($)	Change (%)	% of Total RPP Bill
Energy First Tier (kWh)	600.00	0.0750	45.00	600.00	0.0750	45.00	0.00	0.00%	35.60%
Energy Second Tier (kWh)	264.72	0.0880	23.30	264.72	0.0880	23.30	0.00	0.00%	18.43%
TOU - Off Peak	553.42	0.0650	35.97	553.42	0.0650	35.97	0.00	0.00%	
TOU - Mid Peak	155.65	0.1000	15.56	155.65	0.1000	15.56	0.00	0.00%	
TOU - On Peak	155.65	0.1170	18.21	155.65	0.1170	18.21	0.00	0.00%	
Service Charge	1	21.67	21.67	1	21.86	21.86	0.19	0.88%	17.29%
Service Charge Rate Rider(s)	1	0.73	0.73	1	5.96	5.96	5.23	716.12%	4.71%
Distribution Volumetric Rate	800	0.0173	13.84	800	0.0175	14.00	0.16	1.16%	11.08%
Low Voltage Volumetric Rate	800	0.0011	0.88	800	0.0011	0.88	0.00	0.00%	0.70%
Distribution Volumetric Rate Rider(s)	800	(0.0047)	(3.76)	800	(0.0074)	(5.92)	(2.16)	57.45%	-4.68%
Total: Distribution			33.36			36.78	3.42	10.25%	29.10%
Retail Transmission Rate - Network Service Rate	864.72	0.0051	4.41	864.72	0.0051	4.39	(0.02)	-0.45%	3.47%
Retail Transmission Rate - Line and Transformation Connection Service Rate	864.72	0.004	3.46	864.72	0.0041	3.53	0.07	2.02%	2.79%
Total: Retail Transmission			7.87			7.92	0.05	0.64%	6.27%
Sub-Total: Delivery (Distribution and Retail Transmission)			41.23			44.70	3.47	8.42%	35.36%
Wholesale Market Service Rate	864.72	0.0052	4.50	864.72	0.0052	4.50	0.00	0.00%	3.56%
Rural Rate Protection Charge	864.72	0.0011	0.95	864.72	0.0011	0.95	0.00	0.00%	0.75%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.00%	0.20%
Sub-Total: Regulatory			5.70			5.70	0.00	0.00%	4.51%
Debt Retirement Charge (DRC)	800.00	0.00700	5.60	800.00	0.0070	5.60	0.00	0.00%	4.43%
Total Bill on RPP (before taxes)			120.82			124.29	3.47	2.87%	98.33%
HST		13%	15.71		13%	16.16	0.45	2.87%	12.78%
Total Bill (including HST)			136.53			140.45	3.92	2.87%	111.11%
Ontario Clean Energy Benefit (OCEB)		(10%)	(13.65)		(10%)	(14.04)	(0.39)	2.87%	-11.11%
Total Bill on RPP (including OCEB)			122.87			126.40	3.53	2.87%	100.00%
Total Bill on TOU (before taxes)			122.28			125.75	3.47	2.84%	
HST		13%	15.90		13%	16.35	0.45	2.84%	
Total Bill (including HST)			138.18			142.10	3.92	2.84%	
Ontario Clean Energy Benefit (OCEB)		(10%)	(13.82)		(10%)	(14.21)	(0.39)	2.84%	
Total Bill on TOU (including OCEB)			124.36			127.89	3.53	2.84%	

Parry Sound Power Corporation
Smart Meter Prudence Review
Filed: August 3, 2012

General Service Less Than 50 kW

Consumption	2,000	**kWh**
RPP Tier One	600	**kWh**
Load Factor		
Loss Factor	1.0809	

	CURRENT ESTIMATED BILL			PROPOSED ESTIMATED BILL						
	Volume	Current Rate ($)	Current Charge ($)	Volume	Proposed Rate ($)	Proposed Charge ($)	Change ($)	Change (%)	% of Total RPP Bill	% of Total TOU Bill
Energy First Tier (kWh)	600.00	0.0750	45.00	600.00	0.0750	45.00	0.00	0.00%	15.03%	
Energy Second Tier (kWh)	1,561.80	0.0880	137.44	1,561.80	0.0880	137.44	0.00	0.00%	45.91%	
TOU - Off Peak	1,383.55	0.0650	89.93	1,383.55	0.0650	89.93	0.00	0.00%		31.46%
TOU - Mid Peak	389.12	0.1000	38.91	389.12	0.1000	38.91	0.00	0.00%		13.61%
TOU - On Peak	389.12	0.1170	45.53	389.12	0.1170	45.53	0.00	0.00%		15.93%
Service Charge	1	32.38	32.38	1	32.66	32.66	0.28	0.86%	10.91%	11.22%
Service Charge Rate Rider(s)	1	1.10	1.10	1	16.13	16.13	15.03	1366.33%	5.39%	5.54%
Distribution Volumetric Rate	2000	0.0133	26.60	2,000	0.0134	26.80	0.20	0.75%	8.95%	9.20%
Low Voltage Volumetric Rate	2000	0.0008	1.60	2,000	0.0008	1.60	0.00	0.00%	0.53%	0.55%
Distribution Volumetric Rate Rider(s)	2000	(0.0029)	(5.80)	2,000	(0.0056)	(11.20)	(5.40)	93.10%	-3.74%	-3.85%
Total: Distribution			**55.88**			**65.99**	**10.11**	**18.09%**	**22.04%**	**22.66%**
Retail Transmission Rate - Network Service Rate	2,161.80	0.0046	9.94	2,161.80	0.0046	9.89	(0.05)	-0.50%	3.30%	3.40%
Retail Transmission Rate - Line and Transformation Connection Service Rate	2,161.80	0.0037	8.00	2,161.80	0.0038	8.17	0.17	2.13%	2.73%	2.81%
Total: Retail Transmission			17.94			18.06	0.12	0.67%	6.03%	6.20%
Sub-Total: Delivery (Distribution and Retail Transmission)			**73.82**			**84.05**	**10.23**	**13.86%**	**28.08%**	**28.87%**
Wholesale Market Service Rate	2,161.80	0.0052	11.24	2,161.80	0.0052	11.24	0.00	0.00%	3.76%	3.86%
Rural Rate Protection Charge	2,161.80	0.0011	2.38	2,161.80	0.0011	2.38	0.00	0.00%	0.79%	0.82%
Standard Supply Service – Administration Charge (if applicable)	1	0.25	0.25	1	0.25	0.25	0.00	0.00%	0.08%	0.09%
Sub-Total: Regulatory			**13.87**			**13.87**	**0.00**	0.00%	**4.63%**	**4.76%**
Debt Retirement Charge (DRC)	2,000.00	0.00700	14.00	2,000.00	0.0070	**14.00**	0.00	0.00%	**4.68%**	**4.81%**
Total Bill on RPP (before taxes)			284.13			294.36	10.23	3.60%	98.33%	
HST		13%	36.94		13%	38.27	1.33	3.60%	12.78%	
Total Bill (including HST)			321.07			332.63	11.56	3.60%	111.11%	
Ontario Clean Energy Benefit (OCEB)		**(10%)**	(32.11)		(10%)	(33.26)	(1.16)	3.60%	-11.11%	
Total Bill on RPP (including OCEB)			**288.96**			**299.36**	**10.40**	3.60%	**100.00%**	
Total Bill on TOU (before taxes)			276.06			286.29	10.23	3.71%		98.33%
HST		13%	35.89		13%	37.22	1.33	3.71%		12.78%
Total Bill (including HST)			311.95			323.51	11.56	3.71%		111.11%
Ontario Clean Energy Benefit (OCEB)		**(10%)**	(31.19)		(10%)	(32.35)	(1.16)	3.71%		-11.11%
Total Bill on TOU (including OCEB)			**280.75**			**291.16**	**10.40**	3.71%		**100.00%**