

Potential Risk / Barrier	Background	Type of Risk	Level of Risk	Mitigation Plan to Reduce Risk
Insufficient Supplier Availability <ul style="list-style-type: none"> IT Meters Communications 	<ul style="list-style-type: none"> Could be affected by delayed decision making of regulatory agencies Affected by number of vendors chosen Minimum requirements, once established, could eliminate available vendors to choose from Products may be available in the U.S., but do not have CSA or MC approvals Supplier availability may be affected by size of order 	Implementation Financial	Probability L Impact H	<ul style="list-style-type: none"> Setup overall schedule to be aware of lead times required Ensure technical and commercial requirements are not too stringent to avoid too few suppliers Clearly communicate required decisions dates and impact of missing dates Seek to amalgamate purchase requirements
Delayed Decision Making by External Agencies	<ul style="list-style-type: none"> Delayed decisions by agencies may jeopardize timelines Decisions that alter requirements may affect contracts 	Implementation Financial	Probability H Impact H	<ul style="list-style-type: none"> Effective governance and issue management through steering committee setup early on Identify changes necessary in OEB instruments (codes and licenses) Clearly communicate required decisions dates and impact of missing dates Work with MC to facilitate approvals Work with CSA for approvals and recognition of UL certification Establish flexible contracts that anticipate problems
Contract Defaults by Suppliers	<ul style="list-style-type: none"> Suppliers may not be able to meet supply requirements Supplier may not be capable of meeting required timeframes The supplier goes bankrupt 	Implementation Financial Operational	Probability M Impact L	<ul style="list-style-type: none"> Proper contracts, and careful review of actual abilities vs. stated abilities prior to engaging suppliers Avoid sole supplier arrangements Conduct vendor research Supervise suppliers, enforce contract milestones Perform credit assessment and ensure financial viability of suppliers before contracting with them

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Resource issues <ul style="list-style-type: none"> collective bargaining agreements insufficient installation resources 	<ul style="list-style-type: none"> Collective bargaining agreements may preclude competitiveness and/or contestability for LDC LDC or service provider may not have adequate resources for implementation plan CBA may prevent LDC from utilizing external resources Currently there are a number of strikes underway with contracting out as prime issues LDCs may be required to use high priced resources for low skill work Lack of skilled labour from service providers Training of available installers may not be an issue for residential single phase metering, but could be an issue if fast deployment of complex metering is expected 	Implementation Financial Operational	Probability M Impact H	<ul style="list-style-type: none"> LDCs should create open dialogue with bargaining units and respect agreements To the extent that respecting collective agreements including interim agreements results in higher costs, these incremental costs would not be born by electricity consumers Review and understand options/agreements regarding temporary and contract labour Ensure that implementation plan does not make false assumptions about the availability of outside resources Ensuring use of existing staff for complex metering may mitigate concerns over loss of jobs Train resources using available training programs and facilities where appropriate Hire resources from external service providers Develop inter-utility resource sharing arrangements where possible Allow for adequately staged implementation Allow for recovery of increased costs if new staff hiring and training is required Work with collective bargaining units and their hiring halls to obtain resources if cost effective
Poor Product and Installation Quality	<ul style="list-style-type: none"> Sudden increase in manufacturing of product in tight timelines increases the risk of reduced quality control Quality issues are often not apparent until some time after meter installation or warranty expiration New vendors may introduce products without securing necessary federal approvals Vendors will not pay any post-warranty costs associated with product recalls Most Meter Test Shops will not be able to calibrate or service electronic meters in-house 	Financial Operational	Probability L Impact H	<ul style="list-style-type: none"> Setup alternate suppliers to deal with quality issues Setup sample test installations early and obtain upfront cost recovery from OEB Test all chosen technologies early in the process to identify any issues as early as possible Ensure accredited meter verifiers provide meter sealing services Ensure proper training and skill levels of contract hires, and establish accountabilities for error and dispute resolution Ensure contracting terms specify expectations of quality and push risk onto vendors through penalty clauses Ensure meters have capability of remote software patches

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LDC Non-performance	<ul style="list-style-type: none"> Distributors will have difficulty buying into the plans if it is seen that ongoing future issues are not addressed. Distributors / shareholders may see increase in meter reading costs as manual reads of water metering may still be required. LDC's are not prepared to assume unnecessary financial risk with respect to cost recovery Intervenors and OEB may question costs to be recovered LDC's may be reluctant to move away from existing demand reduction or real time pricing initiatives LDCs may have limited resources that are working on other initiatives such as EDR, RPP and RAR 	<p>Implementation</p> <p>Operational</p>	<p>Probability M</p> <p>Impact H</p>	<ul style="list-style-type: none"> Ensure that LDC rate recovery is guaranteed Establish OEB processes to ensure LDC compliance Clear code requirements re: LDC obligations Allow process driver the authority to assign a third party to carry out distributor's obligations under the smart meter implementation plan if compliance issues persist (e.g. assign another distributor or a contractor) OEB must develop fair and defensible cost recovery processes Carefully plan implementation to reduce additional pressures in future years
Public Pressure on Government to Change Direction	<ul style="list-style-type: none"> Program will not be completed prior to next Provincial election (2007) Public pressure on government to reverse decisions Multiple initiatives underway that may impact on customers at the same time 	<p>Financial</p> <p>Implementation</p>	<p>Probability M</p> <p>Impact H</p>	<ul style="list-style-type: none"> Stay within the framework of the Minister's directive on smart meter implementation and work within present government's policy Well defined implementation plan Track achieved benefits and communicate early successes Develop a government communication plan aimed at all stakeholders Develop strong policy case for initiative that outlines benefits to customers

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Negative Customer Reaction	<ul style="list-style-type: none"> Customers may be unaware of smart meter initiative Customers may be concerned about privacy of data Customer may refuse to participate out of principle to show disagreement with initiative May be customer backlash if expected benefits don't materialize Customers may not be satisfied with implementation rate of program Customers may see this as a way to justify increase in bills Customers don't understand rate structure Other DSM or DR initiatives may result in multiple visits to homes increasing disruption to customers Large (non RPP) customers will want to be priority for smart meter installations as they remain exposed to spot market pricing (may be frustrated with LDC responsiveness) Timing of RPP in relation to smart meter installations may make customers think that a smart meter installation will increase their bills Customers in different LDCs pay different rates for smart meters 	<p>Implementation</p> <p>Operational</p>	<p>Probability H</p> <p>Impact H</p>	<ul style="list-style-type: none"> Careful and properly orchestrated communication and education plans from the Provincial level that are consistent with messages from local levels Adequate government penalties to ensure LDCs have authority to deliver implementation plan Demonstrate to the customer real methods for savings Develop close ties between Smart Meter initiative and DSM and DR initiatives Coordinate required visits to homes from different initiatives to minimize disruption to customers and better utilize LDC resources Set clear guidelines for LDC obligations with respect to customers who self-select for upgrade to smart meter Time RPP in relation to the smart meter installation so that customers view the smart meter as a way of being about to manage electricity costs Well thought out installation process clearly communicated to customer
Insufficient LDC cashflow to finance program	<ul style="list-style-type: none"> Many LDC's are still in the process of recovering costs from market opening and may struggle with cashflow Smart meter initiative will require funding for equipment purchases, installation programs, CIS and meter data management system changes, etc. 	<p>Financial</p> <p>Implementation</p>	<p>Probability L</p> <p>Impact H</p>	<ul style="list-style-type: none"> Upfront cost recovery processes should take LDC cashflow situations under consideration Analyze financing options provided by vendors Utilities may apply to the Minister for rate review by OEB if lacking funds

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EBT Hub Non-performance	<ul style="list-style-type: none">EBT Hubs will need to have their systems ready to be able handle the additional data that will be passed through their systems from LDCs to RetailersAlong with the additional volumes of data, new data for a customer will be received by the Retailer every day instead of on a weekly basis (current state)	Implementation Operational	Probability L Impact H	<ul style="list-style-type: none">The process driver should fully test hub readiness early on in the process to ensure that they will be ready