

London Economics International LLC

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Manitoba Hydro Cost of Service Methodology Review Workshop #2

Prepared for GSS/GSM customer class



Agenda

1 Introduction

2 Key Issues



LEI was retained to represent the interests of Manitoba Hydro's general service small and medium non-residential customers

- ► LEI was retained to represent the interests of Manitoba Hydro's general service small and medium ("GSS/GSM") non-residential customers in its cost-of-service ("COS") methodology review proceeding
- ► LEI's analyzed rate design issues from the perspective of GSS/GSM customers and proposes amendments to the existing COS methodology to improve its alignment with generally accepted rate making principles
- ► With some modifications, LEI believes ratemaking goals and COS methodology put forward by Manitoba Hydro are consistent with wider industry practice



LEI has identified four main issues which are important to general service small and medium customers

Issue	Status Quo	LEI Recommendation
1. Allocation of fixed costs to export sales	Assigned to 50% of export sales	Assign to 66% of export sales
2. Allocation of net export revenue ("NER")	Based on share of allocated costs	Base on share of total costs (allocated and direct)
3. Treatment of Demand-side management ("DSM") costs	Directly allocated to participating classes	Classify as demand and allocate using the D14 2CP allocator
4. Revenue cost coverage ("RCC")	RCC for GSS customers above the zone of reasonableness	Correct in subsequent rate application



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1 Summary

2 Key Issues



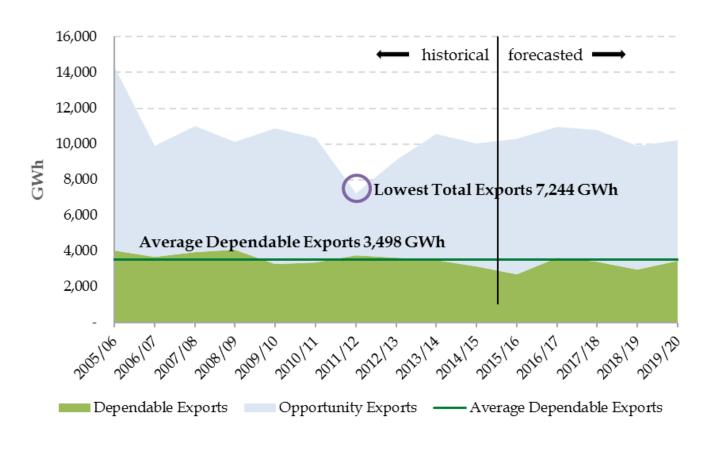
Fixed costs are currently only assigned to 50% of export sales

- ► Manitoba Hydro assigns full embedded generation and transmission costs to dependable exports, while opportunity exports only pay variable costs
 - MH has stated that new capacity is built for domestic load and advanced if firm contracts for dependable exports can be negotiated
- ► Current COS methodology defines the opportunity to dependable export sales split as 50:50 based on forecasted dependable and average water flows
- ► Sustained opportunity exports play a role in advancing generation investments
 - "because you're building it a little earlier you're attracting a long-term firm sale, and you're attracting then some additional revenues from the opportunity market for the surplus that that plant might provide."
 - Needs For and Alternatives To ("NFAT") Manitoba Hydro's Preferred Development Plan Manitoba Hydro assumes that <u>all</u> surplus electricity can be sold either as long-term firm energy or as on-peak and off-peak opportunity sales



Opportunity export sales can be considered reliable and so should pay a portion of fixed costs

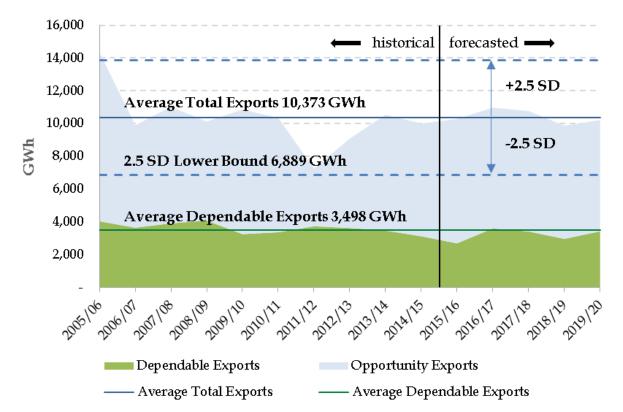
► Between 2005 and 2015, total export sales have never been lower than 7,244 GWh, which is more than double the average amount of dependable export sales (3,498 GWh)





A statistical approach to determine which exports pay fixed costs is proposed

- ► Lower confidence interval (2.5 standard deviations (SD) from the mean of total exports) represents a 1 in 162-year likelihood that total exports would fall below this threshold
 - Over the full 15-year period, average export sales are projected at 10,373 GWh with a 2.5 SD lower bound of 6,889 GWh, equivalent to 66% of average total export sales
- ▶ Based on this analysis, it is proposed that 66% of total export sales be considered dependable and be allocated full embedded generation and transmission costs; 34% would be allocated variable only





Exclusion of direct costs from the allocation of net export revenue is not consistent with the principle of fairness and should be replaced by a more holistic measure of total costs

- ► Net export revenues (NER) are distributed to each customer class based on allocated costs, not total costs
 - The introduction of the export class and current allocation of NER aimed to address the fairness issue related to export revenue offsetting generation and transmission costs prior to 2005
- ▶ Net export revenue should be allocated on the basis of total costs, which includes direct costs, due to the principles of fairness, objectivity and equity
 - Consumers in specific customer classes would not be able to be served if directly attributable investments were not made
 - "I suppose one could make the argument to extend the application to dedicated end-use facilities also. We stopped it at the point of delivery, which is really just the meter, and we've said that that is reasonable."



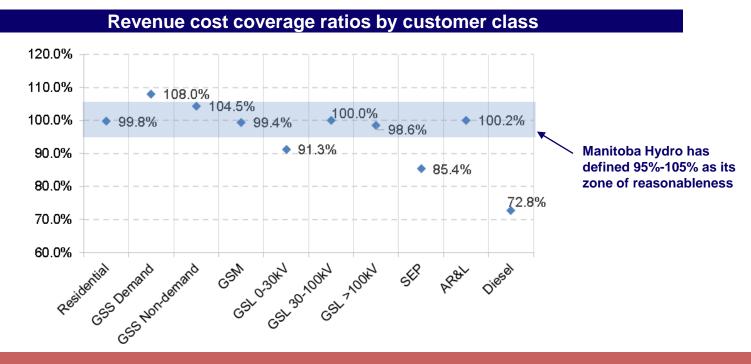
DSM costs should be allocated to customers that contribute to peak demand

- ► Currently, costs of DSM programs are directly attributed to individual participating customer classes
- ▶ Peak demand is the primary driver of the need and therefore costs to manage peak demand using DSM
- ► System-wide benefits from DSM are produced from a reduction in system peak demand costs and can be viewed as a public good
 - "Reductions in domestic demand have contributed to electricity surpluses, which have been sold on the export market to support lower domestic rates for Manitoba consumers, reduce greenhouse gas emissions, and defer the need for new Manitoba resources."
- ► The direct assignment of DSM costs penalizes participating customer classes for providing a system service
 - Allocation by demand strengthens rather than weakens incentives for DSM
- ► The need for DSM is driven by peak-demand consumption and therefore the costs to provide DSM should be allocated to the set of customers that consume at the peak
 - Allocate using the existing D14 2CP for Domestic and Dependable Export table



Cross-subsidization exists between the customer classes, which needs to be addressed at the next GRA

- ► A customer class' RCC is the ratio of the revenue collected from that customer class relative to its allocated costs
 - Customer classes with an RCC above 100% would be effectively paying to the cover costs allocated to other customer classes
 - Likewise, an RCC less than 100% indicates that the customer class is not charged rates sufficiently high enough to cover its allocated costs



This point was raised at the first workshop and the importance of reducing rates and correcting RCCs should continue to be underscored at the next general rate application