

**CONSUMERS ASSOCIATION OF
CANADA (MANITOBA) LTD./
MANITOBA SOCIETY OF SENIORS
(CAC/MSOS)**

1 **REFERENCE: InterGroup Consultants Report, page 7**

2

3 **QUESTION:**

4

5 a) Please provide a breakdown as to the number of MIPUG members in each of
6 Manitoba Hydro rate classes. In doing so, please distinguish between GSL 0-
7 30kV; GSL 30-100kV and GSL >100kV.

8

9 **ANSWER:**

10

11 **(a)**

12

13 Most MIPUG member accounts are in the >100kV class. Some MIPUG members have
14 accounts in the 30-100kV class.

1 **REFERENCE: InterGroup Consultants Report, page 6 (footnote #4) and page 12**
2 **(lines 1-2)**
3

4 **QUESTION:**
5

6 a) What issues (if any) does InterGroup or MIPUG believe should be addressed as
7 part of Manitoba Hydro's planned review of its cost-of-service methodology.
8

9 **ANSWER:**
10

11 **(a)**
12

13 The views of Messrs. Bowman and McLaren are as stated in the pre-filed testimony.
14

15 The cost of service study has previously been subject to extensive review and should
16 now be considered to produce reasonable and reliable results. Further extensive review
17 at this time is not necessary; incremental adjustments and improvements can be
18 routinely undertaken at sequential GRAs.
19

20 The cost of service study is required as an analytical tool to measure costs incurred to
21 serve each customer class. "Policy-related"¹ allocations that vary from normal cost
22 causation principles undermine the analytical value of the cost-of-service study and
23 should not be included in the values derived from the study.

¹ As noted in the Pre-filed Testimony, policy related allocations include the direct assignment against exports of Uniform Rate related costs, the Affordable Energy Fund related costs and allocation of Net Export Revenues against total allocated costs of each domestic class (e.g., distribution and customer service function). These considerations call all be addressed in ratemaking without being aspects of the cost of service study.

1 **REFERENCE: InterGroup Consultants Report, page 27**

2

3 **QUESTION:**

4

- 5 a) The Report states that “evidence available indicates that Manitoba’s ratepayer
6 risk to be borne through rates over the short-term is relatively low”. The
7 subsequent discussion focuses on concerns/risks regarding “rate
8 instability/predictability”. Please discuss whether, in InterGroup’s view, the risk of
9 “higher overall rate levels” is also a relevant concern that must be considered in
10 any risk evaluation.

11

12 **ANSWER:**

13

14 **(a)**

15

16 The preamble misquotes the evidence of Messrs Bowman and McLaren. The correct
17 quote is “...evidence available indicates that Manitoba’s ratepayer risk *tolerance* to be
18 borne through rates over the short-term is relatively low...”

19

20 A reasonable risk evaluation of Hydro must consider “higher overall rate levels” as a
21 “relevant concern”, as by definition the outcome of poorly managed risks will show up in
22 higher rate levels to domestic ratepayers.

23

24 However, this does not mean that the level of rates over a given period (a single year, or
25 a period of years) being higher or lower is determinative of whether risks have been
26 appropriately managed.

1 **REFERENCE: InterGroup Consultants Report, page 32, lines 12-19**

2

3 **QUESTION:**

4

5 a) Since the management of Manitoba Hydro's exports, debt portfolio and exchange
6 exposure impact on costs and rates, shouldn't the PUB (in the interest of cost
7 control and minimizing customer bills) be directly concerned with whether
8 Manitoba Hydro is following best practices in these areas?

9

10 **ANSWER:**

11

12 **(a)**

13

14 The Public Utilities Board should be broadly concerned with reviewing and
15 understanding Hydro's approach to managing risks related to exports, interest rates and
16 exchange rates, and ensuring the results are reasonable for rate setting purposes. It is
17 management's responsibility to manage the utility and the Board's responsibility to set
18 just and reasonable rates.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 28, lines 6-12 and**
4 **page 45, lines 23-28**

5

6 **PREAMBLE:**

7

8 The evidence makes reference to no rate increases from 1997-2004.

9

10 **QUESTION:**

11

12 a) Please provide MIPUG understanding of the absence of rate increases relative to
13 such factors as load, export revenue, inflation, construction, interest rates, etc.

14

15 b) Please compare annual and cumulative rate increases since 2004 to present.

16

17 c) Please MIPUG's understanding of the comparison outlined in (b) above.

18

19 **ANSWER:**

20

21 **(a) through (c)**

22

23 Rate increases and the cumulative rate increases for the period since 2004 are
24 summarized in Table 1 below. In addition, Hydro's application requests a further 2.90%
25 rate increase effective April 1, 2011 for all customer classes excluding Area and
26 Roadway Lighting.

1 **Table 1**
2 **Annual and Cumulative Rate Increases from 2003/04 through 2010/11¹**

	Annual Rate Increase (%)	Cumulative Rate Increase (%)
2003/04	-0.72	-0.72
2004/05	5.00	4.25
2005/06	2.25	6.59
2006/07	2.25	8.99
2007/08	0.00	8.99
2008/09	5.00	14.44
2009/10	2.90	17.76
2010/11	2.90	21.18

14
15 Generally Messrs Bowman and McLaren understand the absence of rate increases in
16 the period from 1997 to 2002 while Hydro simultaneously realized a material increase in
17 retained earnings can be attributed largely to the following factors:

- 18
- 19 • No major capital investment;
 - 20
 - 21 • O&M increases being well managed; and
 - 22
 - 23 • Rate payers benefitting from export revenues during a “decade of returns” after a
24 major investment in Limestone.

¹ Rate increases for 2006/07 through 2010/11 are for general consumers excluding area and roadway lighting customers.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 36, lines 24-26**

4

5 **PREAMBLE:**

6

7 The evidence states:

8

9 The recommendation at its core appears premised on consistency with the long-
10 term well accepted overall regulatory intent in Manitoba to minimize net costs of
11 generation and delivery to domestic customers.

12

13 **QUESTION:**

14

15 a) Please provide passages from Manitoba Hydro filings and PUB decisions (other
16 documents), including the specific related cites and references, on which the
17 statement in the preamble is based.

18

19 **ANSWER:**

20

21 **(a)**

22

23 While there are numerous examples pervasive to discussions about Hydro's pursuit of
24 new developments and export markets, as an example Messrs Bowman and McLaren
25 note the following specific references to support the statement that the overall regulatory
26 intent in Manitoba is to minimize net costs of generation and delivery to domestic
27 customers:

28

29 • Manitoba Hydro's Strategic Objectives referenced in the 1990 capital proceeding
30 which note that Manitoba Hydro practices Least Cost Planning by selecting the
31 combination of facilities, import/export arrangements and resource management
32 programs that contribute to the lowest rates and lowest long-term costs for
33 electricity supply¹.

¹ Page 4-1. Report of the Public Utilities Board in respect of Major Capital Projects of Manitoba Hydro, November 1990.

- 1 • The Terms of Reference to the Clean Environment Commission for the
2 Wuskwatim Project directed the Commission to: “consider whether all alternative
3 resource options have been considered and whether the Wuskwatim Proposals
4 have been selected on reasonable grounds, including economic viability as an
5 export market driven project and relevant technical factors.” The Terms of
6 Reference also required the Commission to review the effect, if any, of the
7 Wuskwatim Proposals on Manitoba Hydro customer rates and the Corporation’s
8 financial stability.²

² Appendix A. Clean Environment Commission Report on Public Hearings for the Wuskwatim Generation and Transmission Projects. September 2004.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 39, lines 11-13**

4

5 **PREAMBLE:**

6

7 The evidence states:

8

9 ...by a rough measure then, the level of target reserves per KM Report approach
10 may approximately double the targets used by Hydro, ICF and KPMG⁸¹ (in the
11 range of an approximately 50:50 debt:equity ratio, a target level of over \$5 billion).

12

13 **QUESTION:**

14

15 a) In reference to the parameters used in the passage above and the paragraph in
16 which it is contained, please provide the dollar quantification of supposed target
17 equity in 2020 (the estimated conclusion of the “decade of investment”).

18

19 **ANSWER:**

20

21 **(a)**

22

23 The KM Report indicates that the target of equity should be “at least a high percentage
24 of the full cost of a seven year drought with high import prices, high interest rates, and
25 an appreciated Canadian dollar” (page 18-19). The KM Report does not provide a
26 calculation of this value.

27

28 While KM did not calculate their own estimate of the cost of a seven year drought, they
29 provided the following observations:

30

31 • The report notes: “The costs of a 5 year drought are in the order of magnitude
32 used by MH...” (page 243). [As referenced in Bowman and McLaren pre-filed
33 testimony, page 37].

34

35 • The report does calculate the cost of a one-year drought for 1940 flows, of \$788
36 million (page 229) which is very close to Manitoba Hydro’s calculation of the

1 costs of a 1940 flow year, of \$747 million (PUB/MH-I-81(a)). [As referenced in
2 Bowman and McLaren pre-filed testimony, page 38].
3

4 For this reason, it appears reasonable to use Manitoba Hydro's estimated costs of
5 drought to consider the implications of the KM recommendations, as follows:
6

- 7 • **7 year drought versus 5 year drought:** Manitoba Hydro's estimated cost of a 7
8 year drought starting 2009 is \$3.5 billion (referenced in KPMG page 173). This is
9 approximately 30% higher than the Manitoba Hydro estimated cost of a 5 year
10 drought of \$2.7 billion starting in 2010.
11
- 12 • **Drought with high import prices, versus drought without high import**
13 **prices:** The KM Report indicates that the \$788 million cost of a one year drought
14 without high import prices rises to \$1.2 billion when high import prices are
15 considered (page 229, Table 6.2).
16

17 For this reason, a simplified estimate of the cost of the KM recommended target of
18 equity is a 7 year drought (\$3.5 billion if started in 2009; potentially higher if started later)
19 plus high import prices (a 50% premium to the basic drought estimate; \$3.5 billion x 1.5
20 = \$5.2 billion) plus high interest rates and an appreciated Canadian dollar¹ (no estimates
21 available – but understood to be factors intended to increase the costs of the
22 hypothetical drought). As a rough estimate, the KM Report would appear to recommend
23 retained earnings target in the near term to be a high percentage of an uncalculated
24 value that exceeds \$5.2 billion. For simplicity, Messrs Bowman and McLaren cite this as
25 “a target level of over \$5 billion” at the current time.
26

27 The only additional adjustment that appears available to address the level required to
28 achieve the KM recommendations by the end of the decade of investment is per the
29 KPMG report, which, at page 181, indicates the cost of a drought starting in 2019 is
30 approximately 32% higher than the cost of a drought starting in 2013, under Hydro's
31 recommended development plan. As a simple adjustment, this could yield a KM
32 recommended retained earnings level of between \$6-\$7 billion by the end of the IFF
33 period.

¹ The “appreciated” Canadian dollar may have a mitigative effect in a drought, rather than a compounding effect, as net US\$ outflows will be large for the purposes of purchased power and potentially fuel.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 39, lines 21-29**

4

5 **PREAMBLE:**

6

7 The evidence states:

8

9 ...there is no credible alternative for development of new plants such as
10 Conawapa as public power resources – alternatives that would have to be
11 considered in light of an inability of Manitoba Hydro to borrow in this manner
12 would presumably include private sector development of the plant with some
13 form of purchase agreement with Hydro (i.e., an Independent Power Producer
14 (“IPP”), the development of new “equity” in Hydro from some form of partial or full
15 privatization, or the abandonment of new capital-intensive hydraulic generation
16 development in Manitoba in favour of lower capital cost sources as natural gas
17 turbines. It is not apparent that any of these forms of options accord with the
18 established public policy framework in Manitoba or with long-term ratepayer
19 benefits.

20

21 The evidence outlines some alternatives to development of new plant.

22

23 **QUESTION:**

24

25 a) Please clarify whether a provincially owned merchant generation and/or
26 merchant transmission entity that is external to the regulated electricity entity
27 which currently provides service to domestic customers may be a possible
28 vehicle for construction and/or operation of facilities used for export purposes.

29

30 b) Please provide MIPUG’s understanding of why the alternative noted in (a) is
31 viable or is not viable, the criteria on how it should be evaluated and specific
32 references to supporting policy documents or statements.

1 **ANSWER:**

2

3 **(a) and (b)**

4

5 Yes, it may be a possible vehicle, just as any number of other possible vehicles may
6 exist, public or private, regulated or not regulated, etc. In the opinion of Messrs. Bowman
7 and McLaren, it is not, however, a recommended vehicle for developing future facilities
8 in Manitoba. This is for a number of reasons.

9

10 First, Manitoba Hydro operates an integrated system. As discussed in the 2006 cost-of-
11 service proceeding, there are almost no assets that are easily classified to being “used
12 for export purposes” or not used in this manner.

13

14 Second, the use of the assets also changes over time. While Wuskwatim or Keeyask
15 may be advanced on the basis of their ability to help serve exports for some period, each
16 is increasingly utilized to serve Manitoba load over time.

17

18 Third, it is not clear why some component of the Manitoba Hydro complement of
19 electricity assets would be suitably “external” to regulation.

20

21 Finally, if the assets in question could theoretically be segregated as having no role in
22 serving domestic customers today or into the future, it is not clear why a “provincially
23 owned” non-regulated, concept would be preferred. As set out in CAC/MSOS/MIPUG-I-
24 9, the premise for provincial involvement in the electricity sector is tied to providing
25 service to Manitobans; a solely merchant function would not readily fit within this model.

26

27 It is also not clear that segregating new developments in a system “external to the
28 regulated electricity entity” addresses the core issues of the KM Report on this subject;
29 that investor and lender protection is a necessary consideration and this can only be
30 achieved with material equity levels. In short, even if Keeyask were developed as a
31 merchant plant by a new unregulated provincial government entity, it would still be debt
32 financed and not have 50% equity as appears to be effectively recommended by the KM
33 Report.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 39, lines 31-32 and**
4 **page 40, lines 1-4**

5

6 **PREAMBLE:**

7

8 CAC/MSOS would like to obtain greater clarity with respect to a passage in the MIPUG
9 evidence. The evidence states:

10

11 The combined effect of the KM Report recommendations, in the event they are
12 meant to be applied in this manner, is to impose on Hydro's framework more
13 appropriately focused on a private sector utility, where there is a need to be
14 attentive to the invested equity of shareholders and related to annual returns and
15 to ensure that the utility's lenders are secure solely with the protection of the
16 underlying assets, specifically: "The organization's equity can be thought of as a
17 "cushion" against potential losses. This cushion protects the organization's
18 shareholders or other lenders"⁸³.

19

20 It is difficult to accord this excerpt with the core structure of Manitoba Hydro
21 adopted in the interests of the Province and of ratepayers, as a public power
22 enterprise, oriented toward orderly development of the Provinces natural
23 waterpower resources, providing power-at-cost, with a very long-term
24 perspective and horizon for benefits, and with the benefit of the Government of
25 Manitoba backstop on borrowings to permit this patient long-term commitment to
26 unfold. [emphasis added]

27

28 **QUESTION:**

29

30 a) Please provide the specific examples by which the KM recommendations
31 "impose on Hydro a framework more appropriately focused on a private sector
32 utility".

33

34 b) Please clarify precisely the parts of the excerpt that are difficult to accord "with
35 the core structure of Manitoba Hydro adopted in the interests of the Province and
36 of ratepayers..."

1 c) Please clarify why each of the excerpt (or as a whole) is difficult to accord “with
2 the core structure of Manitoba Hydro adopted in the interests of the Province and
3 of ratepayers...”
4

5 d) Please confirm that Manitoba Hydro, itself, has used financial targets for
6 regulatory purposes (e.g. debt equity, interest coverage) that are the types of
7 targets used by a private sector utility.
8

9 e) If the confirmation sought in (b) above is not provided, please explain why
10 MIPUG considers the targets used by Manitoba Hydro are not the types used by
11 a private sector utility.
12

13 **ANSWER:**

14
15 **(a)**

16
17 Development of major hydro projects in Canada has largely followed a consistent
18 pattern, of which Manitoba remains at this time likely the purest example. The approach
19 focuses on public investment in bold projects based on the financial backing of the
20 government rather than shareholder capital. Projects are developed based in part on
21 broad economic or infrastructure development-oriented objectives with considerable
22 emphasis on the long-term benefits the projects can provide.
23

24 At its core, the model is to:

- 25
- 26 • Develop projects to serve Manitobans that have a positive long-term business
27 case, including complementary exports where relevant;
28
 - 29 • Set domestic rates at a level that can be maintained relatively stable over the
30 long-term to achieve the business case (but not higher); and
31
 - 32 • Secure the backing of the province on the borrowings required to undertake the
33 development, so that bondholders need not entirely rely on the previous two
34 points when accessing the bond market.

1 The following characteristics encourage this approach:

- 2
- 3 1) The hydro resource is relatively unique compared to other natural resource
4 developments:
- 5 a. Unlike a resource such as oil and gas or mining, major hydro sites are
6 relatively easy to identify. It does not require major speculative investment
7 to find the location of rapids.
- 8 b. Hydro developments are large undertakings requiring massive capital
9 investment and a complement of skilled specialists to develop, and
10 cannot be developed incrementally¹.
- 11 c. The resource is renewable, so it is known from the outset that once
12 developed, the resource will yield benefits for very long periods of time.
- 13
- 14 2) From the outset, it is known that hydro projects will go through uncontrollable
15 hydrologic cycles that can produce years of poor (or negative) returns, potentially
16 for lengthy periods, offset by better water conditions in other periods.
- 17
- 18 3) Major hydro projects, and related transmission, can be integral to overall
19 development of a province, as core infrastructure for service to the local
20 residences and businesses. As such, they are a key strategic resource to the
21 public.
- 22

23 The public power approach to developing hydro resources is characterized by:

- 24
- 25 1) **Nearly 100% debt financing using a government guarantee.** No notable funds
26 are raised from “investors” through share offerings or private capital; the only
27 non-debt capital for the utility is that which is raised from ratepayers over time.
28 The risks to government from backing the debt are ultimately very low over any
29 long time horizon, as (a) the projects will experience cycles of hydrology that
30 balance over time (unpredictable over the short-term, but reliable over the long-
31 term), and (b) economic advantages of the projects improve with time, as the
32 major investment and borrowings are fixed at the time of construction but the
33 value of power grows with time for at least inflationary reasons.

¹ For example, it is not possible to build Limestone 50 MW at a time to reduce the capital investment required at the outset. In the case of transmission, the situation is more acute as the first major project drives the need for investment in transmission that will ultimately serve many projects, but at the outset its costs cannot be shared over the undeveloped projects; for Manitoba the northern power developments were approached with this constraint in mind, with the federal government playing a role in the HVDC transmission in order to help address this “indivisible” nature of the development, and given the challenging requirements of the HVDC technology at that time.

1 2) **Rates are set based on recovering the costs of the utility** (with some modest
2 margin), and not on the basis of providing returns to equity, or ‘what the market
3 will bear’ principles. The point of the approach is to provide infrastructure and a
4 foundation for the economy and quality of life, not to raise profits.

5
6 3) **Limited room in the Corporate objects or mandate to pursue other activities**
7 **except where necessary and ancillary to providing domestic power.** The
8 exercise is not to create a general purpose corporate entity pursuing profits in
9 any line of business where they may exist (however tangential or remote from the
10 core power infrastructure and services activities).

11
12 This same framework has been used repeatedly in Canada to develop major hydro
13 infrastructure projects². While a number of jurisdictions have passed legislation to, in
14 effect, move away from this model to some degree (e.g., BC Hydro rates now being set
15 to earn notional returns on equity and pay added notional “taxes” to the government,
16 Ontario Hydro’s evolution to a more market oriented system, or Quebec’s effective
17 deregulation of future Hydro Quebec generation projects) the framework for future
18 development of hydro in Manitoba continues to reflect this approach³.

19
20 **(b) and (c)**

21
22 The KM framework adopts tools that are not consistent with the long-term focus required
23 for public development of hydro resources. Particularly this relates to the tools employed
24 (such as the Capital Adequacy Ratio or CAR⁴), the apparent recommended equity ratios
25 (estimated at 50:50 target debt:equity ratio⁵) and the recommendations to implement
26 emergency measures or added conservativeness in Hydro’s operations until these
27 targets are achieved (such as amended water management objectives).

28
29 The only practical way to adopt the KM measures would be some or all of the following
30 (a) secure material outside “Tier 1” capital in the form of private equity, (b) materially

² At times, nuclear power has been developed by Crown utilities on a similar basis, but without some of the same defining power resource characteristics, such as very long lives.

³ The situation is not exactly the same with respect to First Nation partners in Hydro’s future generation, who do effectively participate via equity investment in their share of the projects.

⁴ Per KM Report section 2.4. Note that this metric is more typically applied by regulators to banks (including as per the link provided by the KM Report, at www.investopedia.com/terms/c/capitaladequacyratio.asp) where it is “used to protect depositors”. The noted reference also states “Two types of capital are measured: tier one capital, which can absorb losses without a bank being required to cease trading, and tier two capital, which can absorb losses in the event of a winding-up and so provides a lesser degree of protection to depositors” both concepts of which are not relevant to Manitoba Hydro or the power sector in Manitoba which will not be “required to cease trading” nor to return capital to depositors in the case of the Hydro being “wound-up”.

⁵ See page 35 of the Bowman/McLaren evidence December 10, 2010.

1 increase rates to set aside retained earnings so that bondholders (and shareholders⁶)
2 can be more satisfied with the stability of Hydro in any given year (which in itself is a
3 challenging concept given there is no debate that the utility is entirely self-financing over
4 the long-term and the bondholders in any event have their loans backstopped by
5 Manitoba⁷), or (c) amend the operation of Hydro's system to be more conservative in the
6 management of water (and other factors) despite the fact that this will by definition lead
7 to lower average returns (i.e., less financial resources to fund the infrastructure or set
8 aside reserves) than the present approach of seeking to maximize net revenues over
9 time. (Refer to PUB/MIPUG-11).

10
11 None of these actions appropriately fits within the framework noted in (a) above.

12
13 **(d) and (e)**

14
15 Not confirmed. Manitoba Hydro does not use financial targets "for regulatory purposes"
16 that are the types of targets used by a private sector utility.

17
18 In particular, private sector regulated utilities are typically not regulated on the basis that
19 rates are to be set so as to help the utility achieve some financial target it set for itself
20 such as debt:equity ratio. Regardless as to regulation, a private company will be
21 required to raise capital and in doing so must consider the relative mix of sources of
22 capital (e.g., share offerings versus debt) and their implications for costs, cash flows,
23 administrative requirements, etc. Regulation of a private utility typically solely focuses on
24 ensuring that rates can provide a reasonable opportunity to earn a fair return on an
25 appropriate quantity of equity (lower than this level and there will not be further
26 investment in the utility, to the detriment of customers; higher than this level and the
27 regulator is effectively permitting the utility to exploit their monopoly position).

⁶ The concept is more difficult to consider in respect of Hydro's "shareholders" which is the Government of Manitoba. It is a basic premise of Hydro's past and present planning, and not apparently challenged in the KM Report or other materials, that the hydro assets being developed will provide positive benefits over the long-term. In the event these benefits do not arise to the extent expected, Manitoba's domestic rates may not see the same degree of benefit at times than otherwise anticipated. It is not clear how any such situation can lead to the noted concerns for the shareholder over the long-term.

⁷ Further, the DBRS reports provided in Appendix 75 of Hydro's filing indicates no basis for concern for lenders over Hydro defaulting due to a drought for example, or lenders not recovering their investment.

1 In the case of Manitoba Hydro, as noted in previous evidence of Bowman and McLaren,
2 “recent practice has been for the Board to take on the unenviable task of making it their
3 concern that Hydro has insufficient retained earnings”⁸. This type of target for regulation
4 (the regulator reviewing how best to increase the utility’s retained earnings) is not typical
5 of the manner in which privately held utilities are regulated.

⁸ 2008 GRA; evidence of Bowman and McLaren page 2.

1 **SUBJECT: Risk**

2

3 **REFERENCE: MIPUG Evidence, December 10, 2010, page 40, footnote 84**

4

5 **PREAMBLE:**

6

7 The evidence states:

8

9 That is, in response to a major drought and related reduction in reserve levels,
10 ratepayers will face immediate and material upward rate pressures to quickly
11 rebuild reserves, compounded with added annual costs for financing charges due
12 to higher debt levels. This latter factor alone, in the case of a benchmark \$2.6
13 billion drought, can total a 10% upward rate pressure before any added reserve
14 rebuilding occurs. In this ratepayer context, typical investor risk concepts,
15 focused on whether an organization can survive a risk event and fulfill its
16 financial obligations, can potentially fail to consider the effects beyond the risk
17 event horizon.

18

19 **QUESTION:**

20

- 21 a) Please clarify and define what is meant by “beyond the risk event horizon”.
- 22
- 23 b) Please explain what “effects” that can potentially not be considered beyond the
24 risk event horizon.
- 25
- 26 c) Please clarify why MH may have “effects” that may not be considered in the
27 focus of typical investor risk concepts.
- 28
- 29 d) Please identify what “effects” MH may have that may not be considered in the
30 focus of typical investor risk concepts.

1 **ANSWER:**

2

3 **(a) through (d)**

4

5 The phrase means that investor-oriented metrics (or depositor-oriented metrics where
6 using banking analogies) focus on whether investors will get their investment back (their
7 interest due, their bond repaid, their deposits returned, etc.) if risk events occur,
8 including if the company or bank in question ceases to exist and the investor or
9 depositor can then go find a new separate place to put their funds.

10

11 This is not the situation of concern for Manitoba Hydro ratepayers. The focus for a
12 ratepayer is framed by the fact that before, during, and after the risk event, the power
13 system will continue to exist and be providing Manitobans with their energy needs (i.e., it
14 is not a question of getting your deposit back in the case of bankruptcy and dissolution).
15 The issue of concern is whether in that future period after the risk event, Hydro will need
16 to be back to the Board seeking material rate increases (rate shocks) based on some
17 new view of a crisis of retained earnings level (and material new added interest costs
18 due to drought-period borrowings), These “effects” on rates at that time are not part of
19 an investor-focused or depositor-focused risk analysis.

1 **REFERENCE: InterGroup Report, page 52**

2
3 **QUESTION:**

- 4
- 5 a) In referring to “above cost net export revenues” is this similar to “Net-Extra-
6 Provincial Revenues” as defined and discussed on page 33 of the Report? If not,
7 please clarify how InterGroup defines “above cost net export revenues”.
- 8
- 9 b) In InterGroup’s view should all “above cost net export revenues” be used to build
10 appropriate drought reserves?
- 11 - If yes, please explain how current customers benefit from exports and
12 taking on the associated risks.
- 13 - If not, how should the portion of “above cost net export revenues” that will
14 be used to build appropriate drought reserves be determined?
- 15

16 **ANSWER:**

17
18 **(a) and (b)**

19
20 The “above cost net export revenues” discussed on page 52 and the “Net-extra
21 provincial revenues” described on page 33 are two different concepts. Both concepts are
22 at times used by Hydro although they are calculated differently:

- 23
- 24 • **Above cost net export revenues** is a term usually used in a cost-of-service
25 context to describe the portion of export revenues in excess of the embedded
26 costs incurred to serve the export class. The value is the total forecast export
27 revenues, less costs to serve exports sales including a share of embedded costs
28 of the system (e.g., interest, depreciation). The value is only calculated by Hydro
29 on a forecast basis, and there is no reporting of actual values in this manner.

30

31 The calculated revenues bear no linkage to embedded costs to serve exports
32 and have historically been allocated to domestic customer classes to achieve
33 certain policy objectives, such as funding the implementation of uniform rates
34 and providing an offset to bulk power and distribution costs.

- 35
- 36 • **Net extra provincial revenues (NER)** is a short-version of a term developed by
37 Hydro - per PUB-1: “**Extra Provincial Revenues (net of fuel, purchased**

1 **power and water rentals)**". The terms if used in the context of an Integrated
2 Financial Forecast or in reporting actuals to track the export revenues that
3 remain after the most highly variable portions of Hydro's costs (fuel, purchased
4 power and water rentals) have been deducted. These costs do not necessarily
5 bear a cost-of-service linkage to exports (for example clearly some portion of
6 water rental costs are incurred to serve domestic customers). The value is simple
7 to calculate on a forecast or actual basis, encompasses the major categories of
8 Hydro's costs that vary with uncontrollable factor, including water flows and
9 export prices, and is routinely reported.

10
11 In the view of Messrs Bowman and McLaren, the main function of reserves is to address
12 material variations (positive and negative) in the NER values, separate and apart from
13 variations in Hydro's controllable costs. It is also reasonable, over time, to use the
14 "above cost net export revenue" amounts as defined by the cost-of-service study to
15 identify additional amounts that could be contributed to the reserve. In this manner,
16 current customers would benefit from exports in two ways:

- 17
18 1) Through allocation of a material portion of the power assets to the export class in
19 the PCOSS, rather than the domestic classes; and
20
21 2) Through establishment of a protected reserve balance in favour of ratepayers
22 that is in place to aid in rate stability for future droughts.

1 **REFERENCE: InterGroup Report, page 55**

2

3 **QUESTION:**

4

5 a) If coal plant is used as a source of “dependable supply” and used to “back” firm
6 exports, would it be appropriate to allocate a portion of the plant’s fixed costs to
7 exports? If not, why given the proposed treatment for natural gas-fired
8 generation?

9

10 **ANSWER:**

11

12 **(a)**

13

14 Please refer to the response to PUB/MIPUG-I-14.

1 **REFERENCE: InterGroup Report, page 56-58**
2 **InterGroup Report, Tables C-5, C-6 and C-7**
3

4 **QUESTION:**
5

- 6 a) Please explain why it is appropriate to focus on the revenue to cost ratios prior to
7 the allocation of "Net Export Revenues" when considering the extent to which
8 individual customer classes rates cover costs and the resulting need for non-
9 uniform rate adjustments.
- 10
- 11 b) Please provide revised versions of Table 5.1 and Figure 5.1 that include all
12 Manitoba Hydro's customer classes are set out in Table 5.2.
- 13
- 14 c) With respect to Tables C-5 and C-6, the total Bulk System Power costs for Extra
15 Provincial ($\$177.046 + \$158.284 = \$335.33$ M) do not match those reported in
16 Table C-7 ($\$337.249$). Also, neither value matches the Bulk System Power costs
17 for Exports ($\$305.23$ M) as shown in Table 5.1. Please reconcile.
- 18

19 **ANSWER:**
20

21 **(a)**
22

23 The allocation of net export revenues to each customer class in order to lower rates for
24 certain rate classes today represents one potential use of those net export revenues.
25 However, in Messrs Bowman and McLaren's view those net export revenues are better
26 directed to reducing debt or developing drought reserves.

27

28 Therefore, when reviewing the extent to which certain rate classes should receive rate
29 adjustments that are higher or lower than the proposed average rate increases, it is
30 relevant to consider which classes currently have RCC ratios outside 95-105 prior to the
31 allocation of any above cost export revenues.

32

33 **(b)**
34

35 Please refer to the response to PUB/MIPUG-I-18(a).

1 (c)

2

3 The Total Bulk System Power cost for Exports, as shown in Table 5.1, includes the
 4 policy related allocations to the extraprovincial class. The reconciliation is shown in the
 5 following table.

6

7

Bulk Power Cost Reconciliation

<i>Costs</i>	Exports <i>(\$ M)</i>
1 Bulk Power Costs (line 1 of Table 5.1)	\$305.23
<i>Policy Adjustments</i>	
2 Uniform Rate Credit (line 8 of Table 5.1)	\$20.03
3 Affordable Energy Fund Expenditures (line 9 of Table 5.1)	\$12.00
4 Total Exports (1+2+3)	\$337.25
<hr/>	
5 Total Costs from Table C-7	\$337.25

8

9 Table C-6 (Directly-Assigned Costs by Customer Class) incorrectly included the export
 10 related directly assigned transmission demand costs of \$1.919 M in the total sub-
 11 transmission costs column. These costs are properly transmission demand related costs
 12 and therefore bulk power costs. The total extraprovincial directly assigned bulk power
 13 costs are \$160.203 M (\$158.284+\$1.919 M) as shown in the final column for
 14 extraprovincial costs in Table C-6.

15

16 Table C-7 sum the Bulk Power Costs allocated to the extraprovincial class (\$177,046 on
 17 Table C-5) and the extraprovincial directly assigned Bulk Power Costs (\$160,203) for a
 18 total of \$337.249 million.

1 **REFERENCE: InterGroup Report, page 60, lines 22-23**
2 **Direct Testimony of Paul Chernick, pages 21-22**
3

4 **QUESTION:**
5

6 a) Please comment on Mr. Chernick's recommended changes regarding the
7 allocation of sub-transmission and distribution costs.
8

9 **ANSWER:**
10

11 **(a)**
12

13 Messrs Bowman and McLaren did not undertake a detailed review of the allocation
14 methods used for sub-transmission and distribution functions but note the following:
15

- 16 • Classification and allocation of distribution costs based on energy is not typical in
17 Canada.
18
- 19 • The specific studies of individual substations to determine the class contribution
20 to substation loading recommended by Mr. Chernick seems unwieldy and
21 impractical.
22

23 In any event, it appears all of Mr. Chernick's recommendations relate to sub-
24 transmission and distribution costs and would have little or no effect on the conclusions
25 related to the costs of the bulk power system.

1 **REFERENCE: InterGroup Report, page 57 (line 11) and page 62 (line 2)**

2

3 **QUESTION:**

4

5 a) Please reconcile/explain the difference between the \$46 M export credit referred
6 to on page 57 and the \$79 M export credit referred to on page 62.

7

8 **ANSWER:**

9

10 **(a)**

11

12 The \$79 M 'total export revenue available for "credit" to other ratepayers' referred to on
13 page 62 (line 2) reflects the Net Export Revenue prior to the policy-based deductions for
14 the Uniform Rate Credit (\$20.025 million per schedule C13 of PCOSS11) and the
15 Affordable Energy Fund Expenditures (\$12 million per page 3 of PCOSS11).

16

17 The \$46 M in export revenues available to be allocated to the domestic rate classes
18 referred to on page 57 (line 11) reconciles to PCOSS11 Schedule B1.

19

20

Net Export Revenue Reconciliation

21

	Exports
	<i>(\$ M)</i>
1 <i>Surplus Export Revenue before Net Export Credits</i>	<i>\$78,838</i>
2 Uniform Rate Credit	<i>(\$20,025)</i>
3 Affordable Energy Fund Expenditures	<i>(\$12,000)</i>
4 Net Export Revenue Allocation	<i>\$46,813</i>

22