

2017/18 & 2018/19 ELECTRIC GENERAL RATE APPLICATION**Manitoba Hydro Undertaking Transcript Page 484**

Manitoba Hydro to provide the written notes for Mr. Riley's presentation filed in PUB MFR 71

Response:

Please see the attached speaking notes.

PUBLIC INFORMATION SESSIONS

DRAFT OCT 18

Date: Tuesday, October 18, 2016

Time: 7:00 – 9:00 pm

Location: Victoria Inn Hotel

1808 Wellington Ave., Winnipeg, MB

**H. Sanford Riley
Chair, Manitoba Hydro-Electric Board**

1 **SLIDE 1: Hero Board**

2

3 Thanks Scott. Good evening everyone. I want to start by
4 thanking all of you for taking the time to come out and
5 discuss a subject that, in my opinion, is of importance to
6 all of us in this province – Manitoba Hydro’s future.

7

8 I’m going to take the next few minutes to provide some
9 background on the Board’s review of Manitoba Hydro,
10 our decision to proceed with Bipole III and the financial
11 challenges that are facing the company. Then Kelvin
12 Shepherd, will talk about the next steps Manitoba Hydro
13 must take in the months ahead and what that means for
14 our customers and indeed all Manitobans as we move
15 into the future.

16

17 **SLIDE 2: MHEB Bipole III Review**

18

19 Back in May, the government of Manitoba asked the
20 Board to review the Bipole III project. Very quickly we
21 realized the situation with Manitoba Hydro was much
22 more serious than expected. So, we expanded our review
23 to include other major projects, such as Keeyask, and the
24 corporation's financial situation.

25

26 We also realized we needed help to assemble, organize
27 and interpret the data we were working with. So, shortly
28 after we started this process we retained the Boston
29 Consulting Group, a leading management consult, to
30 assist us in this review. I believe copies of their report are
31 available at the back of this room.

32

33 **SLIDE 3: Provincial Map showing BP I, II, and III**

34

35 To give you a bit of background on the projects the Board
36 reviewed: the Bipole III Transmission Project is a 1,300
37 kilometre High-Voltage Direct Current Transmission Line
38 that will run from the Keewatinohk Converter Station,

39 about 40 kilometres east of Gillam, Manitoba, down the
40 west side of the province, before cutting back towards
41 Winnipeg and terminating at the Riel Converter Station,
42 just east of the city. Bipole III is being developed to
43 provide additional reliability to Manitoba Hydro's Direct
44 Current Transmission system, by providing an alternate
45 path for electricity from northern generating stations to
46 flow to southern Manitoba.

47

48 **SLIDE 4: Provincial Map Keeyask and other GS**

49

50 The Keeyask Generating Station, located just upstream
51 from the existing Kettle Generating Station near Gillam,
52 is being developed by Manitoba Hydro in partnership
53 with four northern First Nations — Tataskweyak Cree
54 Nation, War Lake First Nation, York Factory First Nation,
55 and the Fox Lake Cree Nation — through the Keeyask
56 Hydropower Limited Partnership.

57

58 At 695 megawatts, Keeyask will be the fourth largest
59 generating station in our system.

60

61 So, after an in-depth study, what did the Board
62 conclude?

63

64 **SLIDE 5: Key Findings and Conclusions — Bipole III**

65

66 We concluded that there is no choice but to move ahead
67 with the completion of Bipole III on its current west-side
68 route. It is urgently needed to protect Manitobans from
69 the very real risk of blackouts that would result from a
70 failure of the current Bipole I and II lines, which run side-
71 by-side through Manitoba's Interlake.

72

73 The risk of failure of these two lines — or the Dorsey
74 Converter Station, where they both terminate — because
75 of a weather disruption, forest fire or other natural
76 catastrophe, is very, very real. In fact, it has already
77 happened.

78

79 In 1996, a major storm brought down 19 towers on both
80 Bipole I and II during the month of September.
81 Fortunately, the fact it occurred during our shoulder
82 season, with minimal heating load and demand on the
83 system, is the only reason electrical service was
84 maintained during that emergency.

85

86 **SLIDE 6: Key Findings and Conclusions — Bipole III**

87

88 Today, with much higher electrical demand and usage, it
89 is quite likely that a similar incident would result in
90 rolling blackouts for days or weeks until the lines could
91 be repaired. If Dorsey was damaged, it could be months
92 before normal service is restored. We simply could not
93 import enough energy over our existing transmission
94 interconnections to keep the lights on over that period.

95 More than 70 percent of all electricity generated in
96 Manitoba flows down these two lines to Dorsey — a
97 situation that the Boston Consulting Group — called the

98 largest single risk exposure of any utility they had seen in
99 North America.

100

101 This growing gap has heightened the consequences and
102 impacts of a failure on the existing HVDC lines. Without
103 Bipole III, an extended failure of Bipole I and II could
104 result in up to \$20 billion in societal impact — an
105 unacceptable risk that could do permanent damage to
106 our provincial economy.

107

108 **SLIDE 7: Key Findings and Conclusions — Bipole III**

109

110 Bipole III is also required to carry the additional
111 electricity that will be generated by the Keeyask
112 Generating Station.

113

114 Bipole I and II are largely maxed out in terms of capacity.
115 Without Bipole III, it simply is not possible to carry all the
116 power from Keeyask to southern Manitoba to be fed into
117 our provincial grid. Power from Keeyask would

118 effectively be stranded, creating an even larger financial
119 problem, as Keeyask will generate significant revenue for
120 Manitoba Hydro once it enters service. If you cancel both
121 projects the implications are enormous. You are looking
122 at approximately \$7 billion dollars spent without any
123 functioning assets to show for the money. That's just not
124 a palatable option.

125

126 **SLIDE 8: Key Findings and Conclusions — Bipole III**

127

128 The review clearly showed that the east side route for
129 Bipole III was the most favourable option. Though it was
130 not formally assessed, it is estimated that going down the
131 east side would have saved Manitobans an additional
132 \$900 million. The line is clearly shorter and doesn't
133 require a complete navigation around Winnipeg.
134 However, Manitoba Hydro was directed not to pursue the
135 east side routing by the previous government.

136

137 We concluded it was not economically viable or practical
138 to change Bipole III's route at this point, given the
139 advanced stage of construction.

140 To date, \$2.9 billion has been spent or committed; 95%
141 of the contracts for the project are in place; and it would
142 cost another \$1 billion to cancel the project. And most
143 importantly, it would still leave our province exposed to
144 the significant risk of an extended, major outage.

145

146 **SLIDE 9: Findings and Conclusions — Bipole III**

147

148 The review also identified that there is a risk of Bipole III
149 not meeting its target completion date or budget, with a
150 potential delay of between 12 and 15 months and a
151 potential cost increase from the current budget of \$4.65
152 billion to between \$4.9 and \$5 billion.

153

154 **SLIDE 10: Key Findings and Conclusions — Keeyask**

155

156 Regarding Keeyask, the Board concluded that while
157 Keeyask's energy won't be needed by Manitobans until
158 2027 at the earliest — and quite possibly later — the
159 project should be completed without delay.

160
161 Determining the exact timing of Manitoba's need is
162 dependent on a number of factors, including ongoing
163 economic growth, the addition of major loads —
164 industrial customers, for example — and future
165 effectiveness of Demand-Side Management efforts.

166
167 However, the need will eventually be there — this we
168 know. And Keeyask is a virtually carbon-free, long-term
169 source of renewable energy that will last well into the
170 next century. \$2.1 billion has already been spent on the
171 project, and cancelling it at this stage would cost at least
172 another \$1 billion in addition to other risks that would be
173 difficult to manage.

174

175 And, because valuable long-term export contracts worth
176 \$4.5 billion in revenues are already in place for the
177 majority of power from Keeyask, there is an upside to
178 completing the project.

179

180 Now, I want to take a moment here to address the
181 confusion around export prices. You may hear that
182 export prices are falling. And that is in fact, true —
183 especially for short-term, opportunity sales on the spot
184 market. This is energy that is only available when water
185 flows are above average. The other option for this water
186 in high flow years is to simply open the spillways and
187 dump it downstream, and generate no revenue with it.
188 Or Manitoba Hydro can run it through their turbines at
189 virtually no incremental cost, and sell it on the
190 opportunity market, and create an important revenue
191 stream for the company.

192

193 But, through our review, the Board clearly found that
194 long-term, firm power sales which have been entered

195 into at premium pricing levels, make economic sense for
196 Manitoba Hydro.

197
198 So, where it makes sense to do so, Manitoba Hydro
199 should continue to grow that firm export market.

200
201 **SLIDE 11: Key Findings and Conclusions — Keeyask**

202
203 Finally, the review identified that Keeyask is also at risk of
204 not being completed as originally scheduled, with a
205 potential delay of between 21 and 31 months. There is
206 also a risk that the budget for Keeyask could rise from
207 the current control budget of \$6.5 billion to between
208 \$7.2 and \$7.8 billion.

209
210 **SLIDE 12 — Key Findings and Conclusions — Finances**

211
212 We started this process focused on the decision to build
213 Bipole II but quickly concluded that Bipole III was not the
214 main issue facing hydro, but a side issue - if you can say

215 that a \$900 million mistake is a side issue. By far the
216 more significant problem is the fact that the decision by
217 the previous Board to undertake these two projects at
218 the same time is having a significant, and in our
219 judgment and unacceptable impact on Hydro's financial
220 situation, with serious knock on consequences for the
221 Province of Manitoba.

222

223 Manitoba Hydro's debt is expected to grow from its
224 current level of \$13 billion to \$25 billion within the next
225 three to four years. That's an extraordinary increase and
226 a significant concern.

227

228 This Board, looking at Manitoba Hydro's finances from
229 the perspective of their considerable business and
230 financial backgrounds, considers Manitoba Hydro's
231 debt/equity ratio a major problem that needs to be fixed.

232

233 **SLIDE 13 — Key Findings and Conclusions — Finances**

234

235 The chart you see on the screen shows projections for
236 Manitoba Hydro's debt-equity ratio as we move forward
237 with completing these projects. Debt-equity was already
238 forecast to fall to an 88% debt to 12% equity scenario —
239 potentially degrading to 9% equity — a very low level by
240 any measure. In a worst case scenario, such as a
241 prolonged drought, you can see that equity measure
242 goes even lower —below 5%.

243

244 **SLIDE 14 — Key Findings and Conclusions — Finances**

245

246 As this comparison chart shows, Manitoba Hydro is out
247 of step with other crown and private utilities across
248 North America.

249

250 The board believes these equity levels are too low to
251 manage known and expected risks. Risks like drought,
252 and the resulting low water flows and reduction in hydro
253 generation. Simply put, we have no cushion to absorb
254 what Mother Nature will — at some point — throw at us.

255

256 It's not much different than the equity you build up by
257 paying the mortgage on your home. If something
258 unexpected happens – say, your car breaks down and
259 you need a new one – a bank is far more likely to lend
260 you the money to buy that car if you've built up sufficient
261 equity in your home.

262

263 If, however, you've also just taken out a big loan to buy a
264 new cottage and a new boat, the equity in your home
265 may not be sufficient relative to your debt. That bank
266 may not give you that loan or it will but at a much higher
267 interest rate.

268

269 Manitoba Hydro is no different. The numbers are much
270 bigger, but the principles are the same. If we don't have
271 a sufficient equity base and something unexpected
272 happens, like the drought we saw back in 2004, we have
273 no cushion.

274

275 **SLIDE 15 — Key Findings and Conclusions — Finances**

276

277 Manitoba Hydro's debt is also putting an enormous
278 strain on the credit capacity of the Province.

279

280 Manitoba Hydro borrows on the credit of the
281 government of Manitoba. And, up until now, credit rating
282 agencies have looked at the Province's debt as separate
283 from Manitoba Hydro's debt. They do this because they
284 view Manitoba Hydro as self-sustaining. That means, the
285 rating agencies think Manitoba Hydro has sufficient
286 equity and the capacity to generate sufficient revenues
287 to support its operations.

288

289 However, when rating agencies make the decision that
290 Manitoba Hydro is no longer self-sustaining, then they

291 will look at all of the debt together, the Province of
292 Manitoba's and Manitoba Hydro's.

293

294 What you see in this chart, is the debt of Manitoba Hydro
295 growing from \$13 billion to \$25 billion -- almost 50% of
296 the total debt for the Province of Manitoba. The total
297 combined debt climbs to nearly \$50 billion and, more
298 importantly, that debt as a percentage of Gross Domestic
299 Product climbs from 35% to 60%.

300

301 That puts Manitoba among the worst in this country.

302

303 Now, you may ask, why does that matter? Well, it
304 matters because we are borrowing \$50 billion and if
305 rating agencies downgrade the Province's credit rating,
306 the cost of borrowing goes up. If we see the cost of
307 borrowing increase by just 1%, that's another half-a-
308 billion dollars in borrowing costs. That's half-a-billion

309 dollars that could be used to finance schools, hospitals
310 etc, that is now being used to service debt.

311

312 This is why we, as a Board, believe action is required. We
313 need to ensure this doesn't happen.

314

315 I want to point out that this didn't happen overnight. A
316 combination of 10 years of low rate increases, coupled
317 with increasing borrowing to support major projects and
318 infrastructure renewal, have led us to where we are
319 today.

320

321 **SLIDE 16 — Key Findings — Policy & Regulatory**

322

323 But there are other reasons Manitoba Hydro finds itself
324 in its current position. Our review revealed Manitoba
325 Hydro currently has conflicting objectives – things that
326 can't all realistically be achieved.

327

328 So, what are the right measures of success?

329

- 330 • Is it the lowest electrical rates for residential
- 331 consumers...or for industry...or both?
- 332 • Is it all about providing a reliable energy supply?
- 333 • Is it economic development in the north?
- 334 • Employment?
- 335 • Or earning a return on investment?

336

337 **SLIDE 17 — Key Findings — Policy & Regulatory —**
338 **Government Objectives**

339

340 The need for clarification also extends to clearly defining
341 government objectives for Manitoba Hydro.

342

343 We currently generate over \$350 million in revenues for
344 government, through water rental fees, debt
345 administration and capital taxes.

346

347 At the same time, legislation encourages low electricity
348 rates. We are seen as an economic engine for
349 development. We are also seen as a major tool in
350 achieving climate change and environmental goals. And,
351 in a world where other jurisdictions in Canada and
352 abroad are searching for ways to reduce their carbon
353 footprints, we are seen as a potential solution for their
354 problems, which could in turn generate economic
355 benefits for Manitobans.

356 Which is most important? And is this clearly articulated,
357 either in legislation or in government policy?

358

359 99% of electrical energy created in Manitoba is non-
360 greenhouse gas emitting, but hydroelectric development
361 does carry other environmental and social costs,
362 sometimes disproportionately impacting our Indigenous
363 communities. How should those costs be addressed?

364

365 Then there is social policy. For example, how does the
366 government want to go about protecting low income or
367 those without access to lower cost natural gas heating

368 from increasing electrical rates? Should this be the
369 responsibility of Hydro, or could it be more effectively
370 met through other measures and programs?

371

372 These are questions we need to answer to put Manitoba
373 Hydro on an effective path going forward. This
374 corporation can no longer be all things to all people.

375

376 **SLIDE 18 — Key Findings — Regulatory Framework**

377

378 Our review also identified that the regulatory framework
379 within which Manitoba Hydro operates could be
380 improved. Take, the Public Utilities Board and how rates
381 are set, for example.

382

383 In most other jurisdictions, rates are set based on
384 achieving a regulated return on investment – that means
385 if a utility spends X amount of dollars, rates are set to
386 ensure that investment is recovered plus a guaranteed
387 return or profit on that investment. That profit can be

388 reinvested into the company providing financial stability
389 and building up the equity cushion needed to provide
390 adequate protection against risks.

391

392 The current framework in Manitoba promotes setting
393 rates to recover costs – but there is no “return on
394 investment” or profit motive for Manitoba Hydro.

395

396 While some argue that may be appropriate for a crown
397 corporation, the current circumstance that Manitoba
398 Hydro and the Province find them self in is to the
399 contrary. The current approach to regulations has clearly
400 not encouraged maximum capital efficiency, or the
401 consideration of a full view of financial risks, particularly
402 when it comes to large capital projects.

403

404 Under the current model, Manitoba Hydro is always
405 playing catch-up. The company makes the investments
406 needed to maintain a reliable energy supply then goes to
407 the regulator hoping to get the rate increases needed to

408 cover the cost of that investment – after the money is
409 already spent or committed to be spent. If the regulator
410 chooses not to approve the full amount of those
411 requested increases, Manitoba Hydro’s financial situation
412 deteriorates further. Is this how rates should be set here
413 in Manitoba?

414

415 **SLIDE 19 — The Board’s focus going forward**

416

417 So, as you can see there are a lot of questions that need
418 to be answered. Getting those answers -- setting clear
419 objectives and establishing an appropriate regulatory
420 framework for Manitoba Hydro -- will be the focus of this
421 Board going forward. We will need to work with
422 government, regulators and you, the public, to set our
423 clearly what Manitoba Hydro should be.

424

425 Now, it took a long time to get Hydro into the position
426 we find it today and it will take a fair amount of time to
427 get it back to where it needs to be. However, as a Board,
428 we are already working with Kelvin and his leadership

429 team to develop a plan that will put Manitoba Hydro on
430 the path to financial stability – ensuring that it continues
431 to effectively serve the energy needs of Manitobans.

432

433 That plan will need to be balanced in its approach –
434 Manitoba Hydro, taxpayers and ratepayers will all need
435 to contribute to the solution. For Manitoba Hydro, it
436 means some significant reductions in costs and a
437 renewed focus on successful completion of the major
438 projects. For taxpayers, it probably means a significant
439 equity investment to strengthen the corporation's
440 balance sheet. And, for ratepayers, it likely means rate
441 increases substantially higher than the 3.5% to 4%
442 increases that have been forecasted until now.

443

444 Thank you again for your time. I will now hand the
445 podium over to Kelvin so he can provide more detail on
446 what Manitoba Hydro is doing to address the financial
447 challenges it faces.