

#### **BY EMAIL and RESS**

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December 3, 2018 Our File No. 20180097

Ontario Energy Board 2300 Yonge Street 27<sup>th</sup> Floor Toronto, Ontario M4P 1E4

### Attn: Kirsten Walli, Board Secretary

Dear Ms. Walli:

### Re: EB-2018-0097 – Enbridge Bathurst Reinforcement

We are counsel for the School Energy Coalition ("SEC"). Pursuant to Procedural Order #2 in this matter, this letter constitutes SEC's submissions on the questions posed.

#### **Overview**

1. The Procedural Order requires Enbridge to respond to further interrogatories on two specific questions<sup>1</sup>:

"a) The extent to which Enbridge considered the feasibility of using DSM to defer or reduce the need for the Project.

b) The basis for updating the 2016 annual load growth forecast of 153 m<sup>3</sup>/h to the 2017 forecast of 590 m<sup>3</sup>/h."

<sup>&</sup>lt;sup>1</sup> Procedural Order #2, p. 1.

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Upon receiving the responses to the interrogatories, SEC and OEB Staff are then directed to file their further submissions, limited to those two points, by December 3, 2018.

- 2. These are the submissions of the School Energy Coalition on those two issues.
- 3. In summary, SEC concludes as follows:
  - a. **Did Enbridge Consider DSM?** The evidence is clear that Enbridge never seriously considered using DSM to defer or displace this project, despite the Board's direction to do so. Enbridge at all times intended to proceed with building this reinforcement, regardless of whether DSM was a viable alternative or not.
  - b. *Increased Load Forecast.* The increase in the load forecast has not been adequately explained in the evidence, in part due to refusals to provide information, and in part due to questions about the limited information that has been provided. The Board is not in a position to assess whether the new load forecast is reasonable.
  - c. *Is DSM a Viable Option?* It is likely that DSM is still a viable option to displace this project. However, because Enbridge left it as late as it did, and delayed providing the Board with complete information, the Board is placed in the position of risking an insufficient supply situation in the affected area if it requires Enbridge to delay the project and look more seriously at DSM as an alternative. This may not be a reasonable result for the Board to accept.
  - d. *What Should the Board Decide in this Proceeding?* As an alternative to refusing leave to construct, the Board could determine that Enbridge will receive no return on the rate base for this project until such time as Enbridge demonstrates to the Board that it is seriously considering DSM as an alternative to new projects. While the cost to Enbridge is not material, it would be a clear message to Enbridge that the Board is serious about IRP.

### Did Enbridge Seriously Consider DSM?

4. *History.* The Board, in the DSM Framework Report, said<sup>2</sup>:

"As part of all applications for leave to construct future infrastructure projects, the gas utilities must provide evidence of how DSM has been considered as an alternative at the preliminary stage of project development."

5. Enbridge's response was as follows<sup>3</sup>:

"...[T]he Company believes it would be premature to provide "...an appropriate transition plan to implement DSM as part of its future infrastructure planning

<sup>&</sup>lt;sup>2</sup> EB-2014-0134, Report of the Board, p. 35.

<sup>&</sup>lt;sup>3</sup> EB-2014-0134, Enbridge Letter of Comment, p. 28.



efforts.", or "...provide evidence of how DSM has been considered as part of all leave to construct applications."

- 6. SEC notes that the Enbridge comments were on a draft of the Board's report. In the final report, the Board, after considering the comments of Enbridge and others, kept the language that directed Enbridge to consider DSM in infrastructure planning, and provide evidence in all leave to construct applications describing how it had done so.
- 7. Thus, Enbridge has made this "premature" argument before. The Board listened, and still made IRP mandatory in leave to construct applications. Enbridge was under a direction from the Board to consider DSM seriously as an alternative to the Bathurst Reinforcement Project, and to show the Board that it had done so. It has failed to comply with that direction.
- 8. *The Decision to Proceed with the Project.* Enbridge has planned to do this project for some years. For example, Enbridge says<sup>4</sup>:

*"In respect of the Bathurst Reinforcement project, <u>Enbridge recognized several</u> <u>years ago</u> that forecast low inlet pressures could in the future cause network pressure concerns in an area of Toronto downstream of the Parkview & Doris Station." [emphasis added]* 

9. After a long justification of the infrastructure planning process, Enbridge answers two simple questions from OEB Staff as follows<sup>5</sup>:

"Questions: a) When did the Project receive internal approval for inclusion in the 2018 capital portfolio? b) At the time it was approved, what analysis had Enbridge undertaken of the feasibility of using DSM to defer or reduce the need for the Project?"...

"a) The Project received internal approval in August 2017. b) At the time of approval Enbridge had provided inputs relevant to the Project to ICF to inform the IRP Report but it had yet to receive the conclusions of the IRP Report. Given that the need for the Project had been established on a <u>technical</u> basis, the Company was not in a position to delay planning efforts in the hopes that the IRP Report might indicate that DSM could be a costeffective alternative on a conceptual basis." [emphasis in original]

10. That answer translates roughly as follows: "We were going ahead with this project anyway, no matter what happened. We made the final decision even before we heard from ICF. Even if ICF said DSM could displace the project, we would not have acted on that, because we would have treated that as merely conceptual, not real."

<sup>&</sup>lt;sup>4</sup> Staff#18, p. 1.

<sup>&</sup>lt;sup>5</sup> Staff#18, p. 1,3.

11. Enbridge will argue in Reply that SEC is putting words in their mouth. In fact, they specifically admit that they were never going to displace this project with DSM, no matter what happened<sup>6</sup>:

"Even had DSM conceptually proven to be a cost-effective alternative to the Project, which it has not, the Company would need to: (1)undertake a geographically specific conservation potential study; (2) based on this study, design DSM programs specific to the area in question; (3) apply to the Board to receive approval for the necessary funding over and above currently approved DSM budgets; (4) successfully market the geo-tailored programs to customers; (5) monitor and oversee the implementation of energy efficiency measures; and, (6) conduct a robust evaluation and measurement program for a significant enough period of time to confirm the sufficiency of savings achieved and their impact on peak load. It is for this reason that ICF notes in the IRP Report that DSM must start implementation (not planning) 3 years ahead of the expected date for a facility investment project. In Enbridge's view, even 3 years may be an underestimate of the time required to successfully roll out geo-targeted programs and have the necessary number of efficiency measures in place to achieve a material impact." [emphasis added]

- 12. In other words, although Enbridge was directed by the Board in December, 2014 that it must consider how to use DSM to defer or displace infrastructure projects, and knew about the Bathurst Reinforcement Project at that time, by August 2017, having done nothing to comply with that direction in respect of this Project, it was too late to comply with the Board's direction. Instead, Enbridge decided to proceed with this Project without consideration of DSM.
- 13. Thus, Enbridge did not take the Board's direction seriously and did not consider the feasibility of deferring or displacing this Project with DSM.
- 14. *Response to the ICF Study.* However, it is worse than that. To Enbridge's surprise, and despite the fact that the ICF Study was stacked against geo-targeted DSM from the outset (see below), ICF concluded in January 2018 that this Project could be displaced by DSM.
- 15. How did Enbridge react? Did they start looking at specific programs for the affected area? They didn't have the revised load forecast until May. What did they do in the meantime? That specific question was posed by OEB Staff, and Enbridge answered as follows<sup>7</sup>:

"Given Enbridge's high level analysis showing that geo-targeted DSM could not reduce the peak demand sufficiently to defer the project, further micro analysis was not deemed a prudent expenditure of resources and was therefore not undertaken."

<sup>&</sup>lt;sup>6</sup> SEC#28, p. 1-2.

<sup>&</sup>lt;sup>7</sup> Staff #20(b), p. 2.

- 16. In short, before having the new load forecast, Enbridge had already decided that ICF was wrong, and didn't investigate DSM further. Instead, they proceeded to increase the load forecast, which had the effect of making the ICF conclusion no longer relevant.
- 17. *Conclusion.* This is a relatively small project, with a low cost and a mature, substantial existing load in the affected area. It is, one would think, perfect for geo-targeted DSM.
- 18. At no time during this process was there any indication that Enbridge seriously considered whether it could displace this Project with DSM. Nothing in the evidence before the Board even hints at that. Consistent with their 2014 submissions to the Board, Enbridge believes it is premature to consider geo-targeted DSM, and it refuses to do so despite the Board's clear direction. All of the evidence is consistent with what they in fact continue to say in SEC#28: *Too early. Let's have another consultation, and meanwhile we'll ignore what the Board told us to do.*

### **Increased Load Forecast**

- 19. The ICF Report created a problem for Enbridge. It was not a system planning problem, because Enbridge had already decided that it was going to proceed with this Project (see above). It did have a problem, though a regulatory problem. How would Enbridge get this Project approved by the Board in the face of an independent expert saying it would be cheaper to implement DSM instead?
- 20. Enbridge did what any business would do in that situation. It took a closer look at the Project, trying to find an approach that would provide greater support for the Project in the leave to construct application. To do that, it identified two key changes it could make to the parameters supporting the Project. First, Enbridge noted that the issue of inlet pressures at Parkview and Doris was not considered when ICF was given the data. Second, and in part based on the inlet pressures issue, Enbridge dramatically expanded the area "affected" by the Project, with the result that the load to be displaced would also be much higher.
- 21. Inlet Pressures. Both OEB Staff and SEC tried to get to the bottom of the expanded importance of inlet pressures in this Application. OEB Staff asked<sup>8</sup> for "minimum allowable inlet pressure", but Enbridge refused to provide that. Instead, Enbridge noted that its network must operate at a minimum of 55 psig, and then provided the following table for the <u>design day</u> expected (i.e. forecast) inlet pressure at the stations served by the high pressure network that serves this area:

<sup>&</sup>lt;sup>8</sup> Staff#16(a).

Station Name	2017 Forecast
	Min.Inlet (psig)
Parkview & Doris	94
Bayview & Byng	140
Bayview & Sheppard	137
Carpenter & Steeles	158
Faywood & Wilson	137
Sheppard & Kenaston Gdns	137

22. Parkview and Doris is the station at the heart of this Project. Although Enbridge refused to respond to "minimum allowable" inlet pressure, in a later interrogatory response it said this9:

> "The forecast inlet pressure of 94 psig is below the 100 psig threshold which the Company strives to maintain for stations on this network."

- 23. The Board is thus none the wiser about the inlet pressure "problem" at Parkview and Doris. OEB Staff, however, asked a question that would have assisted the Board in this regard. Staff asked for ten years of history of inlet pressures to show how low inlet pressures get in practice<sup>10</sup>. Enbridge refused to provide that information. Staff also asked for a five year forecast of inlet pressures at the station if the Project is not constructed<sup>11</sup>. Enbridge refused to provide that as well.
- 24. The main reason the load forecast increased so dramatically from the time of the ICF Report to the time this Application was filed appears to be the inlet pressure issue<sup>12</sup>, which caused Enbridge to treat all loads in a large area of Toronto (basically, from Dufferin to the Don River and from Steeles to the 401) as having an impact on the need for a 3.2 km pipe down Bathurst Street.
- 25. SEC submits that the Board does not have sufficient information on the record to test this conclusion on the part of Enbridge. Enbridge appears to be telling the Board to trust in their expertise. The expansion of the affected area is a complex technical matter, they say, and they have made that call.
- 26. Increased Development Expectations. From 2016 to 2017/18 Enbridge changed its long range forecast as follows<sup>13</sup>:

<sup>&</sup>lt;sup>9</sup> Staff#18, p. 1.

<sup>&</sup>lt;sup>10</sup> Staff#16(b).

<sup>&</sup>lt;sup>11</sup> Staff#16(c).

<sup>&</sup>lt;sup>12</sup> In this regard, it is instructive to note that the forecast percentage growth rate in the ICF Study was 0.50%, and the forecast percentage growth rate in the LTC application is 0.52% [Staff#20, Attachment, p. 1]. The similar growth rate suggests, mathematically, that it was the expansion of the area that caused the load increase to jump. If the load increase jumped in the same area, the percentage increase would have to increase as well. <sup>13</sup> Staff#15(a).

"The 2016 LRP did not consider or incorporate specific development proposals which can aid in refining forecasts on a short-term basis. Improvements made in the 2017/18 LRP layers on development proposal data to inform short term system needs while still relying on third party data to inform long term customer growth."

27. However, when asked by OEB Staff for the developer and municipal plans that caused the change in the load forecast, Enbridge refused to provide them, saying<sup>14</sup>:

"The plans requested are <u>numerous (estimated at approaching 80)</u> and include all submitted proposals, ranging from significant commercial developments to minor alterations to single-family residences. As a result, the requested material is not readily available and would require significant time and effort to retrieve. Further, <u>the Company submits that these plans indicate</u> <u>only the existence of proposed short term developments which in and of</u> <u>themselves do not inform a long term forecast</u> nor do they translate directly into a natural gas load requirement." [emphasis added]

- 28. Thus, Enbridge's position is that it made a significant change to its plan, but it can't provide details because there might be eighty developments (of which most are minor and can be ignored), and in any case the developer plans don't "inform a long term forecast".
- 29. SEC approached this a different way, asking that Enbridge simply provide the 2016 and 2017/18 Long Range Plans<sup>15</sup>. This way, the Board could see precisely what changed. Enbridge refused to provide the Plans to the Board.
- 30. The only information the Board has with respect to the new developments that informed the new load forecast is the following<sup>16</sup>:

"Please see the map located in the response to SEC Interrogatory #1 found at Exhibit I.EGDI.SEC.1, Attachment 2, page 3 as reproduced in a larger format in Enbridge's Reply Submission...On this map, each of the small pink coloured polygons are proposed developments that are received by Enbridge from, in this case, the City of Toronto. If the polygon lies beside an orange coloured pipe, the polygon is fed by an IP network. If the polygon lies beside a blue coloured pipe, the polygon is likely fed by the adjacent HP network."

- 31. SEC went to the map to look at the specific projects, and reviewed a few at random:
  - a. The largest pink polygon on Bathurst Street, north of Sheppard, is the Prosserman JCC. It is probably the largest addition to load in the affected area. It broke ground this summer, and will likely be in operation in 2020 according to public reports. This large recreation, athletic, and community complex replaces the previous Jewish Community Centre, which was torn down in 2009. Although the new one is slightly

<sup>&</sup>lt;sup>14</sup> Staff#15(b).

<sup>&</sup>lt;sup>15</sup> SEC#19.

<sup>16</sup> SEC#12(b)(i).

larger, it is being built with many energy efficiency features. It is unlikely that the load of this new complex will be as much as the load of the previous buildings at the site, but the evidentiary record in this proceeding does not provide sufficient information to reach a conclusion on that.

- b. Immediately to the west of that site, across a park and a hydro right-of-way, is a smaller pink polygon, which is a development on the lands sold by Toronto Hydro in 2010 (the former operations building, and the staging yard for Davey Tree). About 100 single family and semi-detached houses were built on that site in 2013 and 2014, and they have been fully occupied since 2016 at the latest. There is no new load coming from this site.
- c. West and north of that site is a pink polygon representing the site at Overbrook and Wilmington being developed by Biddington Group. Originally that was to be low rise apartments and retail, 350+ units, replacing a large shopping plaza that was torn down in 2015, but was in operation up to that time. The development has now been revised, and currently the plan is for 164 townhouses with a small retail outlet (1000 square metres) right at the corner. It is not clear that the load from this development, when it materializes, will exceed the load from the shopping plaza it replaces.
- d. South and east from the JCC, across the parkland, is a pink polygon on Sheppard Avenue east of Bathurst. This site is currently a series of three connected ten story rental apartment buildings, covering the full site. Built more than forty years ago, this complex has about 500 apartments, and is not particularly energy efficient. No public announcements or notices have been given with respect to this site, but it is clearly one that could be redeveloped. Whether it could end up with more units, and whether given the current Ontario Building Code the load from a redeveloped site would be greater than the load today, are both legitimate questions. There is no information on the record to answer this.
- e. The largest development in the orange polygon on the map appears to be at 401 and Leslie, where several high rise buildings have been constructed or are planned in the area around the North York Ikea. It is not clear how this development impacts the load served by the proposed new Bathurst pipe, which is more than 6 km. away, on the other side of the main high pressure pipes along Bayview.
- 32. These five examples suggest that, absent better information from Enbridge (which it has refused to provide), one may reasonably doubt whether there will be 5,900 m3/h of additional peak load over ten years in the area affected by the proposed Project.
- 33. SEC notes that the biggest development in the area, Downsview Park, will not affect the need for the Bathurst Reinforcement Project<sup>17</sup>.
- 34. **Conclusion.** SEC submits that Enbridge has not supported its increase in load forecast with sufficient evidence on the record in this proceeding. Based on the evidence filed, the Board cannot independently conclude that a) the area affected should be expanded due to

<sup>&</sup>lt;sup>17</sup> SEC#22.



inlet pressure issues, and b) the load in that area is materially higher than previously expected.

### Is DSM a Viable Option?

- 35. In order to assess what the Board should do in this situation, SEC submits that it is first necessary to determine whether DSM is (or would have been) a viable option in this case. Even if Enbridge ignored a direction of the Board, and even if their load forecast increase is suspect, if their overall judgment to lay pipe is right, then the Board's response to the Application may well be different than if it isn't.
- 36. SEC submits that DSM was, and is, a viable option to displace projects like this, including the specific Bathurst Reinforcement Project, even at the higher loads alleged by Enbridge. We reach that conclusion for two reasons:
  - a. The ICF Study started from the assumption (whether from ICF or from Enbridge) that geo-targeted DSM must be independently cost-effective to displace infrastructure. This is a common error, but it is still an error. This makes the ICF conclusions on the Bathurst Reinforcement wrong by at factor of at least two, and probably much more<sup>18</sup>.
  - b. The ICF Study was comparing a theoretical DSM potential with a planned activity. The proper way to look at DSM as an alternative is to develop a real plan for how to address the infrastructure need with DSM. Enbridge never did that.
- 37. **Cost-Effectiveness.** The ICF Study assumed that the only value of geo-targeted DSM is the displacement of the pipe that would otherwise be installed. This assumption, and its implication, was described in their study as follows<sup>19</sup>:

"The primary design objective of DSM programs designed to reduce infrastructure investment would be to reduce peak period demand. However, <u>DSM programs implemented with the goal of impacting peak will also save</u> <u>avoided costs associated with annual energy efficiency including gas</u> <u>commodity cost savings, upstream capacity costs and the value of non-energy</u> <u>benefits including the value of the carbon emission reductions.</u> ICF's analysis does not account for any additional benefits. How various savings would be valued in an IRP context will require additional analysis." [emphasis added]

38. Here's what that means. If a regular DSM program passes the TRC+ Test, it is considered cost-effective. No value is given in that test to displacement of new infrastructure. Any infrastructure displacement is effectively free. Similarly, if geo-targeted DSM is "cost-effective" to displace new infrastructure, as that term is used in the ICF Study, that means

<sup>&</sup>lt;sup>18</sup> ICF also assumed that administrative costs for geo-targeted DSM would be much higher, also undermining costeffectiveness, but that pales in comparison to the silo assumption discussed here.

<sup>&</sup>lt;sup>19</sup> Staff#13, Attachment, ICF Study, p. ES-26.

that the gross NPV of the DSM is lower than the NPV of the infrastructure. The TRC benefits are treated as zero, or free.

- 39. This is clearly wrong. As ICF points out, when geo-targeted DSM is implemented, there are still TRC net benefits. To really estimate the cost-effectiveness of DSM to displace infrastructure, those benefits must be included.
- 40. A simple example may suffice. Suppose by spending \$5 million per year for ten years on geo-targeted DSM, the Bathurst Reinforcement Project could be displaced. That would have a net present value of about \$35 million, far in excess of the cost to put the pipe in the ground.
- 41. However, if that \$5 million a year of spending has just a 0.80 TRC ratio (existing programs all are well above 1.00, in some cases as high as 10.00), then the net present value of the real cost of the geo-targeted DSM (after accounting for the other benefits), is \$7 million, below the cost of putting pipe in the ground<sup>20</sup>.
- 42. This is not just an esoteric exercise. In their updated analysis of this Project<sup>21</sup>, ICF estimates that the net present value of the pipes option is \$7.5 million, while the net present value of the DSM option ranges from \$11.7 million to \$15.6 million. Based on the assumption that benefits other than infrastructure displacement have to be valued at zero, that means geo-targeted DSM is not cost-effective.
- 43. The other way to look at that, though, is to ask what the TRC ratio of DSM would have to be for DSM to be cost effective with all benefits counted. Mathematically, Enbridge can implement DSM measures down to between 0.36 TRC Ratio (\$11.7 million) and 0.52 TRC Ratio (\$15.6 million), and still match the cost of putting the pipe in the ground. Ratios this low would, of course, open up many opportunities for load reduction that are not otherwise considered cost-effective, and would not even be included in the DSM Potential Study, or the ICF Study.
- 44. *Planning vs. Conceptualizing.* Enbridge went to ICF and asked: "How much would it cost to displace this much load in this area with DSM?" ICF used general ratios and DSM potential information to estimate the cost. Enbridge refers to that result as "conceptual".
- 45. The better way to approach this is with a planner's mindset: "We have load growth of X. What are the various ways we can meet that load growth, and how much do they cost?" This puts DSM on a par with pipe. In the same way as the planners look at pipe size, and location, and construction options, in order to optimize the cost of meeting that load growth with new pipe, so the planners should look at program options, and delivery mechanisms, and administrative approaches, in order to optimize the cost of meeting that load growth with DSM.

<sup>&</sup>lt;sup>20</sup> We use the TRC+ Test in this example, because it is the more familiar. For geo-targeted DSM, a utility may prefer to use the Program Administrator Cost Test (PACT). For these purposes, that would not matter, because Enbridge DSM programs have high ratios for that test too.

<sup>&</sup>lt;sup>21</sup> Staff#20, Attachment, ICF Memo November 22, 2018.

- 46. Enbridge did not do that, because as noted earlier, Enbridge is not planning to do any geotargeted DSM any time soon. As they put it, "*micro analysis was not deemed a prudent expenditure of resources and was therefore not undertaken*<sup>22</sup>".
- 47. SEC wanted to see if it is possible to take a planner's approach to this, and so looked at the area involved to see what can be done.
- 48. The area in the orange polygon on the Enbridge map roughly comprises old Wards 10 and 23 of the City of Toronto<sup>23</sup>:
  - a. Ward 10, the western part, appears to be the area directly served. In 2016 it had 26,500 dwelling units, of which 29% were single family and 71% were multi-family. Of those, 14,045 units were in high-rises, and 57% of those were built prior to 1981.
  - b. Ward 23, the eastern part, appears to be most of the expanded area in the Enbridge load forecast. In 2016 it had 41,805 dwelling units, of which 29% were single family and 71% were multi-family. Of those, 26,337 units were in high-rises, and 36% of those were built prior to 1981.
- 49. Leaving aside commercial, industrial and institutional<sup>24</sup> loads, therefore, there would appear to be many older residential buildings that could benefit from increased efficiency and reduce the peak load in the area<sup>25</sup>.
- 50. Then we looked at the Enbridge DSM Plan. A good proxy for geo-targeted DSM in residential is low income programs. Unlike normal residential DSM programs, which rely on marketing and incentives to get participation, low-income programs either install measures at no cost to the homeowners, or provide incentives that make the deal (for apartment owners) too good to ignore. In essence, low income programs are targeted to customers with less willingness, or ability, to invest in efficiency themselves.
- 51. All of Enbridge's low income programs have a TRC and PACT of 1.00 or better, the highest being 3.39 PACT for multi-family.
- 52. The question Enbridge should have asked, but didn't, is "Can we, each year, install or incent sufficient energy efficiency measures in the 68,000 homes in this area to displace this pipeline?" If they had asked that question, they may have found that the \$2,800 per house cost of the Home Weatherization Offering, if made available to all customers in the affected area instead of just low income, would still have a TRC+ cost-effectiveness of 1.31<sup>26</sup>, but could easily displace a lot of that load growth. They would have found that the average

<sup>&</sup>lt;sup>22</sup> Staff#20(b), p. 2.

<sup>&</sup>lt;sup>23</sup> All demographic data in this analysis from the City of Toronto website.

<sup>&</sup>lt;sup>24</sup> There are dozens of schools, for example, and at least two major hospitals.

<sup>&</sup>lt;sup>25</sup> Since residential uses are mainly space and water heating, they tend to follow load shapes of the system fairly well.

<sup>&</sup>lt;sup>26</sup> With greater penetration, the TRC+ ratio would likely move up due to economies of scale, and down due to more marginal applications, but in any case would not get close to the 0.52 ratio that is the highest breakeven point.

\$15,000 per building for apartments in the low income multi-family program, if made available to all apartment owners in the affected area, would displace substantial load at a TRC+ cost-effectiveness of 2.06. Further, if all homeowners and apartment owners were aware that this special program of free (or very inexpensive) efficiency upgrades is available only for a limited time to avoid laying new pipe, it is likely uptake would be high.

- 53. SEC is not for a minute suggesting this is a viable plan for Enbridge. This is a hypothetical, created to test whether, once a planner's perspective is employed, it is reasonable to assume that a geo-targeted plan could be implemented. It would not, of course, be this one. This is not much more than back of the envelope. There are a lot of questions and details that would have to be addressed, and in the end the plan would be unlike this simple example.
- 54. What is shows, though, is that even assuming 590 m3/h annual peak growth, and even before you take into account DSM for non-residential customers in this area, once you include in cost-effectiveness the value of the normal DSM benefits, there is ample opportunity to displace a project like this.
- 55. **Conclusion**. SEC therefore submits that DSM is in fact a viable option to displace the Bathurst Reinforcement Project. All it requires is correction of the erroneous cost-effectiveness assumption in the ICF Study, and an approach to the DSM option that is comparable to the utility's approach to the pipes option.

### What Should the Board Decide in this Proceeding?

- 56. Having said all that, SEC believes that it may not be practical for the Board to refuse approval of this leave to construct application.
- 57. *Timing and Risk.* SEC believes that Enbridge may have left this too late, so that at this point any DSM implementation would come with an unacceptable level of supply uncertainty.
- 58. If Enbridge had responded to the Board's direction in 2014, when Enbridge knew it would eventually have to do this Project, by analyzing whether there was a DSM option they could implement instead, they could have started that implementation in 2016 at least. By now they would know whether, for example, apartment owners would flock to low cost building improvements available on a time-limited basis. They would know whether schools and hospitals, with significant capital backlogs, would be willing and able to partner with Enbridge to leverage their building improvement funds for enhanced incentives to displace pipe. They would know whether stripping ("You get efficiency; you get efficiency; everyone gets efficiency") could be an effective model to improve mature housing stock in the city.
- 59. None of that happened.

- 60. If the Board, today, were to deny approval of this project, there is no guarantee that a reluctant Enbridge would be able to put geo-targeted DSM on the fast track to deal with the load growth in the affected area. The Board would, in effect, be rolling the dice that DSM implemented too late in the day would still be able to displace near term load growth.
- 61. SEC cannot recommend that. Yes, it is true that Enbridge has the burden of proving their Application, and they have clearly failed to provide sufficient evidence on key issues. The growth forecast is doubtful, with insufficient evidentiary backup. The DSM alternative is essentially non-existent, and proceeded on the basis of a materially incorrect cost-effectiveness assumption.
- 62. But this Board has to deal with the practical realities of the situation. Enbridge says this has to be installed in 2019, or face a City moratorium on utility infrastructure<sup>27</sup>. Enbridge says that it has low inlet pressures, creating an overall supply risk on the network<sup>28</sup>. Enbridge says it can't deploy geo-targeted DSM for at least 3 years, likely longer<sup>29</sup>.
- 63. The Board has to consider: What if Enbridge is right? Is the fact that they have not really met their burden of proof sufficient to risk lack of supply in a built-up area of the City of Toronto, where tens of thousands of customers could be affected?
- 64. SEC therefore submits that the timing of this project effectively limits the Board's options, and it would likely be imprudent to refuse approval of this project. The lower risk, most practical response is to approve the Project.
- 65. *Alternative to Refusal*. SEC is concerned, however, that the refusal of Enbridge to comply with the Board's direction in EB-2014-0134 will continue with every other project, well into the future, unless somehow the Board makes clear that its directions must be heeded.
- 66. One possible way to do that would be for the Board to approve the leave to construct application, but provide that Enbridge will not be allowed to earn a return on that investment until such time as it demonstrates that it has integrated geo-targeted DSM in a serious manner into its infrastructure planning. The Board could do this by imputing revenues equal to the return on this particular component of rate base.
- 67. SEC recognizes that the amount of money would be small, perhaps \$500/600,000 per year during the first few years of the life of the Project. This does not have a material impact on Enbridge. On the other hand, it would send a clear message to Enbridge that continued delays in implementing integrated resource planning, in the face of clear direction from the Board, are not acceptable.

<sup>&</sup>lt;sup>27</sup> That claim appears to be overstated. See SEC#25, Attachment.

 <sup>&</sup>lt;sup>28</sup> This also appears to be overstated, given the earlier discussion and the several refusals of key information.
<sup>29</sup> SEC#28, p. 2.

### **Conclusion**

SEC therefore submits that the Board should accept the evidence of Enbridge that at this late date there is no available alternative to this capital project, and thus grant leave to construct. At the same time, the Board should order the imputing of income, each year, equal to the return on this investment, until such time as Enbridge satisfies the Board that it is making integrated resource planning a serious component of its system planning.

SEC submits that it has participated responsibly in this proceeding, and requests that the Board order reimbursement of its reasonably incurred costs for so doing.

All of which is respectfully submitted.

### Yours very truly, SHEPHERD RUBENSTEIN PROFESSIONAL CORPORATION

Jay Shepherd

cc: Wayne McNally, SEC (email) Interested Parties