### BEFORE THE MINNESOTA OFFICE OF ADMINISTRATIVE HEARINGS

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#### FOR THE MINNESOTA PUBLIC UTILITIES COMMISSION

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IN THE MATTER OF THE APPLICATION OF ENBRIDGE ENERGY, LIMITED PARTNERSHIP FOR A CERTIFICATE OF NEED AND PIPELINE ROUTE PERMIT FOR THE LINE 3 REPLACEMENT PROJECT IN MINNESOTA FROM THE NORTH DAKOTA BORDER TO THE WISCONSIN BORDER

OAH 11-2500-32764 DOCKET NO. PL-9/CN-14-916 OAH 11-2500-33377 DOCKET NO. PL-9/CN-15-137

#### INITIAL BRIEF OF THE YOUTH CLIMATE INTERVENORS

January 23, 2017

### INTRODUCTION

The Public Utilities Commission ("Commission") should **deny** the Application of Enbridge Energy Limited Partnership ("Enbridge") for a Certificate of Need and Route Permit for the Line 3 Replacement Project ("Project"). The Project would impose costs far beyond any potential benefits, and it runs counter to state and federal environmental policies. The Project does **not** meet the requirements set forth in Minn. Stat. 216B.243 and Minn. R. Ch. 7853, and therefore should **not** be granted a Certificate of Need or a Route Permit.

This is the initial brief of the Youth Climate Intervenors, an unaffiliated group of 13 citizens under the age of 25, participating in this process as a single Party. Our Petition to Intervene was filed on May 12, 2017, and we were granted full Party status on July 3, 2017. We intervened to defend the rights of ourselves and our generation from the long-term threats posed by this Project, including (but not limited to) the threat of climate change. As described in our original Petition to Intervene:

"We rely on the agricultural, human, and ecological services in Minnesota in order to maintain our health, safety, and quality of life. We allege that these rights and privileges, enjoyed by many generations before us, will be severely impacted by the outcome of this Commission's decision on Enbridge's Line 3 tar sands oil pipeline, due to the significant emission of greenhouse gases that it would enable, and the resulting contribution to climate change, which has direct, tangible, and scientifically proven negative impacts in Minnesota."

The Testimony submitted by the Youth Climate Intervenors and other Parties establishes that this Project would impose massive costs on society, including climate change, imperiled drinking water, and endangerment of cultural resources. On this record, Enbridge cannot meet its burden of showing that its proposed Project will provide social benefits that outweigh its many costs.

2

<sup>&</sup>lt;sup>1</sup> Youth Climate Intervenor Petition to Intervene at 1-2 (May 12, 2017) (eDocket Nos. 20175-131806-02 (CN); 20175-131806-01 (R)).

Against this background, the Youth Climate Intervenors will use this brief to demonstrate that the tar sands oil burned as a result of this project would lead to massive greenhouse gas emissions and an equally massive social cost of carbon. We will explain how the Project would be responsible for those costs - costs that would fall hardest on our generation. We will describe the catastrophic threat that this Project poses to vital water resources. We will discuss the multitude of ways in which the Project would assault the culture and violate the rights of Indigenous people. Finally, we will examine the comparatively miniscule benefits of the Project as suggested by Enbridge. Together, these facts lead to three inescapable conclusions: first, that the consequences to society of the Project are deeply unfavorable; second, that these consequences violate fundamental rights; and third, that accordingly, the proposed Line 3 cannot receive a Certificate of Need.

### STATEMENT OF FACTS

### I. THE LINE 3 EXPANSION IS NOT NEEDED

"The relevant question is not whether a need for oil is met, but whether society's needs for electric energy are met." Ex. SC-4 at 6 (Twite Rebuttal)

# A. Minnesota Refineries and Crude Oil Demand do Not Support a Need for the Line 3 Expansion.

- The record contains testimony from a multitude of experts across a wide variety of backgrounds that the Line 3 expansion is not needed, and that denying this Application would not adversely affect the future adequacy, reliability, or efficiency of energy supply.
- The Minnesota Department of Commerce found that refineries in our district "have been operating at high levels of utilization, which indicates that they are not short of physical supplies of crude oil, and also that they have little room to increase total crude oil runs. Thus, the whole proposed incremental increase in capacity of 370 thousand barrels per day for the Enbridge Line 3 project is not likely to be used in Minnesota." Neither of the Minnesota refineries chose to meaningfully involve themselves in this case, and Ms. O'Connell testified that "Flint Hills is very good at advocating for what they actually need...I read their letter very carefully to see whether there was anything there that suggested that they weren't getting the resources they needed. There is nothing...Even though they had two opportunities to do so, I'm not seeing them saying we can't operate our refinery the way we want to. That's not there."
- Despite Minnesota's declining oil demand<sup>4</sup> and carbon emissions, our economy has continued to grow.<sup>5</sup>

### B. Enbridge Improperly Relied on Inflated Global Oil Market Forecasts.

• The supply forecasts used by Enbridge in its Muse Stancil Report are unrealistically optimistic about future supply, and unrealistically pessimistic about the implementation of federal and global climate action. Mr. Joseph, a seasoned consultant on the economic impacts of major infrastructure projects such as pipelines, testified that the National Energy Board ("NEB") forecast relied upon by Enbridge in requesting the Certificate of

<sup>&</sup>lt;sup>2</sup> Ex. DER-4, Attach. 1 at 5 (Fagan Direct)

<sup>&</sup>lt;sup>3</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 136-137 (Kate O'Connell)

<sup>&</sup>lt;sup>4</sup> YC-25 at 4 (Swift Surrebuttal)

<sup>&</sup>lt;sup>5</sup> Ex. SC-14 at 7 (Climate Solutions and Economic Opportunities Report)

Need "does not take into account recent climate change policy in Canada that will have a significant effect on the prospect for further production growth." The forecast therefore can be expected to overestimate Western Canada Sedimentary Basin ("WCSB") oil production. Mr. Swift agreed that Enbridge is "projecting a future that is highly unlikely to resolve itself" based on existing and imminent climate policies.

- Mr. Swift, who brings seven years of experience in analyzing Canadian climate policy and oil markets, testified that in order for Canada to meet its commitments in the Paris Agreement, additional climate policies will need to be implemented.<sup>9</sup> This makes the disparity between the Muse Stancil forecast and climate-conscious reality even greater.
- Mr. Swift also confirmed that if additional climate policies are implemented globally in accordance with the Paris Agreement, global demand for petroleum will begin a longterm decline as early as 2020 according to International Energy Agency (IEA) forecasts.<sup>10</sup>
- The above realities are consistent with a scenario outlined by Dr. Fagan, in which "U.S. refined product demand is weak, refined product cannot be easily exported, and there is a simultaneous glut of refined products globally." Mr. Earnest dramatically termed this realistic scenario "apocalyptic." <sup>12</sup>
- Enbridge is and has always been a fossil fuel company, and it seems unable to seriously consider a renewable energy future. Mr. Earnest's casual dismissal of Dr. Fagan's "oil glut" scenario as somehow unthinkable is remarkably oblivious to current realities. There is a scientific and political consensus on the transition to renewable energy, which is highly likely to precipitate a seismic economic shift. When asked about his attention to climate policy in his testimony, Mr. Earnest responded "There's not a great deal of discussion in my testimony about climate change policy in Canada. There's a brief or a single sentence, as I recall." The Muse Stancil report's exclusion of any meaningful discussion of climate policy is both unrealistic and a poor reflection on the ability of Enbridge to adapt its business model to new realities.

<sup>&</sup>lt;sup>6</sup> Ex. FOH-10 at 1-2 (Joseph Surrebuttal)

<sup>&</sup>lt;sup>7</sup> Ex. FOH-6 at 14 (Joseph Direct)

<sup>&</sup>lt;sup>8</sup> Ex. YC-25 at 5 (Swift Surrebuttal)

<sup>&</sup>lt;sup>9</sup> Ex. YC-1 at 4 (Swift Direct)

<sup>&</sup>lt;sup>10</sup> Ex. YC-1 at 6 (Swift Direct)

<sup>&</sup>lt;sup>11</sup> Ex. DER-4 at 30 (Fagan Direct)

<sup>&</sup>lt;sup>12</sup> Ex. EN-37, Sched. 1 at 46 (Earnest Rebuttal)

<sup>&</sup>lt;sup>13</sup> Evid. Hrg. Tr. Vol. 1B at 22-23 (Neil Earnest)

- Mr. Earnest also neglected to acknowledge historical examples of similar oil glut scenarios that occurred in the late 1980s and late 2000s. 14
- The questionable forecast used in the Muse Stancil report has ripple effects throughout the record. Since Mr. Glanzer<sup>15</sup> and Mr. Rennicke<sup>16</sup> relied exclusively upon Mr. Earnest's Muse Stancil report, the failure to consider current and reasonably anticipated future climate policies is part and parcel of most of Enbridge's projections and conclusions. Additionally, Mr. White confirmed on behalf of the DOC-EERA that the Final Environmental Impact Statement (FEIS) did not consider any supply forecast for Canadian crude oil that differed from the one proposed by Enbridge, which strongly suggests that Enbridge's disregard of climate policy is also reflected throughout the conclusions it drew from the FEIS.<sup>17</sup>
- In the very recent past and specifically in Minnesota Enbridge has been highly inaccurate with its need forecasts. As established by Mr. Andy Pearson during the McGregor public hearing, Enbridge admitted that it had to shelve its proposed Sandpiper pipeline "due to market changes." When questioned further, Mr. Eberth admitted that Enbridge had given no indication that its Sandpiper forecast was fallible. To the contrary, Mr. Eberth stated "My recollection is we believed in the forecast." That forecast for Sandpiper dismissed in 2016 as untenable due to changing market conditions was prepared by Mr. Earnest, the same person who now offers the Line 3 forecasts. Similarly, the Sandpiper project was under the management of Mr. Eberth, who is now responsible for the Line 3 expansion project. In light of the Sandpiper debacle, Enbridge's faith in its current forecasts is highly suspect.
- Mr. Swift corroborated the historical unreliability of the forecasts used in the Muse Stancil report, explaining that "CAPP forecasts have proven particularly volatile and inaccurate over time. Looking back at forecasts made a decade ago, CAPP overestimated current production levels by nearly 1 million bpd. At the same time, CAPP's 2030 forecast has been revised downward every year since 2013, with the 2030 production forecast dropping by nearly 2 million bpd."
- Mr. Stockman, who brings over twenty years of experience researching and analyzing
  petroleum industry economics and infrastructure projects, testified that "The projections
  relied upon by the industry today signal an unfounded confidence that the future will be

<sup>&</sup>lt;sup>14</sup> Ex. DER-7 at 5-6 (Fagan Surrebuttal)

<sup>&</sup>lt;sup>15</sup> Evid. Hrg. Tr. Vol. 1B at 56 (John Glanzer)

<sup>&</sup>lt;sup>16</sup> Ex. EN-10, Sched. 2 at 10-11 (Rennicke Direct)

<sup>&</sup>lt;sup>17</sup> Evid. Hrg. Tr. Vol. 11B (Nov. 17, 2017) at 92-93 (Eric White)

<sup>&</sup>lt;sup>18</sup> McGregor Pub. Hrg. Tr. (Vol. 4A) at 100 (Oct. 11, 2017)

<sup>&</sup>lt;sup>19</sup> Ex. YC-25 at 6 (Swift Surrebuttal)

much like the past. That the oil industry has been through cyclical peaks and troughs before is true. But I see the signals from accelerating technological change portending a very different future. This stems from my confidence in the capacity of technology to change the world and also from the knowledge that this change is necessary to address the existential crisis of climate change."<sup>20</sup>

- Minnesota has an obligation to think critically about long-term energy infrastructure. The type of arrogance displayed by Enbridge in refusing to acknowledge changing economic circumstances is not consistent with that obligation. As Ms. O'Connell testified, "We're at a point of change, and the need that's been identified in Minnesota is not the same as it had been previously where it was pretty clear that there was a need to ship more crude oil. Now we're kind of hitting this point where maybe we don't need it."<sup>21</sup>
- Mr. Dybdahl expressed additional concerns on behalf of the Minnesota Department of Commerce, noting that Mr. Johnston and Ms. Lim from Enbridge also failed to address the effect of a possible business downturn. As stated by Mr. Dybdahl, such a failure is surprising given that Enbridge supplies "unusually carbon intensive fossils fuels in a carbon constrained economy." His concern is supported by the testimony of Mr. Joseph, who stated, "Canadian oil production is heavily reliant on oil sands production, which is relatively carbon-intense and thus particularly susceptible to emerging climate change policy. This susceptibility to climate change policy translates to higher costs of production, further reducing the global competitiveness of this oil resource." The failure to consider the effects of climate policy and the potential for a business downturn represents a lack of foresight on the part of Enbridge, because as Mr. Dybdahl concluded, "I looked at how fast the coal business took a nose dive. So just within ten years, you can have whole industry sectors become much less financially vibrant than they are today." 24
- The testimony of Mr. Stockman (on behalf of Honor the Earth), Mr. Joseph (on behalf of Friends of the Headwaters), and Mr. Twite (on behalf of the Sierra Club) all contain more **holistic** and **realistic** forecasts that account for the changing reality brought about by climate policy, the surge in cost-effective renewable energy sources, and oil prices that are nowhere near their historical highs.

<sup>&</sup>lt;sup>20</sup> Ex. HTE-7 at 2 (Stockman Testimony Summary)

<sup>&</sup>lt;sup>21</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 42-43 (Kate O'Connell)

<sup>&</sup>lt;sup>22</sup> Ex. DER-15 at 1 (David Dybdahl Testimony Summary)

<sup>&</sup>lt;sup>23</sup> Ex. FOH-6 at 15 (Joseph Direct)

<sup>&</sup>lt;sup>24</sup> Evid. Hrg. Tr. Vol. 8A (Nov. 14, 2017) at 109 (David Dybdahl)

### C. Long-Term Growth of Tar Sands Oil Production is Not and Should Not be Guaranteed.

- A Canadian Association of Petroleum Producers (CAPP) press release from June 2017 states that "Capital spending in the oil sands is expected to decline for the third consecutive year to \$15 billion in 2017 from \$34 billion in 2014."<sup>25</sup>
- Signatories to the Paris Climate Accord agreed to try to keep the rise in global temperatures below 1.5C. A recent report by Oil Change International found that existing oil and gas projects alone are enough to push climate change beyond the 1.5C goal.<sup>26</sup> A 2015 study published in *Nature* established that 75% of Canada's tar sands would need to remain unburned if we even hope to keep the global temperature increase below 2C.<sup>27</sup>
- CAPP acknowledges that, "At present, Canada's oil industry faces a number of challenges tempering long-term growth prospects, including uncertainty related to provincial and federal climate change policies." <sup>28</sup>
- Statoil, Marathon Oil, Shell, ConocoPhillips, Total, and ExxonMobil collectively sold off more than \$24 billion worth of investments in the Alberta tar sands over a five-month period (at a significant discount),<sup>29</sup> and recent analysis of capital expenditures in the oil sands suggest that there is a limited interest from producers in spending on projects that would bring on new production beyond the 2020 timeframe.<sup>30</sup>
- Pipelines like Line 3 do not follow the boom-and-bust model that less capital-intensive oil infrastructure projects are prone to.<sup>31</sup> Rather, they represent long-term investments that commit us to decades of oil extraction, transportation, and combustion, and burden us with the associated greenhouse gas emissions.<sup>32</sup> This creates incentives to continue operating these investments "even after it stops being economically rational."<sup>33</sup> Mr. Scott gave the following example: "For the purpose of cutting emissions from the coal sector, many governments have faced the liability of compensating billions of dollars to companies in order to force early shut-down of energy infrastructure. It can be reasonably expected to see something similar in the oil sands."<sup>34</sup>

<sup>&</sup>lt;sup>25</sup> Ex. YC-4 at 1 (CAPP Press Release)

<sup>&</sup>lt;sup>26</sup> Ex. YC-2 at 8-10 (Scott Direct)

<sup>&</sup>lt;sup>27</sup> Ex. YC-12 at 14 (Oil Change International Report)

<sup>&</sup>lt;sup>28</sup> Ex. YC-4 at 1 (CAPP Press Release)

<sup>&</sup>lt;sup>29</sup> Ex. YC-25 at 2 (Swift Surrebuttal)

<sup>&</sup>lt;sup>30</sup> Ex. YC-1 at 7 (Swift Direct)

<sup>&</sup>lt;sup>31</sup> Ex. YC-2 at 7 (Scott Direct)

<sup>&</sup>lt;sup>32</sup> Ex. YC-14 at 6 (Abraham Direct)

<sup>&</sup>lt;sup>33</sup> Ex. YC-9 at 2 (SEI Discussion Brief)

<sup>&</sup>lt;sup>34</sup> Ex. YC-2 at 8 (Scott Direct)

### D. Renewable Energy and Electric Alternatives are Actively Disrupting Global Oil Markets.

- The global demand for oil is already changing. Electric vehicle policies have been implemented in France, the United Kingdom, Norway, Scotland, India, and China,<sup>35</sup> causing a reduction in global demand for oil.<sup>36</sup> Bloomberg recently suggested that electric vehicles could be cheaper than their internal combustion engine equivalents by 2030.<sup>37</sup> Even Total SA, a major oil company, forecasts that electric vehicles will constitute up to 30% of new-car sales by 2030.<sup>38</sup>
- Renewable energy technologies, such as utility-scale solar photovoltaics, are also improving, and costs are rapidly becoming competitive with fossil fuels,<sup>39</sup> often to the point of saving consumers money over a longer term when compared with older oilreliant technologies.<sup>40</sup>
- Wind energy is also developing rapidly. A 2016 Wind Technologies Market Report provided by Mr. Twite states that "Declines in the price of wind energy over the last half decade have been substantial, helping to improve the economic position of wind even in the face of challenging competitive pressures." Nature Energy's Expert Elicitation Survey on the Future of Wind Energy Costs states that the levelized cost of electricity for wind energy is also anticipated to decline by 24-30% in 2030 and by 35-41% in 2050, relative to 2014 baseline values. There is now more wind power capacity under consideration than any other energy resource, based on the major transmission interconnection queues around the country.
- Even an Enbridge stockholder testified during a public hearing that "Fossil fuel is a dying industry. Every year renewables provide a larger share of our energy needs in Minnesota." 44

<sup>&</sup>lt;sup>35</sup> Ex. SC-4 at 22 (Twite Rebuttal)

<sup>&</sup>lt;sup>36</sup> Ex. HTE-7 at 1 (Stockman Testimony Summary)

<sup>&</sup>lt;sup>37</sup> Ex. SC-12 at 17 (Rocky Mountain Institute Report)

<sup>&</sup>lt;sup>38</sup> Ex. SC-12 at 17 (Rocky Mountain Institute Report)

<sup>&</sup>lt;sup>39</sup> Ex. YC-14 at 16 (Abraham Direct)

<sup>&</sup>lt;sup>40</sup> Ex. SC-4 at 7-8 (Twite Rebuttal)

<sup>&</sup>lt;sup>41</sup> Ex. SC-6 at 73 (Wind Technologies Market Report)

<sup>&</sup>lt;sup>42</sup> Ex. SC-8 at 3-5 (Expert Elicitation Survey on Future Wind Energy Costs)

<sup>&</sup>lt;sup>43</sup> Ex. SC-6 at 10 (Wind Technologies Market Report)

<sup>&</sup>lt;sup>44</sup> McGregor Pub. Hrg. Tr. (Vol. 4A) at 46-47 (October 11, 2017)

# II. THE LINE 3 EXPANSION WOULD RESULT IN A PROHIBITIVELY HIGH SOCIAL COST OF CARBON

"Line 3 would contribute systemically to a significant long-term increase in greenhouse gas emissions over coming decades at a time when substantial emissions reductions are required."

Ex. YC-2 at 2 (Scott Direct)

### A. Canadian Tar Sands Oil Extraction is Constrained by Pipeline Capacity.

- The record strongly supports that, if completed, the Project would result in increased production and combustion of tar sands oil. Without pipelines, production of tar sands cannot expand. Mr. Scott testified that "The oil industry has typically framed the debate around pipeline approvals by asking 'how many pipelines are needed to carry forecast oil production growth?' In fact, this question gets the causality the wrong way around. Since pipelines are required to unlock new reserves, the question should be 'how much extra production will be created by additional export pipeline growth?" This is corroborated by Oil Change International's recent report, 46 and by the June 2017 CAPP Press Release stating "The projected growth [in tar sands] will exceed the existing pipeline transportation capacity."
- Multiple parties, including Enbridge, have confirmed that rail and truck are not viable alternatives for the oil supply associated with the Line 3 expansion. Specifically the Line 3 Project Manager, Mr. Eberth, stated, "the parties generally agree that truck or rail do not represent reasonable alternatives to the Project, as it is impractical to move the proposed 760,000 bpd from the Project by either mode, and doing so would be more expensive, less efficient, and less reliable." 48
- The rail alternative presented by the FEIS requires the construction of at least four additional large pieces of infrastructure, including two new rail terminals and the purchase of at least 7,200 new tank cars. <sup>49</sup> These are facilities that "either do not exist or would require significant investment and modification in existing infrastructure. Each of these investments would require independent and lengthy permitting processes in addition to significant expenditures of capital." <sup>50</sup> Enbridge witness Mr. Rennicke

10

<sup>&</sup>lt;sup>45</sup> Ex. YC-2 at 3 (Scott Direct)

<sup>&</sup>lt;sup>46</sup> Ex. YC-12 at 11 (Oil Change International Report)

<sup>&</sup>lt;sup>47</sup> Ex. YC-4 at 1 (CAPP Press Release)

<sup>&</sup>lt;sup>48</sup> Ex. EN-30 at 6-7 (Eberth Rebuttal)

<sup>&</sup>lt;sup>49</sup> Ex. EERA-23, Chap. 4 at 4-12 (FEIS)

<sup>&</sup>lt;sup>50</sup> YC-1 at 9 (Swift Direct)

confirmed that rail terminals, specifically, cost approximately one hundred million dollars apiece. <sup>51</sup>

- Mr. Rennicke also establishes that crude oil shipments by rail through Minnesota have, in fact, been declining since 2014.<sup>52</sup>
- Mr. Rennicke confirmed that if the Line 3 expansion is not built, very little oil will be transported by truck, explaining that "that's probably the least efficient mode of transportation." Ms. O'Connell, on behalf of the Minnesota Department of Commerce, agreed that rail wasn't a viable alternative for 760,000 bpd. 54
- If the Line 3 expansion were completed, the increase in pipeline capacity would result in increased production of tar sands oil. In turn, this would result in a scientifically measurable quantity of additional greenhouse gas emissions. This would impose costs on society that must be fully weighed by the State of Minnesota when evaluating the implications of this Project. A report by the Minnesota Environmental Quality Board (with input from the Pollution Control Agency, Department of Commerce, Department of Agriculture, Department of Employment and Economic Development, Metropolitan Council, and others) confirms the reality that "Federal and state policy recognizes that there is a social cost associated with carbon emissions that can be considered in decision making." 55

### B. A Social Cost of Carbon is Attributable to the Line 3 Expansion.

- The FEIS identified a multitude of oil transportation scenarios that could occur as a result of the Line 3 expansion. These scenarios refer to whether the oil transported by the Line 3 expansion would be replacing existing capacity, or inducing new upstream production and downstream consumption. Replacing existing capacity is known as "displacement." <sup>56</sup>
- The FEIS focused on two scenarios, one that involves no displacement, assuming all oil transported by Line 3 would **not** have been otherwise extracted, and one that involves partial displacement, in which the Project displaces 390,000 bpd of WCSB light crude and 370,000 bpd U.S. light tight oil.<sup>57</sup> The FEIS provided no evidence stipulating that the

<sup>&</sup>lt;sup>51</sup> Evid. Hrg. Tr. Vol. 1B (Nov. 1, 2017) at 144 (Bill Rennicke)

<sup>&</sup>lt;sup>52</sup> Ex. EN-10, Sched. 2 at 5 (Rennicke Direct)

<sup>&</sup>lt;sup>53</sup> Evid. Hrg. Tr. Vol. 1B (Nov. 1, 2017) at 136 (Bill Rennicke)

<sup>&</sup>lt;sup>54</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 72 (Kate O'Connell)

<sup>&</sup>lt;sup>55</sup> Ex. SC-14, Sched. 9 at 12 (Twite Rebuttal)

<sup>&</sup>lt;sup>56</sup> Ex. EERA-23, Chap. 5 at 5-450 (FEIS)

<sup>&</sup>lt;sup>57</sup> Ex. EERA-23, Chap. 5 at 5-451 (FEIS).

no displacement scenario is more likely than the partial displacement scenario; the no displacement scenario can be viewed as an "upper limit" for the social cost of carbon.

- The FEIS listed the no displacement scenario as producing an incremental increase of 193 million tons of CO2e annually, and the partial displacement scenario as producing an increase of 35 million tons CO2e annually.<sup>58</sup>
- Ms. Kinder proposed an additional partial displacement scenario using a different combination of displaced oil types which produces an increase of 98-113 million tons of CO2e annually. <sup>59</sup>
- The FEIS relied upon the outputs of the White House Interagency Working Group (IWG) 2015 social cost of carbon model. The IWG was comprised of "scientific and economic experts from the White House and federal agencies, including Council on Environmental Quality, National Economic Council, Office of Energy and Climate Change, and Office of Science and Technology, EPA, and the Departments of Agriculture, Commerce, Energy, Transportation, and Treasury." Ms. Miltich confirmed on behalf of the DOC-EERA that the outputs from the IWG model are generally acceptable values to be used in this type of regulatory or policy context, and represent one of the most reputable and well-vetted SCC models.
- Ms. Miltich agreed with counsel for Enbridge that the social cost of carbon values produced by the IWG are developed from highly sophisticated and peer-reviewed policies known as integrated assessment models.<sup>62</sup>
- As stated by the FEIS, "The [social cost of carbon] is meant to be a comprehensive estimate of climate change damages. It includes changes in net agricultural productivity; human health; property damages from increased flood risk; and changes in energy system costs, such as reduced costs for heating and increased costs for air conditioning." 63
- The IWG looked at multiple "discount rates" for assigning value to the climate damages that will take place in the future. Whitehouse 2015 produced social cost of carbon values based on the average social cost of carbon from three integrated assessment models

<sup>&</sup>lt;sup>58</sup> Ex. EERA-23, Chap. 5 at 5-452 (FEIS).

<sup>&</sup>lt;sup>59</sup> Ex. EN-47 at 6 (Kinder Rebuttal).

<sup>&</sup>lt;sup>60</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS).

<sup>&</sup>lt;sup>61</sup> Evid. Hrg. Tr. Vol. 11A (Nov. 17, 2017) at 63 (Louise Miltich).

<sup>&</sup>lt;sup>62</sup> Evid. Hrg. Tr. Vol. 11A (Nov. 17, 2017) at 46-48 (Louise Miltich).

<sup>&</sup>lt;sup>63</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS).

(IAMs) for a 5%, 3%, and 2.5% discount rate. $^{64}$  The IWG acknowledged the 3% discount rate as the average value. $^{65}$ 

- A key output that the IWG produced is a "price" per metric ton of CO2e which increases annually, <sup>66</sup> "because future emissions are expected to produce larger incremental damages as physical and economic systems become more stressed in response to greater climate change (White House 2015, p13)." This statement was uncontroverted and in fact emphasized by counsel for Enbridge and Ms. Miltich. This price is then used to calculate the social cost of carbon in the FEIS. <sup>69</sup>
- Ms. Kennett, Enbridge's Supervisor of Pipeline Asset Integrity Projects, testified that the Line 3 replacement pipeline could last longer than the existing Line 3,<sup>70</sup> which has been in the ground since 1963.<sup>71</sup> The FEIS states that "the economic life of the pipeline...is anticipated to be **no less than** 30 years" (emphasis added).
- The FEIS used the IWG outputs to calculate the life-cycle emissions of the proposed Line 3 expansion. This includes all greenhouse-gas emissions from the extraction of the tar sands oil and any partial processing of the raw materials that occurs at the extraction site; the transportation from the point of extraction to the refineries, such as energy required to operate pumping stations, purchased fuels such as natural gas, and operation of bulk storage depots; and the eventual combustion of the oil itself and combustion of byproducts like petcoke. The FEIS noted that "Oil extracted from the Western Canadian Sedimentary Basin (WCSB) like the heavy crudes that would be carried by the proposed Line 3 pipeline, require greater energy input for extraction and upgrading than U.S. light crudes, and therefore create more GHG emissions at each stage during production."
- Using the replicable calculations that produced the 30-year social cost of carbon in the FEIS, Attachment 6 to Adam Scott's Direct Testimony provided estimated social cost of carbon numbers for a 60-year operating lifetime of the proposed Line 3 expansion. These tables include numbers for both the 3% and 2.5% discount rates, and the no displacement and partial displacement scenarios described in the FEIS.

<sup>&</sup>lt;sup>64</sup> Ex. YC-8 at 2 (Scott Direct).

<sup>&</sup>lt;sup>65</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS).

<sup>&</sup>lt;sup>66</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS).

<sup>&</sup>lt;sup>67</sup> Ex. YC-8 at 4 (Scott Direct).

<sup>&</sup>lt;sup>68</sup> Evid. Hrg. Tr. Vol 11A (Nov. 17, 2017) at 47 (Louise Miltich).

<sup>&</sup>lt;sup>69</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS).

<sup>&</sup>lt;sup>70</sup> Evid. Hrg. Tr. Vol1A (Nov. 1, 2017) at 39-42 (Laura Kennett).

<sup>&</sup>lt;sup>71</sup> Ex. EN-12 at 11 (Kennett Direct).

<sup>&</sup>lt;sup>72</sup> Ex. EERA-23, Chap. 2 at 2-7 (FEIS).

<sup>&</sup>lt;sup>73</sup> Ex. EERA-23, Chap. 5 at 5-449-450 (FEIS).

<sup>&</sup>lt;sup>74</sup> Ex. EERA-23, Chap. 5 at 5-450 (FEIS).

<sup>&</sup>lt;sup>75</sup> Ex. YC-8 at 5 (Scott Direct).

- The **most conservative** partial displacement scenario in both the FEIS and Ms. Kinder's testimony would result in a \$330 billion social cost of carbon over 60 years. If calculations are done using a 2.5% discount rate instead of a 3% discount rate (in other words, valuing future damages more), the cost increases to \$444 billion. <sup>76</sup> A social cost of carbon over 60 years was not calculated for Ms. Kinder's alternative partial displacement scenario, but it would be even more costly.
- Ms. Kinder proposed alterations to a component of the social cost of carbon associated with energy required for the pipeline's pumping stations, in order to more accurately reflect Minnesota's Renewable Energy Standard goals. Her assertion is that the valuation of the impact from the 533,249 megawatt-hours per year needed to operate the Line 3 pumping stations over 30 years should be approximately \$336 million rather than \$673 million. This represents less than 0.7% of the overall lifetime social cost of carbon for this Project, and therefore does not materially change the Project's lifetime social cost of carbon.

### C. The Social Cost of Carbon for Tar Sands Oil is Considerably Higher Than for Other Crude Oils.

- Dr. Abraham affirmed that the proposed Line 3 expansion would be particularly detrimental to the global climate, as more CO2 is emitted in the well-to-wheels lifecycle of tar sands oil than conventional crude oil.<sup>79</sup>
- The Line 3 expansion will presumably carry 65% heavy crude oil. That heavy crude oil is produced by extracting bitumen from the tar sands. Extraction of bitumen from the tar sands requires the combustion of large amounts of natural gas to turn water into steam (which is pumped underground to heat the bitumen so it will flow). The raw bitumen must then be processed, blended with diluent, and transported long distances to refineries. Thus, tar sands oil requires significantly more energy input to generate the same amount of usable energy output than the refining of conventional crude oil. 81
- The use of tar sands oils causes still more CO2 emissions because a byproduct of the bitumen refining process results in petroleum coke or "petcoke." Petcoke is a solid petroleum residue that is used as fuel, resulting in additional CO2 emissions when it is

<sup>&</sup>lt;sup>76</sup> Ex. YC-8 at 5 (Scott Direct).

<sup>&</sup>lt;sup>77</sup> Ex. EN-47 at 6 (Kinder Rebuttal).

<sup>&</sup>lt;sup>78</sup> Ex. EERA-23, Chap. 5 at 5-446 (FEIS).

<sup>&</sup>lt;sup>79</sup> Ex. YC-14 at 4 (Abraham Direct).

<sup>80</sup> Ex. EERA-23 at 10-22 (FEIS); Ex. YC-14 at 4 (Abraham Direct).

<sup>&</sup>lt;sup>81</sup> Ex. YC-14 at 4 (Abraham Direct).

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- There will be exceptional harm to the climate from the Line 3 expansion because its lifecycle emissions could extend into the late 2060s or even later, as confirmed by Ms. Kennett of Enbridge. 83 The documented impediments to shutting down capital-intense pipelines that serve tar sands projects will effectively lock-in oil production and inevitably worsen climate change. 84 Mr. Scott deduced that incremental, cumulative life cycle emissions from the Line 3 expansion range between 1.75 to 9.65 billion tons of CO2 equivalent over its design life. He testified that "Tar sands companies intend to keep their projects producing carbon pollution and high-carbon fuels after the rest of the world must reduce emissions to near zero." 85
- Dr. Abraham also discussed the lock-in effect of major tar sands projects. Per-barrel revenue, and the subsequent incentive to refine tar sands oil, would increase as transportation is facilitated and made inexpensive. This means, "Infrastructure such as the proposed pipeline that lower transmission costs will lead to a more complete mining of the tar sands." Dr. Abraham pointed out the potential impact of the carbon-intensive tar sands oil on a global scale: if extracted, the total estimated amount of oil in the Alberta tar sands would equate to a global temperature increase of approximately 0.36C (0.65F). To put this in context, total temperature rise from all emissions of fossil fuels to date has been approximately 1C. 87

# III. THE SOCIAL COST OF CARBON REPRESENTS REAL AND SIGNIFICANT HARM

"My future and the future of all the young people in this room and beyond this room, our future is uncertain. We have to ask ourselves every day what this world we are growing into will be like. If it would be safe for us and for our families, if it will be safe for future generations. I want to tell you that if this pipeline is approved and built and functional, it will add a degree of certainty to my future. Certainty that we will see ever-increasing conflict, ever-increasing danger, ever-increasing storms and flooding."

Liam DelMain, St. Paul Pub. Hrg. Tr. (Vol. 2B) at 188 (September 28, 2017)

### A. Global Anthropogenic Climate Change is Happening Now.

<sup>82</sup> Ex. YC-14 at 4 (Abraham Direct).

<sup>83</sup> Evid. Hrg. Tr. Vol1A (Nov. 1, 2017) at 39-42 (Laura Kennett).

<sup>&</sup>lt;sup>84</sup> Ex. YC-2 at 7 (Scott Direct).

<sup>85</sup> Ex. YC-2 at 6 (Scott Direct).

<sup>&</sup>lt;sup>86</sup> Ex. YC-14 at 5 (Abraham Direct).

<sup>&</sup>lt;sup>87</sup> Ex. YC-14 at 4 (Abraham Direct).

- Dr. John Abraham, an internationally acclaimed climate scientist, provided a synthesis of his research on climate change. He testified that average global temperatures reached record highs in 2014, 2015, and 2016, respectively. Heat contained within the Earth's climate continues to increase, and as Dr. Abraham stated, "The amount of warming that is entering the oceans is equal to 4-5 Hiroshima explosions of heat every second." Consequently, he warned that long-term trends of sea ice loss have been observed and are projected to raise sea levels by a conservative minimum of 1 meter by 2100 unless greenhouse gas emissions are substantially reduced. 90
- Mr. Paul Douglas' testimony concurs with Mr. Abraham's conclusions about climate change. Mr. Douglas testified further, "A warmer environment is making heat waves hotter, droughts deeper, longer, and an increase in extreme rainfall events. As climate models predicted 30 years ago, wet areas are trending wetter dry areas trending drier." 91
- California recently experienced one of the worst droughts on record, and the dryness has influenced the frequency and intensity of wildfires across the western United States.<sup>92</sup>
   Warmer temperatures are believed to be driving more frequent severe hurricanes in the western Pacific, and creating hurricanes in the Atlantic that are more likely to reach Category 4-5 strength.<sup>93</sup>
- In addition to the global consensus on anthropogenic climate change, several studies have linked human-induced climate change with specific extreme weather events. Dr. Abraham included a chart in his testimony that lists 14 examples of extreme weather in the U.S, 11 of which could reasonably be attributed to human-induced climate change. The chart is taken from a study conducted by Chemical and Petroleum Engineering, Institute for Sustainable Energy, Environment and Economy, and the Centre for Environmental Engineering Research and Education at The University of Calgary.<sup>94</sup>

# B. Minnesota Will Experience Unique Negative Impacts as a Result of Exacerbated Climate Change.

• Climate change is already heavily affecting Minnesota. The primary reason for this is our latitudinal location. Northern latitudes are warming at a much faster rate than other areas

<sup>88</sup> Ex. YC-14 at 5 (Abraham Direct).

<sup>&</sup>lt;sup>89</sup> Ex. YC-14 at 5 (Abraham Direct).

<sup>&</sup>lt;sup>90</sup> Ex. YC-14 at 7 (Abraham Direct).

<sup>&</sup>lt;sup>91</sup> Ex. YC-15 at 3 (Douglas Direct).

<sup>92</sup> Ex. YC-14 at 8 (Abraham Direct); Ex. YC-15 at 3 (Douglas Direct).

<sup>&</sup>lt;sup>93</sup> Ex. YC-15 at 3 (Douglas Direct).

<sup>&</sup>lt;sup>94</sup> Ex. YC-14 at 11 (Abraham Direct).

due to positive feedback effects such as a weakening albedo (a measure of the amount of solar energy reflected from Earth back into space) and the release of methane into the atmosphere from melting permafrost.<sup>95</sup>

- These warming effects may be impacting jet stream winds. As reported by Mr. Douglas, "this may be creating a slower, wavier pattern, with greater amplification, more dips and bulges in the jet stream." The jet stream is an important global weather regulator; changes to it "may be leaving [Minnesota] weather more susceptible to stalling storms and fronts, in turn capable of magnifying rainfall amounts."
- Dr. Bruce Snyder also detailed Minnesota's climate irregularities. He testified that, "Minnesota's average temperature has risen about 2F in the past century," and, "Seven of Minnesota's ten warmest years occurred since 2000." Every county in Minnesota is, "experiencing more climate related stresses: extreme storms, flash floods, excessive heat, droughts." If business continues as usual, the average temperature of the Midwest is projected to increase by ~5F or ~9F, respectively, underfor low or high emission scenarios. This would be a massive shift to our normal climate, which we are already observing.
- The observed humidity and tropical dew points, have exceeded 70-80F more frequently over time. <sup>100</sup> Our winters are also getting much warmer, with substantially fewer nights reaching below -20F in the metro area or -40F in northern Minnesota. <sup>101</sup> Mark Seeley, a climatologist and meteorologist from St. Paul, Minnesota has recorded a "fourfold increase in midwinter rain and ice across Minnesota." <sup>102</sup>
- Mr. Douglas observed that, "the most obvious change has been the frequency and intensity of extreme rainfall events, statewide." <sup>103</sup> Minnesota has had 14 "Mega-Rains" since 1858 (six inches or more rain falling over at least 1,000 square miles), and half of them have occurred since 2002. <sup>104</sup> Our state has also observed 4 separate 1,000 year floods since 2000. <sup>105</sup>

<sup>95</sup> Ex. YC-15 at 3 (Douglas Direct).

<sup>&</sup>lt;sup>96</sup> Ex. YC-15 at 3 (Douglas Direct).

<sup>&</sup>lt;sup>97</sup> Ex. YC-26 at 11 (Snyder Direct).

<sup>&</sup>lt;sup>98</sup> Ex. YC-26 at 3 (Snyder Direct).

<sup>&</sup>lt;sup>99</sup> Ex. YC-14 at 9 (Abraham Direct).

<sup>&</sup>lt;sup>100</sup> Ex. YC-15 at 7 (Douglas Direct).

<sup>&</sup>lt;sup>101</sup> Ex. YC-15 at 6 (Douglas Direct).

<sup>&</sup>lt;sup>102</sup> Ex. YC-15 at 6 (Douglas Direct).

<sup>&</sup>lt;sup>103</sup> Ex. YC-15 at 4 (Douglas Direct).

<sup>&</sup>lt;sup>104</sup> Ex. YC-15 at 4 (Douglas Direct).

<sup>&</sup>lt;sup>105</sup> Ex. YC-15 at 4 (Douglas Direct).

- More rainfall does not necessarily mean wetter soils, however. Rain has been falling in larger pulses across the state and subsequently evaporating quickly due to greater heat or simply running off into storm sewers. Mr. Douglas testified that, "retaining water for Ag, maintaining consistent soil moisture, will be a challenge in the years ahead." 106
- Aggregate Minnesota rainfall amounts have increased over time as well. "Average annual Twin Cities precipitation was 25.93 [inches] during the 30-year period from 1941 to 1970. The most recent 30-year average from 1981 to 2010 is 31.16 [inches] in Minneapolis/St. Paul." 107

## C. The Social Cost of Carbon Represents Tangible and Highly Detrimental Impacts to Minnesotans.

- Several experts in this case provided evidence demonstrating that the impacts of climate change will adversely affect us if business continues as usual and the Line 3 expansion is approved. The cumulative social costs of carbon found in the FEIS are an attempt to quantify some of these adverse effects. However, these numbers do not provide a complete picture of how these damages will be felt personally by Minnesotans.
- Minnesota will undoubtedly have social costs that are unique to its location. Our state is already experiencing economic shortfalls from the loss of winter tourism. <sup>108</sup>
- Dr. Snyder explained that a large expected cost of climate change will come from damage to our medical and social infrastructure. This type of damage will have to be continually repaired and reconditioned in order to deal with havoc wreaked by extreme weather events and a damaged environment.<sup>109</sup> For example, in the Twin Cities, a major flood event in 2014 threatened to severely damage on Methodist Hospital.<sup>110</sup>
- Forests in Minnesota will also be damaged by climate change. Dr. Peter Reich, a Sr. Professor at the University of Minnesota's Department of Forest Resources, explained that a changing climate will cause "major problems to our forests, including slower growth, greater mortality and poorer regeneration. This is due to the greater frequency of temperature extremes, soil water shortages, and floods... increased frequency of wildfires, windstorms, native insect pests, and non-native invasive plants, worms, insects, and diseases." According to Dr. Reich, unhealthy forests will mean "fewer economic benefits

18

<sup>&</sup>lt;sup>106</sup> Ex. YC-15 at 9 (Douglas Direct).

<sup>&</sup>lt;sup>107</sup> Ex. YC-15 at 5 (Douglas Direct).

<sup>&</sup>lt;sup>108</sup> Ex. SC-14, Sched 9 at 5 (Twite Rebuttal).

<sup>&</sup>lt;sup>109</sup> Ex. YC-26 at 4 (Snyder Direct); Ex. SC-14, Sched 9 at 5 (Twite Rebuttal).

<sup>&</sup>lt;sup>110</sup> Ex. YC-26 at 15 (Snyder Direct).

and ecosystem services in terms of timber production, water quality, tourism and recreation."<sup>111</sup>

- This has significant implications for the people of Northern Minnesota. At the public hearing in Crosslake, Larry Wannebo commented: "One of our [county] commissioners here...said in the paper a few days ago, our economy is based on tourism. If we don't protect the great pristine area we have here as far as water quality, as far as our forest, then people just aren't going to come."
- Damaged forests could, in turn, cause a feedback effect and accelerate climate change.
   While healthy forests help to slow down climate change by sequestering more carbon
   than they release every year through tree respiration, damaged forests have less ability to
   sequester carbon. Moreover, worsening forest fires emit large amounts of CO2 into the
   atmosphere in very short timespans. 114
- The hot summers occuring in the U.S. have led to major economic losses within the agriculture industry through reduced crop yields, and future yields may be even more significantly reduced. Such losses amounted to approximately \$35 billion in 2012 alone. One often overlooked economic repercussion of climate change is the sharp decline in productivity of those who work outside when they need to cope with record high temperatures every year. Trying to remain productive despite intolerable heat, as many workers are forced to do, can also be dangerous in many instances. As Dr. Snyder stated, "in one study over 10% of farm workers developed acute kidney injuries after working a single shift [in high heat conditions]."
- Global unrest can also be directly attributed to climate change, and this will continue to be a problem in the future. Mr. Abraham identified that "Worldwide, 150,000,000 people live within 1 [meter] of current sea levels. Consequently, sea level rise will lead to major climate refugee situations." 118
- Unusual meteorological events resulting from climate change will also impact Enbridge's own spill response and cleanup duties. The experts who testified on behalf of the Youth Climate Intervenors described the increasing frequency of extreme weather events, which could inhibit Enbridge's ability to deal with spills. The FEIS stated that climate change

<sup>&</sup>lt;sup>111</sup> Ex. YC-21 at 3 (Reich Direct); Ex. YC-21 at 4 (Reich Direct).

<sup>&</sup>lt;sup>112</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 90-91 (October 25, 2017)

<sup>&</sup>lt;sup>113</sup> Ex. YC-21 at 4 (Reich Direct).

<sup>&</sup>lt;sup>114</sup> Ex. YC-21 at 4 (Reich Direct).

<sup>115</sup> Ex. YC-14 at 8 (Abraham Direct).

<sup>&</sup>lt;sup>116</sup> Ex. YC-14 at 15 (Abraham Direct).

<sup>&</sup>lt;sup>117</sup> Ex. YC-26 at 12 (Snyder Direct).

<sup>&</sup>lt;sup>118</sup> Ex. YC-14 at 7 (Abraham Direct).

could damage Project facilities and affect both how oil moves and how it impacts the environment once it has spilled. The impact of the flood event that coincided with the Kalamazoo River spill has been brought up several times in the record. As described by Dr. Kenneth Kornheiser, "The high volume and increased flow rate of water in Talmadge Creek and even more so in the Kalamazoo River caused the oil spilled into the Kalamazoo River to move more, especially rapidly downstream. The very high water also resulted in oil being deposited heavily and far higher on the banks and into the river floodplain. Although this was an unfortunate coincidence, Enbridge was ill-prepared to act quickly or effectively enough to contain the oil in this event." This raises valid concerns about Enbridge's ability to respond to spills as climate change continues to worsen.

- The Minnesota Environmental Quality Board reported that greenhouse gas emissions have cost Minnesota over \$800 million in healthcare costs. 121 The healthcare community has vocalized its concerns regarding climate change; Dr. Snyder stated that "Over 1,700 national and international health organizations ... representing worldwide some 13 million doctors, nurses, and public health professionals have called for an urgent end to polluting fossil fuels as our primary energy source and a rapid transition to clean renewables." 122
- The prevalence of mental illness increases in those who have endured traumatic weather events. Dr. Snyder testified, "The incidence of PTSD and major depression increased by 23% in areas affected by Hurricane Katrina and suicidal ideation and severe mental illness nearly tripled within a year following that storm." It is especially difficult for victims to cope with the stress of extreme weather losses because they are often unable to access their homes and religious or community centers, which can cause additional instability in their lives. 124
- Climate change poses particularly difficult psychological problems for those who do not have the economic or social support they need and/or who already suffer from a mental illness. <sup>125</sup> Dr. Christie Manning reminds us that "Minority groups in the U.S have historically borne a disproportionate share of negative environmental impacts, and climate change is likely to continue this trajectory ... communities are less resilient when

<sup>&</sup>lt;sup>119</sup> Ex. EERA-23, Exec. Summary at 22-23 (FEIS).

<sup>&</sup>lt;sup>120</sup> Ex. SC-1 at 7 (Kornheiser Direct).

<sup>&</sup>lt;sup>121</sup> Ex. YC-26 at 3 (Snyder Direct).

<sup>&</sup>lt;sup>122</sup> Ex. YC-26 at 5 (Snyder Direct).

<sup>&</sup>lt;sup>123</sup> Ex. YC-26 at 8 (Snyder Direct).

<sup>&</sup>lt;sup>124</sup> Ex. YC-23 at 5 (Manning Direct).

<sup>&</sup>lt;sup>125</sup> Ex. YC-23 at 6 (Manning Direct).

they are weakened by social stressors resulting from racism, economic inequality, and environmental injustices."

- Indigenous communities in Minnesota are often a part of the forenamed groups and must carry the extra psychological burden of cultural loss as climate change negatively impacts traditional activities like wild ricing.<sup>126</sup>
- An especially prevalent effect of climate change in Minnesota is the increase in pests and the infectious diseases that come with them. Warmer temperatures are causing mosquitos and ticks to thrive in places they normally do not. In the Twin Cities, an annual average of 42 "ideal mosquito days" have been added as a result of the warming climate, and the black-legged deer tick has migrated throughout our state from southeastern Minnesota, where it used to be isolated 20 years ago. 127
- The pollen season has increased by almost a month across Minnesota due to climate change. This has caused more severe allergies and asthma, affecting citizens all across the state.<sup>128</sup>
- Young people will continue to be the most impacted by climate change for a number of reasons, including their health. For one, children are more susceptible to heat stress. Furthermore, Dr. Manning asserted that "The social foundations of children's mental and physical health are threatened by the specter of far-reaching effects of unchecked climate change, including community and global instability, mass migrations, and increased conflict. Given this knowledge, failure to take prompt, substantive action would be an act of injustice to all children." 129

### D. Not All Impacts from Climate Change are Quantified in the Social Cost of Carbon, but Those Costs Must Still Be Considered.

- While the IGW is one of the most frequently utilized social costs of carbon, the FEIS acknowledges that "Given current modeling and data limitations...it does not include all important damages."<sup>130</sup>
- The report *Omitted Damages: What's Missing from the Social Cost of Carbon* provides evidence that the price derived from the IGW model should be viewed as a lower bound

<sup>&</sup>lt;sup>126</sup> Ex. YC-23 at 6 (Manning Direct).

<sup>&</sup>lt;sup>127</sup> Ex. YC-26 at 10 (Snyder Direct).

<sup>128</sup> Ex. YC-26 at 3 (Snyder Direct).

<sup>&</sup>lt;sup>129</sup> Ex. YC-14 at 15 (Abraham Direct); Ex. YC-26 at 6 (Snyder Direct).

<sup>&</sup>lt;sup>130</sup> Ex. EERA-23, Chap. 5 at 5-447 (FEIS)

for estimating damages.<sup>131</sup> Not included in the IGW are a variety of impacts including: respiratory illnesses from increased ozone pollution, pollen, and wildfire smoke; food price spikes; acidification, temperature, and extreme weather impacts on fisheries, oceanic species extinction and migration, and coral reefs; ecosystem changes such as pest infestations and pathogens; impacts on labor productivity and supply from extreme heat and weather; and national security.<sup>132</sup>

 Ms. Miltich, who authored the social cost of carbon section of the FEIS, agreed that cultural and spiritual impacts of climate change on Indigenous people are also not covered by the IGW social cost of carbon pricing.<sup>133</sup>

# IV. THE PROPOSED LINE 3 EXPANSION POSES SUBSTANTIAL AND UNDER-ANALYZED RISKS TO MINNESOTA'S WATER RESOURCES

"Energy companies are unique in their ability to produce billion-dollar disasters." Evid. Hrg. Tr. Vol. 8B (Nov. 14, 2017) at 69 (David Dybdahl)

### A. A Spill Along the Pipeline Route is Extremely Likely Over its Lifetime.

- Mr. Mittelstadt testified that the probability of a major pipeline failure for the new Line 3 would be 1 in 223 per year (across the ND, MN, and WI portion, of which the vast majority is in Minnesota). Although these odds appear to be low, the risks are too high for a major pipeline failure.
- Based on the spill probabilities listed in the DEIS, Ms. Molly Sowash, a public citizen, did the math and commented that "...we can expect 14 pinhole leaks, 54 small spills, four medium spills, and one catastrophic spill" if Line 3 operates for 60 years. <sup>135</sup>
- The FEIS established that "Although the probability of a large or major oil release at any specific location is extremely low, the probability of a release of some type along the entire pipeline during its lifetime is not low." <sup>136</sup> Mr. Mittelstadt <sup>137</sup> and Ms. Bergland's <sup>138</sup>

<sup>&</sup>lt;sup>131</sup> Ex. YC-31 at 2 (Omitted Damages Report)

<sup>&</sup>lt;sup>132</sup> Ex. YC-31 at 3-4 (Omitted Damages Report)

<sup>&</sup>lt;sup>133</sup> Evid. Hrg. Tr. Vol. 11A (Nov. 17, 2017) at 63-70 (Louise Miltich)

<sup>&</sup>lt;sup>134</sup> Evid. Hrg. Tr. Vol4A (Nov. 6, 2017) at 44 (Benjamin Mittelstadt)

<sup>&</sup>lt;sup>135</sup> St. Paul Pub. Hrg. Tr. (Vol. 2B) at 160 (Sept. 28, 2017)

<sup>&</sup>lt;sup>136</sup> Ex. EERA-23, Chap. 10 at 1 (FEIS)

<sup>&</sup>lt;sup>137</sup> Ex. EN-51 at 18-19 (Mittelstadt Rebuttal)

<sup>&</sup>lt;sup>138</sup> Ex. EN-46 at 3 (Bergland Rebuttal)

reliance on site-specific probabilities to diminish concerns about spill potential misrepresents the risk involved with a crude oil pipeline.

- Even with technological advances, the risks of a spill will never go away. As Mr. Dybdahl testified, "The risk of pipeline leaks, spills and ruptures cannot be completely engineered away because human error is always a potential risk factor in industrial settings, including pipeline operations. For example, the Marshall Michigan spill and the Chernobyl nuclear disaster ironically were both caused by human error overriding loss prevention equipment and protocols." Mr. Mittelstadt confirmed that even with all the risk management employed by Enbridge and all the new safety construction, it's not absolute that there would be no ruptures. The risks of a pipeline spill occuring are also made greater by the inadequacies of federal regulations.
- The likelihood of a spill would also increase over time, especially as the pipeline ages. Dr. Etkin confirmed that over the life of the proposed project the potential for it to spill would increase. As Mr. Kornheiser's testimony states, there is also "...a questionable history of maintenance of Line 3 and other Enbridge pipelines, and inadequate detection of and response to oil pipeline leaks and spills by Enbridge in the past." 143
- ◆ As the spill risk increases with age, the risks and threats to Minnesota increase as well. As Ms. O'Connell states, "If we put a new crude oil pipeline corridor in the proposed route -- the preferred route, then think 30 years from now. Think 60 years from now. That's no longer a new crude oil pipeline. We have an older crude oil pipeline that is in a different part of Minnesota that exposes more of Minnesota to the risk of a pipeline spill." 144
- Future collocation of additional pipelines would also increase the risk of a spill to the areas traversed by the route. Justification for the Applicant's preferred route already relies on its paralleling of existing transmission corridors or roads<sup>145</sup> and Ms. Bergland confirmed on behalf of Enbridge that "Collocation with existing rights-of-way is certainly preferable." Former Minnesota State Senator Darril Wegscheid is concerned about seeing additional pipelines installed, and commented at the Crosslake public hearing that he opposed the Project in part because "This is clearly a strategic attempt to

<sup>&</sup>lt;sup>139</sup> Ex. DER-15 at 1 (David Dybdahl Testimony Summary)

<sup>&</sup>lt;sup>140</sup> Evid. Hrg. Tr. Vol4A (Nov. 6, 2017) at 27 (Benjamin Mittelstadt)

<sup>&</sup>lt;sup>141</sup> Ex. FOH-16 at 1 (Kuprewicz Witness Summary)

<sup>&</sup>lt;sup>142</sup> Evid. Hrg. Tr. Vol6A (Nov. 9, 2017) at 99-100 (Dagmar Etkin)

<sup>&</sup>lt;sup>143</sup> Ex. SC-1 at 3-4 (Kornheiser Direct)

<sup>&</sup>lt;sup>144</sup> Evid. Hrg. Tr. Vol. 12B (Nov. 20, 2017) at 28 (Kate O'Connell)

<sup>&</sup>lt;sup>145</sup> Ex EN-30 at 8 (Eberth Rebuttal)

<sup>&</sup>lt;sup>146</sup> Ex. EN-46 at 8 (Bergland Rebuttal)

open a new corridor. Because Line 2 is already under restriction. Line 3 is under restriction."<sup>147</sup>

### B. Even Small Ruptures Still Have the Potential to Release Large Amounts of Oil.

- Mr. Baumgartner, Enbridge's Director of Control Center Operations, testified that "Leaks are typically detected by the CPM system and the line balance calculation process, both of which are tuned to detect large and small leaks. The smaller the leak, the more time it takes for these systems to alarm. The highest sensitivity leak threshold requires 24 hours to trigger an alarm." According to Mr. Baumgartner, the sensitivity of that "highest sensitivity" threshold is 1% of nominal flow.
- Enbridge's protocols to detect and respond to smaller ruptures are inadequate given the risks that those ruptures pose. For this Project, a pipeline with a capacity of 760,000 bpd, 1% of nominal flow over 24 hours would represent a potential leak of 7,600 barrels before a detection alarm would go off.<sup>150</sup>
- Small leaks are a risk because they may be handled with slow response times or go completely undetected. As confirmed by Mr. Baumgartner, it could take Enbridge days to respond to a small leak. Furthermore, Mr. Philipenko testified that leaks of less than 5 gallons would not be reportable. 152
- Even the smallest leaks, known as "pinhole leaks," pose a potentially major threat. According to the *Replacement Project Assessment of Potential Pinhole Release Report* prepared by Stantec and Barr, a 1/32 inch pinhole leak could release between 28 and 784 barrels per day before being detected 28 days out. With the volume and pressure of the proposed line and a pinhole release of that size, this implies a potential spill of 32,928 gallons before detection.

# C. Heavy Tar Sands Oil Poses a Greater Risk to Water Resources than Conventional Light Crude Oil.

• The transportation of heavy crude oil through pipelines poses an even greater risk to local ecosystems than lighter oils because it is viscous and tends to adhere to soil and organic

<sup>&</sup>lt;sup>147</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 157-160 (Oct. 25, 2017)

<sup>&</sup>lt;sup>148</sup> Ex. EN-16 at 9-10 (Baumgartner Direct)

<sup>&</sup>lt;sup>149</sup> Evid. Hrg. Tr. Vol4A (Nov. 6, 2017) at 66-67 (Allan Baumgartner)

<sup>&</sup>lt;sup>150</sup> Evid. Hrg. Tr. Vol 4A (Nov. 6, 2017) at 75-76 (Allan Baumgartner)

<sup>&</sup>lt;sup>151</sup> Evid. Hrg. Tr. Vol 4A (Nov. 6, 2017) at 66-67 (Allan Baumgartner).

<sup>&</sup>lt;sup>152</sup> Evid. Hrg. Tr. Vol4A (nov. 6, 2017) at 115 (Ray Philipenko).

<sup>&</sup>lt;sup>153</sup> Ex. EERA-25 at 11 (Pinhole Release Report).

material. Heavy crude oil cannot migrate vertically through soil as much as light crude oil can, and contains a higher proportion of hydrocarbons that degrade slowly.<sup>154</sup>

- Tar sands oil also interacts with water less predictably than conventional crude oil. A National Academy of Sciences, Engineering, and Medicine report cited by Ms. Schuldt states: "Spills of diluted bitumen pose particular challenges when they reach water bodies. In some cases, the residues can submerge or sink to the bottom of the water body. Importantly, the density of the residual oil does not necessarily need to reach or exceed the density of the surrounding water for this to occur. The crude oil may combine with particles present in the water column to submerge, and then remain in suspension or sink."155
- Spills of diluted bitumen also pose a particularly dangerous challenge because there is an "... infinite number of dilbit mixtures that will meet the maximum viscosity tariff, but results in a wide variation of dilbit compositions, even from bitumen produced from the same fields. Line 3 will receive dilbit form many different bitumen oil fields so there will be a significant composition variation in the oil moved in Line 3."<sup>156</sup>
- First responders are put at risk because they often don't know which particular chemicals they could encounter at a spill site, since specific components within the varying dilbit mixtures are often proprietary information. 157
- Components of dilbit may persist in the environment longer than lighter oils. Mr. Wuolo confirmed that the microbes that eat oil over a long period of time could take longer to consume the diluent chemicals mixed in the tar sands oil, thus prolonging the amount of time during which the chemicals are present in the environment.<sup>158</sup>

### D. A Spill From Line 3 Would Threaten Local Ecosystems and Communities.

• The lengthy time it takes to recover from a heavy crude oil spill can put considerable strain on the people and environment. Ms. Tillquist testified that "In the Asher Creek crude oil pipeline release....researchers concluded that recovery of the aquatic macroinvertebrate community occurred in nine months. At Wabamun Lake, researchers concluded a recovery time of two years for vegetation." If a spill of this magnitude

<sup>&</sup>lt;sup>154</sup> Ex. EN-64 at 11 (Tillquist Rebuttal).

<sup>&</sup>lt;sup>155</sup> Ex. FDL-4 at 4-5 (Schuldt Surrebuttal).

<sup>&</sup>lt;sup>156</sup> Ex. FOH-11 at 3 (Kuprewicz Surrebuttal).

<sup>&</sup>lt;sup>157</sup> Evid. Hrg. Tr. Vol. 4B at 130-131 (Wuolo)

<sup>&</sup>lt;sup>158</sup> Evid. Hrg. Tr. Vol4B (Nov. 6, 2017) at 130-131 (Wuolo)

<sup>159</sup> Ex. EN-64 at 7 (Tillquist Rebuttal)

happened near a wild rice water or other critical water resource, this recovery time could be devastating.

- Ms. Tillquist recounted that "Another release on the Yellowstone River in 2015 from the Bridger Pipeline resulted in the community of Glendive, Montana, being unable to use water from the river for six days, with residents having to rely on bottled water." Ms. Tillquist referred to this disruption as "limited." However, the impact of such a disruption to any community that relies on a critical water resource should be obvious. Communities in northern Minnesota that have a river-based water supply could be seriously affected by such a spill.
- Impacts to groundwater would also place a burden on local ecosystems and communities. Ms. Schuldt testified that "If a pinhole subsurface release were to occur, and the pressure detection systems did not reveal it, there is no reason to believe that product would not continue to be released indefinitely to the groundwater aquifer before eventually reaching the closest surface water features (and then becoming visually detectable), or potentially reaching public or private drinking water wells or irrigation pumps. This risk cannot be dismissed, as Mr. Wuolo admits; he only concludes that it is unlikely." 162
- Mr. Wuolo testified that "For large releases that involve emergency responses, the time required for product to migrate to the water table would greatly exceed the emergency and remediation response time and the oil would be removed before it reached the water table. The only exception to this would be in cases where the pipe leak is at or below the water table, in which case the leaked product would immediately float on the water table surface. These shallow water-table conditions are typically present only where the pipeline crosses through wetlands, in which case the surrounding soils consist of low-permeability organic clays and muck, and the product would seep to the surface rather than migrate from the immediate vicinity of the pipe" (emphasis added). Despite Mr. Wuolo's confidence that such seepage is unlikely, it should not be overlooked that 20 percent of the pipeline profile is at or below the water table. Even if the spilled oil behaved exactly as Mr. Wuolo hopes and does not migrate, Ms. Schuldt's concerns about the time between the leak and detection would still be relevant.
- A leak at South Cass Lake Pumping Station polluted the surrounding groundwater to an extreme extent. A similar spill along the Line 3 route would be dangerous to the groundwater that is connected with drinking water wells along the route. In a public

<sup>&</sup>lt;sup>160</sup> Ex. EN-64 at 20 (Tillquist Rebuttal)

<sup>&</sup>lt;sup>161</sup> Ex. EN-64 at 20 (Tillquist Rebuttal)

<sup>&</sup>lt;sup>162</sup> Ex. FDL-4 at 3 (Schuldt Surrebuttal)

<sup>&</sup>lt;sup>163</sup> Ex. EN059 at 2 (Wuolo Surrebuttal)

<sup>&</sup>lt;sup>164</sup> Evid. Hrg. Tr. Vol. 8A (Nov. 14, 2017) at 28 (Paul Eberth)

comment, Mr. Stan Sattinger wrote: "Because of the 48,000-gallon leak of crude oil at the South Cass Lake Pumping Station, the concentration of the carcinogen benzene in the site's groundwater rose to a level 1,300 times higher than the maximum contaminant level for benzene allowed by the U.S. Environmental Protection Agency." <sup>165</sup>

- Ms. Schuldt further explains, based on her experience with the mainline corridor, that
  even without a spill, "The movement of heavy equipment and the below-grade
  installation of a 36-inch-diameter pipeline will likely result in both temporary and
  permanent impacts to the surface and groundwater hydrology within the pipeline
  corridor."166
- Although the hydrologic changes from constructing the pipeline could be minimal in the short-term, they can have long-term consequences. An example of this can be seen with wild rice. Schuldt testified that "We have observed many instances where seemingly small hydrologic changes, such as those caused by downstream beaver dams or plugged culverts, raise water levels sufficiently that wild rice can no longer reach the surface after germination. After several seasons of water levels that are just marginally too deep for wild rice to reach maturity, the seed bank is exhausted and the rice population is lost. This phenomenon could occur for wild rice waters that are located 'upstream' hydrologically from the pipeline, if there are contiguous wetlands providing that shallow groundwater connection that provides a source of water to the rice bed. The opposite situation could also occur, where wild rice waters located 'downstream' from the pipeline could be deprived of sufficient groundwater inflows, and the effect -- particularly in drought years -- would be diminished areas with sufficient water to support wild rice through the growing season." 167
- The threats posed by a spill could be exacerbated by the various environments the Applicant's preferred route goes through. Ms. Deanna Johnson commented in Crosslake, "The Kalamazoo spill happened one half mile from Interstate Highway 59 and approximately two miles south of the town of Marshall. And yet they had great difficulty locating and shutting down the spill and took years to mitigate. Location and restoration of a spill in the headwaters area is a situation vastly different and more difficult than the Marshall spill site. Much of the proposed Line 3 project is routed through large expanses of bog and wetlands that have limited or no accessibility....Considering the scale of the disaster in Michigan, one only needs to imagine the scale of a potential disaster in the headwaters or the Minnesota lakes, the heart and soul of our state." 168

<sup>&</sup>lt;sup>165</sup> Comment by Stan Sattinger (November 13th, 2017) (Batch 12) (eDocket Nos. 201711-137314-01).

<sup>&</sup>lt;sup>166</sup> Ex. FDL-4 at 5-6 (Schuldt Surrebuttal)

<sup>&</sup>lt;sup>167</sup> Ex. FDL-4 at 6-7 (Schuldt Surrebuttal)

<sup>&</sup>lt;sup>168</sup> Crosslake Pub. Hrg. Tr. at 85-87 (October 25, 2017)

- Dr. John Andrews, a physician who was part of the federal disaster medical assistance teams that provided medical care in Louisiana after the 2010 BP oil spill and whose career included positions with the CDC and ATSDR, testified at the Crosslake public hearing that "I have carried out studies on populations exposed to pesticides and polyaromatic hydrocarbons, also known as PAHs....Although the specific materials in dilbit are proprietary, most formulations are thought to include natural gas liquid concentrate with volatile hydrocarbons such as benzene, toluene, n-hexane, ethylbenzene and xylene. Benzene and PAHs are both known to cause cancer....In Michigan, the state Department of Public Health determined that 320 people suffered adverse health effects [as a result of the Enbridge tar sands spill], including cardiovascular, dermal, gastrointestinal, neurological, ocular, renal, and respiratory impacts. Following the Arkansas spill, residents living close to the spill reported increased headaches, nausea, and respiratory problems." 169
- Also during the public hearings, Ms. Kathy Hollander gave three examples of permanent damage to water in Minnesota from an oil spill: the Pinewood spill left oil in aquifer under Leech Lake, the July 4th 2007 spill into a wetland was deemed permanently damaged, and PCA documentation shows residual oil being pulled out of Clearbrook years later.<sup>170</sup>
- As stated succinctly by Ms. Christine Dolph at the St. Paul public hearing: "The easiest and cheapest way to protect the value of clean water is not to degrade it in the first place." <sup>171</sup>

# V. THE PROPOSED PROJECT THREATENS CULTURAL RESOURCES THAT ARE CRITICAL TO THE LIFE AND WELL BEING OF INDIGENOUS COMMUNITIES

"The Anishinaabe are taught to look at how we will impact future generations, and to think about the consequences that our actions will have seven generations from now....Any major changes to the land and environment will not just affect us, but our children, our grandchildren, and their grandchildren." Ex. ML at 2 (Kemper Witness Summary)

A. The Project Will Have Detrimental Impacts to Medicinal Plants, Wild Rice, and Other Natural Resources That Are Critical to Indigenous Culture and Spirituality.

28

<sup>&</sup>lt;sup>169</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 77-89 (October 25, 2017)

<sup>&</sup>lt;sup>170</sup> St. Paul Pub. Hrg. Tr. (Vol. 2B) at 227-228 (Sept. 28, 2017)

<sup>&</sup>lt;sup>171</sup> St. Paul Pub. Hrg. Tr. (Vol. 2A) at 61 (Sept. 28, 2017)

- The Applican't preferred route crosses territory ceded in the 1854, 1855, and 1842 treaties. 172
- According to the Fond du Lac Band's *Interim Report: Line 3 Corridor Tribal Cultural Survey*, "the Ojibwe retained usufructuary rights on ceded lands to ensure future generations would always have access to foods, materials and places important to the Ojibwe. Treaty-guaranteed rights to hunt, fish and gather has always been, and continues to be, of great social, economic and cultural importance to Minnesota tribes. Court decisions affirming treaty guaranteed rights to hunt, fish, and gather in the ceded territories did not grant these rights, but instead affirmed that these rights were never relinquished....Within those territories there are cultural corridors that encompass important navigable waterways, historic trail and road networks, historic villages and encampments for fishing, hunting, wild rice harvesting and processing, sugar bush and other traditional subsistence practices that are traditionally, currently, culturally, and spiritually in relationship to the Ojibwe people. There are also numerous gravesites of Ojibwe ancestors scattered throughout the ceded territories." <sup>173</sup>
- The direct testimony of Mr. Paulson, Ms. Lamb, Mr. Kemper, Mr. Dupuis, Mr. Ferris, and Ms. Goodwin discussed the profound significance that this land and water has to the Indigenous community up North.
- Mr. Paulson, an Anishinaabe of the White Earth Reservation and traditional pipe carrier who is also seated at the Big Drum (a ceremonial place of honor), a member of Midi Medicine Society, and pupil of the respected elder Earl Hoagland, testifies that: "My 'religion' (for lack of a better word) recognizes the spiritual everywhere -- in every plant, stone, and sentient being. To the Anishinaabe, 'Nibi' (water) is a sentient being, and our Wild Rice is a sentient being. I want to help others understand this and have these values respected in processes like this one. **Our connection is real, even if many cannot understand it**,"<sup>174</sup> (emphasis added).
- Ms. Lamb, a traditional pipe carrier, Chair of the Gitchi Gummi Lakekeepers and Interim Executive Director of All Nations Indigenous Center, and a traditional birthing Doula, testifies that: "Water is the first medicine given to the Anishinaabe (Ojibwe). Water is used not only to maintain hydration and cleanliness, but is essential to life. Water is also used in ceremony and as a medicine. It is a belief of the Anishinaabe people that water is living and has a spirit." 175

<sup>&</sup>lt;sup>172</sup> Ex. FDL-11 at 2 (Interim Report: Line 3 Corridor Tribal Cultural Survey)

<sup>&</sup>lt;sup>173</sup> Ex. FDL-11 at 2 (Interim Report: Line 3 Corridor Tribal Cultural Survey)

<sup>&</sup>lt;sup>174</sup> Ex. YC-20 at 6 (Paulson Direct).

<sup>&</sup>lt;sup>175</sup> Ex. YC-19 at 5 (Lamb Direct).

- Mr. Kemper, an assistant at the Tribal Historic Preservation Office for the Mille Lacs Band of Ojibwe and Band member raised in the traditional culture, testifies that: "The Mille Lacs Band's cultural resources include not only ceremonial areas, burial sites, and archaeological sites, but also natural resources such as water, wild rice, medicinal plants, wildlife, as well as our language, customs, and beliefs. All of these resources play an integral role in who the Anishinaabe (Ojibwe) are as a people. These resources are important to the Mille Lacs Band. Our community is rooted in its history. The Anishinaabe have a rich and long-standing spiritual connection to the land and the water. That connection is still strong today -- the people and the land cannot be separated." 176
- Mr. Kemper explains further that "Wild rice is the lifeblood of the Anishinaabe people. It nourishes the community, the soul, and the bodies of the Anishinaabe. Wild rice provides sustenance to members of the tribe, but it is not merely a source of food; it is a spiritual resource. We use wild rice at our ceremonies. Harvesting wild rice is also a spiritual activity and is an integral part of the Anishinaabe culture. Everyone in the family helps with gathering wild rice." Finally, Mr. Kemper summarizes that "Wild rice is at the core of the identity of the Anishinaabe people. It is the reason that the Anishinaabe tribes migrated from the east and settled here, and is an essential part of our culture, our ceremonies, and our everyday life." 178
- Mr. Dupuis, of the Awassisi or Bullhead clan, who has been employed by the Fond du Lac Band tribal government for more than 30 years and currently holds the position of Environmental Program Manager, testifies that: "The relationships we have with the plant and animal world are **key to Anishinaabe survival**." <sup>179</sup>
- The ability to harvest and use medicine plays a critical role in the physical and mental health of Native communities:

"Traditional foods and medicines are crucial in combating issues such as diabetes and heart disease among Native Americans." (Lamb)

"Further destruction of these resources will have a negative effect on mental and physical health of both the tribe and the surrounding non-Indian populations." <sup>181</sup> (Kemper)

<sup>&</sup>lt;sup>176</sup> Ex. ML-2 at 1 (Kemper Witness Summary).

<sup>&</sup>lt;sup>177</sup> Ex. ML-1 at 4 (Kemper Direct).

<sup>&</sup>lt;sup>178</sup> Ex. ML-2 at 1 (Kemper Witness Summary).

<sup>&</sup>lt;sup>179</sup> Ex. FDL-1 at 1 (Dupuis Direct).

<sup>&</sup>lt;sup>180</sup> Ex. YC-19 at 4 (Lamb Direct).

<sup>&</sup>lt;sup>181</sup> Ex. ML-2 at 2 (Kemper Witness Summary).

- Under the American Indian Religious Freedom Act, Ojibwe people have the right to practice their religion and culture. The harvest and use of these plants is integral to the practice of the Ojibwe culture and therefore, as Ms. Lamb testified, "to place any of these foods, plants, or trees in danger is to violate those rights." Additionally, many of the plants being put at risk by Line 3 are used and respected in ceremony, thus it is an Indigenous Right to protect and preserve these plants. 183
- Mr. Ferris asserted that "the proposed Line 3 Project will have adverse effects on the flora and fauna that Red Lake and Minnesota Chippewa tribal members rely on, including but not limited to the large and small game, birds, fish, and medicinal and food plants, and that the proposed Project will result in a direct interference with the ability of many to exercise Aboriginal rights and economic endeavors surrounding these resources." <sup>184</sup>
- According to Mr. Ferris, The Red Lake and Minnesota Chippewa tribal members are also very concerned about the "significant archaeological sites and traditional cultural properties are known to exist within the proposed Line 3 Project [area]."<sup>185</sup>
- Additionally, Mr. Kemper explained that the proposed pipeline would run adjacent to the
  largest berry patches in the region, where there are seven types of berries that the Band
  harvests; "The Anishinaabe have traveled to and camped next to these berry patches for
  hundreds of years. We depend on these berried for nourishment but also they are a key
  component of the Band's cultural resources." 186
- Mr. Kemper also explained that even if the pipeline doesn't leak or spill, the proposed project will contribute to climate change and this changing climate will contribute stress to an already fragile ecosystem. 187
- Mr. Paulson concurred that the fossil fuel industry has historically catastrophically contaminated the environment and this destruction "could ultimately end the existence of Anishinaabe people by robbing us of our spiritual and physical needs." <sup>188</sup>
- Mr. Eberth of Enbridge acknowledged that he is aware the impact this project will have on culturally significant land: at the Evidentiary Hearing when he discussed how the

<sup>&</sup>lt;sup>182</sup> Ex. YC-19 at 10 (Lamb Direct).

<sup>&</sup>lt;sup>183</sup> Ex. YC-28 at 2 (Summary of the Testimony of Sheila Lamb).

<sup>&</sup>lt;sup>184</sup> Ex. RL-1 at 1 (Ferris Direct).

<sup>&</sup>lt;sup>185</sup> Ex. RL-1 at 1-2 (Ferris Direct).

<sup>&</sup>lt;sup>186</sup> Ex. ML-1 at 5 (Kemper Direct).

<sup>&</sup>lt;sup>187</sup> Ex. ML-1 at 7 (Kemper Direct).

<sup>&</sup>lt;sup>188</sup> Ex. YC-20 at 6 (Paulson Direct).

preferred route crosses a tributary that feeds into Big Sandy Lake, which is culturally significant to the Mille Lacs Band. 189

- More than 95% of historic wild rice distribution across to continental U.S. east of the Rocky Mountains and thousands of wild rice stands in Minnesota have been lost in the past century.<sup>190</sup>
- Because it is so difficult to restore wild rice stands after they have been damaged, protection of existing healthy wild rice waters must be a priority for the State of Minnesota.<sup>191</sup> When asked what has made wild rice restoration successful in the past, Ms. Schuldt explained that "Restoration is not a single action or project. Restoration is ongoing. Restoration is incredibly difficult to achieve, even on reservation lakes where we have been working to restore hydrology and to reseed and reestablish in wild rice beds that have only experienced hydrologic alteration, not a pollution spill...[restoration] is not a simple matter. It is not as simple as cleaning up the oil-soaked plants and throwing seed out for several years. It requires intensive and sustained effort, and then, even then, success is not guaranteed. It is an exceptionally sensitive plant." Some wild rice remediation and recovery on Fond du Lac Reservation has been ongoing for 20 years.
- Enbridge's expert witnesses on wild rice do not appear to understand the cultural significance of this resource. Ms. Tillquist agreed that cultural values are important, but confirms that her report does not attempt to address them. Additionally, when asked whether a dilbit spill can cause irremediable harm, she replies with "no", adding that there will be remediation "until effects to human health and the environment are not significant. Her response does not attempt to address the cultural losses or socioeconomic damages that have intense and irremediable consequences.
- Additionally, Enbridge's witnesses Ms. Tillquist and Mr. Lee clearly lack research necessary to make these claims. In her rebuttal, Tillquist clearly stated that "No literature was found on crude oil releases into wild rice production areas." Ms. Tillquist also confirmed that her testimony does not cover the effects of diluent spilled into wild rice, despite its higher level of toxicity; "The BTEX compounds tend to be more toxic that are

<sup>&</sup>lt;sup>189</sup> Evid. Hrg. Tr. Vol. 10B (Nov. 16, 2017) at 67 (Paul Eberth).

<sup>&</sup>lt;sup>190</sup> Ex. FDL-4 at 8 (Schuldt Surrebuttal).

<sup>&</sup>lt;sup>191</sup> Ex. FDL-8B at 1 (Summary of Testimony of Nancy Schuldt).

<sup>&</sup>lt;sup>192</sup> Evid. Hrg. Tr. Vol. 8B (Nov. 14, 2017) at 43-44 (Nancy Schuldt).

<sup>&</sup>lt;sup>193</sup> Evid. Hrg. Tr. Vol. 8B (Nov. 14, 2017) at 44-46 (Nancy Schuldt).

<sup>&</sup>lt;sup>194</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 147 (Heidi Tillquist)

<sup>&</sup>lt;sup>195</sup> Ex. EN-64 at 19 (Tillquist Rebuttal).

<sup>&</sup>lt;sup>196</sup> Ex. EN-64 at 23 (Tillquist Rebuttal).

found in the diluent."<sup>197</sup> Moreover, Mr. Lee confirmed that none of the wild rice remediation examples he provides involve impacts from crude oil spills. <sup>198</sup>

- Both Ms. Tillquist and Mr. Lee stated that if there were to be a spill which harms wild rice, it could simply be remediated by reseeding. However, Ms. Schuldt clearly explains that "Anyone with actual experience in attempting to restore wild rice knows it is unreasonable to presume that it is as simple as just reseeding for several years, or that in all cases it is even possible." Mr. Lee does confirm that the restoration after a spill, including removing oiled vegetation or sediment and reseeding, would impact the ability of Anishinaabe people to gather wild rice in the impacted area and concurs that if oil reaches a wild rice stand, the crop "may not be harvestable in that year." 201
- Ms. Bergland attempted to belittle Ms. Schuldt's testimony by saying that "Her opinion appears to be based on her own personal valuation of some resources over others." It is important to remember that this 'personal valuation' is a value system held by a significant number of northern Minnesotans, particularly amongst the constituency on whose behalf Ms. Schuldt is testifying (the Fond du Lac Band). Not only should those valuations be considered "real," but in fact weighted differently than other resources because of their cultural significance and historical marginalization of these communities. These resources are irreplaceable should they be destroyed.
- Mr. Lee's testimony failed to address the very important difference between light and heavy crude oil in his wild rice report. He claimed that he didn't discuss this difference in his report because he is "not a petrochemical scientist." In Lee's direct testimony, he argues that the chances of a spill impacting wild rice waters are quite low because the majority of oil will supposedly evaporate before it reaches a body of water. He cites the book *Oil Spill Science and Technology*, which shows that 30% of the oil will evaporate within a day of release. However, missing from his testimony is that the 30% statistic applies only to light crude oil. In the cited book, the chart that Mr. Lee cites clearly states that in fact only 15% of heavy crude oil evaporates within the day. This is half of the number Mr. Lee cites. This is critical to understanding the impact Line 3, which is designed to carry 65% heavy crude oil, could have on wild rice waters in case of a spill.

<sup>&</sup>lt;sup>197</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 149-150 (Heidi Tillquist).

<sup>&</sup>lt;sup>198</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 20-21 (Jeff Lee).

<sup>&</sup>lt;sup>199</sup> Ex. EN-64 at 24 (Tillquist Rebuttal); Ex. EN-50 at 4 (Lee Rebuttal).

<sup>&</sup>lt;sup>200</sup> Ex. FDL-4 at 8 (Schuldt Surrebuttal).

<sup>&</sup>lt;sup>201</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 59 (Jeff Lee); Ex. EN-50 at 10 (Lee Rebuttal).

<sup>&</sup>lt;sup>202</sup> Ex. EN-46 at 29 (Bergland Rebuttal).

<sup>&</sup>lt;sup>203</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 50 (Jeff Lee).

<sup>&</sup>lt;sup>204</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 41-59 (Jeff Lee); Ex. EN-18 at 23 (Lee Direct).

<sup>&</sup>lt;sup>205</sup> Ex. EERA-23, Chap. 2 at 2-7 (FEIS)

- Enbridge's experts also lack adequate information on the economic impact that damaged wild rice waters will have on Indigenous tribes. Mr. Lee confirmed that he did not analyze the economic impact to tribal members of impacts on wild rice<sup>206</sup>. Mr. Lee also claims that wild rice sells for \$2.00 per pound, when in fact tribally harvested, Minnesota wild rice is sold for \$10-\$15 per pound.<sup>207</sup>
- Economic losses are only a small part of the harm that damaged wild rice waters will have on Indigenous people. It is not possible to overstate the cultural significance wild rice has and this makes the rice "priceless." Mr. Lee admits that his testimony does not contain analysis of the cultural and spiritual importance of the 88 wild rice waters directly jeopardized by the pipeline. 209

# B. The Project has Raised Concerns About an Increase in Sexual Assault and Violence Against Indigenous Women.

- The FEIS establishes that there is a potential association between an influx of temporary workers and an increase in sex trafficking, particularly among native populations.<sup>210</sup>
- The FEIS states that because of this correlation, Enbridge can "fund or prepare and implement and education plan or awareness campaign around the issue with the companies and subcontractors it hires to construct, restore, and operate the pipeline."<sup>211</sup> Enbridge agreed to provide this training.<sup>212</sup>
- However, Mr. Simonson stated that Enbridge currently has no such training<sup>213</sup> and could not cite any academic literature or professional consultation being sought by Enbridge to develop such a training. Mr. Simonson admitted that to the best of his knowledge, Enbridge had not taken any actions to develop this training.<sup>214</sup>
- Other than a vague reference to an "example being done by the trucking industry" as a potential template for a training to prevent sexual violence, Mr. Eberth was also unable to

<sup>&</sup>lt;sup>206</sup> Ex. FDL-4 at 9 (Schuldt Surrebuttal)

<sup>&</sup>lt;sup>207</sup> Ex. FDL-4 at 9 (Schuldt Surrebuttal)

<sup>&</sup>lt;sup>208</sup> Ex. ML-2 at 2 (Kemper Witness Summary).

<sup>&</sup>lt;sup>209</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 53 (Jeff Lee).

<sup>&</sup>lt;sup>210</sup> Ex. EERA-23, Chap. 11, at 20-23 (FEIS)

<sup>&</sup>lt;sup>211</sup> Ex. EERA-23, Chap. 11, at 20-23 (FEIS)

<sup>&</sup>lt;sup>212</sup> Ex. EN-30 (Mitigation Measures Summary Table).

<sup>&</sup>lt;sup>213</sup> Evid. Hrg. Tr. Vol. 2A (Nov. 2, 2017) at 57-67 (Barry Simonson).

<sup>&</sup>lt;sup>214</sup> Evid. Hrg. Tr. Vol. 2A (Nov. 2, 2017) at 57-67 (Barry Simonson).

provide any examples of preparatory work being done by Enbridge to develop this training.<sup>215</sup>

• In a line of questioning between Mr. Blackburn and Mr. Eberth, Mr. Eberth committed to put together a "semi outline" of the plan early this year (2018) so that parties will have time to comment on it prior to the Commission's final decision.<sup>216</sup> Enbridge has not made any further comments regarding this "semi outline."

C. The Proposed Project Would Exacerbate a Legacy of Multigenerational Trauma for the Indigenous Communities in Minnesota, and Prevent Healing From This Trauma by Inhibiting the Ability of Indigenous Communities to Practice Their Cultural Traditions.

 It is clear from testimony provided by Ms. Lamb and Mr. Kemper that multigenerational trauma has profound impacts on the mental and physical health of Indigenous communities.

"Multigenerational trauma has resulted in the loss of traditional lifestyles, which has resulted in an increase of addictions, depression and suicide, PTSD, and incarceration rates." (*Lamb*)

"By removing the right to practice traditional ceremonies, use Native languages, and to maintain the right to gather, losses have occurred on multiple levels for Indigenous people. These losses include, but are not limited to, a breakdown of traditional and ceremonial practices which allow for mental, physical, emotional, and spiritual health, the connection to one's own culture, and has resulted in many searching for fulfilment that only comes by maintaining one's culture." (Lamb, emphasis added)

"Mental health issues deriving from the psychological damage done by the loss of culturally relevant items, loss of self-determination, loss of religious freedom, and historical trauma, all have an added financial burden. When corporations are chosen over the needs of Indigenous people, depression and suicide rates climb, PTSD continues to be an issue, and Natives are not allowed to heal from the generations of historical trauma." (*Lamb*)

<sup>&</sup>lt;sup>215</sup> Evid. Hrg. Tr. Vol. 10B (Nov. 16, 2017) at 64 (Paul Eberth).

<sup>&</sup>lt;sup>216</sup> Evid. Hrg. Tr. Vol. 10B (Nov. 16, 2017) at 77-78 (Paul Eberth).

<sup>&</sup>lt;sup>217</sup> Ex. YC-19 at 4 (Lamb Direct).

<sup>&</sup>lt;sup>218</sup> Ex. YC-19 at 4 (Lamb Direct).

<sup>&</sup>lt;sup>219</sup> Ex. YC-19 at 10 (Lamb Direct).

"When we are cut off from our resources and culture, there is a large impact on mental and physical health. Our people have some of the highest rates of homelessness, depression, suicide, alcoholism, and other illnesses. This is tied to the loss of our traditions and resources." (Kemper, emphasis added)

"The Minnesota Department of Health recently concluded that 'Causes of health inequities in American Indian communities are directly linked to determined and deliberate efforts of American federal, state, and local governments to uproot the American Indian people from their land, eradicate their languages and destroy their way of life." (Kemper)

- Ms. Lamb described in her direct testimony that "cultural connections are vital to bring about healing of historical trauma" and that "Ceremonies and language are essential in order to bring about much needed healing from the above assaults on Indigenous people."<sup>222</sup> Therefore, this project and its desecration of cultural resources will not only further the trauma that Indigenous people in Minnesota suffer from everyday; it will also prevent healing from existing trauma in the community.
- The destruction of cultural resources will not only impact the current generation of Indigenous people, but have everlasting impacts for generations to come. Mr. Kemper describes in his witness summary the importance of this land to the Anishinaabe people and the long history of their use of this land. Also significant is his explanation of how this project will impact future generations; "The Anishinaabe are taught to look at how we will impact future generations, and to think about the consequences that our actions will have seven generations from now....Any major changes to the land and environment will not just affect us, but our children, our grandchildren, and their grandchildren."<sup>223</sup>
- Projects similar to Line 3 have had destructive impacts on cultural resources in the past (emphasis added to the following quotes).

"As we have watched over and over, intrusion into Anishinaabe land areas has always impacted our cultural resources." (Paulson)

<sup>&</sup>lt;sup>220</sup> Ex. ML-1 at 6-7 (Kemper Direct).

<sup>&</sup>lt;sup>221</sup> Ex. ML-1, Exhibit A at 15 (Kemper Direct).

<sup>&</sup>lt;sup>222</sup> Ex. YC-19 at 3 (Lamb Direct).

<sup>&</sup>lt;sup>223</sup> Ex. ML-2 at 2 (Kemper Witness Summary).

<sup>&</sup>lt;sup>224</sup> Ex. YC-20 at 4 (Paulson Direct).

"The community has been through a lot, both historically and within the past generation. Recently, the community has been broken up by other pipelines, power lines, and gas lines coming through. We've seen a good number of wild rice lakes disappear due to construction projects and global warming. We've lost land where our traditional medicines grow. We've seen the wildlife dwindle. These things impact our spiritual rituals. Our whole community is hurting because of the things that have happened."<sup>225</sup> (Kemper, emphasis added)

"I look at the development around the Chi Gami Ziibi (St. Louis River) and feel the devastation that has resulted from industrial development that has facilitated, among other things, the extraction mining of the Misabe (Great Man) range. The forests have also changed as a result of the logging industry and near wipe out of the magnificent White Pines that graced our region. The extraction of the resources is what instigated the removal of the Anishinabe from these ceded territories and forced us onto the Ishkonigan (left over) or reservation." (Dupuis, emphasis added)

"Our community has had a lot of disruption with construction projects in the past. Another pipeline was put on reservation land, and we've seen the effects in that area. People no longer seek medicinal plants near previous construction sites....We have also seen construction projects in the area in the past that have unearthed graves and other archeological items. Construction projects are routed to avoid certain sacred sites or areas, but there are always inadvertent discoveries of burial sites and archaeological sites." (Kemper)

"People don't disturb their own people's graves -- people don't start construction projects in their own cemeteries. But the bones of our ancestors are often dug up and put on display. People just see it as an archeological survey, but we feel the impacts in our community." (Kemper, emphasis added)

D. The Applicant Failed to Present an Expert Witness That was Capable and Qualified to Answer the Questions Other Parties Had Regarding Indigenous Cultural Impacts.

<sup>&</sup>lt;sup>225</sup> Ex. ML-1 at 6-7 (Kemper Direct).

<sup>&</sup>lt;sup>226</sup> Ex. FDL-1 at 3 (Dupuis Direct).

<sup>&</sup>lt;sup>227</sup> Ex. ML-1 at 5 (Kemper Direct).

<sup>&</sup>lt;sup>228</sup> Ex. ML-1 at 6 (Kemper Direct).

- None of the expert witnesses that testified on behalf of Enbridge considered themselves experts on Indigenous culture, nor were they capable of answering questions involving Indigenous culture. As Mr. Plumer (counsel for Red Lake and White Earth) observed during the Evidentiary Hearing; "It is very frustrating because the things that are the most meaningful to the groups of Native people that this project directly impacts, no one is -- everybody's dancing around the edges, and nobody will deal with it directly."
- Mr. Eberth confirmed that no Enbridge witness was an expert on the culture of the Anishnaabe, or the cultural/spiritual impacts the pipeline would have on present-day Indigenous communities.<sup>230</sup> Mr. Eberth's Rebuttal references a letter from the Osage Nation Energy Services LLC as tribal support for Enbridge. Osage Nation Energy Services is based in Oklahoma.<sup>231</sup>
- In Ms. Bergland's rebuttal, she stated: "Construction of a pipeline project has the potential to impact cultural resources." She claimed that cultural resources fall under the "resources that Enbridge contemplated." Therefore it is clear that Enbridge is aware of the cultural costs of this project, yet they failed to provide any cultural expert or meaningful analysis of what they openly acknowledge to be a controversial impact of the Project.
- Ms. Bergland redirected cultural questions to Dr. Bergman, and Mr. Lee, <sup>233</sup> and she stated that she is unfamiliar with the federal wild rice refuges set aside by Congress for the use of the Chippewa. <sup>234</sup> Ms. Bergland also confirmed that she has not performed an analysis of cumulative impacts on off-reservation treaty resources that will be affected by the preferred route, and is unaware of any such analysis being submitted by Enbridge. <sup>235</sup>
- Dr. Bergman confirmed that he does not consider himself an expert in Anishinaabe culture, the cultural significance of wild rice, the cultural significance and importance of the natural environment, the current use of natural medicines by the Anishinaabe, the continuing practice of traditional ceremonies, or the effects of historical trauma. <sup>236</sup> Dr. Bergman also confirmed his testimony is not relevant to the living culture and the value that the living culture places on wild rice. <sup>237</sup>

<sup>&</sup>lt;sup>229</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 140-141 (Christopher Bergman)

<sup>&</sup>lt;sup>230</sup> Evid. Hrg. Tr. Vol7B (Nov. 13, 2017) at 135-136 (Paul Eberth)

<sup>&</sup>lt;sup>231</sup> Evid. Hrg. Tr. Vol10B (Nov. 16, 2017) at 71-72 (Paul Eberth)

<sup>&</sup>lt;sup>232</sup> Ex. EN-46 at 2 (Bergland Rebuttal).

<sup>&</sup>lt;sup>233</sup> Evid. Hrg. Tr. Vol. <sup>2</sup>B (Nov. 2, 2017) at 68 (Britta Bergland)

<sup>&</sup>lt;sup>234</sup> Tr. Vol2B (Nov. 2, 107) at 104 (Britta Bergland) Evid. Hrg.

<sup>&</sup>lt;sup>235</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 120 (Britta Bergland)

<sup>&</sup>lt;sup>236</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 130 (Christopher Bergman)

<sup>&</sup>lt;sup>237</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 138 (Christopher Bergman)

- Dr. Bergman responded to a question about the inclusion of wild rice stands as traditional cultural properties by saying, "I would prefer to say that the experts in the matter, including consulting Minnesota bands and other consulting tribes for the THPOs, would be the ones to best make that kind of evaluation and bring it forward as part of the process." When informed that other witnesses had deferred to him on cultural questions, Dr. Bergman responded "In all honesty, I have a certain basic set of understanding, but it doesn't make me an expert. I mean, there are people in this room that are more experts than I am on the matters that you're raising, and I'm referring to members of the Anishinaabe community. I understand the concerns, but I feel from the narrow view that I have, I don't know how to respond." 239
- Dr. Bergman deferred to Mr. Lee on questions of wild rice. 240 Mr. Lee confirmed he is not an expert regarding the cultural significance of wild rice: "I'm not really qualified to deeply address the cultural and spiritual issues related to wild rice." Neither Mr. Wuolo nor Mr. Lee (who based his testimony on Mr. Wuolo) analyzed factors such as site specific conditions, seasonality, volume spills, or response time, in their assessment of which wild rice lakes could be impacted. Ar. Lee deferred questions to Ms. Schuldt on the cumulative impacts analysis looking at the historic impacts to wild rice resources. Ar. Lee also admits his analysis does not cover the cultural importance of any particular wild rice waters that would be affected. Ar. Plumer explained that the reason he asked Mr. Lee about the cultural impacts of wild rice was that Mr. Lee is "billed as the wild rice expert in this proceeding" Mr. Lee was also unfamiliar with the testimony of Ms. Lamb<sup>246</sup> and Mr. Paulson. Ar.
- Ms. Heidi Tillquist, Enbridge's other witness regarding impacts to wild rice, also confirmed that she is not a cultural expert.<sup>248</sup>

### E. The voices of Indigenous people in Northern Minnesota are being ignored by Enbridge.

• In Mr. Eberth's rebuttal testimony, he claimed that "The Project enjoys strong support from local units of government and the broader communities and business with whom

<sup>&</sup>lt;sup>238</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 136-137 (Christopher Bergman)

<sup>&</sup>lt;sup>239</sup> Evid. Hrg. Tr. Vol2B (Nov. 2, 2017) at 138-139 (Christopher Bergman)

<sup>&</sup>lt;sup>240</sup> Evid. Hrg. Tr. Vol3A (Nov. 3, 2017) at 48 (Christopher Bergman)

<sup>&</sup>lt;sup>241</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 28 (Jeff Lee)

<sup>&</sup>lt;sup>242</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 16 (Jeff Lee)

<sup>&</sup>lt;sup>243</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 30 (Jeff Lee)

<sup>&</sup>lt;sup>244</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 37 (Jeff Lee)

<sup>&</sup>lt;sup>245</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 67-68 (Jeff Lee)

<sup>&</sup>lt;sup>246</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 53 (Jeff Lee)

<sup>&</sup>lt;sup>247</sup> Evid. Hrg. Tr. Vol5B (Nov. 8, 2017) at 56 (Jeff Lee)

<sup>&</sup>lt;sup>248</sup> Evid. Hrg. Tr. Vol5B (Nov. 7, 2017) at 131 (Heidi Tillquist)

Enbridge works. This is evidenced by the numerous local government resolutions submitted into the record in support of the Project."<sup>249</sup> To say that "local units of government" support this program disregards the five sovereign units of government currently intervening in opposition to this project.

- In Mr. Eberth's witness summary, he claimed that "The consequences to society of granting the certificate of need are more favorable than denial. This is recognized by those who are most affected, the people living along the route." This is a blatant erasure of the numerous Indigenous people living along the route who have spoken out against the Project.
- Mr. Eberth's confidence in the popularity of the Project was directly contradicted by the overwhelming Indigenous opposition to the new Line 3 expressed at public hearings. The comments were both numerous and direct, and indicative of the high level of personal commitment from Indigenous communities to stop the project "by any means necessary."<sup>251</sup> Many public commenters referenced the opposition to the Dakota Access Pipeline seen at Standing Rock, with comments such as, "If you proceed with this permit...it's going to be bigger than Standing Rock. Because it involves the wild rice of this land. It involves the traditions of our people and it also involves our water....It'll be over our dead bodies that you're going through with this line." <sup>252</sup> Another Indigenous commenter elaborated that "When Enbridge starts digging into these lands in Minnesota, it will be considered an act of war on Ojibwe territories."253 Some went so far as to commit that "If this does happen...I'll quit my job to fight next to my family for this pipeline not to be put in. I'll go to jail. I'll sit there if I have to."<sup>254</sup> In drawing comparisons, one commenter in St. Paul noted "At Standing Rock, the youth led the movement there....I am a water protector because of them, because of their fire, their love. I see that same leadership here now, leading against, standing against this Line 3."255
- In Mr. Eberth's rebuttal, he stated that "The Indigenous (Canada) and Native American (US) engagement program we have undertaken for the Line 3 Replacement Program is the largest in Enbridge's history." He also suggested that "contrary to the impressions some commentators may have, the Tribal engagement team has been working tirelessly

<sup>&</sup>lt;sup>249</sup> Ex. EN-30 at 7 (Eberth Rebuttal).

<sup>&</sup>lt;sup>250</sup> Ex. EN-95 at 2-3 (Eberth Witness Summary).

<sup>&</sup>lt;sup>251</sup> Evid. Hrg. Tr. Vol. 10A (Nov. 16, 2017) at 84-86 (Levi Brown)

<sup>&</sup>lt;sup>252</sup> McGregor Pub. Hrg. Tr. (Vol. 4B) at 130 (October 11, 2017)

<sup>&</sup>lt;sup>253</sup> Crosslake Pub. Hrg. Tr. (Vol. 8B) at 165-166 (October 25, 2017)

<sup>&</sup>lt;sup>254</sup> Hinckley Pub. Hrg. Tr. (Vol. 5B) at 113 (October 12th, 2017)

<sup>&</sup>lt;sup>255</sup> St. Paul Pub. Hrg. Tr. (Vol. 2B) at 225 (September 28th, 2017)

<sup>&</sup>lt;sup>256</sup> Ex. EN-30 at 19 (Eberth Rebuttal).

to engage with numerous Minnesota Tribal governments regarding the Project."<sup>257</sup> Despite these efforts, Ms. Tara Houska, a well-known Indigenous advocate and former Native American Affairs advisor to Senator Bernie Sanders, pointed out in a comment that, "Not one of Minnesota's 11 tribes support this pipeline."<sup>258</sup>

- Enbridge's Dr. Bergman spoke at length about the importance of the Tribal Cultural Resource Investigation ("TCR survey") currently being conducted under the direction of the Fond du Lac Band, affirming Enbridge's support for the survey, 259 and explaining that the survey will include substantial information gathered from "field surveys, interviews, and site visits." When asked if it would be best practices to do a full traditional resource survey along the entire scope of the route, Dr. Bergman responded "I think it's absolutely essential." However, the TCR survey as currently underway has a very limited scope and does not include the entirety of the Applicant's preferred route or any portion of alternate routes.
- Dr. Bergman testified that even the current limited-scope survey "will provide further information on potential impacts to historical properties of traditional religious and cultural significance." However, Enbridge has advocated for the exclusion of that information from the record that will be available to inform the Commission's decisions. decisions.
- Since Enbridge has not advocated for a complete TCR survey in the record, their 'support' of the survey is insufficient to demonstrate commitment to the inclusion of tribal concerns and legal rights.

<sup>&</sup>lt;sup>257</sup> Ex. EN-30 at 20 (Eberth Rebuttal).

<sup>&</sup>lt;sup>258</sup> St. Paul Pub. Hrg. Tr. (Vol. 2B) at 184 (September 28, 2017)

<sup>&</sup>lt;sup>259</sup> Ex. EN-48 at 3-4 (Bergman Rebuttal)

<sup>&</sup>lt;sup>260</sup> Ex. EN-48 at 3-4 (Bergman Rebuttal)

<sup>&</sup>lt;sup>261</sup> Evid. Hrg. Tr. Vol. 3A (November 3, 2017) at 25 (Christopher Bergman)

<sup>&</sup>lt;sup>262</sup> Ex. EN-48 at 7 (Bergman Rebuttal)

<sup>&</sup>lt;sup>263</sup> Enbridge Energy Reply to Petitions for Reconsideration of Tribes and Sierra Club (Jan 12, 2018) (eDocket Nos. 2081-138884-03(CN); 20181-138884-04 (R)).

<sup>&</sup>lt;sup>264</sup> PUC Order Finding Environmental Impact Statement Inadequate (Dec 14, 2017) (eDocket Nos. 201712-138168-02 (CN); 201712-138168-01 (R)

## VI. ANALYIS OF POTENTIAL BENEFITS FROM THE LINE 3 EXPANSION HAVE BEEN SKEWED AND OVERSTATED BY THE APPLICANT

"Putting a pipeline through several watersheds, one of them being a major watershed, the Mississippi basin, goes against everything that I've been taught to teach the next generation. So I feel like I'm here speaking for all these kids that I'm teaching. Are we going to do -- show them what we are teaching them or are we going to continue to do the same thing over and over again?"

Jessica Bleichner, Crosslake Pub. Hrg. Tr. (Vol. 8B) at 47-48 (October 25, 2017)

### A. There is no comparison of benefits between approval and denial of the Certificate of Need.

- The FEIS and testimony from Enbridge establish the "no action alternative" baseline scenario as the continued operation of the existing Line 3. Mr. Eberth states in his Rebuttal testimony that "Under the 'no action' alternative, Enbridge would continue to operate existing Line 3, addressing the ongoing integrity issues with increasing dig and repair activities." Despite this, Enbridge filed no testimony on the economic impact of continued operation of Line 3.
- The Lichty and Carey report provided by Enbridge and sponsored by Dr. Lichty looks at the gross economic impact of the Line 3 Expansion rather than its incremental economic impact in comparison to the 'no action' alternative.<sup>266</sup>

### B. Omission of a cost-benefit or net benefit analysis that incorporates environmental and socioeconomic externalities skews conclusions drawn by Enbridge.

- Dr. Lichty repeatedly confirmed that his analysis did not include any negative externalities, potential job losses caused by the project, job shifting opportunities, environmental externalities such as climate change, or a cost-benefit analysis. <sup>267</sup>
- Dr. Lichty was unable to provide any example of a possible negative externality of the Project.<sup>268</sup>

<sup>&</sup>lt;sup>265</sup> Ex. EN-30 at 5 (Eberth Rebuttal)

<sup>&</sup>lt;sup>266</sup> Ex. FOH-6 at 12 (Joseph Direct)

<sup>&</sup>lt;sup>267</sup> Evid. Hrg. Tr. Vol. 1B at 164-165 (Richard Lichty) and Evid. Hrg. Tr. Vol. 1B at 169-170 (Richard Lichty)

<sup>&</sup>lt;sup>268</sup> Evid. Hrg. Tr. Vol. 1B at 165-166 (Richard Lichty)

- Mr. Eberth concluded that under the 'no action' alternative, "landowners and the environment would continue to be impacted year-over-year, and shippers in Minnesota and neighboring states would continue to experience apportionment. As such, it is not a more reasonable and prudent alternative." However, neither an economic impact analysis of the 'no action' alternative nor any comprehensive cost-benefit analysis inclusive of environmental externalities for the proposed Project have been done. This makes it unclear what basis Mr. Eberth had for establishing that the environmental costs of the 'no action' alternative are outweighed by the economic benefits of approving the Project.
- Enbridge also provided no analysis of the potential negative impacts of construction or a
  potential spill on local fishing and tourism industries, which could be compared to Dr.
  Lichty's benefits report to create a more complete picture of the consequences to society.
  Public comment, however, outlines the risks.
- Mr. Jeff Laurel of Crosslake testified at the public hearing held there that "636 of those acres [for the Project are] in the Pine River watershed, which flows its water to many of the highest quality recreational lakes in Minnesota, including the Whitefish Chain of 14 lakes."270 His neighbor, Mr. David Fischer, added "I am concerned that the current proceedings and the EIS do not address the important natural resource activity taking place in this chain of lakes. The DNR maintains a walleye egg collection station at the point where Pine River enters Upper White Fish Lake....Minnesota has more walleye, walleye lakes, and walleye anglers than any other state. Each year, anglers harvest about 3.5 million walleye. The DNR considers walleye managing a highly critical responsibility. Of course, all you have to do is read the newspapers to realize it is for the people of Minnesota also. The EIS omitted information about the annual spring walleye egg hunts at the Pine River as it enters Upper Whitefish Lake. At the Pine River location, 500 to 700 quarts of eggs are collected in the spring. The fertilized eggs to to the Brainerd hatchery. This operation stocks annually 25 to 70 million walleye fry and fingerlings here in lakes in central Minnesota. The DNR, of course, also reports the best way to maintain walleye numbers is to protect critical natural habitat. The proposed Line 3 route would cross the north and west branches of the Pine River. Contamination during construction or subsequent oil spill in the Pine River watershed will have a direct impact not only on walleye and any collection station, but also on the numerous natural walleye spawning beds on the Pine River."271

<sup>&</sup>lt;sup>269</sup> Ex. EN-30 at 5 (Eberth Rebuttal)

<sup>&</sup>lt;sup>270</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 97-98 (October 25, 2017)

<sup>&</sup>lt;sup>271</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 111-112 (October 25, 2017)

- The former three-term mayor of the town of Emily, Mr. George Pepek, also testified to the impact a spill would have on the town's economy, saying "The misleading ads we're seeing on TV and in the paper say that only three lakes will be affected by the spill. Three of the area's largest lakes, plus many other lakes that are fed by these will be affected. An example, Roosevelt feeds Lawrence Lake in Outing. Crosslake feeds many other lakes in its chain of lakes in Crow Wing County. Any spill to any of our lakes would destroy the fishing and recreation of our lakes as well as endanger our drinking water....Property values would drop if the lakes were damaged and the weekend people who come up to enjoy the recreation of the lakes would sell because there would be no recreation reason to come north."<sup>272</sup> Mr. Lowell LaBerge testified in McGregor that "We can't imagine anything that would be worse than having this pipeline run through these wetlands here. It would make our lake worthless if there was a spill anywhere here. Properties aren't going to sell for very much when the lake is polluted."<sup>273</sup> Mr. Bill Reed, also of McGregor, similarly stressed the risk to the tourism industry of Aitkin County.<sup>274</sup>
- Another public commenter represented that as a result of the tourism industry, \$200 million and more than 4,000 jobs were brought into Cass and Beltrami County. 275
- Ms. Lindsey Ketchel, the Executive Director of the Leech Lake Area Watershed Foundation, testified that "the fishing industry in the state of Minnesota creates 43,000 jobs annually. It represents \$2.8 billion, \$650 million a year in tax revenue alone....65% of all our fishing occurs in these four counties. This is where they come. This is what we are risking."<sup>276</sup>
- Mr. Lloyd Thyen, an elected officer of Crooked Lake Township and chair of the town Board, submitted resolution opposing the Project's current route, saying "The proposed pipeline route traverses the entire six-mile northern edge of the township from west to east, crossing at least two perennial waterways and in proximity to several bodies of water. In fact, the township includes most of Roosevelt Lake, which was identified by an Enbridge contractor as potentially endangered by the planned route. An oil spill to the north of Roosevelt Lake could also threaten the viability of the Minnesota DNR's Spire Valley fish hatchery....We are very concerned about the potential impact of an oil spill in our waters, especially given this company's history, and strongly recommend that further study be conducted, and an ecologically and environmentally less risky route be selected."

<sup>&</sup>lt;sup>272</sup> Crosslake Pub. Hrg. Tr. (Vol. 8a) at 49-50 (October 25, 2017)

<sup>&</sup>lt;sup>273</sup> McGregor Pub. Hrg. Tr. (Vol. 4A) at 37 (October 11, 2017)

<sup>&</sup>lt;sup>274</sup> McGregor Pub. Hrg. Tr. (Vol. 4B) at 65 (October 11, 2017)

<sup>&</sup>lt;sup>275</sup> Bemidji Pub. Hrg. Tr. (Vol. 6B) at 104 (October 17, 2017)

<sup>&</sup>lt;sup>276</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 155 (October 25, 2017)

<sup>&</sup>lt;sup>277</sup> Crosslake Pub. Hrg. Tr. (Vol. 8A) at 73-74 (October 25, 2017)

- Local elected official Ms. Jan Mosman spoke to her personal research on the comparative economic benefits during the Crosslake public hearing, stating "As a council member, I know that 78 percent of our local taxes are paid by lakeshore properties, which means that our economy is dependent on the environment." 278
- Mr. Tom Watson, the President of the Whitefish Area Property Owners' Association (WAPOA) testified that "As reported in research at the University of Minnesota, [the tourism industry was] \$713 million in 2007/2008."<sup>279</sup>

#### C. Benefits to Workers are Not Unique to This Project.

- The United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry of the United States and Canada (AFL-CIO), an intervening party in this case, are a member of the BlueGreen Alliance, and established that their members also work on renewable power generation. <sup>280</sup>
- Mr. Whiteford, a member of LIUNA Local 563 and an expert witness on behalf of the Laborers' District Council, confirmed that his workers have experience building wind farms and would be able to be employed to build such a facility.<sup>281</sup>
- Multiple union members expressed similar positions on renewable energy during the public hearings. A member of the AFL-CIO testified in St. Paul that "I would just like to say that as a union worker, there's a green and sustainable future that we all as a labor movement and as an environmental movement need to unite to push forward towards. And that anybody that supports this pipeline is...basically betraying the rest of the working class. We as a working class need to unite for a just transition and a sustainable future."282

### D. Testimony on behalf of Enbridge about the potential impacts of the Project in northern Minnesota has been inconsistent and unreliable

• Mr. Eberth testified that in Enbridge's initial 2015 application for the Project, Enbridge forecasted 4,000 integrity digs on the old Line 3 over the course of the next fifteen years. However, Enbridge has now changed that number to 7,000 digs (6,250 of which would be in Minnesota), claiming the increase was because "that was several years ago and

<sup>&</sup>lt;sup>278</sup> Crosslake Pub. Hrg. Tr. (Vol. 8B) at 109-111 (October 25, 2017)

<sup>&</sup>lt;sup>279</sup> Crosslake Pub. Hrg. Tr. (Vol. 8B) at 161-162 (October 25, 2017)

<sup>&</sup>lt;sup>280</sup> Ex. UA-1 at 8 (Barnett Direct)

<sup>&</sup>lt;sup>281</sup> Evid. Hrg. Tr. Vol. 5A (Nov. 8, 2017) at 64 (Evan Whiteford)

<sup>&</sup>lt;sup>282</sup> St. Paul Pub. Hrg. Tr. (Vol. 2B) at 198 (September 28, 2017)

conditions have changed since then."<sup>283</sup> Nearly doubling the estimated number of integrity digs suggests either substantial inflation of the numbers in more recent statements, or, a serious miscalculation about the condition of the Line 3 on the part of the company.

- Public commenter Willis Mattison, a former Regional Director of the Minnesota
  Pollution Control Agency, noted that "Once pipe easements are obtained and the
  company brandishes the percentage of permit owners or landowners who have accepted
  easements as public acceptance, high degree of public acceptance is represented by the
  coercion of payment to the landowners."<sup>284</sup>
- Mr. Eberth testified while under oath during the Evidentiary Hearing that "I was at all the public hearings, I didn't hear a landowner showing up and asking for the pipeline to be removed or lowered or otherwise." In fact, there were multiple landowners who spoke at public hearings in favor of removal.
- In Thief River Falls, Ms. Alice Peterson testified that "It is our opinion that Line 3 should not be left in the ground because eventually it is going to collapse. And when it collapses, it's going to cause a problem. So isn't it better to deal with a problem before a problem starts compared to afterwards? I would think it should be." 286
- In Grand Rapids, Mr. Rob Struble reviewed his easement with Enbridge aloud, stating "I'm not independently wealthy. I go to these meetings because I have a vested interest. Enbridge's easement reads: I grant them right-of-way and easement for purpose of laying, maintaining, operating, controlling, altering, repairing, removing, moving in whole or in part a pipeline transportation station of crude oil petroleum, its products, derivatives, whether liquid or gases, and mixes thereof upon the land described thereof. It says nothing about abandonment. So I asked Enbridge, under what wildest stretch of your imagination, how did you ever come up with your right to abandon your rusty environmental asset on my property? And I asked the Department of Commerce how they could even consider issuing the certificate of need before the issue of what happens to this pipe has been addressed?" (emphasis added).<sup>287</sup>
- Mr. Allen Richardson, an organizer with Minnesotans for Pipeline Cleanup, testified that "numerous landowners" he has spoken with would prefer to have the old line removed, and suggested that "if the PUC truly wishes to gauge the depth of of support for pipeline

<sup>&</sup>lt;sup>283</sup> Evid. Hrg. Tr. Vol. 7B (Nov. 13, 2017)

<sup>&</sup>lt;sup>284</sup> Hinckley Pub. Hrg. Tr. (Vol. 5B) at 131-133 (October 12, 2017)

<sup>&</sup>lt;sup>285</sup> Evid. Hrg. Tr. Vol. 10B (Nov. 16, 2017) at 130 (Paul Eberth)

<sup>&</sup>lt;sup>286</sup> Thief River Falls Pub. Hrg. Tr. (Vol. 1A) at 62 (September 26, 2017)

<sup>&</sup>lt;sup>287</sup> Grand Rapids Pub. Hrg. Tr. (Vol. 3A) at 75-76 (October 10, 2017)

removal among landowners, they should require Enbridge to remove the decommissioned line at the landowner's request, and then see how many take them up on it,"<sup>288</sup> rather than trusting the Applicant's word.

- Mr. Jim Hill of Grand Rapids testified that "I am a property owner in Itasca Country. The corridor does run through my property, just so you know....I do have a lot of swampland. I've lived here my whole life. I did have an oil spill on my property within a mile and a half of the Mississippi River. Even though the problem wasn't much runoff into the river, a lot of crude oil was burnt to prevent that. So we did end up with 150,000 gallons roughly of crude oil being burnt, which really is also a pollution of contaminants. So I do not believe in abandoning the pipe."289
- Mr. Eberth's testimony also severely mischaracterized the record by minimizing the opinions of the reservation residents who requested that the old Line 3 be removed. For example, in McGregor, Mr. Thomas Howes testified "The idea of leaving a pipe in place through my reservation, near resources that I rely upon for various aspects of my physical and spiritual life, I find offensive. So I would appreciate that it's removed, because my grandchildren and great-grandchildren and so on don't deserve to accept your garbage. And I say that respectfully." 290

<sup>&</sup>lt;sup>288</sup> Bemidji Pub. Hrg. Tr. (Vol. 6B) at 163 (October 17, 2017)

<sup>&</sup>lt;sup>289</sup> Grand Rapids Pub. Hrg. Tr. (Vol. 3B) at 40-41 (October 10, 2017)

<sup>&</sup>lt;sup>290</sup> McGregor Pub. Hrg. Tr. (Vol. 4B) at 53 (October 11, 2017)

### STATEMENT OF LAW

#### A. Issue Presented

The matter before the ALJ and the Commission is whether the Commission should grant Enbridge the two permits it needs to construct the Project: a Certificate of Need and a Routing Permit. While Enbridge has applied for both permits at the same time, Minnesota Statute 216B.243 Subd. 2 requires that "no large energy facility shall be sited or constructed in Minnesota without the issuance of a certificate of need by the commission." Therefore, the Commission would need to grant a Certificate of Need for the project before it could grant a Routing Permit. We focus our analysis accordingly on the Certificate of Need.

#### **B.** Applicable Laws

Minn. Stat. 216B.243 establishes the requirement for a Certificate of Need and provides a roadmap for the application process. Subdivision 3 of the statute provides a list of twelve items that the Commission must assess in considering an application. Some of these items apply specifically to energy generation and transmission facilities, but many apply to pipelines, including:

- (1) the accuracy of the long-range energy demand forecasts on which the necessity for the facility is based;
- (2) the effect of existing or possible energy conservation programs under sections 216C.05 to 216C.30 and this section or other federal or state legislation on long-term energy demand;
- (3) the relationship of the proposed facility to overall state energy needs, as described in the most recent state energy policy and conservation report prepared under section 216C.18 [...]
- (4) promotional activities that may have given rise to the demand for this facility;
- (5) benefits of this facility, including its uses to protect or enhance environmental quality, and to increase reliability of energy supply in Minnesota and the region;
- (6) possible alternatives for satisfying the energy demand or transmission needs including but not limited to potential for increased efficiency and upgrading of existing energy generation and transmission facilities, load-management programs, and distributed generation;
- (7) the policies, rules, and regulations of other state and federal agencies and local governments;

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<sup>&</sup>lt;sup>291</sup> Minn. Stat. 216B.143

- (8) any feasible combination of energy conservation improvements, required under section 216B.241, that can (i) replace part or all of the energy to be provided by the proposed facility, and (ii) compete with it economically;
- (11) whether the applicant has made the demonstrations required under subdivision 3a; and
- (12) if the applicant is proposing a nonrenewable generating plant, the applicant's assessment of the risk of environmental costs and regulation on that proposed facility over the expected useful life of the plant, including a proposed means of allocating costs associated with that risk.

While 216B.243 provides important guidance for assessing need, its list of factors is not intended as a full set of criteria. Rather, subdivision 1 of the statute requires that "The commission shall, pursuant to chapter 14 and sections 216C.05 to 216C.30 and this section, adopt assessment of need criteria to be used in the determination of need for large energy facilities pursuant to this section." Under the authority of this statute, the Commission adopted a rule, Minn. R. 7853.0130, which contains a more formal set of criteria for examining the need for a project.

Specifically, Rule 7853.0130 describes four criteria that the Commission must consider in granting a Certificate of Need. An project must meet **all four** of these criteria in order to merit a Certificate of Need; failure to meet one or more of the criteria must result in denial. The four Criteria are:<sup>292</sup>

- A. the probable result of denial would adversely affect the future adequacy, reliability, or efficiency of energy supply to the applicant, to the applicant's customers, or to the people of Minnesota and neighboring states[...]
- B. a more reasonable and prudent alternative to the proposed facility has not been demonstrated by a preponderance of the evidence on the record by parties or persons other than the applicant[...]
- C. the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate[...]
- D. it has not been demonstrated on the record that the design, construction, or operation of the proposed facility will fail to comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments.

(subparts omitted for clarity)	(subparts	omitted	for	clarity)
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<sup>&</sup>lt;sup>292</sup> Minn. R. 7853.0130

We focus our argument on Parts C and D, with the understanding that other Parties are presenting arguments related to parts A and B and that the Project must satisfy all four criteria before "need" can be found to exist.

Part C addresses to the consequences to society of the Project, and requires that the benefits to society outweigh the costs. There are four subparts to Part C, all of which the Commission must consider. Those subparts are as follows:<sup>293</sup>

- (1) the relationship of the proposed facility, or a suitable modification of it, to overall state energy needs;
- (2) the effect of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effect of not building the facility;
- (3) the effects of the proposed facility or a suitable modification of it, in inducing future development; and
- (4) socially beneficial uses of the output of the proposed facility, or a suitable modification of it, including its uses to protect or enhance environmental quality.

Notably, in referring to "consequences to society," Part C is not narrowly defined (unlike Part A, which refers specifically to "Minnesota and neighboring states"). <sup>294</sup> Therefore, "society" must be interpreted broadly. If permitting of the Project by the Commission would impose consequences beyond Minnesota's borders, those consequences remain within the purview of the Commission. This interpretation is consistent with other practices of the Commission in related matters. For example, on January 3, 2018, the Commission filed an Order adopting an ALJ's conclusion that in calculating the social cost of carbon for electricity generation, "the geographic scope of damages [should] be viewed in terms of the source of the CO2 emissions and all their damaging impacts, wherever they are experienced."

Finally, Part D requires that the Project must "comply with those relevant policies, rules, and regulations of other state and federal agencies and local governments." We present and explain below a number of other applicable environmental laws, with which the Project would need to comply in order to be built but with which it would not comply.

<sup>&</sup>lt;sup>293</sup> Minn. R. 7853.0130

<sup>&</sup>lt;sup>294</sup> Minn. R. 7853.0130 Subp. 1, 3

<sup>&</sup>lt;sup>295</sup>In the Matter of the Further Investigation into Environmental and Socioeconomic Costs Under Minnesota Statutes Section 216B.2422, Subdivision 3. PUC Docket No. E-999/CI-14-643 "Order Updating Environmental Cost Values" at 57 (January 3, 2018); adopting "Findings of Fact, Conclusions, and Recommendations: Carbon Dioxide Values" at 120-121 (April 15, 2016)

#### C. Burden of Proof

Minn. Stat. 216B.243 subd. 3 states that "no proposed large energy facility shall be certified for construction unless the applicant can show that demand for electricity cannot be met more cost effectively through energy conservation and load-management measures and unless the applicant has otherwise justified its need."<sup>296</sup> Accordingly, the burden is on the applicant here, Enbridge - to justify the need for its proposed Project. This requires Enbridge to satisfy the four criteria under Minn. R. 7853.0130 as discussed above. If Enbridge fails to satisfy even one of these criteria, its application for a Certificate of Need must be denied.

<sup>&</sup>lt;sup>296</sup> Minn. Stat. 216B.243 Subd. 3

### **ARGUMENT**

# I. THE CONSEQUENCES TO SOCIETY OF GRANTING A CERTIFICATE OF NEED FOR THIS PROJECT WOULD BE FAR LESS FAVORABLE THAN THE CONSEQUENCES OF DENYING IT

Enbridge has not met and cannot meet its burden under Minn. R. 7853.0130, Part C, of proving that the consequences to society of granting a Certificate of Need for the Line 3 expansion would be more favorable than the consequences of denial. As detailed below, the social costs of proceeding with this Project would far outweigh its potential benefits. The application for a Certificate of Need should therefore be denied.

### A. The Line 3 Project Would Exacerbate Climate Change, with Enormous Consequences to Society.

This Project is fundamentally incompatible with addressing climate change. The forecasts used by Enbridge fail to account for current and reasonably anticipated climate policy, and project a future that is synonymous with catastrophic destabilization of our atmosphere.<sup>297</sup> Scientists have concluded that 75% of the Canadian tar sands need to remain unburned in order to give our generation a chance at a future with less than 2 degrees of warming.<sup>298</sup> Because tar sands extraction is constrained by transportation capacity, long-term investments in pipeline infrastructure like the proposed Line 3 expansion have exactly the wrong effect: they promote growth in an industry that should be severely curtailed.<sup>299</sup>

The proposed Line 3 expansion has an attributable social cost of carbon conservatively estimated at \$330 billion over the course of its predicted 60-year operating lifetime. The release of an additional 35 million tons of CO2e per year is far more than our planet can afford, and when Mr. Eberth was asked "Who pays the social cost of carbon?" he responded simply: "You know, I don't know."

<sup>&</sup>lt;sup>297</sup> Ex. YC-25 at 5 (Swift Surrebuttal)

<sup>&</sup>lt;sup>298</sup> Ex. YC-12 at 14 (Oil Change International Report)

<sup>&</sup>lt;sup>299</sup> Ex. YC-2 at 3 (Scott Direct)

<sup>&</sup>lt;sup>300</sup> Ex. YC-8 at 5 (Scott Direct)

<sup>&</sup>lt;sup>301</sup> Evid. Hrg. Tr. Vol7B (Nov. 13, 2017) at 147 (Paul Eberth)

We **do** know. The truth is that today's young people will pay the cost of this reckless extraction. We will pay in the form of heat waves and droughts; dangerous storms and floods; increased asthma, severe allergies, and disease vectors; global unrest; agricultural deterioration and increased food prices; economic downturn as a result of reduced tourism; the loss of the forests, lakes, and other ecosystems which support us and which we hold dear; and the mental health repercussions of the destabilization of our communities.<sup>302</sup> These impacts will be even more severe for people already dealing with poverty, discrimination, mental or physical health challenges, or a lack of social support.

The \$330 billion social cost of carbon associated with this Project is a conservative valuation of the future, meaning the price of future damage is discounted to place more value on today than tomorrow. It also excludes costs from climatic feedback loops (like melting ice caps and rising seas), secondary impacts like smoke inhalation from wildfires, intermittent food price spikes, impacts to fisheries, reduced labor productivity due to heat or extreme weather, and many national security concerns. This means the \$330 billion price tag marks a reasonable lower limit, but is far from a full assessment of the harm that will befall our generation if this Project is allowed to proceed.

No marginal benefit touted by Enbridge comes quantitatively or qualitatively close to compensating for this Project's adverse effects on society caused by the devastation of climate change. For that reason alone, no Certificate of Need should be issued.

#### B. The Commission must consider full life-cycle climate change impacts of the Project.

Regulators and the courts have considered indirect greenhouse gas emissions in recent fossil fuel infrastructure cases. In September 2015, a County Hearings Examiner upheld the Washington State Department of Ecology's denial of a Development Permit for the Millennium Bulk Terminals coal export facility. The permit was denied in part because of a finding that without full mitigation, net greenhouse gas ("GHG") emissions would have an "unavoidable, significant adverse impact." In November 2015, the Secretary of State recommended against

<sup>&</sup>lt;sup>302</sup> Part III of the Statement of Facts

<sup>&</sup>lt;sup>303</sup> Part III of the Statement of Facts

<sup>&</sup>lt;sup>304</sup> In Re the Matter of Millenium Bulk Terminals - Longview, LLC Coal Export Terminal, No. 12-04-0375, 31 (Cowlitz Cnty. Wa., Nov. 14, 2017) http://blogs2.law.columbia.edu/climate-change-litigation/wp-content/uploads/sites/16/case-documents/2017/20171204\_docket-S17-17c\_decision.pdf

the approval of a border crossing permit for the Keystone XL pipeline, writing that "the critical factor in my determination was this: moving forward with this project would significantly undermine our ability to continue leading the world in combating climate change." And in August 2017, the D.C. Circuit Court of Appeals ruled in *Sierra Club v. FERC* that the Federal Energy Regulatory Commission ("FERC") erred in approving construction of the Southeast Market Pipelines Project (a series of 3 natural gas pipelines) because FERC did not consider or quantify the downstream greenhouse gas emissions from the combustion of the natural gas transported by the project. 306

Here in Minnesota, Enbridge has argued that the Commission should not take similar action. In their 2014 post-hearing brief regarding a different tar sands pipeline, the Line 67 Phase II project, Enbridge argued that the Commission should disregard life-cycle greenhouse gas emissions because:

- "there are no state laws that require consideration of the impacts of Canadian oil extraction, and even if there were, Minnesota state laws cannot be applied to activities in foreign nations or other states." 307 and
- "the MPUC has no authority to regulate or control petroleum product use in another state" 308

These arguments falsely suggest that by merely considering the impacts of Canadian oil extraction or downstream oil consumption, the Commission would somehow be attempting to regulate in other states or countries. Clearly, that is not the case. Rather, because the extraction and combustion of oil that moves through Minnesota has extensive impacts both within Minnesota and elsewhere (climate change, for instance, being a global phenomenon), the Commission not only has every right to take those impacts into account - it has a **duty** to do so. Here, if Minnesota approves and constructs Line 3, Minnesota will indisputably be responsible for the induced extraction increase in the Canadian tar sands, and subsequent increase in greenhouse gas emissions. The Commission must consider those impacts under Minn. R. 7853.0130, Part C, given that they are "consequences to society" resulting from a decision in this matter.

<sup>&</sup>lt;sup>305</sup> John Kerry, Keystone XL Pipeline Permit Determination (Nov. 6, 2015), available at, https://2009-2017.state.gov/secretary/remarks/2015/11/249249.htm.

<sup>&</sup>lt;sup>306</sup> Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d 1357 (D.C. Cir. 2017).

<sup>&</sup>lt;sup>307</sup>Enbridge Energy Post Hearing Brief for the Line 67 Phase 2 Project (April 29, 2014) (eDocket No. 20144-98917-02)

<sup>&</sup>lt;sup>308</sup> Enbridge Energy Post Hearing Brief for the Line 67 Phase 2 Project (April 29, 2014) (eDocket No. 20144-98917-02)

The D.C. Circuit's decision in *Sierra Club vs. FERC* is particularly informative here. As the court noted, "an agency conducting a NEPA review must consider not only the direct effects, but also the indirect environmental effects, of the project under consideration." Indirect effects, in this legal context, would include life-cycle greenhouse gas emissions. However, the pipeline developers cited *Department of Transportation vs. Public Citizen* to argue that FERC would not be a legally relevant cause of power plant emissions and therefore was not required to consider them under NEPA. The D.C. Circuit disagreed, concluding that:

- p. 20. "The purpose of NEPA is to help agencies and the public make informed decisions. But when the agency has no legal power to prevent a certain environmental effect, there is no decision to inform, and the agency need not analyze the effect in its NEPA review."
- p. 21. "An agency has no obligation to gather or consider environmental information if it has no statutory authority to act on that information. That rule was the touchstone of *Public Citizen*."
- p. 22. "Here, FERC is not so limited. Congress broadly instructed the agency to consider 'the public convenience and necessity' when evaluating applications to construct and operate interstate pipelines."
- p. 23. "Because FERC could deny a pipeline certificate on the ground that the pipeline would be too harmful to the environment, the agency is a "legally relevant cause" of the direct and indirect environmental effects of pipelines it approves. 311 (emphasis added)

We can apply a similar standard to the proposed Line 3 expansion. Like FERC, the Commission must consider the public interest. For instance, MEPA directs state agencies to act "in a manner calculated to foster and promote the general welfare." Minn. R. 4410.2300 requires that an EIS consider all "potentially significant" environmental effects, "be they direct, indirect, or cumulative." And Minn. R. 7853.0130 directs the Commission to consider the "consequences to society" of the Project (interpreted broadly), including "the effect of the proposed facility, or a suitable modification of it, upon the natural and socioeconomic environments compared to the effect of not building the facility." Approval of the Project would result in massive indirect impacts due to upstream and downstream greenhouse gas emissions (as identified in the FEIS and elsewhere). And the Commission is required to consider

<sup>&</sup>lt;sup>309</sup> Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d at 1371.

<sup>&</sup>lt;sup>310</sup> 541 U.S. 753 (2004).

<sup>&</sup>lt;sup>311</sup> Sierra Club v. Fed. Energy Regulatory Comm'n, 867 F.3d at 1372-73.

<sup>&</sup>lt;sup>312</sup> Minn. Stat. 116D.02. Subd. 1

<sup>313</sup> Minn. R. 4410.2300 Subp. H

<sup>&</sup>lt;sup>314</sup> Minn. R. 7853.0130

all consequences to society of approving the Project. Therefore, the Commission is required to consider the life-time climate impacts of Line 3 in any decision regarding need.

#### C. The Project's Impacts to Water Would be Unfavorable.

As established in the Statement of Fact, the Project would present a significant risk of accidental releases to a many of Minnesota's lakes, rivers, and streams. While the probability of a major release in any given year is low, over time, the probability is staggeringly and unacceptably high. Furthermore, the record shows that small "pinhole" releases could go undetected for multiple days, meaning that a leak would not have to be large to cause significant harm. Minnesota's waters provide significant and irreplaceable values to its inhabitants. Lakes and rivers provide many people with recreation and sustenance, and in some cases fuel a vibrant tourism industry. For Minnesota's Indigenous communities, wild rice beds and other features represent a critical cultural resource that they have a legal right to access and utilize. Any major spill could cause unacceptable damage to or desecration of these precious resources. Enbridge's proposed mitigation measures in case of a spill fall far short of being able to address those damages. Accordingly, the Certificate of Need should be denied.

### D. The Project Would Have Significant Adverse Impacts to Cultural Resources; Additional Information is Required to Determine the Full Extent of the Damage.

The record for this case contains an overwhelming amount of expert and public testimony detailing the significant personal, cultural, and spiritual damage this Project would inflict upon Minnesota's Anishinaabe communities. Every qualified expert on the cultural ramifications of construction and potential for accidental releases opposed granting a Certificate of Need for Line 3. This is again a basis for denying the Certificate of Need under the "consequences to society" provisions of Minn. R. 7853.0130, Part C.

The Applicant's preferred route for the Project traverses 1854, 1855, and 1842 treaty territories to which the Anishinaabe have defined and inalienable usufructuary rights.<sup>315</sup> The wild rice, waterways, traditional medicinal and ceremonial plants, and the land itself are essential to Native residents. Indigenous communities already suffer some of the highest rates of depression,

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<sup>&</sup>lt;sup>315</sup> Ex. FDL-11 at 2 (Interim Report: Line 3 Corridor Tribal Cultural Survey)

suicide, addiction, and PTSD.<sup>316</sup> Increasing the strain on these communities by continuing a legacy of assaults on their relationship to the land would be a serious detriment to an already marginalized population. Even without risk of an oil spill from the proposed Project, construction through the proposed new corridor would constitute an irremediable spiritual harm to the Anishinaabe who rely on the land in question as a central part of their world and identity.

Enbridge attempts to downplay the consequences of a spill by detailing various remediation plans. These remediation plans are neither realistic nor sufficient. The record robustly demonstrates the difficulty of restoring wild rice beds and waterways. These under a best-case scenario in which cleanup was executed diligently, it could take 'months to years' to restore aspects of these ecosystems to their pre-contamination conditions. If a spill were to impact one of the 88 wild rice beds hydrologically connected to the Line 3 expansion, this would burden tribes with significant economic losses during the time it took to remediate the wild rice crop. The spill was a spill were to constant the significant economic losses during the time it took to remediate the wild rice crop.

Regardless of the location of a spill, remediation does not begin to mitigate spiritual injury. An analogy proves useful here. Imagine someone driving a mud-covered motorcycle through a church during an important mass, splattering the pulpit, pews, and walls with mud, and breaking a vase. Imagine that person defending themselves with the logic that the congregation would be able to hold mass again in the future, that the mud was cleanable, and that the vase was replaceable. The person's disrespectful actions would be no less egregious and deplorable in light of those excuses, and the impact to churchgoers on that day would not be reduced. If the offending individual added to their crimes by driving the motorcycle through the cemetery, damaging headstones and grave sites, the person would almost certainly be arrested.

The Anishinaabe's spiritual and cultural connection to the treaty territories along the Project's proposed route is no less significant simply because it is not bound by walls. Enbridge seeks permission to disturb the spiritual and ancestral place of a people who have been the subject of genocide for hundreds of years and consistently disrespected, robbed, and ignored. While the company has proposed protocols in case of "unexpected discovery" of gravesites,

<sup>&</sup>lt;sup>316</sup> Ex. YC-19 at 4 (Lamb Direct)

<sup>&</sup>lt;sup>317</sup> Evid. Hrg. Tr. Vol. 8B (Nov. 14, 2017) at 43-44 (Nancy Schuldt).

<sup>&</sup>lt;sup>318</sup> Evid. Hrg. Tr. Vol. 8B (Nov. 14, 2017) at 43-44 (Nancy Schuldt).

<sup>&</sup>lt;sup>319</sup> Evid. Hrg. Tr. Vol. 5B (Nov. 8, 2017) at 53 (Jeff Lee).

these ignore the fundamental disrespect of spilling oil or disturbing grave sites on traditional land.

Finally, as demonstrated in the *Interim Report: Line 3 Corridor Tribal Cultural Survey* submitted by Fond du Lac, the Commission has not reviewed (and will not be able to review) the full extent of the risks this Project poses to historical and cultural sites of the Anishinaabe people. In addition to the many concerns raised through public and expert testimony, it can be safely assumed that further important sites will be identified during the survey process. By failing to provide any relevant cultural expert or testimony, Enbridge has not met its burden of proving that the Project would *not* be highly detrimental to the ceded territory rights of Minnesota's Indigenous populations. If the Certificate of Need were granted, the Commission would be approving a route in ignorance of the full extent of the damages they would be imposing on an already marginalized population.

The cultural impacts of this Project are impossible to quantify. Fortunately, Minnesota law does not require them to be quantified. As established in MEPA, "all departments and agencies of the state government shall... (3) identify and develop methods and procedures that will ensure that environmental amenities and values, whether quantified or not, will be given at least equal consideration in decision making along with economic and technical considerations."<sup>320</sup> The proposed Project's negative impact on cultural resources provides yet another reason for denial.

#### E. The Benefits of the Project Would be Comparatively Small.

Enbridge has lauded the benefits of employment and the increased flow of oil that it expects if it is allowed to proceed with the Line 3 expansion, but neither of those benefits can justify this Project.

It is important to understand that the Lichty and Carey report relied upon by Enbridge for their economic statistics are skewed to the point of irrelevance in the absence of additional information. First, under the criteria for the Certificate of Need, the Commission is required to assess the consequences to society of granting the permit *in comparison* to the consequences to society of denial. The Lichty report does not constitute a basis for comparison because Enbridge

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<sup>320</sup> Minn. Stat. 116D.03 Subd. 2

has provided no comparable assessment of how employment would be affected in the 'no action' alternative (if the Project did not proceed).

Second, Enbridge provided no data on the Project's negative externalities in its report, nor did it conduct a full cost-benefit analysis. For example, Enbridge did no analysis on potential job losses as a result of accidental contamination of various waterways essential to industries that support tourism and second homeowners in northern Minnesota, or economic damages resulting from reduced wild rice yields.

Third, Enbridge has also consistently misrepresented the extent of public support for this Project. The Applicant's repeated assertions that the majority of those who would be "most affected" by the new Line 3 were in favor of it is soundly disproven by the five intervening tribes, numerous aggrieved landowners, public dissent from Indigenous communities, and concern from northern Minnesotans who rely on our bountiful natural resources to make a living.

Finally, because the Project would not benefit refineries within the Minnesota region, the State of Minnesota would bear the risk of transporting oil with little reward.<sup>321</sup>

### F. In Light of the Above, the Commission Should Deny the Certificate of Need Because the Project Would Impose Disproportionately Adverse Consequences to Society.

The profound negative consequences to society of this Project, both quantifiable and non-quantifiable, dwarf the potential benefits that Enbridge has identified on the record. Any one of the impacts to climate, water, or Indigenous culture alone would represent a sufficient reason to deny a Certificate of Need; together, their magnitude is astonishing. Enbridge has not identified any ways in which they could mitigate the impacts of climate change or restore desecrated cultural resources - there are none. Enbridge has also failed to identify any benefits on the record that remotely approach that scope; in fact, by failing to conduct a full cost-benefit analysis, they have fallen far short. Therefore, the applicant has failed to prove that "the consequences to society of granting the certificate of need are more favorable than the consequences of denying the certificate," as required. Accordingly, Enbridge's application should be denied.

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<sup>&</sup>lt;sup>321</sup> Ex. DER-4, Attach. 1 at 5 (Fagan Direct)

<sup>322</sup> Minn. R. 7853.0130 Subp. 3

# II. THE PROPOSED LINE 3 EXPANSION SHOULD NOT RECEIVE A CERTIFICATE OF NEED BECAUSE IT WOULD FAIL TO COMPLY WITH STATE AND FEDERAL REGULATIONS

Enbridge also has not met and cannot meet its burden under Minn. R. 7853.0130, Part D, of proving that the Project will *not* fail to comply with the "policies, rules, and regulations of other state and federal agencies and local governments." As further explained below, this Project will not comply with state and federal requirements, and it therefore should not receive Certificate of Need.

### A. Granting the Project Would Violate the Commission's and Minnesota's Responsibilities Under the Public Trust Doctrine.

Article I, Section I of the Minnesota Constitution states: "Government is instituted for the security, benefit and protection of the people, in whom all political power is inherent, together with the right to alter, modify or reform government whenever required by the public good may require it." This is not a symbolic opening, but rather an affirmation of the basic nature of legitimate government: to act as steward of the people's power, subject to the requirements of the public good. One of the most essential and fundamental duties of government, is to protect the resources that people depend on for their well-being and survival. This concept is known as the Public Trust Doctrine.

The Public Trust Doctrine is a principle of law which holds that governments (trustees) must protect certain essential natural resources for the benefit of all people, including youth and future generations (beneficiaries). This principle goes back to Roman law and is well established in U.S. legal precedent, dating back to *Illinois Central R.R. Co. v. Illinois*, in which the Supreme Court found (referring to the waters of a harbor) that "the decisions are numerous which declare that such property is held by the State, by virtue of its sovereignty, in trust for the public." 146 U.S. 387, 455 (1892). In *Geer v. Connecticut*, this time referring to common ownership of the natural environment more broadly, the Supreme Court reiterated that "the power or control lodged in the State, resulting from this common ownership, is to be exercised, like all other powers of government, as a trust for the benefit of the people." 161 U.S. 519, 529 (1896).

Pursuant to the Public Trust Doctrine, trustees have a mandatory duty to maintain, control, preserve, and prevent substantial impairment to and waste of public trust resources. Trustees also have a duty of loyalty and impartiality to manage public trust resources for the benefit of all beneficiaries and not to favor one class of beneficiaries at the expense of another class.

The Public Trust Doctrine applies broadly to essential natural resources, including the atmosphere, surface and groundwater, submerged and submersible lands, other state-owned lands, and fish and wildlife. In *Illinois Central*, the Court established that the Public Trust Doctrine applied because access to the lake, the resource which was threatened, was "a subject of public concern to the whole people of the state." 146 U.S. at 455. This same description certainly applies to the air we breathe. As the Supreme Court said in *Geer*, "There are some few things which . . . must still unavoidably remain in common . . . Such (among others) are the elements of light, air, and water . . ." 161 U.S. 668 (citing William Blackstone, 2 BL Comm. 14).

Multiple states have expressly affirmed a public trust duty to protect the atmosphere in statutes, constitutional provisions, or judicial orders. For example, in *National Audubon Society v. Superior Court of Alpine County*, the California Supreme Court named protection of "the purity of the air" as one of the purposes of the public trust doctrine. 658 P.2d 709, 720 (1983). In *Bonser-Lain v. Texas Commission on Environmental Quality*, a Texas District Court ruled that the public trust "includes all natural resources of the State including the air and atmosphere." No. D- 1-GN-11-002194, 2012 WL 2946041 (Tex. 201st Dist. Aug. 2, 2012) *rev'd on other grounds, Tex. Comm'n on Envtl. Quality v. Bonser-Lain*, 438 S.W.3d 887 (Tex. App. Austin 2014). In *Robinson Township v. Commonwealth of Pennsylvania*, the Pennsylvania Supreme Court stated: "at present, the concept of public natural resources includes not only state-owned lands, waterways, and mineral reserves, but also resources that implicate the public interest, such as ambient air." 623 Pa. 564, 652 (2013) (plurality opinion). And in *Sanders-Reed vs. New Mexico*, the New Mexico Court of Appeals affirmed that "a public trust duty exists for the protection of New Mexico's natural resources, including the atmosphere, for the benefit of the people." 350 P.3d 1221, 1225 (N.M. Ct. App., 2015).

The Public Trust Doctrine also applies to the atmosphere in Minnesota. Here, the state's public trust responsibilities are set forth explicitly in two statutes: the Minnesota Environmental Policy Act ("MEPA") and the Minnesota Environmental Rights Act ("MERA"). MEPA specifically references the state's responsibility to future generations, and establishes that that "it

is the continuing responsibility of the state government to use all practicable means" to, among other things:

- "(1) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;"
- (2) assure for all people of the state safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- (3) discourage ecologically unsound aspects of population, economic and technological growth, and develop and implement a policy such that growth occurs only in an environmentally acceptable manner;
- (4) preserve important historic, cultural, and natural aspects of our national heritage, and maintain, wherever practicable, an environment that supports diversity, and variety of individual choice;
- (9) practice thrift in the use of energy and maximize the use of energy efficient systems for the utilization of energy, and minimize the environmental impact from energy production and use;
- (10) preserve important existing natural habitats of rare and endangered species of plants, wildlife, and fish, and provide for the wise use of our remaining areas of natural habitation, including necessary protective measures where appropriate;
- (12) minimize wasteful and unnecessary depletion of nonrenewable resources;
- (16) reduce the deleterious impact on air and water quality from <u>all sources</u>, including the deleterious environmental impact due to operation of vehicles with internal combustion engines in urbanized areas;"

(emphasis added).

MERA, meanwhile, lays out the right of all Minnesotans to clean air, as well as the responsibility of the state government to protect that air:

"The legislature finds and declares that each person is entitled by right to the protection, preservation, and enhancement of air, water, land, and other natural resources located within the state and that each person has the responsibility to contribute to the protection, preservation, and enhancement thereof. The legislature further declares its policy to create and maintain within the state conditions under which human beings and nature can exist in productive harmony in order that present and future generations may enjoy clean air and water, productive land, and other natural resources with which this state has been endowed. Accordingly, it is in the public interest to provide an adequate civil remedy to protect air, water, land and other natural resources located within the state from pollution, impairment, or destruction." (emphasis added).

Under MEPA and MERA, the state of Minnesota (and, by extension, the Commission) has an obligation to preserve the atmosphere, and all other public trust resources, in public trust for all Minnesotans and for future generations. As described thoroughly in the Statement of Fact above, approval of this project would have adverse impacts on public trust resources in Minnesota, including the air and water. These impacts would be a significant violation of of our rights.

Importantly, the Minnesota Constitution declares that no person is "deprived of life, liberty, or property without due process of law." Art. I, § 7. However, climate change already is infringing and will continue to infringe on constitutional rights of Minnesota's residents.

Therefore, to fulfil its mandatory public trust responsibilities to the people of Minnesota, including future generations, and refrain from violating constitutional rights, the Commission cannot permit projects that lead to the further waste and degradation of the atmosphere, and other public trust resources. Before the Commission issues this, or any other permit, it must demonstrate how doing so is consistent with protection of Minnesota's public trust resources. Until such a showing is made, the Commission must deny the Certificate of Need for this Project, as issuing such a certificate would have irreversible and damaging effects on resources to which all of us are entitled.

### B. The Project is Inconsistent with the International Consensus on the Need to Address Climate Change.

There is global consensus on the gravity of the threats posed by climate change and the need to address the problem before it is too late. In 1992, the United Nations Framework Convention on Climate Change, to which the United States is a signatory, stated: "The ultimate objective of this Convention and any related legal instruments that the Conference of the Parties may adopt is to achieve . . . stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system." The Paris Agreement is the latest example of global recognition of the need to solve the threats posed by climate change. The Paris Agreement is an international agreement within the United Nations Framework Convention on Climate Change, which commits its 194 signatories to "holding the increase in the global average temperature to well below 2°C above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5°C above pre-industrial levels,

recognizing that this would significantly reduce the risks and impacts of climate change."<sup>323</sup> The Agreement continues:

Article 4.1: "In order to achieve the long-term temperature goal set out in Article 2, Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, recognizing that peaking will take longer for developing country Parties, and to undertake rapid reductions thereafter in accordance with best available science[.]"

While the agreement is not flawless, it is indicative of the world's recognition of the need to confront climate change with meaningful actions. In June of 2017, Minnesota joined a coalition of states, the U.S. Climate Alliance, that intends to adhere to the Paris Agreement. Governor Dayton announced that Minnesota will "uphold the tenets of the Paris Climate Change Agreement in our state," and that "Minnesota and other states will show the world what we can achieve by working together to conserve energy, to use cleaner and renewable energy, and to leave a livable planet to our children and grandchildren."

Minnesota has enacted a number of statutes that put us on the road to meeting these goals. They include Minn. Stat. 216H.03 ("no person shall construct within the state a new large energy facility that would contribute to statewide power sector carbon dioxide emissions"), and the renewable energy standard for electric utilities under Minn. Stat. 216B.1691. However, the Paris Agreement calls for "economy-wide absolute emission reduction targets."<sup>324</sup> As described in the testimony of Dr. Abraham, the total estimated amount of oil in the Alberta tar sands would equate to a global temperature increase of approximately 0.36C (0.65F) -- nearly one quarter of the temperature increase limit established in the Paris Agreement. <sup>325</sup>

If extraction of the tar sands continues, the world will be unable to meet its goal of protecting a stable climate for our generation and future generations. The Commission can and should consider the global consensus on the gravity of climate change when considering a pipeline that would enable that very extraction., Allowing this Project to go forward would fly in the face of Minnesota's policy of reducing greenhouse gas emissions, locking us (and the rest of the world) into burning some of our dirtiest fuels - with catastrophic consequences for the climate system.

<sup>324</sup> Paris Article 4.4

<sup>&</sup>lt;sup>323</sup> Paris Article 2

<sup>325</sup> Ex. YC-14 at 4 (Abraham Direct)

# III. ENBRIDGE HAS FUNDAMENTALLY MISUNDERSTOOD THE CERTIFICATE OF NEED PROCESS, AND GRANTING THE CERTIFICATE OF NEED RISKS SETTING A DNAGEROUS PRECEDENT

Enbridge has not interacted appropriately with the Certificate of Need process, and in so doing has exposed Minnesota to setting a dangerous regulatory precedent. Ms. O'Connell testified on behalf of the Department of Commerce that by filing for a Certificate of Need for the new Line 3 prior to committing to retire their current asset, Enbridge has failed to meet the necessary criteria for a Certificate of Need. This has put a compound decision before the Commission: determining whether there is a need to retire the old pipeline, *and* determining the need for the proposed new Project.

As Ms. O'Connell noted, this incorrectly places the responsibility for evaluating current company assets on the Commission,<sup>327</sup> without also granting them the authority to act on that evaluation. The decision options before the Commission are limited by a process intended to evaluate one rather than two major infrastructure projects at a time. Should the Commission accept the responsibility of evaluating the old pipeline and then decide that it should be decommissioned, the Commission does not have the authority to enforce that decision without forfeiting an evaluation of the need for the proposed new Line 3. In other words, there is no option before the Commission to decommission the old line **and** have an independent ruling on the need for the proposed Line 3 expansion.

Enbridge is thus manipulating its own misuse of the application process to force the Commission's hand. In Ms. O'Connell words, "It seems more like a certificate of threat, frankly,

<sup>&</sup>lt;sup>326</sup> Ex. DER-6 at 46 (O'Connell Surrebuttal)

<sup>&</sup>lt;sup>327</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 86-87 (Kate O'Connell)

to tell you the truth."<sup>328</sup> This sets a dangerous precedent of extortion<sup>329</sup> that other utilities would be able to similarly abuse. For example, if a company with dangerous electrical transmission lines were to follow a similar process, rather than identifying the need to retire lines that posed a public safety threat and allowing the Commission to determine the best option for their replacement, the company would be able to threaten to continue exposing the public to the risk of electrocution **unless** the Commission approved twice as many transmission lines for the same company, regardless of whether there was any justification for those new lines. Without the authority to independently decide on both questions before it, the Commission is being forced to make a compound decision on this Project. The Commission should not have been put in that position, and should stand firm against this practice by denying Enbridge's application for a Certificate of Need.

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<sup>&</sup>lt;sup>328</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 88 (Kate O'Connell)

<sup>&</sup>lt;sup>329</sup> Evid. Hrg. Tr. Vol. 12A (Nov. 20, 2017) at 130 (Kate O'Connell)

### CONCLUSION

The earth's climate is changing, and those changes are a result of human activity. Science tells us that to avert the worst of this catastrophe, we must act immediately and decisively. It is already almost too late. To build any new fossil fuel infrastructure in this moment is simply madness. To build a pipeline that threatens our water and tramples on indigenous sovereignty is beyond that - it is thoroughly and deeply unjust. The Youth Climate Intervenors have grown up watching those in power make decisions that will shape the world we grow into. We cannot afford to watch business as usual any longer.

At the Public Hearing on the Project in St. Paul, a public commenter posed the question: "if this pipeline were a children's book, how would it end?"<sup>330</sup> This question, though perhaps intended to be hypothetical, is not. This absolutely is a children's story. This is the story of thirteen young people, under the age of 25, who have come together to speak for our futures. More broadly, this is the story of the nearly two million Minnesota children, teenagers, and young adults who all stand to lose real, very personal rights from climate change. We stand with all of them. We are fighting together for our rights and for the things that we love.

The ending of this story has not yet been written. Much of the talk in this case has been about models and forecasts, but while we may seek to predict the future, it is not set in stone. Instead, we have the power to influence and shape the future through our actions and our decisions. With this pipeline, the Commission faces a choice between two possible futures: one where we accept a fate of climate chaos and double down on the dirty fuels of the past; and one where climate policies, creativity, and innovation succeed in creating a safe and equitable future for all.

We urge the ALJ and the Commission to deny the Certificate of Need and Routing Permit for the Line 3 Replacement and to choose a future that works for us.

Respectfully Submitted,

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67

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