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Re: EB-2014-0022

Ontario Energy Board
Attn: Kirsten Walli, Board Secretary
P Box 2319
27th Floor
2300 Yonge Street Toronto ON M4P 1E4

September 2 2014

Dear Ms. Walli,

RE: EB-2014-0022

In accordance with Procedural Order 5, enclosed is the WAIT Reply Submission to Suncor's (the Applicant) Argument-in-Chief.

Having reviewed Suncor's argument in support of its Application, WAIT finds that it does not meet even the base criteria set by OEB Section 96 and therefore WAIT requests that the Board not make an order granting Suncor Energy Products Inc. leave to construct its Proposed Transmission Facilities.

Two paper copies of this document have been sent to the Board by regular mail.

Sincerely,

Original signed by:

Santo Giorno
Elizabeth Bellavance

IN THE MATTER OF the *Ontario Energy Board Act, 1998*, S.O. 1998, c.15, Schedule B;

AND IN THE MATTER OF an application by Suncor Energy Products Ltd. for an order or orders pursuant to section 92 of the *Ontario Energy Board Act, 1998* (as amended) granting leave to construct transmission facilities in the Municipality of Lambton Shores, the Town of Plympton Wyoming and the Township of Warwick, all in the County of Lambton, Ontario.

WAIT'S REPLY SUBMISSION

To

THE APPLICANT'S ARGUMENT-IN-CHIEF AUGUST 25 2014-08-25

SEPTEMBER 2 2014

OVERVIEW

1. This submission is filed by *We're Against Industrial Turbines in Plympton Wyoming* (**WAIT**) in reply to the Argument-in-Chief filed by the law firm Fogler, Rubinof LLD on behalf of Suncor Energy Products Inc. (**Suncor** or the **Applicant**). WAIT is an Intervenor in EB-2012-0022 (the Ontario Energy Board Application Hearing). WAIT has no economic interest in this Application and does not represent private interests or any private enterprise with an economic interest in the Application. Moreover, WAIT is not against the concept of renewable energy, including wind energy. WAIT is against the irresponsible use of wind energy, particularly the practice of shoehorning industrial wind turbine generators into rural communities.
- 1.1 WAIT is a combination of two groups that originally petitioned to act as intervenors:
 - ≡ *Concerned Seniors Lambton County*: CSLC is an informal group of seniors on fixed incomes who are concerned about the runaway cost of electricity in Ontario. We are all residents of rural Lambton County and as such we pay disproportionately higher costs for our electricity. We have requested intervenor status to ensure that the interests of consumers are heard and acted upon through this s. 92 OEB Hearing.

≡ *We're Against Industrial Turbines Plympton-Wyoming*: WAIT-PW is the collective voice of residents who, for a variety of reasons, have serious concerns about the energy policy of the provincial government, in particular, the form of industrialization that the Proposed Transmission Facilities would allow within Plympton-Wyoming. WAIT's mission is to inform the public and dispel misinformation about industrial wind turbines. Its vision is to preserve and promote Plympton-Wyoming's existing rural landscape and small town values, free of danger to our health, economy, and free from division amongst our residents. In part, WAIT accomplishes its vision through its Intervenor status in this Application.

- 1.2 At an early stage in the hearing, CSLC in Santo Giorno Group Amalgamation Suncor 20140328 suggested merging these two groups in the interest of avoiding duplication of material submitted to the Board and other intervenors. The OEB accepted this suggestion in Procedural Order No.2 20140516.

EXECUTIVE SUMMARY

2. WAIT seeks to have the Board not make an order granting the Applicant leave to construct under Section 92 of the *Ontario Energy Board Act* (the Act) an electricity transmission line and a collector/transformer substation (the **Proposed Facilities**) in order to secure a pathway for electricity generated by Suncor's Cedar Point II Wind Energy Project (the **Project**) that will eventually enable its Project's commodity – electricity - to be marketed through the IESO-controlled grid.
3. The framework for WAIT's reply submission is the interplay of the Board's mandate, mission and objectives and the OEB sections which provide, in part, the scope of the Board's jurisdiction when considering the Application – sections 92 and 96 of the Ontario Energy Board Act (the Act). WAIT finds that the Applicant's submissions on the following issues do not merit the making of an order granting leave to construct the Proposed Transmission Facilities:
 1. the Proposed Transmission Facilities will not meet the objectives of the FIT program.
 2. the Proposed Transmission Facilities will have an adverse impact on price of electricity service because consumers will ultimately pay the capital costs of the Facilities and the costs needed to upgrade the grid.

3. the Proposed Transmission Facilities is not consistent with the government's policy that renewables be connected in a timely fashion and the time is **not** during a **surplus** situation
4. the Proposed Transmission Facilities will have an adverse impact on reliability of the grid, and quality of electricity service, as indicated in the SIA Report.
5. the HONI Report is for a different location and therefore has no force here.
6. the location of transmission lines in county road right of ways is contrary to the needs of Lambton County, and will present a significant safety hazard to traffic on those roads.

4. For convenience in referencing WAIT's reply to the Applicant's submissions in its *Argument-in-Chief*, WAIT's reply submission adopts the heading organization of the Applicant's *Argument-in-Chief*. References to paragraphs are references to the numbered paragraphs in the Applicant's *Argument-in-Chief* unless otherwise noted.

A. INTRODUCTION

5. paras 1 2, 3: no comment

6. para 4

- 6.1 The Applicant asserts that it has, in both its pre-filed evidence and in its EB 2014-0022 hearing interrogatory responses, "provided detailed, comprehensive and specific information in support of its Application." WAIT submits that problems with detail, comprehensiveness, and specificity in both the pre-filed evidence and the interrogatory responses exist and will note these differences of opinion regarding the quality of information provided as appropriate during the course of the reply submission. WAIT further submits that the Applicant has not provided a convincing explanation of how the Proposed Transmission Facilities is in the public interest. Nor does WAIT consider the route, specifically pole locations in Lambton County right of ways, to be appropriate. In reply to the Applicant's five points presented to support the granting of an order, WAIT submits that the Board not make an order to grant leave to construct the Proposed Transmission Facilities for the following counter reasons:

- (a) the interests of consumers with respect to prices have not been protected just because the FIT Program mandates that the Applicant cover all construction costs of the Proposed Facilities. For example, additional IESO costs to ensure adequate generation capacity and reliability, costs incurred by using wind energy transmitted

to the grid and by having to mitigate the adverse impact of the Applicant's choice of wind turbine generator (WTG), are both included in the Global Adjustment rate that consumers pay; further, the distributor, HONI, will incur additional costs and these costs will be passed on to consumers.

- (b) The Independent Electricity System Operator's (IESO) System Impact Assessment Report (SIA) did report an adverse impact, one which the Applicant has not disputed;
- (c) The Hydro One Networks Inc.'s (Hydro One) Customer Impact Assessment report is not valid for the Applicant's Proposed Transmission Facilities because it references a different location and the Applicant has not disputed that fact;
- (d) The Proposed Transmission Facilities, merely through its association with a renewable energy generating facility, is not, as a result, necessarily consistent with the Province of Ontario's policy of promoting renewable energy. WAIT submits that the Proposed Transmission Facilities is not consistent with provincial policy because it will not accomplish FIT program goals.
- (e) The routing of the transmission line is not just on private lands – the route also requires use of public right of ways for which agreement has yet to be reached with Lambton County. The proposed locations for crossings are not aligned with County planning.

B. APPLICATION

- 7. paras 5,6,7 – no comment

C LEGISLATIVE FRAMEWORK

- 8. paras 8, 9

The Applicant quotes Section 92(1) and Section 96 of the Act. WAIT repeats these sections below along with their accompanying sub headings:

Leave to construct, etc., electricity transmission or distribution line

92. (1) No person shall construct, expand or reinforce an electricity transmission line or an electricity distribution line or make an interconnection without first obtaining

from the Board an order granting leave to construct, expand or reinforce such line or interconnection. 1998, c. 15, Sched. B, s. 92 (1).

Order allowing work to be carried out

96. (1) If, after considering an application under section 90, 91 or 92 the Board is of the opinion that the construction, expansion or reinforcement of the proposed work is in the public interest, it shall make an order granting leave to carry out the work. 1998, c. 15, Sched. B, s. 96.

Applications under s. 92

(2) In an application under section 92, the Board shall only consider the following when, under subsection (1), it considers whether the construction, expansion or reinforcement of the electricity transmission line or electricity distribution line, or the making of the interconnection, is in the public interest:

1. The interests of consumers with respect to prices and the reliability and quality of electricity service.
2. Where applicable and in a manner consistent with the policies of the Government of Ontario, the promotion of the use of renewable energy sources. 2009, c. 12, Sched. D, s. 16.

9. para 10

9.1 The Applicant sets forth its view of Board jurisdiction in the discharge of its s. 92(1) and s.96 duties. WAIT agrees that in determining a leave to construct application, the Board evaluates whether the construction is in the public interest taking into consideration aspects of price, reliability, and quality of electricity service and promotion of the use of renewable energy sources.

In fact, s.96(2) directs the Board's attention to its first and fifth legislated objectives. The five objectives are:

1. (1) The Board, in carrying out its responsibilities under this or any other Act in relation to electricity, shall be guided by the following objectives:

1. To protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.
2. To promote economic efficiency and cost effectiveness in the generation, transmission, distribution, sale and demand management of electricity and to facilitate the maintenance of a financially viable electricity industry.
3. To promote electricity conservation and demand management in a manner consistent with the policies of the Government of Ontario, including having regard to the consumer's economic circumstances.
4. To facilitate the implementation of a smart grid in Ontario.
5. To promote the use and generation of electricity from renewable energy sources in a manner consistent with the policies of the Government of Ontario, including the timely expansion or reinforcement of transmission systems and distribution systems to

accommodate the connection of renewable energy generation facilities. 2004, c. 23, Sched. B, s. 1; 2009, c. 12, Sched. D, s. 1.

WAIT submits that the jurisdiction defined by s.96 needs to be understood within its context. Indeed the Board has stated in its *Filing Requirements* 4.2.3 that the only area where the Board will not consider broader issues is with respect to need for the project. WAIT notes that the Board has not, therefore, imposed this constraint on its evaluation of an application's merits in satisfying the needs of the public interest.

- 9.2 The Board is a Crown Agency – it is wholly owned, controlled and operated by the Government of Ontario. Its governing statutory framework is the Ontario Energy Board Act (the Act). In accordance with that framework, the Board states (on its website) that its mandate is to “oversee the province's electricity...sector through effective, fair and transparent regulation and in accordance with the objectives set out in the governing statutory framework.” Its mission is to “promote a viable, sustainable and efficient energy sector that serves the public interest and assists consumers to obtain reliable energy services at reasonable cost.” WAIT submits that the Applicant's characterization of s.96 diminishes the true complexity of the Board's discharge of its s.96 duties. The legislation's overarching intent is to provide broad direction and to grant the Board discretion in discharging its duties.
- 9.3 In WAIT's opinion, s.96 requires the Board to consider the application against its first and fifth objectives and after that consideration to form an opinion. To assist it in coming to an opinion, the Board holds a public hearing - a legislative requirement the Applicant glosses in its description of the legislative framework but that WAIT believes is critical to the Board's decision-making. The purpose of the public hearing is to allow Applicants to “outline needs or make their case” and for “individuals or groups with concerns to have a voice in the hearing process”. The OEB website also notes three facts: one is that the Board's decision (its opinion) will be “based on the evidence presented by the applicant and by other affected parties.” The second is that the Board is “responsible for balancing the interests of all stakeholders.”
- 9.4 By conflating consideration and opinion, the Applicant suggests both are subject to s.96(2). WAIT disagrees. Section 96 directs the Board's *consideration* of the application itself – it is silent about what the Board may or may not do while coming to an opinion. The Board has itself stated that it will form its opinion on whether the application is in the public interest on information outside sole consideration of the Application as specified in s. 96(2). Further,

WAIT suggests that the Board exercise its discretionary powers to ensure that its opinion appropriately balances competing interests and is consistent with its other objectives. Its opinion cannot undermine, jeopardize, diminish or otherwise hinder the Board in accomplishing all of its objectives and thereby its mandate and mission.

9.5 WAIT proffers that the legislature was very explicit about whose interest the Board is to serve—not private interests but the public interest. It designed the legislation to ensure that in managing private-public electricity issues, the public interest would prevail. The thread that binds the five objectives is the primacy of service to the public interest. The Board cannot give lip service to the public interest or to the interests of consumers (as, for example, putting consumer interests on a level playing field with the Applicant’s interests). It has a duty to serve the public interest in all matters and to actively protect the interests of consumers by assisting them to obtain reliable energy at a reasonable cost. When circumstances require a balancing of competing interests, the Board must decide in favour of the public interest and the interests of consumers.

9.6 The final assertion the Applicant makes in para 10 is that the Project (the associated wind generation facility and its 34.6 kV collector system) is “beyond the scope of the proceeding”. In fact, the Applicant itself links the Proposed Transmission Facilities to the Project in para 26 where it states that “The proposed Transmission Facilities are required to convey the electricity generated by this facility... .” Also, in **Decision and Order** EB 2012-0458, the Board notes that

reliability and quality of electricity service impacts are not considered as though the Transmission Proposed Facilities works in isolation, since the potential impacts on the IESO controlled grid and the customers connected to it are somewhat dependent on the electrical design of the generation facilities the transmission line is intended to connect (p. 5 para 2).

WAIT supports this position. The Board in discharging its duties needs to consider the Proposed Transmission Facilities within the context of what it is connecting (wind energy electricity) and what it is connecting it to (the IESO grid). While the Project (the Cedar Point 11 Wind Energy Centre) does not play a predominant role in this proceeding, it plays a role nonetheless and cannot therefore be totally ignored. Nor, for that matter, can the role of the IESO and HONI.

9.7 paras 11, 12, 13, 14, 15, 16, 17 – no comment

9.8 In para 18, the Applicant notes that “the question before the Board is only with respect to where the transmission line will cross the road allowances.” The Applicant goes on to say that where

the transmission line crosses road allowances is “largely” determined by the line’s route. The Applicant here suggests that some other factor is in play but is not forthcoming on that detail. As the Board is aware, future County plans with respect to Thomson Road are at stake. The Applicant has already agreed, at some future date, to relocate its transmission line to allow the County to implement the upgrades necessary to ensure community safety. The Applicant has been steadfast in its position, arguing cost as the major factor. WAIT submits that future relocation will more than double the current cost of construction (potential increases in cost of labour, materials). The Applicant, being a private entity, can spend its resources at its discretion. However, subjecting residents to double disruption to road use is unnecessary and avoidable. This issue has been raised several times in the hearing: the Applicant did not offer full and adequate responses to interrogatories.

- 9.9 Para 19 is the Applicant’s summary of section C. **Legislative Framework**. The narrative here is congruent with the Applicant’s various submissions in the preceding paragraphs. WAIT’s replies are found in WAIT paras 9.1. to 9.8 above.

D. PUBLIC INTEREST CONSIDERATIONS

Interests of Consumers with Respect to Prices and Project Need

10. para 20

- 10.1. Here, the Applicant sets forth its view of the applicability of the key elements in Section 96(2)1 to its application – specifically, the interests of consumers with respect to prices. WAIT interprets the Applicant’s view as follows.

The Proposed Transmission Facilities:

- a. will not directly serve consumers, so by implication, the public interest test to consider the interests of consumers with respect to prices does not apply;
 - b. since the FIT contract requires the Applicant to cover all construction and operation costs of the Proposed Transmission Facilities, these costs will not be passed on to consumers through transmission rates or prices; and,
 - c. because FIT contract pricing is standardized (not influenced by transmission or connection costs incurred for purposes of its generation facility) transmission rates or prices will not be impacted
- 10.2 WAIT acknowledges that the Applicant has a vested economic interest in presenting an interpretation of the interests of consumers with respect to prices in ways that serve its private

interests. And on the surface, the Applicant's argument that it has no consumers seems plausible. However, WAIT asserts that it is actually wrong. The Proposed Transmission Facilities, if approved, will participate in a supply chain that begins and ends with consumers. Consumers need electricity, the Proposed Transmission Facilities moves electricity to the interconnected IESO power system which supplies distributors who deliver it to consumers who pay the price for it. And not just for the electricity – consumers will also pay for costs incurred by the IESO and by HONI.

- 10.3 Moreover, the Legislature provided clear direction to the Board to discharge its s. 92 duties regarding the public interest with sole consideration to both s.96 2(1) and (2). This condition applies to all s. 92 applications. There are no exemptions. S. 96 contemplates that all s. 92 applications be evaluated against both s.96(2)1 and 2. To read this section as the Applicant would have us read it would be to conclude that the same legislature that set the rules for renewable energy generation did so in a way that would deliberately and willfully obstruct its own agency, the Board, from serving the public interest according to the Legislature's explicit direction.
- 10.4 WAIT submits that, had the Legislature intended that this type of application be exempt from this public interest scrutiny, the legislature would have explicitly exempted this application type from consideration in its formulation of s. 96. It did not. Were the Board to adopt this interpretation, WAIT cannot think of any s.92(1) leave to construct application that would not be exempt from scrutiny under s.96(2)1.
- 10.5 WAIT submits that the Act Regulations s. 2(e) directly connects consumers and distributors to IESO costs:

The Lieutenant Governor in Council may make regulations,

...

(e) governing the calculation of amounts payable by distributors and consumers to the IESO for the operation of the IESO-administered markets and the operation of the IESO-controlled grid;

This is one of the broader issues that the Board undoubtedly considers to ensure that the Proposed Transmission Facilities is in the public interest. Thus, WAIT submits that the interests of consumers with respect to prices is clearly and unambiguously an aspect of this Application that the Board needs to examine.

10.6 WAIT further submits that the Act is an expression of the prevailing political reality of the day. The Legislature continues to provide comment on and direction for the Board's work in achieving objective 1.1.1 and as a corollary, consideration of objective 1.1.1 in s.92 applications. In an interview published in the Toronto Star on October 10, 2013, Energy Minister Bob Chiarelli emphasizes the need for decisions regarding, for example, s. 92 applications, to be sensitive to serving the public interest with respect to the interests of consumers with respect to prices:

"We're in a comfortable (electricity generation) surplus position at this time and it's not advisable to make the major investments in new nuclear. Some time in the future we might be looking at it," said Chiarelli.

The move comes as [auditor general Bonnie Lysyk castigated](#) the government for spending up to \$1.1 billion for cancelling two gas-fired power plants in Oakville and Mississauga to save five Liberal seats in the 2011 election.

Chiarelli said the government is, however, committed to refurbishing the existing Darlington nuclear station, which supplies about 20 per cent of Ontario's electricity.

A multi-year overhaul of all four reactors there is set to start in 2016.

"It is not wise to spend billions and billions of dollars in new nuclear when that power is not needed," the minister said. (WAIT emphasis)

"So this is a good decision for ratepayers and the people of Ontario."

Although this comment references surplus supply as the rationale for not investing in new nuclear electricity generation, WAIT respectfully directs the Board's attention to the importance of Minister Chiarelli's comment that adding additional, and unneeded, generating capacity at this time would not be "wise" because consumers are paying for resources being spent on power that is not needed. WAIT submits that Minister Chiarelli's point is equally applicable to transmission lines. WAIT asks the Board to consider this point when assessing the application's merits with respect to price .

10.7 Further, WAIT submits that the Board ensure that its consideration supports accomplishment of all of objective 1.1.5 not just the part contained in Section 96(2)2 namely, "...including the **timely** expansion or reinforcement of transmission systems and distribution systems...."

10.8 WAIT notes that the Applicant's reply to WAIT's initial interrogatory was that the reference to "timely" was a reference to their project timelines. However, WAIT submits that the context of Board objective 1.1.5 makes clear that "timely" refers to expansion or reinforcement of grid capacity in step with the needs of consumers with respect to prices. This and only this definition

is helpful to the Board in determining whether the Proposed Transmission Facilities is in the public interest.

- 10.9 Further, WAIT submits that the Board's evaluation of the Proposed Transmission Facilities take into account the information below. WAIT believes that this information will assist the Board to assess the Application's merits against s. 96 (2) in a manner consistent with provincial policies and in line with the rest of objective 1.1.5, namely the requirement for timely expansion of the grid. WAIT submits that the granting of this Application is untimely because it imposes an unnecessary cost on consumers. The Application is:

1. Inconsistent with the 2013 OPA Long Term Energy Plan (LTEP). From the OPA's 2013 LTEP, Module 1, page 6, the projected generating capacity at January 2014, exclusive of any wind or solar generators, is **sufficient to meet base demand AND peak demand until 2020.**

The project generating capacity as of January 2014 exclusive of wind or solar, will have a safety margin of about 29% over peak demand in 2014, declining to a safety margin of 17% in 2018 and 9% in 2019 and 2020.

WAIT emphasizes that this surplus capacity until 2020 also meets the IESO's obligations to the North American Electrical Reliability Corporation (NAERC) for this period of time, **even at periods of peak demand.** The NAERC requires surplus generating capacity available on short notice to cover the single largest generating facility and 50% of the second largest generating facility that feeds into the IESO grid. This is approximately 1500 MW.

Installing additional capacity **or transmission facilities in 2015, six years before that capacity is required, in 2021,** is the polar opposite of "timely".

Table 1 on the following page summarizes this data.

Notes: the **highlighted safety margins** do not include any renewables. The nuclear, hydro and natural gas generating capacities were obtained from the LTEP publication. The renewables are shown as if frozen at the 2014 levels, and do not reflect the proposed increases in their capacities.

Theoretical 10 Year Capacity if Non Hydro renewables and Natural Gas remain frozen at January 2014 Levels
The Nuclear capacity reflects the planned refurbishments at Darlington and Bruce

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Nuclear	12947	12946	11295	11295	11295	10009	10263	7320	7268	7268
Hydro	7939	7939	7939	7939	7939	7939	7939	7939	7939	7939
Natural Gas	9920	9920	9920	9920	9920	9920	9920	9920	9920	9920
Total non variable capacity	30806	30805	29154	29154	29154	27868	28122	25179	25127	25127
Renewables at Jan 2014 levels	1725	1725	1725	1725	1725	1725	1725	1725	1725	1725
LTEP projected PEAK demand	24097	24275	24579	24665	25024	25511	25805	26174	26368	26607
Surplus or shortfall, AT PEAK DEMAND, without renewables, or non IESO controlled suppliers	6709	6530	4575	4489	4130	2357	2317	-995	-1241	-1480
Surplus AT PEAK DEMAND, with renewables at January 2014 levels (1725 KW) but without non IESO controlled suppliers	8434	8255	6300	6214	5855	4082	4042	730	484	245
% Safety margin	28%	27%	19%	18%	17%	9%	9%	-4%	-5%	-6%

Table 4

Note: the installed capacity does not include capacity of sources not controlled by the IESO

10.10 As noted in WAIT para 9. 6 above , the Board has already stated that it cannot properly consider the Proposed Transmission Facility in isolation. Further, the Applicant did not object to any of the conclusions and recommendations/requirements imposed by the IESO SIA Report with respect to its Project. It has committed to installing inertia emulation control on its wind turbine generators if and when the function becomes commercially available. In the meantime, consumers will pay the price of IESO upgrades to accommodate this deficiency. WAIT asserts that this is an unnecessary cost being imposed on consumers by the Applicant's choice of generator. The Applicant may argue that leaseholders and community members wanted fewer turbines. WAIT suggests that leaseholders probably wanted as many as they can get to maximize revenue and WAIT knows that increasing numbers of community members want none. The consumer ultimately pays the fixed contract rate for wind energy whether that energy makes it into the supply mix or not. And the consumer ultimately pays IESO and HONI related costs to accommodate the electricity flowing through the transmission line.

10.11 WAIT submits that the Proposed Transmission Facilities brings with it substantial costs that will be passed on to consumers – one example, as previously discussed, is the upgrades to the integrated power system needed to accommodate electricity coming from renewable sources like wind energy. A second is development of natural gas energy access to assist in mitigating the fact that the grid was designed to accommodate conventional energy generation not renewable energy generation.

10.12 Specifically, WAIT argues that contrary to the Applicant's no cost position, the Proposed Transmission Facilities will add to the consumers' global adjustment cost. The Ontario electricity grid was designed to accept conventional energy generation (fossil fuels, hydro, nuclear). Conventional energy generation continues to dominate Ontario's power system. Maintenance of the grid's reliability, integrity and security is based on this fact. The Applicant knows that conventional energy contributes inertia to stabilize frequency excursions when power imbalances occur. The Siemens 2.33 WTG lacks inertia emulation control and therefore cannot contribute to the reliability of the integrated grid. The Applicant is also aware of the options for mitigating the adverse impact of lack of inertia emulation for example in over-frequency conditions:

- ≡ require the project to pitch the blades to spill wind thus reducing power production – Suncor absorbs the costs to help mitigate unreliability problems created by its electricity flow through the Proposed Transmission Facilities to the grid
- ≡ require the grid owner to implement more efficient real time predictions of wind resource assessment through more advanced control technologies; make greater use of storage and demand response management of conventional generation

WAIT submits that the Grid owner is ultimately the public of Ontario and that costs to implement advanced technology controls, more sophisticated forecasting technology and so on are all costs that consumers eventually will pay for through monthly Global Adjustment fees.

10.13 Furthermore, WAIT argues that the Board, in assessing whether the Proposed Transmission Facilities satisfies the needs of the public interest, take into account the costs described below that the Proposed Transmission Facilities will pass on to consumers.

10.14 WAIT acknowledges that the transmission costs from the generator to the connection to the grid are generally the responsibility of the developer. Moving electricity from the receptor into the grid system and making the CONNECTION is a cost to Hydro One and is referred to as an "electricity connection charge". It is included in the "Electricity" line of our bills. The cost of getting the electricity from that point is then assumed by Hydro One who levies all of its TRANSMISSION costs to the ratepayer via the IESO (Independent Electricity System Operator). That latter charge (TRANSMISSION) is collected in the "Delivery" line of consumer hydro bills as a straight pass through.

10.15 The following illustration assumes that the Proposed Transmission Facilities would be operational, along with its source of electricity, starting in 2016:

▪ **From 2016 to 2020**

- The negative impact on the consumer that this premature expansion of grid capacity will have cannot be overstated. Since September of 2013, the IESO has instituted “load dispatching” for surplus power. However, the OPA has guaranteed that wind developers will be compensated for “potential electricity that has been “dispatched”, or “deemed” electricity. Thus **the ratepayers will be required to pay the Applicant not to produce electricity when it's not needed.**
- The cost to consumers can be easily calculated using the nameplate capacity and the capacity factor of industrial wind turbines in Ontario due to the availability of suitable wind conditions. The Applicant’s assertion in para 26 that its Project will contribute approximately 100 MW of power is misleading. The 100 MW refers to the nameplate capacity. The actual capacity will depend on the availability of suitable wind conditions. Dr. John Harrison, Professor of Physics at Queen's University in Kingston, has calculated the average yearly capacity of several wind projects using data obtained from the published IESO database is about 30%. Thus, Suncor's Cedar Point project, with a nameplate capacity of 100 MW, would have the capability to produce 30 MW, or 262,800 MWh yearly. **Over the five-year period from 2016 to 2020, given a cost of \$135/MWh, the Applicant could extract approximately \$34,500,000/yr , or a total of \$177,000,000 from the ratepayers, in exchange for exactly ZERO net benefit.**
- That number does not include the CRA's accelerated capital cost allowance that Suncor will be allowed to extract from the taxpayers which would effectively negate any

corporate tax payable on Suncor's windfall profits. Dr. Harrison's report was submitted separately to the Board and other intervenors in **WAIT Correspondence OEB 20140725**.

- WAIT submits that an order granting approval to construct the Proposed Transmission Facilities will result in ratepayers compensating the Applicant \$177,000,000 for electricity that is not needed, most likely will not be used or will be sold off at a loss. Not only would such an order not be in the best interest of consumers; it would be completely irresponsible.
- In the event that the IESO does purchase some electricity delivered from the Proposed Transmission Facilities prior to 2020, it would necessitate either a “steaming off” of nuclear capacity, or a “spilling” of water from hydro generating plants. In addition to the added costs of dispatching nuclear or hydro power, the IESO would be replacing lower cost nuclear or hydro power, both with no greenhouse gas emissions, with much more expensive wind power that does increase greenhouse gas emissions due to the need for gas generator backup, at 200 kg/CO₂ for every MWh, and all for the sole purpose of giving wind power flowing through the Proposed Transmission Facilities a veneer of credibility.

≡ **From 2021 onwards**

- It could be argued that after 2020 and while the nuclear reactors are taken off-line for refurbishments, the electricity that will be available from the Proposed Transmission Facilities will be required by the grid.
- However, due to the mismatch between suitable wind conditions and peak power demand, the electricity flowing from the project through the Proposed Transmission Facilities would be limited to 20 % of the power actually produced by the project. This has been confirmed by the Auditor General of Ontario in his 2011 report¹ using data from the IESO database. Thus, most of the shortfall would be supplied by the back up gas generators. The Proposed Transmission Facilities would have a minimal beneficial impact.
- If the IESO were to act in the best interest of consumers, they would still have to dispatch 80% of the electricity from the project.

- since the Applicant would be compensated for 80% of the power that it “could” produce, but isn't needed, the true cost to ratepayers for the power actually delivered would not be \$135 MWh, but rather five times that amount, or \$675 MWh.

10.16 WAIT also submits that if the OEB assesses the price of the transmission only, and not the commodity pricing of electricity, the capital cost of the Proposed Transmission Facilities will, for the most part, be paid for by ratepayers and taxpayers through the capital cost allowance. Thus, the Proposed Transmission Facilities will increase the cost of electricity service and delivery to consumers through higher taxes. Additionally, delivery charges are based on the cost of the commodity and are much higher in rural areas where this Proposed Transmission Facilities will be located. Thus the residents most impacted by this project will also pay a disproportionately higher percentage of the increased delivery charges.

11. para 11 to para 18 no comment

12. para 19

In reply to the Applicant's summary of the scope of the Board's assessment of s. 92 applications, WAIT submits that the Proposed Transmission Facilities is subject to both subsection (1) and (2). Assessment under subsection (1) is required because the assertion that the Proposed Transmission Facilities has no consumers is not correct, and the fact that the Applicant assumes all construction and operation costs does not mean that therefore interests of consumers with respect to prices is not a consideration.

13. para 21

13.1 Here, the Applicant presents its submission on “project need”. The Applicant notes that project need is not expressly mentioned in s. 96(2); that it does not need to provide evidence of project need because no costs are being passed on to ratepayers; and being a non-rate regulated transmitter, proof of a FIT contract “typically satisfies the Board as to the need for the proposed transmission facilities”. WAIT submits that the *Minimum Filing Requirements for Electricity Transmission Projects under Section 92 of the Ontario Energy Board Act Chapter 4* (Filing Requirements) presents a different picture of requirements:

4.4.2.3 Evidence in Support of Need

Project justification delineates the responsibilities and necessary evidentiary components required for the project review. The responsibility for the provision of all evidence for the entire case rests with the applicant.

The Board, in accordance with section 96(2) of the Act, requires an applicant of a non-rate regulated proponent-funded project to establish that the project fulfills needs which are in the public interest. This would normally include items such as the need to connect a generator to supply the IESO-controlled grid, or the need to connect a load to the IESO-controlled grid, etc. It is expected that the applicant will submit evidence that it has a valid contract with the OPA to supply renewable generation.

- 13.2 The Applicant does not have discretion to provide or not provide convincing evidence to support project need. Moreover, the Board expects to receive a copy of the FIT contract.
- 13.3. The Board requires the Applicant to establish that the Proposed Transmission Facilities fulfills needs which are in the public interest. The application is incomplete in this respect. It contains no fulsome explanation of how the project meets the needs of the public interest as defined by section 96(2) of the Act. The Applicant makes scattered references to the interests of consumers with respect to prices and the reliability and quality of electricity service and being a renewable energy generator but fails to bring even those general assertions together in a detailed comprehensive and convincing explanation of how the Proposed Transmission Facilities satisfies needs which are in the public interest.
- 13.4. The purpose of interrogatories is to test the Applicant's evidence. The Applicant entered an IESO System Impact Assessment report to provide evidence to the Board regarding the effect connecting the applied for transmission line to the grid may or may not have on reliability of the IESO-controlled grid. The IESO cannot assess the Proposed Transmission Facilities in isolation – it has to assess the electricity flowing through the lines in order to determine any effect – adverse or no effect- on the reliability of the grid. The IESO concluded that the Proposed Transmission Facilities would have an adverse effect – not a significant one but an adverse effect nonetheless. Although the Applicant had several opportunities to respond to this test of its evidence throughout the proceeding, the Applicant did not provide more detailed evidence. The Applicant shifted the burden of proof away from itself. WAIT considers the Applicant's reply manoeuvre here a serious breach of the Applicant's responsibility to demonstrate that its evidence can withstand testing.

Interests of Consumers with respect to Reliability and Quality of Electricity Service.

14. In para 22, the Applicant submits that its connection to the grid will not cause material reliability problems for the grid and that the incorporation of the Proposed Transmission Facilities will not degrade the connecting transmitter's electricity service to its customers. Its evidence is an IESO SIA Report and a HONI CIA Report. Para 23 and 24 repeat what the Applicant has already submitted regarding these reports at para 4 (b) and (c). WAIT's counter reply is found at WAIT para 3 and detailed in our supplementary interrogatory, **Concerned Seniors Lambton County & WAIT-PW_IR_Suncor_20140416**. The Applicant declined to reply to this supplemental interrogatory citing late submission as the reason. Similar questions were also raised by **D St. Amand Letter of Comment 20140702**. It is important to note that WAIT in its interrogatories was not seeking information that WAIT thought the Applicant should have included in the Application. The Interrogatories submitted were true tests of the evidence provided in the Application. The hearing proceedings illustrate that the Applicant did not satisfy the requirement to make full and adequate responses.

Promotion of Renewables Consistent with Government Policy

15. paras 25 and 26
- 15.1 The Applicant submits that possession of a FIT contract is sufficient evidence to satisfy the Board that the Proposed Transmission Facilities fulfills needs that meet the public interest with respect to renewables, and therefore this contract is all the Board requires to satisfy s.96 (2)2. WAIT submits that the FIT contract is a necessary filing requirement but it is not sufficient in and of itself to satisfy the Board's need for a detailed and substantive explanation. The Applicant only offers general historical information and a series of one liners about the FIT program's objectives. The Applicant fails to expressly show how the Proposed Transmission Facilities will contribute to the FIT program.
- 15.2 WAIT submits that the Proposed Transmission Facilities does not meet the objectives of the FIT program. The Auditor-General in the 2011AGO Report¹ states:
- no comprehensive business-case evaluation was done to objectively evaluate the impacts of the billion-dollar commitment. Such an evaluation would typically include assessing the prospective economic and environmental effects of such a massive investment in renewable energy on future electricity prices, direct and indirect job creation or losses, greenhouse gas emissions, and other variables.

The provincial government response to the AGO's comments (pg 91-92) was:

Ontario's FIT program was designed to meet three key policy objectives:

1. Reduce our environmental footprint (greenhouse gas emissions) by bringing more renewable energy online and supporting the phase-out of coal by 2014.
2. Better protect the health of Ontarians by eliminating the harmful emissions from burning coal. In fact, an Ontario independent study in 2005 found that coal-fired generation costs \$4.4 billion annually when health and environmental costs are taken into consideration.
3. Create green energy jobs and attract scarce investment capital to Ontario amidst a global recession.

¹Available at: http://www.auditor.on.ca/en/reports_en/en11/2011ar_en.pdf

15.3. WAIT submits that the Applicant's Proposed Transmission Facilities fails to meet the objectives of the FIT program in all three of the stated objectives. First, regarding green house gas emission reduction, WAIT submits that the increase in renewables in general and wind energy in particular will result in an increase in greenhouse gas emissions from the current levels. The reason is that both solar and wind energy's unreliability and mismatch with system demand requires that back-up natural gas generators be kept on standby when wind generated electricity is entering the grid. The Proposed Transmission Facilities will contribute to this increase if it is allowed to provide the pathway for the electricity that necessitates mitigation which, in turn, increases emissions.

15.4 Further, the January 2014 Joint Energy Policy Report² by the Ontario Society of Professional Engineers and the Professional Engineers of Ontario (OSPE and PEO) found that

- wind drops below 10% of installed capacity across the province approximately 20 days a year for at least 24 hours at a time.
- by 2021 Ontario will not have 7,500 wind turbines of approximately 1 MW each. It will have one 7,500 MW wind turbine.
- wind capacity requires a much higher system reserve (backup) than conventional power plants.
- wind capacity in Ontario requires approximately 90% of flexible backup supply to meet reliability needs compared to 15% for conventional power plants.

According to the OSPE and PEO report, (pages 12 and 19) the back up gas generators whenever needed because wind has stopped producing, will generate 400 kg of CO₂ per MWh. The combination of wind energy and gas generation will produce an average of 200 kg of CO₂ per MWh. Thus, an increase in wind energy to the grid, with the planned cancellation of new nuclear reactors (producing zero CO₂ emissions), will result in an increase in greenhouse gas emissions from the present levels.

²Available at: <http://www.ospe.on.ca/chappres>

- 15.5 WAIT submits that evidence supporting the FIT program's second objective, the protection of the health of residents by reducing airborne particulates, is deeply flawed. At para 26, the Applicant's implied reference to the 2005 independent study on health by the provincial government is disingenuous at best. This study refers to lung disease and adverse health effects by particulates known as PM 2.5, or particulates smaller than 2.5 microns. These particulates are a component of visible smog. The study did not recommend closing or replacing the coal-fired plants, but rather recommended installing scrubbers to remove the particulates. This action was taken shortly after the report was completed, and was paid for by taxpayers. The study made no mention of greenhouse gases and made no recommendation to lower GHG's.
- 15.6 The Clean Air Alliance, using data from the 2005 study, estimated that coal-fired plants will cause 316 deaths, 440 hospital admissions and 522 emergency room admissions each year. According to Environment Canada's emissions inventory, the pre-scrubber coal plants in Ontario emitted 699 tonnes of PM 2.5 in 2009; during the same period, Ontario residential wood burning fireplaces emitted 1,150 tonnes of PM 2.5. Therefore, if the Clear Air Alliance numbers are correct, wood burning fireplaces will cause 520 deaths each year. Also, according to Environment Canada's emissions inventory, unpaved roads in Ontario generate 90,116 tonnes of particulates each year. Once again, if the Clear Air Alliance numbers are correct, then unpaved roads in Ontario are causing 40,739 deaths in Ontario each year. And, if the provincial government is correct in its reply to the AGO that the 699 tonnes of particulates from Ontario pre-scrubber coal plants resulted in health and environment costs of \$4.4 Billion dollars annually, then unpaved roads are costing the province nearly \$568 Billion dollars annually in health and environmental costs. That amount is over four times the amount of the total 2014 budget.

- 15.7 These numbers clearly illustrate the absurdity of the provincial government's claim that installing wind energy sources will improve health. The Proposed Transmission Facilities is part of a renewable energy project, and as such shares in its absurdity. The Applicant has not presented any detailed, comprehensive and specific evidence to support its implied claim that its Proposed Transmission Facilities will create a cleaner environment or improve the health of Plympton-Wyoming residents.
- 15.8 The Applicant does not provide evidence to support, by inference, the claim that the Proposed Transmission Facilities will create green jobs - the third FIT program objective. WAIT submits that the '50,000 green jobs' creation claim has now been thoroughly debunked, and even the provincial government has acknowledged that the number was actually referring to temporary construction jobs, and even then was greatly exaggerated. It has been estimated that over 300,000 manufacturing have been lost due to the increase in electricity costs in the province. In a news release dated December 5, 2011, the Auditor-General of Ontario felt strongly enough about this fallacy that he declared that "*The Green Energy and Green Economy Act, 2009* was expected to support more than 50,000 jobs. However, about 30,000 of these jobs are likely to be short-term construction jobs. Studies in other jurisdictions have also shown that for each job created through renewable energy generation, two to four jobs are often lost in other sectors as a result of higher electricity prices." The Applicant knows what its job situation is in the event it receives an order to construct. It did not include that important information in the Argument-in-Chief as evidence that the Proposed Transmission Facilities will create jobs.
- 15.9 WAIT has no comment on para 27 through to and including para 31.

E. CONCLUSIONS

16. For all the reasons noted above, WAIT submits that
1. the Proposed Transmission Facilities will not meet the objectives of the FIT program.
 2. the Proposed Transmission Facilities will have an adverse impact on price of electricity service because consumers will ultimately pay the capital costs of the Facilities and the costs needed to upgrade the grid.

3. the Proposed Transmission Facilities is not consistent with the government's policy that renewables be connected in a timely fashion and that time is **not** during a **surplus** situation
4. the Proposed Transmission Facilities will have an adverse impact on reliability of the grid, and quality of electricity service, as indicated in the SIA Report.
5. the HONI CIA Report is for a different location and therefore has no force here.
6. the location of crossings for transmission lines in county road right of ways is contrary to the needs of Lambton County and will present a significant safety hazard to traffic on those roads.

17. For the reasons set out herein, WAIT respectfully requests that the Board not make an order granting the Applicant leave to construct the Proposed Transmission Facilities pursuant to Section 92 of the OEB Act.

All the above respectfully submitted on September 2, 2014

Santo Giorno _____

On behalf of Concerned Seniors Lambton County

Elizabeth Bellavance _____

On behalf of WAIT-PW