# IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL ARBITRATION RULES

	Witness Statement of Bob Chow February 28, 2014	
AND:	GOVERNMENT OF CANADA	Respondent
BETWEEN:	MESA POWER GROUP, LLC	Claimant

Department of Foreign Affairs, Trade and Development Trade Law Bureau Lester B. Pearson Building 125 Sussex Drive Ottawa, Ontario K1A 0G2 CANADA

#### I. BACKGROUND

- 1. My name is Bob Chow. I live at Mississauga, Ontario, Canada.

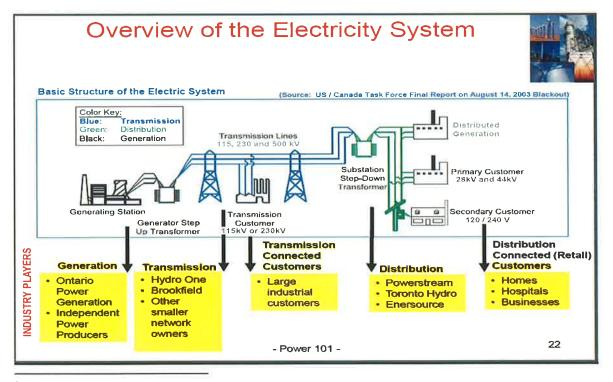
  I was born on I am currently the Director, Transmission Integration, at the Ontario Power Authority ("OPA").
- 2. I received a Bachelor's Degree in Applied Science from the University of Toronto in 1974 and a Master's Degree in Engineering from the University of Toronto in 1979. After graduating, I began my career with Ontario Hydro in its System Planning Division. I progressed up the ranks, mostly in the System Planning, Asset Management and Investment Planning divisions. I attained the position of Director System Development in April 1998. I then joined Hydro One as Director Investment Planning from 1999 to 2000. From 2001 to 2003, I joined ACRES International as their Manager, Transmission and Distribution. From 2003 to 2005, I worked with the Alberta Electric System Operator as their Manager, Bulk System Planning.
- 3. I joined the OPA in 2005 as Director, Transmission Integration. In this position, I am responsible for managing a staff of about seven engineers. Our role at the OPA is to develop the transmission component of the integrated power system plan, carry-out regional planning studies and support OPA procurement activities such as the FIT Program. I report to Amir Shalaby, who is the Vice President of the OPA for Power System Planning.

#### II. THE ONTARIO ELECTRICITY TRANSMISSION SYSTEM

4. Like any electricity system, Ontario's consists of facilities that generate electricity, wires that transmit that electricity, distributors that provide access to that electricity, and consumers who use that electricity. The OPA is mandated to, among other things, procure electricity generation from generators. However, such procurement makes little sense unless there is a way

to physically carry the electricity produced by generators to consumers across Ontario's power grid.

5. A robust transmission system is important to Ontario. It is complicated by the fact that, as in many places, the generating facilities are often located far from the ultimate consumers of the electricity. As is shown in the diagram below, in order to be transmitted from generators to users, electricity in Ontario is produced at generation stations, stepped up to a higher voltage at transformer stations, transmitted on high voltage transmission lines across long distances to load centres across Ontario, and stepped down again at another transformer station so that it can be distributed on local lines to consumers. This is made much more complicated in that there are hundreds of generators and millions of customers all sharing the transmission system; an interconnected network operating independently, yet collectively, as an integrated system, at the same time.



<sup>&</sup>lt;sup>1</sup> **R-038**, Ontario Power Authority Presentation, "Power 101" (Jun, 7, 2007), slide 22 ("Ontario Power Authority Presentation, Power 101").

- 6. Ontario's transmission system, like many other power systems across the world, has developed over time to address past needs (i.e. new generation, new load, greater transfer requirements, etc.) that drove its expansion. As new demand is placed on the transmission system, such as electricity procured through the FIT Program, constraints may appear as the system may not be sufficiently developed to support such new demand. This was the case in 2009 when Ontario's transmission system, which contained a limited number of high voltage transmission lines to bring electricity long distances from generating facilities to users,<sup>2</sup> was asked to connect a significant level of new generation across the Province pursuant to the FIT Program.
- 7. The amount of electricity that can be transmitted on lines, transformers or other station equipment is normally limited by their thermal capability, i.e., the maximum electrical current that they can carry before they overheat, thereby causing the equipment to "trip" and be removed from service. Overheated transmission lines can be a safety hazard. Transformers are critical pieces of equipment which can be easily damaged by such overheating. Their replacement can take weeks, and as such, damage to a transformer can result in adverse effects on the system for an extended period of time. Even beyond the thermal limitations of the equipment, determination of transmission capability must also respect other electrical parameters at the system level such as having healthy voltages, and maintaining system stability under normal and outage conditions.
- 8. This fact places constraints not only on the amount of electricity that can come into the system at any particular point, but also on the amount of electricity that can be transmitted

<sup>&</sup>lt;sup>2</sup> **R-066**, Ontario Power Authority Presentation, "Expanding the Transmission System to Enable Renewable Developments in Ontario", Discussion Panel at the 2009 EUCI FIT Conference, Toronto, presented by Bob Chow, Director, Transmission Integration (Sep. 21, 2009). Available at: http://www.powerauthority.on.ca/sites/default/files/news/15448 EUCI Panel Sept 21 2009-09-

<sup>21</sup> v2 (Bob Chow).pdf.

between regions. In a sense, the electricity network is not unlike a system of local roads and highways. Traffic on that system can congest at any point if there are not enough local roads to accommodate population density. But at the same time, having more local roads is pointless if the highways are too congested to allow the people to get into the cities and other populated centres.

9. As a result, when considering transmission availability, the OPA views the Province in terms of geographic transmission areas or zones delineated by "pinch points" or "weak spots" on the transmission system. The "geography" of these areas is defined by the electrical network, and the boundaries are only approximate as they relate to electrical stations and not physical locations. In essence, a project which is physically located in one geographic area may not be located in that area for the purposes of electricity transmission because it is connecting to the wires that are electrically within another geographic area. The region of a particular project for the purposes of electrical transmission ultimately depends on the location of the circuit the project is connecting to and not the physical location of the project. A general overview of the transmission zones in Ontario, as they stood in the late 2000's can be seen below.

<sup>&</sup>lt;sup>3</sup> For example, the town of Cornwall is physically located in the Province of Ontario, but for the purposes of electricity, projects in the area connected to the electricity grid of the Province of Quebec.

<sup>&</sup>lt;sup>4</sup> **R-038.** Ontario Power Authority Presentation, Power 101, slide 67.

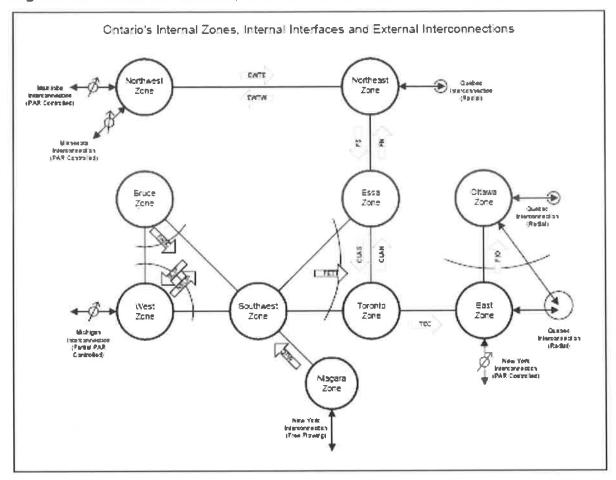


Figure 4.1 Ontario's Zones, Interfaces and Interconnections

10. Within a transmission area or zone, there are various factors which determine capacity for new projects. First, there is the question of the capability of the individual circuit to which the generation facility intends to connect to handle further electricity – this is known as circuit capability. Circuits are not individual points. The capability of a circuit to add new generation is not necessarily the same along the circuit. It is dependent on the size of conductors employed along the different parts of the line as well as the location, magnitude and type of customers already connected to the line. In fact, the capacity of a circuit to handle further transmission can vary significantly depending on where on the circuit the new generation is seeking to connect. The L7S circuit, which I understand to be an issue in this case, is one such example of where

there is varying capacity available depending on where on the circuit a generator is seeking to connect.<sup>5</sup>

- 11. Second, for distribution connected projects, there is the question of capacity at the transformer station. As shown in the diagram above, before allowing a generating facility to connect to the electricity system, the electricity it generates needs to be stepped up to a higher voltage by a transformer to allow it to use transmission lines to carry the electricity over long distances throughout Ontario. Even if an upstream transmission circuit has capacity, it is of little value if the transformer that would step up its voltage for transmission cannot handle more capacity.
- 12. Finally, there is the question of the total megawatts available for transmission out of the area on the high voltage wires. This limit is known as the area limit and it refers to the technical limitations on the bulk transfer of electricity from one area of the Province to another because of the system limitations of the bulk transmission network. Even if a project can connect at a circuit and a transformer, if the "highway" to the customers is already too congested to handle additional capacity, then there is physical constraint on procuring more generation in that zone or area.
- 13. In light of these physical constraints, for the OPA to procure electricity from a generating facility it must be established that there is capacity at the circuit, transformer station, and area levels.

<sup>&</sup>lt;sup>5</sup> **R-118**, Email from Tracy Garner, Ontario Power Authority to Bob Chow, Jim Lee and Kun Xiong, Ontario Power Authority (Jun. 7, 2011).

### III. THE ROLE OF RENEWABLES IN ONTARIO'S ELECTRICITY TRANSMISSION SYSTEM

- 14. The FIT Program was launched in 2009 as part of a procurement initiative to replace coal-generated electricity with renewable energy. My group was involved in the design of the FIT Program and provided advice on the development of the policies behind it to the extent related to connection availability and transmission expansion.
- The planning of an electricity system is all about balance at every moment of every day. You need to make sure you are transmitting just the right amount of electricity across your wires at any particular point in time to ensure that needs are met but that equipment is not damaged. This means that from the perspective of your sources of electricity supply, you need some resources to be stable and predictable, and you need some to be very flexible. The difficulty with renewable energy from a transmission perspective is that it is neither stable nor flexible. In short, the problem is that we cannot control when the wind blows or the sun shines, and this makes integrating electricity generated from renewable sources into the electricity transmission system a challenge that needs to be planned for. I believe that the rules and concepts that we developed to determine the level of generation to be procured under the FIT Program that would be acceptable for the system balanced the need to maintain the well being of Ontario's power system and the capability to connect renewable generation in Ontario.

## IV. THE ASSESSMENT OF TRANSMISSION CAPACITY IN THE CONTEXT OF THE FIT PROGRAM

16. One of the roles of my group in the FIT Program was to conduct connection availability assessments for individual generation projects that applied to the FIT Program. A set of test procedures, the Transmission Availability Test ("TAT"), was developed for all FIT projects. A similar set of procedures, the Distribution Availability Test ("DAT"), was also developed for FIT

projects wishing to connect to the distribution system. In order to be granted a FIT contract, a project would need to pass the TAT and if distribution connected, it would also need to pass the DAT.

- 17. When a FIT application was made, the OPA "located" the project in one of Ontario's transmission areas based on one of two factors: 1) choice of connection point, or 2) project location (if they were an enabler requested project, discussed below). If a specific connection point was chosen, the project would be subject to the TAT. The TAT was performed by the OPA to determine if there was sufficient capability on the transmission path to deliver the project's output from the point of connection to the provincial grid. The TAT considered numerous factors, such as the capacity of the existing transmission system, committed transmission system upgrades, existing and committed generation facilities, the balance between electricity load and generation in the project's vicinity (which determines the surplus power that would be delivered to the rest of the system), and reliability and service quality requirements.
- 18. My group assessed projects using the TAT in their order of appearance in the priority rankings which had been determined by the OPA's Electricity Resources division. My group was not involved in that ranking process we simply processed the results of it from a transmission perspective.
- 19. Consistent with what I have described above, during the TAT, projects were assessed at three levels: transmission circuit, transformer station, and area. If sufficient capacity was not available for a particular project at any of those levels, it would fail the TAT and be placed in line for the Economic Connection Test ("ECT") discussed below.
- 20. If sufficient capacity was available at all three levels, we would inform the relevant group at the OPA that the project was eligible to receive a contract from a connection assessment

perspective. Projects seeking to connect to the distribution system would also have needed to pass the DAT, performed by the affected distribution company.

- 21. TAT is a connection screening test. A successful TAT did not guarantee a project would be able to connect to the transmission system in the end. The applicant would still have to seek all necessary approvals, including the completion of a System Impact Assessment ("SIA") conducted by the Independent Electricity System Operator ("IESO"). An SIA is required for all generation customers wishing to connect to the Ontario transmission grid.
- 22. Projects which did not specify a connection point in their FIT application were referred to as enabler requested projects or facilities. An enabler is a "line connection facility" or a "transformer connection facility" which would be constructed, owned and operated by a transmitter and to which two or more generation facilities would connect in order to transmit energy into the transmission system.<sup>6</sup> The costs of enabler facilities are attributed to each project connecting to it in proportion to the capacity of the project's respective electrical generation expressed as a percentage of the total capacity of the enabler facility.
- 23. The enabler project concept was proposed by the OPA as part its first Integrated Power System Plan ("IPSP") in 2007. This concept would allow multiple renewable generation developers, whose projects are individually typically small when compared to the capacity made available by a transmission upgrade, to work together to share the costs of connecting to the transmission grid.<sup>7</sup> The Ontario Energy Board ("OEB") subsequently initiated a proceeding to formally include the enabler asset category in the Transmission System Code ("TSC"). Under the FIT Program, enabler requested projects allowed FIT applicants to wait until there were enough

<sup>&</sup>lt;sup>6</sup> R-002, Ontario Power Authority, FIT Program Overview, v. 1.1 (Sep. 30, 2009).

<sup>&</sup>lt;sup>7</sup> C-0034, Ontario Power Authority Presentation, "The Economic Connection Test Process" (Mar. 23, 2010) ("Ontario Power Authority Presentation, The Economic Connection Test Process").

projects clustered in a specific area to share the costs of the connection requirements. As such, applicants with enabler requested projects were not required to specify connection details in their FIT application.

24. As FIT applicants with enabler requested projects had not selected a connection point, they did not undergo the TAT. Instead, they went directly into the priority ranking list awaiting ECT. For the purposes of allocating projects to particular regions, the OPA placed enabler requested projects in a transmission region based on the physical location of the project. As I explained above, the physical location of a project is not determinative from an electrical point of view but we felt it was a reasonable approach given the limited information available to us at the time. In some cases, such as NextEra's Bluewater project, which was right on the border between the West of London and Bruce transmission areas, we simply made a call one way or the other. We were comfortable doing so because ultimately our initial decision simply would not matter. When the time came during the ECT to consider such enabler-request projects, it would be clear in which electrical region they would connect and we could adjust accordingly. The only relevant factor at that point would have been their provincial ranking and actual point of connection.

#### V. THE ECONOMIC CONNECTION TEST

25. The FIT Rules, Version 1.1, section 5.4 contemplated the running of the ECT. This test was to be completed for projects that failed the TAT due to insufficient connection availability or which were enabler-requested. The ECT was intended to be the framework for managing FIT applications on an ongoing basis and was conceptualized as a means to expand the FIT program.<sup>9</sup>

<sup>&</sup>lt;sup>8</sup> R-116, Email from Bobby K. Adjemian, NextEra to Bob Chow, Ontario Power Authority (Jun. 6, 2011).

<sup>&</sup>lt;sup>9</sup> C-0034, Ontario Power Authority Presentation, "The Economic Connection Test Process".

The objective of the ECT, as communicated to FIT applicants, was to enable generator connections and maximize the amount of renewable generation that could be accommodated in an economic manner on the electricity system.<sup>10</sup>

- 26. The first stage of the ECT process was the Individual Project Assessment ("IPA"). The IPA was intended to assess whether projects could be connected to the grid based on existing transmission and distribution capability, in order of time stamp priority. The components of the IPA were explained to stakeholders in my March 23, 2010 presentation. The components of the IPA were explained to stakeholders in my March 23, 2010 presentation.
- 27. In short, the IPA was intended to identify any applications that failed the TAT, but that could now be awarded a contract based on changes in the capacity since the original test was performed. It would also allow proponents to better redistribute themselves to more efficiently use the capacity that already existed, through a change of connection point as part of this process. Further, it would allow enabler requested projects to pick a connection point if they saw that there were no other projects around them with whom they could pool. And finally, the IPA process also allowed a FIT applicant that had failed the TAT due to insufficient capacity on the "connection" portion of the transmission path, to obtain a FIT contract by committing to bear the cost of any upgrades required to that part of the system in order to create the capacity the applicant required to connect to the grid. "Connection facilities" are defined in the TSC and are generally used exclusively by a limited number of customers. Any cost to provide or upgrade such connection facilities is borne by those customers and not the provincial ratepayers. This is

<sup>&</sup>lt;sup>10</sup> C-0116, Ontario Power Authority, Draft ECT Communications Roll-out (Apr. 28, 2011).

<sup>&</sup>lt;sup>11</sup> C-0034, Ontario Power Authority Presentation, "The Economic Connection Test Process".

<sup>12</sup> Ibid.

<sup>&</sup>lt;sup>13</sup> R-093, Ontario Energy Board, Transmission System Code (Jun. 10, 2010). Available at: <a href="http://www.ontarioenergyboard.ca/OEB/">http://www.ontarioenergyboard.ca/OEB/</a> Documents/Regulatory/Transmission System Code.pdf

not the case for "network facilities" (also defined in the TSC), <sup>14</sup> which are generally used as a "common carrier" for all customers and are therefore paid for by all customers. Generator-paid upgrades were available at many connection points, including the L7S circuit, which is a "connection facility" under the TSC, but not at others, such as B23D, which is a "network facility" under the TSC.

- 28. As noted above, chief among the IPA components was the ability for applicants to change the connection points of their projects. When a FIT applicant originally selected its connection point in its FIT application, or elected to be enabler requested, it did so without knowledge of which connection point other FIT applicants had chosen or which if any, had also chosen to be enabler requested. The FIT Program was quite restrictive in this regard and this blind approach could have led to inefficiencies as applicants needlessly crowded onto a single circuit instead of spreading out. In addition, it also could have led to an applicant electing to be the only enabler requested project in its area, which would defeat the very purpose of seeking an enabler facility.
- 29. For these reasons, the FIT Rules always contemplated offering a chance for applicants to change connection points as part of the ECT.<sup>15</sup> This was made clear in my stakeholder presentations on the IPA of March 23, 2010 and on the ECT of May 19, 2010.<sup>16</sup> Information on how to request a change of connection point, or enabler, was posted on the FIT website.<sup>17</sup>

<sup>&</sup>lt;sup>14</sup> Ibid.

<sup>&</sup>lt;sup>15</sup> C-0258, FIT Program Rules, v. 1.1, (Sep. 30, 2009), s. 5.5(b) and s. 5.6(b); C-0034, Ontario Power Authority Presentation, "The Economic Connection Test Process".

<sup>&</sup>lt;sup>16</sup> C-0034, Ontario Power Authority Presentation, "The Economic Connection Test Process"; C-0088, Ontario Power Authority Presentation, "The Economic Connection Test – Approach, Metrics and Process" (May 19, 2010). Available at: http://fit.powerauthority.on.ca/Storage/11025 ECT Presentation May 19 2010 Revised.pdf.

<sup>&</sup>lt;sup>17</sup> C-0034. Ontario Power Authority Presentation, "The Economic Connection Test Process".

- 30. I am aware that there has been an allegation that connection point changes during the ECT were to be limited to within region changes. This is false. At no time did we ever say this and electrically it would have made no sense whatsoever. If an applicant was close to the border of two regions, it would make no sense to prohibit it from changing its connection to go one way merely because of a line drawn by the OPA solely for planning purposes. At no time has the OPA ever expressed any limitations on an applicant electing to change its connection point during the ECT to connect in a different electrical region.
- 31. In order for a chance to change connection points to be effective, applicants had to know where other projects were proposing to connect. For this reason, before any IPA was run, the OPA was to publish updated TAT tables. In addition to allowing applicants to make informed choices about connection points or being enabler requested, the TAT tables would reflect whether additional capacity had become available due to, among other things, new transmission facilities coming into service, or the cancellation of another project. These tables would provide applicants with an indication of the electricity system's ability to accommodate new renewable generation projects at particular connection points and in particular areas. The TAT tables listed available capacity in megawatts (MW) for each eligible transmission circuit and transformer station. The tables also included area limits which indicated the maximum amount of new renewable generation that could be accommodated in an area. Applicants were told to note and discuss these limits with their transmitter and local distribution company prior to choosing a connection point.
- 32. The purpose of publishing the TAT tables was to allow applicants to make more informed choices on a going-forward basis. In this regard, the values indicated in a TAT table were to provide general guidance to applicants only. They were based on the information which

was available at the time the table was prepared. That information could be affected by numerous factors. In addition, the TAT tables indicated the lowest available capacity at each circuit. As I explained above, because of the nature of electricity transmission, capacity is not the same at all parts of a circuit. We chose to provide the lowest capacity available on any circuit in the TAT tables because doing so would signal to applicants with larger projects that they had to exercise caution and speak to transmitters for additional information, such as additional capacity on other parts of a circuit.

- 33. We made applicants aware of our approach in the TAT tables. For example, in the June 8, 2011 Question and Answers posted on our website regarding the Bruce to Milton Contract Allocation Process, we noted that the 30MW value for the connection point at L7S which was indicated in the TAT table was intended to reflect the weakest portion of that circuit.<sup>18</sup>
- 34. For any project that passed the IPA, we would inform the relevant applicants that they were eligible for a FIT Contract from the transmission perspective. If projects did not pass the IPA, they would then be considered during the second stage of the ECT.
- 35. The second stage of the ECT would have provided a process to assess the need, scope and economics of potential expansions to the transmission system. During this stage of the ECT, the OPA would work with the IESO, transmitters and distributors, as appropriate, to determine if transmission and distribution upgrades could be done on an economical basis in order to allow new renewable energy projects to connect to the grid. Through the ECT, the OPA could identify economically justifiable transmission expansion projects which would be required

<sup>&</sup>lt;sup>18</sup> C-0291, Ontario Power Authority, Questions and Answers, Bruce to Milton Contract Allocation Process (Jun. 8, 2011).

<sup>&</sup>lt;sup>19</sup> C-0034. Ontario Power Authority Presentation, "The Economic Connection Test Process".

to accommodate FIT applicants who were not awarded a contract through the TAT or IPA processes.<sup>20</sup>

- 36. The running of an ECT would not guarantee a FIT contract to an applicant. In the course of the ECT, the OPA would examine what could be done in a transmission region to make a connection economical. Only when an economic expansion of the transmission system had been identified would a FIT applicant at this connection point be placed in the FIT Production Line. Once the expansion received the required regulatory approvals, and advanced sufficiently such that the OPA was reasonably certain that the upgrades would be completed by a project's milestone date for commercial operation, the FIT applicant would be awarded a contract. Otherwise, the application would be placed in the FIT Reserve Line and await the next ECT process.<sup>21</sup> The ECT was originally scheduled to be run in August, 2010 and then every six months thereafter.
- Originally, it was thought that transmission expansion would be needed in order to make the FIT Program successful. At the time of the creation of the FIT Rules, it was not known how the transmission system could handle increased expansion. In the end, it turned out the electricity system could handle a significant level of FIT projects without requiring expansion to the existing electricity grid. In fact, it was ultimately determined that the grid could handle all of the renewable energy that the Government wanted to procure, thus making an ECT unnecessary. In version 2.0 of the FIT Rules, released on August 10, 2012 the possibility of running an ECT was eliminated.

<sup>&</sup>lt;sup>20</sup> Ibid.

<sup>&</sup>lt;sup>21</sup> This is in response to the Claimant's Memorial ¶ 759, where the Claimant alleges that if an ECT had of been run they would have received a FIT Contract.

38. I understand that there have been some claims made about the set asides allocated to the Korean Consortium and their effect on the ECT process. The Korean Consortium did not finalize its connection points in the Bruce area prior to August 2010. While this did delay the running of the ECT as originally planned for in August 2010, it should be clearly understood that it was not the reason the ECT did not go ahead.

### VI. THE BRUCE TO MILTON CAPACITY ALLOCATION PROCESS

- 39. The Bruce area is home to the Bruce Nuclear Facility ("BNF"), from which Ontario draws much of its electricity supply. In the mid-2000 period, it was recognized that a new high voltage line, formally known as the Second Bruce to Milton Line ("Bruce to Milton Line"), was required to ensure sufficient transmission capacity was there when all eight BNF units come back online.
- 40. We were also aware of the wind generation potential in the Bruce area based on the earlier wind power procurements by the OPA. We included this capacity need in our plan for the Bruce to Milton Line in the Leave-to-Construct application to the OEB in 2007. As a result, when completed, the Bruce to Milton Line would provide significant transmission capacity for FIT or other procurement programs.
- 41. My group was involved in the development of the process to allocate the Bruce to Milton capacity. In our early presentations, we discussed with stakeholders the expectation that the additional capacity from the Bruce to Milton Line would be allocated as part of the province-wide ECT process, a process which, as I described above, would include a chance to change connection points. Ultimately, it was decided to use a regionalized and modified ECT approach for the allocation.

### 1. Bruce to Milton Capacity Allocation Time Frame

42. One of the issues that we provided comments on was the timeframe to run the process. The speed with which the Ministry of Energy wanted to move on the Bruce to Milton allocation process created concern at the OPA from a transmission planning perspective.<sup>22</sup> The OPA preferred to have more time to prepare for such a process.

43. On Thursday May 12, 2011, I received an email from JoAnne Butler, Vice President of the OPA for Electricity Resources with regards to the Bruce to Milton allocation process. In response to the proposed allocation process, I indicated that allowing a change of connection point would "complicate the process". The complication that I was referring to arose from the length of time being contemplated for the window to allow changes in connection points. As I indicated in that email, to allow for the proposed allocation, the TAT table for the Bruce and West of London regions would have to be updated (possibly for the entire Province) and new configurations would have to be addressed. There were also numerous other factors which could complicate the allocation from a transmission perspective, such as a FIT applicant wishing to connect to the 500 kV lines. The province of the such as a FIT applicant wishing to connect to the 500 kV lines.

44. On May 13, 2011 I provided the Ministry of Energy with a list of the activities the OPA would have to carry out in order to allow the Bruce to Milton allocation as proposed at that time,

<sup>&</sup>lt;sup>22</sup> C-0307, Email from Bob Chow, Ontario Power Authority to Joanne Butler, Shawn Cronkwright, and Michael Lyle, Ontario Power Authority (May 12, 2011).

<sup>&</sup>lt;sup>23</sup> Ibid.

<sup>&</sup>lt;sup>24</sup> Ibid.

<sup>&</sup>lt;sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Ibid.

<sup>&</sup>lt;sup>27</sup> Ibid.

assuming a change window was included.<sup>28</sup> At that time I explained that the process could be run within the time frame proposed if it was given the OPA's highest priority.<sup>29</sup>

### 2. OPA Receipt of the Draft June 3, 2011 Direction

45. On May 16, 2011, I received an email from Sue Lo of the Ministry of Energy which attached a draft direction concerning the Bruce to Milton allocation process. The draft direction provided for a change window for applicants in the Bruce and West of London transmission areas. We immediately began the preparatory work for this window. The formal direction was issued by the Minister of Energy on June 3, 2011, and a five-day window for applicants to change connection points opened on June 6, 2011.

# A. The Impact of the Bruce to Milton Capacity Allocation Process on the Bruce to Longwood Line

- When the OPA published updated TAT tables on June 3, 2011, we highlighted a change in connection point to the 500kV Bruce to Longwood line as a possibility. The Bruce to Longwood line is a 500 kV line used for transmitting large quantities of power from the Bruce Nuclear Facility. The OPA defers to the IESO on allowing projects to connect to this line. In February 2007, prior to the development of the FIT Program, the Kingsbridge II wind farm in Goderich, Ontario, was given approval by the IESO to connect its project to this line (per the IESO SIA dated Feb 9, 2007). The project proponents had spoken to the IESO first and received their approval.
- 47. After that, the IESO had been reluctant to allow connections to this line because it is a critical back up line for Bruce Nuclear Facility when it is operating the full capacity. However,

<sup>&</sup>lt;sup>28</sup> **R-109**, Email from Bob Chow, Ontario Power Authority to Sue Lo, Ministry of Energy (May 13, 2011).

<sup>&</sup>lt;sup>29</sup> Ibid.

the additional capacity created by the new Bruce to Milton Line reduced the need to keep the Bruce to Longwood line as a critical reserve line. As a result, in the TAT table released on June 3, FIT applicants were referred to the IESO to learn more about connecting to this line. The OPA specifically included this reference in the TAT table due to the complicated technical requirements and financial cost of connecting to a 500 kV line. As always, the OPA deferred to the IESO for the final call on allowing such connections.

48. The OPA did not suggest to or encourage any FIT proponents to connect to the Bruce to Longwood line. Proponents had to conduct their own studies and work with the IESO and Hydro One to make that decision when applying for FIT.

# B. Meeting with FIT Applicants Concerning Change in Connection Point during the Bruce to Milton Capacity Allocation Process

- 49. I understand that much has been made about NextEra's decision to change its connection points of certain of its projects, and that an allegation has been made that they somehow had inside and advance information about the Bruce to Milton allocation process and the connection point change window that was a part of this. I do not believe there is any merit to these allegations.
- 50. The Claimant seems to suggest that the fact that NextEra was able to make significant decisions on changing connection points within a short period is extraordinary. To the contrary, it is hardly surprising at all. As I said above, the potential for connection point changes was a big part of the FIT Rules from the very beginning. As a result, FIT applicants often carried out their own studies in anticipation of the opening of a change window. As each FIT applicant was entering the process not knowing where other applicants had chosen connection points or the size of their projects, it was common practice for FIT applicants to work on a back-up plan of

changing connection points in the event they failed the TAT due to lack of capacity at their chosen connection point. FIT applicants also carried out studies based on new transmission lines which were to come online, such as the Bruce to Milton Line, which had been in contemplation since 2006-2007. FIT applicants knew well in advance of the June 3<sup>rd</sup> direction that a change window could occur and advance work would be necessary to meet a potentially short timeframe in which to make the changes.

- 51. In fact, throughout the course of the FIT Program, other proponents, such as a wind developer with a project in the Bruce Peninsula, approached the OPA with ideas with respect to changing connection points should a change window occur.<sup>30</sup> During these meetings, the OPA would never opine on whether a proposed connection point would or would not lead to a FIT contract, or the timing as to when connection point changes would be allowed.
- 52. NextEra was one of the companies that consistently inquired about changing the connection points of some of its projects. The OPA provided NextEra with only general, publicly available information concerning the FIT Program and ECT process.
- On January 14, 2011, I received an email from Mary Ellen Richardson, on behalf of NextEra, requesting a meeting to discuss some concerns NextEra had identified during their analysis of options for revising the connection points of their respective FIT projects. Specifically, NextEra wanted to discuss the connection points for their Bluewater, Goshen, Adelaide and Bornish projects. This was followed up with an email from Bobby Adjemian from NextEra on January 18, 2011. 32

<sup>&</sup>lt;sup>30</sup> R-103, Email from "PB", Ontario Power Authority to Bob Chow, Ontario Power Authority (Apr. 20, 2011).

<sup>&</sup>lt;sup>31</sup> C-0139, Email from Mary Ellen Richardson, Canadian District Energy Association to Bob Chow, Ontario Power Authority (Jan. 17, 2011).

<sup>&</sup>lt;sup>32</sup> C-0234. Email from Bobby Adjemian, NextEra to Bob Chow, Ontario Power Authority (Jan. 18, 2011).

- On January 18, 2011, I replied to Mr. Adjemian's email, indicating that while the OPA could agree to a meeting, the OPA was limited on the extent in which it could discuss information about the upcoming ECT. I further indicated that the OPA could not "recommend, suggest or consult" on NextEra's specific needs.<sup>33</sup> This was consistent with our approach to working with proponents in general.
- 55. For FIT projects in general, the proponents were encouraged to discuss connection matters with their LDC or transmitter before they apply. To the extent possible, OPA would provide broader system availability information such as the TAT table to assist all the proponents. The OPA did not provide specific assistance to proponents when they were looking at where they would like to connect to the electricity grid. For larger FIT projects, typically those that would be connected directly to the transmission system, proponents were expected to conduct their own due diligence, including by hiring, for example, a consultant who would advise on the feasibility of certain projects. Each proponent is on equal ground for determining where they would want to connect based on the general information the OPA provided through its website, webinars, etc. equally to all proponents.
- On January 21, 2011, I met with NextEra in response to their meeting request, along with Jim Lee and Tracy Garner, also of the OPA. NextEra discussed two of their enabler requested projects during these meetings and expressed intentions to change connection points for these projects. NextEra expressed concern that their Bluewater project had been put in the West of London Region when NextEra believed the projects coordinates placed it in the Bruce Region.<sup>34</sup> NextEra expressed an interest in changing connection points for this project to place it in the

<sup>33</sup> Ihid.

<sup>&</sup>lt;sup>34</sup> C-0295, Handwritten Notes (Jan. 21, 2011).

Bruce Region. NextEra also indicated a desire to change the connection point for its Jericho project.<sup>35</sup> Consistent with what I told to Mr. Adjemian, the OPA listened to NextEra and thanked them for the information, but gave them no information other than what was already publicly available.<sup>36</sup>

- Once the connection point amendment window opened, the OPA ceased all direct 57. communications with applicants about potential changes (though we continued to meet and have contact with applicants on other issues).<sup>37</sup> For example, after the window was announced, we cancelled a meeting with NextEra which was scheduled for June 6, 2011.38 NextEra was told that all communications during the running of the Bruce to Milton allocation were to be in writing through the general FIT email address (fit@powerauthority.on.ca).<sup>39</sup> On June 7, 2011, the OPA NextEra through the FIT email address received from general an email (fit@powerauthority.on.ca) with six questions concerning the allocation of capacity and the offer of FIT contracts for Bruce to Milton enabled projects. 40 I was copied on this email.
- 58. Our response was provided on June 8, 2011 through the posting of Questions and Answers on our website with regards to the Bruce to Milton Contract allocation process. 41 We

<sup>&</sup>lt;sup>35</sup> C-0296, Email from Tracy Garner, Ontario Power Authority to Irwin Ng, Ontario Power Authority (Jan. 25, 2011).

<sup>&</sup>lt;sup>36</sup> C-0234, Email from Bobby Adjemian, NextEra to Bob Chow, Ontario Power Authority (Jan. 18, 2011).

<sup>&</sup>lt;sup>37</sup> See for example, **R-122**, Email from Jim Lee, Ontario Power Authority to John Sabiston, Hydro One (Jul. 6, 2011).

<sup>&</sup>lt;sup>38</sup> C-0298, Email from Tracy Garner, Ontario Power Authority to Bob Chow, Ontario Power Authority (Jun. 6, 2011).

<sup>&</sup>lt;sup>39</sup> *Ibid*.

<sup>&</sup>lt;sup>40</sup> R-117, Email from Nicole Geneau, NextEra to Feed-in Tariff Program (Jun. 7, 2011).

<sup>&</sup>lt;sup>41</sup> **C-0291**, Ontario Power Authority, Questions and Answers, Bruce to Milton Contract Allocation Process (Jun. 8, 2011).

adopted this approach because we wanted to ensure that no proponent would have information

about changing connection points that was not available to other proponents.

I am aware that I and others are alleged to have had some sort of "special relationship" 59.

with NextEra simply because we met with them on numerous occasions. This is false. I do not

have a special relationship with NextEra or any other FIT applicants or proponents. It was not

uncommon for us to meet with proponents with respect to various projects – I certainly met with

several. In general, if a meeting was requested, we tried to accommodate, mostly to listen and

provide clarification of information already in the public sphere. At these meetings, proponents

would present their ideas or concerns. They would often try to gauge reactions and obtain clues

– to "read the tea leaves." However, to the best of my knowledge, the OPA never provided any

information to any individual proponent, including NextEra, beyond that which was publicly

available. The OPA strives to maintain its neutrality in all its processes. The OPA never provided

preferential treatment or inside information to any individual FIT proponent.

Dated: Feb. 27, 2014

**Bob Chow** 

Robert F. (BA) Chow