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VIA RESS, COURIER AND EMAIL

Ontario Energy Board
P.O. Box 2319
2300 Yonge Street, 27th Floor
Toronto ON M4P 1E4

Attention: Ms. K. Walli, Board Secretary

Dear Ms. Walli:

Re: Canadian Niagara Power Inc. - Application for Leave to Construct and Reinforce Transmission Facilities in the Fort Erie / Niagara Falls Area - Responses to Supplemental Interrogatories (Board File No. EB-2009-0283)

We are counsel to Canadian Niagara Power Inc. (the "Applicant"). Enclosed are two copies of the Applicant's Responses to the Supplemental Interrogatories from Board Staff, which have been filed electronically on RESS.

Yours truly,

for Charles Keizer

CK*dh

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RESPONSES TO SUPPLEMENTAL INTERROGATORIES OF BOARD STAFF

(A) PROJECT NEED

References

(1) Exh. B, Tab 3, Sch. 1, Pages 14 and 15

Preamble

The following are excerpts from CNP's evidence in the above noted reference.

> The lack of N-1 contingency on the CNP Transmission System would therefore be a significant barrier to the connection of such renewable generation facilities.
>
> ....it may not be possible for CNP Transmission to provide the Board with a satisfactory plan for expansion or reinforcement to accommodate the connection of renewable generation facilities unless the reliability issues associated with the lack of N-1 contingency on the CNP Transmission System have by that point been addressed.

Board staff requires further explanation/clarification regarding the above.

Questions/Requests

SI-1 Please explain further why potential renewable energy generators would be reluctant to connect to the existing CNP transmission system because of its performance record which has been excellent over the last three years, i.e., there has not been an outage on the CNP system over the last approximately three years.

SI-2 Please provide any supporting documentation or evidence that potential renewable energy generators would be concerned about connecting to the CNP transmission system if it does not meet the N-1 contingency criterion.

SI-3 Please explain if/why CNP is concerned about connecting potential renewable energy generators if CNP's transmission system does not meet the N-1[1] contingency criterion.

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[1] Refers to a system for which a single contingency will not result in the loss of supply, i.e., uninterrupted supply following a single contingency

Responses

SI-1, SI-2 and SI-3

The following is a general response to SI-1 through SI-3 and CNP's evidence in general. Specific responses to each of SI-1, -2 and -3 follow. The need for this general response is to clarify CNP's current position on the applicability of the N-1 contingency criterion which, based on the various supplemental interrogatories posed to CNP and other parties, appears to have become a matter of some discussion in this proceeding.

In Exhibit B, Tab 3, Schedule 1 at page 1 of its pre-filed evidence, CNP states that "there are important reliability concerns for the CNP Transmission System. Because there are no viable alternatives, the Project in respect of this reliability concern is non-discretionary. The need for the Project is driven by the requirements of the Transmission System Code, which in turn requires the CNP Transmission System to satisfy requirements found within the reliability *standards of NERC*, as well as to meet the *standards of good utility practice*."

CNP relied on the literal and stated wording of section 5.1.2 of the Transmission System Code, which requires CNP to operate and maintain its transmission facilities in compliance with "the standards of all applicable reliability organizations", where "reliability organization" is defined in the Code as meaning "NERC, NERC's reliability councils and the IESO." As a result of statements by the IESO, CNP understands and acknowledges that, because CNP's transmission system is not considered part of the Ontario bulk power system, NERC Standards do not necessarily apply to CNP's system. In particular, as explained by the IESO, it is for this reason that NERC Standard TOP-002-2 does not apply. CNP is therefore not relying on this standard as the basis for project need.

While the applicability of the reliability standards of NERC has come into question during the course of the proceeding and these standards are acknowledged as not applicable, the underlying reliability concerns associated with the configuration of CNP's transmission system remain. The obligation to meet good utility practice causes CNP to have to solve the fundamental reliability problem associated with the configuration of its transmission system. In CNP's view, the only solution to this problem is to enable the system to withstand the loss of a single element and the only viable way to achieve this is through implementation of the Project.

CNP is relying on that part of the definition of "good utility practice" set out in the Code which provides that "good utility practice" means:

> *any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety and expedition.*

While this aspect of the definition is worded so as to be applied with hindsight to projects that have already been carried out, if CNP could have carried out this project without leave and then sought recovery for costs at a later date, then this would be the applicable measure of whether it was good utility practice to do the project. As such, there is no reason why this portion of the definition does not apply to a leave to construct proceeding. There are not two standards, i.e. one for actions taken with leave and one for actions taken without leave. Using this portion of the definition is therefore appropriate to employ on a case by case basis.

It is therefore important to distinguish between N-1 as a component of the *NERC Standard* and N-1 as a *solution to a reliability concern.* As a solution to a reliability concern, N-1 simply refers to the idea that a system is able to withstand the loss of a single element. For CNP, the reliability concern that needs to be addressed is that the system is not currently able to withstand the loss of a single element. For example, the loss of supply from HONI results in a complete system-wide outage for CNP. This reliability concern is demonstrated by having regard to, among other things, the scope of CNP's outages, as well as their duration and frequency over the long-term. Also relevant are near-miss events which, but for CNP's good fortune, would have resulted in outages, as well as the concerns expressed by end-users. Based on the facts relating to CNP's system, providing the ability to withstand the loss of a single element as a solution to the reliability concerns associated with the CNP transmission system is required as a fundamental principle of good utility practice.

Notwithstanding that CNP acknowledges that the NERC standard does not apply, CNP has presented evidence and has consistently maintained that, based on the facts unique to CNP, that the Project is needed as part of good utility practice and that there are sufficient quantitative and qualitative benefits to justify the Project in the public interest. As indicated above, the TSC's definition of good utility practice permits its application to specific facts and actions.

SI-1

CNP believes that potential renewable energy generators may be reluctant to connect to the existing CNP transmission system (or to the distribution system served by the CNP transmission system) for the following reasons:

- CNP's reliability statistics demonstrate that, since 2002, CNP has, on average, experienced lower than average reliability. Given the typical 20-year timeframe of a power purchase agreement under the OPA's Feed-in Tariff ("FIT") program, a prospective generator, acting prudently, would be interested in CNP's reliability statistics over a period greater than the last three years. This data would demonstrate to a prospective generator that, since 2002, CNP has, on average, experienced lower than average reliability.

- As explained in CNP's responses to Board Staff's initial round of interrogatories, there is not much more that CNP can do to improve the reliability of its transmission system.

CNP's response to Board Staff interrogatory 2.0(ii)(d) explains that there is no other viable alternative for resolving the fundamental reliability problem associated with the CNP transmission system and that, while CNP has a range of planned system improvements of a normal or ongoing nature, such improvements will not solve the fundamental problem associated with the system's configuration. Normal or ongoing programs will not address the issues of "load at risk" or the inability for the system to withstand the loss of a single element. Moreover, as discussed further below, part of the risk to CNP's system is due to the proximity of the system to roads.

- As explained in CNP's response to Board Staff Interrogatory 1.0(x), with respect to the performance record over the last three years, CNP has been very fortunate. While this good fortune can significantly influence CNP's reliability statistics and actual performance history, it does not actually mitigate the underlying vulnerability of the system.

- The extent to which this good fortune has and can affect actual performance of CNP's system is demonstrated by the several "near misses" described in the response to 1.0(x), where CNP explains as follows:

> *In addition to the vehicle accidents and burning pole incidents described in Figure 3.2 of the pre-filed evidence, which lists events that resulted in actual system outages, in recent years there have also been a number of similar events on these portions of the system that gave rise to significant risks of lengthy, forced outages, but which did not actually result in service disruption:*
>
> *a. A vehicle accident occurred in 2005 that resulted in a broken transmission pole;*
> *b. A transmission pole burned in 2006 due to insulator tracking;*
> *c. A vehicle accident occurred in 2009 that resulted in a broken transmission pole; and*
> *d. A transmission pole burned in 2009 due to insulator failure on a 34.5 kV underbuild circuit.*
>
> *While each of these incidents could very well have given rise to lengthy outages to CNP's entire transmission system, CNP and the end-users of the system were very fortunate that none of the above-noted incidents actually caused forced outages. Nevertheless, these incidents demonstrate the types of risks faced by CNP, any one of which poses a significant risk of causing a forced outage. Just as a prudent utility in measuring its safety performance would effectively regard a "near miss" in the worker safety context as though the injury or harm to the worker actually occurred, it is prudent in considering CNP's transmission system*

performance to, at least qualitatively, regard incidents such as those listed above as though outages actually resulted.

A photograph of the broken transmission pole that resulted from the 2009 insulator failure noted above is presented in **Appendix "A"**.

- As discussed in Exhibit B, Tab 3, Schedule 1 at pp. 10-11, while CNP's local area performance based on the IESO's process and criteria for assessment has been categorized as "Green" in 2007 and 2008, achieving this "Green" classification has been largely a function of the classification methodology, which compares unsupplied energy levels in recent years against a 10-year average level of unsupplied energy. For the "Green" years of 2007 and 2008, CNP's performance was measured against the 10-year average level of unsupplied energy on the CNP transmission system between 1993 and 2002. Based on this, just a 30 minute outage during a period of average load in one of those years would have caused CNP's classification to fall to "Yellow" and if an outage of such duration were to have occurred in consecutive years, CNP's classification would have fallen to "Red". However, the threshold for achieving the "Green" classification has been reset for 2009 to 2014 based on the 10-year average level of unsupplied energy between 1999 and 2008. As such, for the next 5 years it will take an outage of approximately 150 minutes or more for CNP's classification to fall to "Yellow" and two consecutive years with an outage of such duration for CNP's classification to fall to "Red". Putting this measure into context, declining performance over time lowers this threshold and better performance raises the threshold. The underlying assumption is that a transmitter strives to improve. However, as in CNP's case, when all improvements have been made, the change in the benchmark to signify "Green" merely represents the shifts in CNP's good fortune and the inherent uncertainties associated with the reliability of the system.

  Despite this moving target, any one of the near-miss events noted above would be expected to have given rise to an outage of approximately 4 hours. As such, CNP's classification under the IESO's process and criteria for assessing local area performance can change at any time, as a result of just a single event. There is no certainty that CNP will stay green and there is nothing inherent in CNP's system that would enable CNP to avoid falling to "Yellow" or "Red" under this performance indicator. Consequently, CNP cannot provide assurance to a prospective generator that it can consistently stay within the "Green" classification. For these reasons, there should be little weight given to CNP's recent classifications under this performance indicator.

- Another area of concern for prospective generators may be found in the OPA's FIT contract under which the output of such generation would most likely be procured. A prudent generator would understand that, under the FIT contract (which may be viewed at http://fit.powerauthority.on.ca/), there would be a risk to a generator in connecting to a system where a single contingency would result in the loss of supply. In particular, under

the FIT contract, the payments that a renewable generator is entitled to receive are, essentially, based on the contract price, multiplied by the electricity generated and delivered during any hour. To be "delivered", the generator must provide their electricity output to the applicable connection point and the electricity must be successfully injected into a distribution system or the IESO-controlled grid. Since an outage on the CNP transmission system, whether a forced outage or a planned maintenance outage, would cause an outage on the distribution system that it serves, any such outage would prevent a connected generation facility from being able to deliver its electricity output. In such circumstances, if the generator were able to generate at such times, the generator would not receive payments under the FIT contract for generation that it otherwise would have been paid for.

SI-2

CNP's understanding of the concerns expressed by prospective renewable energy generators is based in part on its experience and from face-to-face discussions or telephone communications with such parties. As such, CNP does not have any documentation at this time in this regard. However, the absence of such documentation should not diminish the concerns that have been expressed.

SI-3

CNP's primary interest is to provide reliable transmission service in order to serve its end-users and potential end-users, which includes prospective renewable energy generators. Moreover, as a licenced transmitter, CNP is cognizant of the recent amendments to the Board's legislative objectives, which call for the Board 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." CNP also recognizes its responsibilities under the deemed conditions of its transmitter licence set out in s. 70(2.1) of the *Ontario Energy Board Act*, which require it to provide priority connection access to renewable generation facilities, as well as to prepare, file, seek approval for and implement plans for the expansion or reinforcement of it's transmission system so as to accommodate the connection of renewable energy generation facilities.

For CNP, these policy and legislative developments highlight the importance of addressing the reliability problems associated with its system configuration. These problems are not specific to prospective renewable generators. Rather, the concern about CNP's transmission system reliability is shared by many of CNP's end-users, including its large commercial and industrial end-users, the agency that operates the Peace Bridge, and local government officials in Fort Erie. Attached at **Appendix "B"** is a series of correspondence from end-users stressing the importance and need for improved reliability on the CNP transmission system. Examples of comments in the letters include the following:

- Aero-Safe Processing Inc., which operates an anodizing, electroplating and metal finishing facility that supplies the military and aerospace industries, explains that "*a large power interruption would impact our customers ability to assemble completed product and meet the very stringent time lines dictated by their prime customers resulting in loss of revenue and large financial penalties . . . Improving the reliability of electrical power to this facility would enhance our ability to meet our customer's timelines, maintain our environmental obligations and employee safety requirements.*"

- AmericanColor, which operates a large printing facility for newspaper and mail inserts and which serves major retailers and large food chains in Canada and the United States, explains that "*a major power interruption would have a large impact on (client) sales, as their flyers would not be printed and distributed in the allowed timeframe. The key impact to the food chains would be the loss of perishable goods that would not be advertised and therefore not sold.*"

- The Town of Fort Erie, through the Office of the Mayor, explains that "*Fort Erie has had its share of power interruptions . . . CNP has proposed an elegant solution . . . This will establish a level of reliability of supply for the Town of Fort Erie that other communities are receiving, a very important economic development benefit . . . As Mayor I wish to offer my support for this CNP project as part of the overall pool of transmission resources and bring the same level of reliability to our border community as other towns and cities across Ontario now enjoy.*"

- Buffalo and Fort Erie Public Bridge Authority explains that "*the Peace Bridge is . . . the busiest border crossing for cars and the third busiest truck crossing (between Canada and the United States) . . . Many sectors of the local, regional, provincial and national economy rely on a free-flowing border with no interruptions. Many factories rely on just-in-time inventory control which would be disrupted if the border is closed. Tourist operators, particularly in the Niagara Region rely heavily on cross border traffic. A long term power outage would have a significant negative impact on border traffic movements and the overall economy. It is imperative that the reliability of the power supply be enhanced to ensure that the border continues to operate uninterrupted. It is crucial that an alternative or a redundant power supply be achieved as quickly as possible.*"

(B) ALTERNATIVES CONSIDERED

References

(1) CNP Responses to Board Staff Interrogatories, Page 16

Preamble

In answer to a Board staff interrogatory 2.0 (ii) (c) regarding the option of improving the 31-step switching procedure to reduce the 4-hour switching time, CNP answered that:

> The actual switching operation that is carried out to effect the change in supply from HONI to USNG (or vice-versa) takes approximately 30 minutes, while the remainder of the four-hour minimum timeframe is attributable to the need for USNG to perform switching operations on it's system and for necessary co-ordination among CNP, HONI, IESO and USNG…CNP does not believe there are any equipment or procedural changes that would be able to materially expedite the procedure for engaging the emergency tie line in response to a forced outage.

It appears that following the loss of the normal supply from Hydro One, the actual switching operation can be done in about 30 minutes but there is a significant delay getting the US National Grid ("USNG") system ready for the transfer.

In answer to a Board staff interrogatory 2.0 (ii) (a), CNP submitted that if the 0.66 km line section between Queen St. Tower and High Tower were to be upgraded, the capacity available from USNG would be limited to 53 MW because of capacity limitations on L46 and L47 on the USNG system.

The Board would like to get a better understanding as to why the four hour switching time could not be significantly reduced and the feasibility/cost of eliminating the capacity limitation on the USNG system.

Questions / Requests

SI-4 Please consult with USNG and other parties if needed (Hydro One, IESO) to provide a summary of the main steps needed to transfer supply of the Fort Erie load to its back-up supply from USNG that account for the four hour time needed to complete the transfer. Please indicate:

(i) time required to complete each step;

(ii) measures that can be taken to reduce the time taken for each step and the amount of time saved;

(iii) overall time needed to complete the transfer assuming all feasible measures to reduce the time are implemented;

(iv) estimated overall cost of implementing the measures to achieve the time in (iii).

SI-5 Please consult with USNG and other parties if needed (Hydro One, IESO) to determine the feasibility and cost of eliminating the 53 MW limitation on the capacity available from USNG so that the entire CNP load (56 MW peak in 2008) can be supplied from the USNG system under emergency conditions for the next 10-15 years. (It is understood that this would be in addition to upgrading of the 0.66 km line section between Queen St. Tower and High Tower at an estimated cost of $150 k).

Responses

SI-4

The main steps needed to transfer supply of the Fort Erie load to its emergency supply from USNG, in the event of a forced outage, are as follows:

- Upon the occurrence of the forced outage, the initial response of CNP staff is to identify the problem, including the source of the outage and the location of the event that gave rise to the outage. If the outage is due to an event on the CNP system, then CNP would dispatch crews to the location in order to assess the damage. Based on the assessment of damage, a decision is made on whether to make repairs so as to restore service without having to engage the emergency supply from USNG or whether to initiate the process for engaging the emergency supply. Where the outage is due to an event on the HONI system, the damage assessment and estimated time for repair will be determined by HONI. Generally, if the repairs can be made and service restored in less time than it would take to engage the emergency supply, then CNP would not seek to transfer supply of the Fort Erie load to USNG. However, if it is determined that restoring service would take longer than 4 hours, then the decision would most likely be to engage the emergency supply from USNG. The total amount of time to complete these steps is fact-dependent as it can vary depending on the nature and location of the event, or the time of day at which it occurs, along with other factors, but can generally be estimated to be up to 120 minutes.

- Once there is a decision by CNP to transfer supply of Fort Erie load to USNG, CNP's System Operator then communicates this information by telephone to the IESO, HONI and USNG. This takes approximately 30 minutes.

- Based on consultation with USNG, it is CNP's understanding that upon receipt of the communication from CNP's System Operator, USNG then initiates its own process so as

to prepare its system to supply the Fort Erie load. This involves, among other things, taking the necessary steps to ensure that USNG has enough capacity to supply the CNP system. A copy of USNG's procedure for the operation of Line 46 is provided in **Appendix "C"**. This procedure demonstrates the various loads for which supply will need to be maintained by USNG in addition to picking up CNP's load under emergency conditions. Based on consultation with USNG, it is estimated that this process takes approximately 60 minutes for USNG to complete if the need arises during business hours. Otherwise, if occurring outside of USNG's business hours, this process could take USNG up to 180 minutes.

- Upon USNG notifying CNP that it is ready, CNP then follows the 31-step Switching Procedure to Supply Fort Erie Load from 46 Line, which is provided in Appendix "A" of Exhibit B, Tab 3, Schedule 1. This procedure begins with CNP confirming the expected duration of the outage and confirming with HONI, the IESO and USNG, after which a series of operational steps are carried out via CNP's SCADA system and in the field at CNP stations #11, #17 and #18. It is estimated that these steps take approximately 30 minutes, after which the Fort Erie load would then be supplied by USNG via the Emergency Tie Line.

As indicated in CNP's response to Board Staff interrogatory 2.0(ii)(c), and as demonstrated from the above description of the process (much of which is beyond CNP's control), CNP does not believe that there are any measures, including equipment or procedural changes, that could be taken that would materially reduce the time needed to complete the process of transferring supply of the Fort Erie load to USNG via the Emergency Tie Line. CNP has consulted with USNG. USNG has confirmed that it requires up to one hour to perform the required switching operations in accordance with their established protocols should the need arise during USNG's normal business hours and up to three hours if outside of its normal business hours.

SI-5

CNP has consulted with USNG. USNG advises that a detailed power system study would be required to determine system capabilities in a contingency scenario.

(C) PROJECT ECONOMICS AND COST RESPONSIBILITY

References

(1) CNP Responses to Board Staff Interrogatories, Page 24

Preamble

CNP's responses to Board staff interrogatories 3.0 (x) and (xi) included the following excerpts:

> While it is true that electricity will flow in both directions, USNG has not sought the benefits arising from the project because USNG already has adequate and reliable supply. Moreover, the USNG system already enjoys N-1 contingency and would therefore derive minimal local reliability benefit from the project.
>
> CNP did attempt to negotiate a cost-sharing agreement with USNG, but as noted in (x) above, USNG was not receptive to the idea because they were of the view that the USNG system already enjoyed N-1 contingency and would therefore derive minimal benefit from the Project.

Questions / Requests

SI-6 Please provide any available written materials including correspondence, e-mail, notes of meetings, letters, memoranda of understanding etc. that document the negotiations that took place between CNP and USNG that led to the conclusion that USNG would derive minimal benefit from the Project and the agreement that CNP would pay for the entire Project.

SI-7 Please provide verification from the OPA that CNP's calculated value of $36.6 million for the benefits to Ontario associated with the increased interconnection capability provided by the Project is a realistic/reasonable value. If it is not, please ask the OPA to provide an estimate of what it considers a realistic/reasonable value.

Responses

SI-6

Please see CNP's responses to the interrogatories of Board Staff, specifically the letter from USNG provided in Appendix "D" and as referenced in CNP's response to 7.0(ii). In that letter, from the Director of Commercial Transmission Services for USNG, it is clearly stated that USNG "anticipates minimal benefits for its interests from the Fort Erie Interconnection Project."

Aside from the above-noted letter, discussions between CNP and USNG in respect of the potential for cost-sharing and the extent to which the portions of the Project situated on the

USNG system might benefit USNG were carried out via telephone meetings between Mr. A. Orford, Vice President of Operations for CNP, and Mr. K. Kennedy, formerly Transmission Account Manager for USNG. There are no written materials evidencing these telephone meetings. Over a two-year period between 2007 and 2008, various meetings were held. These meetings primarily focused on system studies and analysis, with some limited discussion of Project benefits. Throughout this series of meetings, USNG consistently expressed the view that the Project provided no benefits to its system. During a telephone meeting between Mr. Orford and Mr. Kennedy during the first quarter of 2009, the focus of the discussion concerned the question of Project benefits. During the call, Mr. Orford clearly asked Mr. Kennedy to consider whether the Project would be expected to provide any benefits to USNG for which USNG could rationalize making a contribution to part of the Project cost. Mr. Kennedy consulted internally within USNG and, in a follow-up call, confirmed that USNG has determined that it would not carry out any aspect of the Project if CNP was not doing the Project. This is because USNG's system already meets the N-1 contingency criterion, does not require any of the facilities associated with the Project and, but for CNP's proposed Project, USNG has no reason to do any of the work. This response from USNG is consistent with the responses that Hydro One has received from USNG over a longer period, which is that USNG has no interest in pursuing increased interconnection capacity (see HONI response to Board Staff supplemental interrogatory SI-24).

Finally, while Board Staff's question states that there was a "negotiation" that resulted in an "agreement" that CNP would pay for the entire Project, this was not a negotiated business transaction and there was no such resulting agreement. Rather, it was a question of whether there is a benefit to USNG for which it was willing to pay. As the Project does not provide benefits to USNG, if USNG is to carry out any of the work associated with the Project, CNP will be required to cover the related costs.

SI-7

Please see **Appendix "D"** for a copy of correspondence from the OPA with respect to the value of the benefits to Ontario associated with the increased interconnection capability provided by the Project. In its correspondence, the OPA stated that "the use of avoided costs for demand response for this case is not entirely accurate because the value of demand response takes into account the value of reduced reserve margin requirements and losses. The value of demand reduction is expected to be about 20% higher than the value of additional supply." Accordingly, CNP has recalculated the avoided generation capacity benefit associated with the Project so as to take into account this variable. A recalculated version of Figure 4.4 of Exhibit B, Tab 4, Schedule 1 shows the value of the avoided generation capacity benefit at nearly $30.5 million (See **Appendix "E"**). This recalculated benefit is factored into the calculation of the Project Net Present Value in a revised version of Figure 5.2 of Exhibit B, Tab 5, Schedule 1, which demonstrates that the Net Present Value of the Project remains positive at over $4.27 million (see **Appendix "F"**).

(D) ENVIRONMENTAL ASSESSMENTS

References

(1) CNP Responses to Board Staff Interrogatories, Page 29-30

(2) Guide to Environmental Assessment Requirements for Electricity Projects, Ministry of the Environment Environmental Assessment and Approvals Branch, March 2001

Preamble

CNP submitted that the federal environmental and provincial (Ontario) assessment processes is a proponent-driven processes under which the question of whether a proposed Project may be subject to federal or provincial environmental assessment requirements is determined by means of a self-evaluative process and that CNP expects that no environmental assessment requirements will apply to the Project.

CNP also submitted that it is its understanding that Environment Canada and the Ministry of the Environment do not provide verification requested in Board staff Interrogatories 6.0 (i) and (ii). Based on the Table on page 10 of Reference (2), it appears that the only transmission projects that don't have any EA requirements are those with:

- transmission lines operating at voltages less than 115 kV; and

- transmission lines operating at voltage levels of 115 kV or greater with a line length equal to or less than to 2 km.

Questions / Requests

SI-8 Please advise what steps CNP has taken to determine that the provincial and federal organizations responsible for environmental assessments (EA) would not provide verification regarding any EA requirements for the Project. Please provide the details of any contacts made, e.g., names, copies of any correspondence, details of telephone calls etc.

SI-9 Please provide the rationale for CNP's submission that there are no provincial environmental assessment requirements associated with the Project in light of the information in Reference (2) and noted in the preamble.

Responses

SI-8

CNP has consulted with its legal counsel who, based on significant experience in the field of environmental law, including in the areas of federal and provincial environmental assessment requirements, advised that the Ontario Ministry of the Environment and the Canadian Environmental Assessment Agency, do not normally verify for proponents that projects do not trigger requirements under either of the provincial or federal environmental assessment regimes. CNP, through its legal counsel, has also attempted to confirm this with the Ministry of the Environment. However, despite attempts having been made to speak with a particular representative within the Ministry's Environmental Assessment and Approvals Branch and despite that individual's attempts to return the calls, as of the date of these Supplemental Interrogatory Responses, the Applicant has been unable to confirm with the Ministry.

SI-9

Board Staff is requesting that CNP provide rationale for its submission that "there are no provincial environmental assessment requirements associated with the Project." The language in SI-9 suggests that Board Staff may interpret CNP's pre-filed evidence as stating unequivocally that the Project will not give rise to provincial environmental assessment requirements. CNP wishes to clarify that the pre-filed evidence states in Exhibit B, Tab 7, Schedule 1 on page 3 at line 15, that "CNP Transmission *does not expect* that provincial environmental assessment requirements will apply to the proposed Project." CNP's expectation is based on the detailed analysis set out in the same schedule, beginning on page 3 at line 17 and continuing until page 5 at line 15. In the closing sentence of this discussion, it is stated that ". . . CNP Transmission is confident that no provincial environmental assessment requirements will apply to the Project." This statement includes a reference to a footnote in which CNP acknowledges that in the course of performing detailed engineering for the Project, there are two project variables that could change that would affect the finding that no provincial environmental assessment requirements will apply. These variables are described in the analysis below.

CNP's rationale for its submission that, subject to the outcome of detailed engineering, the Project is not expected to give rise to provincial environmental assessment requirements, are, as noted, set out in the detailed analysis on pp. 3-5 of Exhibit B, Tab 7, Schedule 1. As explained on page 4 beginning at line 10, there are exemptions under O. Reg. 116/01 in addition to those cited by Board Staff in the preamble to this Supplemental Interrogatory. In particular, there are exemptions for modifications to existing facilities. These exemptions are not reflected in the table set out at pages 9 and 10 of the Guideline provided as Reference (2). Section 7 of O. Reg. 116/01 provides as follows:

> **7.** An undertaking that is designated under this Regulation as an undertaking to which the Act applies and that is the changing or expanding of a thing that was constructed before this Regulation came into force is exempt from Part II of the Act if,
>
> (a) no approval under section 5 of the Act was required to construct the thing; and
>
> (b) the change or expansion, together with any other change or expansion of the thing that occurred since the thing was constructed, is not a significant modification.

As indicated, the applicability of these exemptions depend upon the definition of "significant modification". The Ministry's *Guide to Environmental Assessment Requirements for Electricity Projects* (Reference (2)), which is incorporated by reference into the regulation, further clarifies at page 12 that "minor modifications" are modifications that are below the threshold for "significant modifications" as defined in section 1 of O. Reg. 116/01. As explained in Exhibit B, Tab 7, Schedule 1 at page 4, line 14:

> "Significant modifications" are, with respect to transmission lines of 115 kV or more, any expansion of or change in the line that includes (a) the replacement of a pole or tower, or (b) a change in a right-of-way for the line, if after the expansion or change the transmission line would still be designed to operate at 115 kV or more.[2] With respect to transformer stations, a "significant modification" would be any expansion of or change in the station that includes the installation of additional transformer equipment if (a) the installation of the additional equipment requires an extension of the site where the station is located and, after installation the station would operate at 115 kV or more, or (b) the installation of the additional equipment would increase the nominal voltage at the station to greater than 230 kV.[3]
>
> CNP Transmission expects that (a) the Project is not likely to require the replacement of any poles or towers or any changes in rights-of-way, and (b) the installation of additional equipment at CNP transformer stations, including the installation of the phase shifting transformer and voltage regulator at Station #18, is not likely to require the extension of any transformer station site and will not increase the voltage of any station to greater than 230 kV. As such, CNP Transmission has a strong basis for its expectation that the Project will represent only a "minor modification" for purposes of the EA Act and O. Reg. 116/01.

---

[2] Section 1(1), O. Reg. 116/01 (Electricity Projects), subparagraph (j) in the definition of "significant modification".

[3] Section 1(1), O. Reg. 116/01 (Electricity Projects), subparagraph (k) in the definition of "significant modification".

Pursuant to section 7(b) of O. Reg. 116/01, so long as the Project only represents a "minor modification", the Project will be exempt from provincial environmental assessment requirements. The exemptions described above are further explained on page 12 of the document provided as Reference (2) under this Supplemental Interrogatory. Please note that the table on pages 10 and 11 of Reference (2), cited in Board Staff's supplemental interrogatory question, does not address these exemptions.

With respect to federal environmental assessment requirements, as explained in Exhibit B, Tab 7, Schedule 1 at page 2, CNP has confirmed with NEB staff that CNP will be required to file an application under section 21 of the NEB Act for prior approval of the changes needed on the international power line that is the subject of its permit EP-137. An application under section 21 of the NEB Act does not trigger federal environmental assessment requirements as it is not listed under the Law List Regulation of the *Canadian Environmental Assessment Act*. Moreover, CNP's legal counsel have canvassed the various other potential triggers that could give rise to federal environmental assessment requirements and concluded that it was very unlikely that any aspect of the project would give rise to such requirements. By not having any applicable "trigger", no "responsible authority" has accountability for the administration of the federal legislation in respect of CNP's Project. This is relevant to the response in SI-8 as to why CNP would not be able to obtain verification that there are no federal environmental assessment requirements that apply.

(E) ABORIGINAL PEOPLES CONSULTATIONS

References

(1) CNP Responses to Board Staff Interrogatories, Page 29-30

Preamble

CNP submitted that:

> While there is a significant off-reservation Aboriginal population in the general vicinity of Fort Erie and the proposed project, there is, to the best of our knowledge, no formal Aboriginal representative council.

Questions / Requests

SI-10 Did CNP contact the Ontario Ministry of Aboriginal Affairs to determine if there are any existing or asserted Aboriginal or treaty rights in the vicinity of the Project? If yes, please provide any correspondence to and from the Ministry. If no, please contact the Ministry to determine if there are any existing or asserted (claimed) Aboriginal or treaty rights in the vicinity of the project.

Responses

SI-10

CNP consulted directly with the Fort Erie Native Cultural Centre, but prior to receiving this supplemental interrogatory did not contact the Ontario Ministry of Aboriginal Affairs. CNP has since contacted the Ministry for purposes of determining whether there are any existing or asserted Aboriginal or treaty rights in the vicinity of the project. A representative of the Aboriginal Relations and Ministry Partnerships Branch of the Ministry has advised that, although he believes there to be no active matters or claims in the relevant area, this cannot be confirmed until a comprehensive search is completed by the Ministry. The Ministry advised that the results of the comprehensive search will be available in January 2010. CNP will notify Board Staff and all parties once the Ministry's response has been confirmed.

(F) OTHER REGULATORY APPROVALS

References

(1) Exh. B, Tab 7, Sch. 1, Pages 1

Preamble

The following is an excerpt from Reference (1):

> CNP currently holds an electricity permit (EP-137) from the National Energy Board ("NEB"), issued in May 1999 under 58.11 of the *National Energy Board Act (NEB Act")*. Permit EP-137 authorized CNP to rehabilitate and to subsequently operate the international power line at Fort Erie. In addition, permit EP-137 revoked and replaced a Certificate of Public Service and Necessity (EC-22), which had been issued in 1959. Section 9 of permit EP-137 requires that CNP obtain prior approval from the NEB for any change to the international power line. Given that the Project includes the removal and replacement of conductors along the international portion of the system that spans the Niagara River between Fort Erie and Buffalo, CNP is therefore required to obtain prior approval for the project from the NEB. Such approval to change the international power line will need to be sought under section 21 of the NEB Act, under which the NEB has authority to vary a permit issued under that Act.

Questions / Requests

SI-26 Please provide a copy of NEB Permit EP-137.

SI-27 What portion of the Project does CNP consider to be an "international power line"[4], as defined in the *National Energy Board Act*? Please identify terminal points, distance, cost and scope of work associated with that portion of the Project.

SI-28 When was the "international power line" first constructed? Did the NEB approve the "international power line" when it was first constructed? Did the Ontario Energy Board have any role with regard to this approval? Please provide copies of the approvals if available.

---

[4] "international power line" means facilities constructed or operated for the purpose of transmitting electricity from or to a place in Canada to or from a place outside Canada.

Responses

SI-26

A copy of NEB Permit EP-137 is attached in **Appendix "G"**.

SI-27

In accordance with NEB Permit EP-137, the portion of CNP's transmission system that is considered to be an "international power line" is that portion of the system that runs from CNP's Station #18 to the international boundary on the Niagara River. This portion of CNP's transmission system is approximately 4 km in length. The work associated with the Project that is to take place on this portion of the system includes the replacement of 0.5 km of conductor from the Bertie Hill Tower to the Queen Street Tower and the replacement of 0.66 km of conductor from the Queen Street Tower across the Niagara River to the High Tower adjacent to Terminal House B in Buffalo, New York. In addition, the installation of the 150 MVA phase shifting transformer and voltage regulator is to take place at Station #18 and therefore forms part of the "international power line". As shown in Exhibit B, Tab 5, Schedule 1 at Figure 5.1, the cost of the conductor replacement work is estimated to be $200K and the cost of the phase shifting transformer and voltage regulator is estimated to be $8.8M. Both of these cost estimates are exclusive of any associated project development costs.

CNP notes that, while these portions of the Project will take place on the portion of the system that is an "international power line" that part of the Project requiring reinforcement is the 2 kilometres of lines A36 and A37 between CNP's Station #11 and Hydro One's Murray TS. This portion of CNP's system does not form part of the "international power line".

SI-28

In 1905, CNP commenced supplying 25 Hz power to Niagara Falls, NY, via cables crossing the Niagara River at Niagara Falls. In 1907, CNP commenced supplying power to the Town of Fort Erie via a 22 kV line in Ontario running from Niagara Falls to Fort Erie. In 1909, the river crossing between Fort Erie and Buffalo, NY was completed and CNP commenced supplying 25 Hz power to Buffalo. In 1998, CNP refurbished the 115 kV link between Fort Erie and Buffalo using the same river crossing mentioned above (there was a re-insulation of the line to increase its operating voltage from 41 kV to 115 kV) for purposes of establishing the line as the Emergency Tie Line.

The National Energy Board was established in 1959. The NEB considered and, on May 14, 1999 approved, the rehabilitation of the international power line for purposes of establishing the river crossing as the Emergency Tie Line (NEB File No. 2200-C010-2), at which time it issued electricity permit EP-137 and an order revoking a certificate of public convenience and necessity for the construction and operation of an international power line that had been issued December

29, 1959. As the date of the (now revoked) certificate falls within the year that the NEB was established, it appears that the certificate may have been issued retroactively by the NEB to authorize the river crossing that had been in place since 1909. The certificate was subsequently amended on May 8, 1969 and on July 9, 1982, before being revoked under Order RO-EC-22 on May 14, 1999.

The Ontario Energy Board was established in 1960. The OEB would therefore not have been involved at the time of construction in 1909 nor at the time the NEB issued its retroactive approval in 1959. CNP is not aware of whether the OEB issued any form of retroactive authorization since 1960. The OEB did not have a role with respect to the approval of the rehabilitation work for purposes of establishing the Emergency Tie Line. Schedule 1 of CNP's Electricity Transmission Licence (ET-2003-0073) defines the transmission facilities of CNP that are the subject of the licence as including "4.4 kms of 115 kV line from Station 18 to the international boundary at Fort Erie."

APPENDIX "A"

Photograph of Broken Pole Caused by 2009 Insulator Failure


2009/04/05

APPENDIX "B"

Correspondence from System End-Users

aero-safe processing inc.

Accredited Nadcap™

1360 Commerce Parkway
P.O. Box 335 Fort Erie
Ontario Canada L2A 5N1

Phone (905) 994-8848
Facsimile (905) 994-8849

GST# 865615157
www.aerosafe.ca

June 26, 2008

To whom it may concern,

Aero-Safe Processing inc. is an anodizing, electroplating and metal finishing job shop specializing in military, aerospace and satellite industrial sub-sectors. Our facility is located in Fort Erie, Ontario and supplies major aerospace companies in Canada and eastern United States.

Our customers demand and Aero-safe Processing specializes in fast turn-around times usually within 3 days of receipt. A large power interruption would impact our customers ability to assemble completed product and meet the very stringent time lines dictated by their prime customers resulting in loss of revenue and large financial penalties.

Improving the reliability of electrical power to this facility would enhance our ability to meet our customer's timelines, maintain our environmental obligations and employee safety requirements. This would attract more customers to acquiring our services based on our ability produce product safely & on time.

Yours truly,

Ed Melanson
General Manager

AmericanColor

May 21, 2008

To Whom It May Concern:

American Color is a large printer of free standing inserts, distributed weekly through the newspaper and mail. The Canadian facility, located in Stevensville, Ontario produces over 3 million inserts daily for a significant number of major retailers and large food chains in both Canada and the USA.

All our clients have time and price sensitive requirements. A major power interruption would have a large impact on their sales, as their flyers would not be printed and distributed in the allowed timeframe. The key impact to the food chains would be the loss of perishable goods that would not be advertised and therefore not sold.

Improving the reliability of the main energy source for this plant would prove beneficial to American Color as it would enhance our ability to meet tight production deadlines and provide timely shipment of product to our customers. This would strengthen our relationships with our customer base as they in turn would be able to have more confidence in their ability to meet distribution schedules of their advertisements to their customers, the general public, on both sides of the border.

Yours truly,

Robert Wildbore
Vice President, Manufacturing

3565 Eagle St., P.O. Box 130, Stevensville, Ont L0S 1S0 • (905) 382-3177 • Fax (905) 382-3612 • www.americancolor.com

CANADIAN GASKET & SUPPLY INC.
P.O. BOX 548, FORT ERIE, ON, L2A 5Y1
Telephone: 905-871-0600 Fax: 905-871-6178

June 11, 2008

To Whom It May Concern,

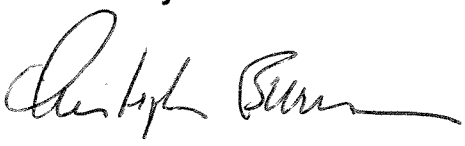
Lamons Canadian Gasket is a supplier of industrial sealing products to companies throughout Ontario, Quebec and the Maritimes as well as various companies in the northeastern USA.

Our sales office located at 240 Jarvis Street, Fort Erie, employs three inside sales representatives and two outside territory managers.

The two most important factors to our clients are price and delivery. A number of our orders are placed as hot rushes. We have developed a reputation of being able to satisfy our customers needs on a 24/7 basis even under the most difficult situations. A major power interruption would have a very negative impact on our sales as well as our daily operations. It might force our customers to seek the services of our competition thus threatening our future relationship with them.

Any project that would improve the reliability and delivery of electricity would be very beneficial to Canadian Gasket. It would allow us to continue to service all of our clients in a professional and timely manner thus continuing to make us profitable.

Yours truly



Chris Burnett
Inside Sales Manager / Key Account Manager
Canadian Gasket & Supply

CANADIAN TIRE

June 16, 2008

To Whom It May Concern:

Canadian Tire Store # 033 is located at 240 Garrison Rd. in Fort Erie and is a very typical retail outlet with Automotive parts and accessories, Hardware, Housewares, Sporting Goods, and Seasonal but also has an 8 bay Service Centre with full service for automotive vehicles. In fact, we have the busiest 8 bay Service Centre for Canadian Tire in the entire country of over 450 stores.

When we experience power outages at our facility, not only does it affect the jobs of all the staff that are working at that time, but most importantly it affects our customers. They come to us in times of outages for their basic requirements of flashlights, batteries, candles, generators, cooking and heating requirements as required (depending upon how long the outage lasts) and all other necessities they require for their home and businesses during power interruption.

Obviously, without power our cash and computers are affected so that we cannot process customers through the cash, process customers through the shop or provide basic 'lookup' information on the computers. Neither are we able to process trucks at our back door considering our dependency on computers for that task as well. It limits our staff productivity and may require us to send them home depending on the length of the outage – which inevitably is an unknown.

All in all, power outages are a major frustration for our business and better reliability for power would be very positive for our customers and staff overall.

Yours truly,

Patti Mills-Roy
Dealer
Canadian Tire Store #033
Fort Erie

CANADIAN TIRE ASSOCIATE STORE
MILLS-ROY ENTERPRISES LTD.
240 GARRISON RD., FORT ERIE, ONTARIO L2A 1M7
TEL: (905) 871-1564 FAX: (905) 871-9471

DMI
INDUSTRIES

July 17, 2008

To whom it may concern:

DMI Canada Inc is a heavy metal wind tower manufacturing plant located in Stevensville Ontario.

DMI clients have government regulated tower erection deadlines. A major power interruption due to the heavy nature of the wind tower industry would have a large impact on North American tower installations and the generation of wind power to consumers in the US and Canada.

Enhancement of the main power source for this facility would prove beneficial to DMI as it would allow DMI to continue its reputation to provide quality wind towers to its current customers in an efficient and timely manner.

Yours truly

George Ranalli
Plant Controller

Durez
CANADA
A DUREZ CORORATION COMPANY

August 15, 2008

FORT ERIE PLANT
100 DUNLOP STREET
FORT ERIE, ONTARIO
CANADA L2A 4H9

P.O. BOX 100
FORT ERIE, ONTARIO
CANADA L2A 5M6

RE: Reliability of Electrical Supply

To whom it may concern,

Durez Canada is a manufacturer of Phenolic Resins and Phenolic Resin Molding Compounds. We produce up to 60 Million pounds of product in our four production units each year, for use primarily in applications for the automotive industry. We currently have a workforce of approximately 85 employees.

All of our customers have strict expectations for delivery and price. In order to maintain profitability, especially in the current economic situation, we operate on a very lean budget and production plan, with very little room for unplanned downtime.

Due to the nature of our processes, we rely very heavily on an uninterrupted power supply to keep production rates high. As per the attached questionnaire, you can clearly see that even a momentary disruption in our power supply can have very significant effects to our productivity and our bottom line, in addition to our ability to meet customer demands.

Any improvements that can be made to the reliability our power supply would be greatly beneficial to our facility.

Sincerely,

Patrick Kuzmich, P. Eng
Operations Manager
Durez Canada

eurocopter
an EADS Company

May 27, 2008

To Whom It May Concern:

Eurocopter Canada Limited (ECL) is a wholly owned subsidiary of Eurocopter S.A.S. head quartered in Fort Erie Ontario. As part of a large global organization, ECL's contribution to the Canadian and world helicopter market is quite significant.

The rising demand for our helicopter s in economic sectors such as the Alberta oil patch, offshore oil, natural gas, law enforcement and tourism have certainly pushed the limitations and the importance of our ability to meet our customer's delivery dates. Any sort of major power interruption would have a significant impact on our ability to meet deadlines to our Canadian customers as well as jeopardize the composite manufacturing that feeds the assembly lines in France and Germany and are distributed world wide.

Improving the reliability of the main energy source for our plant in Fort Erie Ontario would eliminate the risk of long term outages and provide the Eurocopter Group with the confidence that the Canadian subsidiary is well positioned to deliver "ON TIME, EVERY TIME".

Sincerely,

Gérard Bringué
Chief Operating Officer

EUROCOPTER CANADA LIMITED, 1100 Gilmore Road, P.O. Box 250, Fort Erie, Ontario L2A 5M9, Canada, Telephone: 905-871-7772, Fax 905-871-3320

FLEET CANADA INC.

PO Box 600 ♦ 1011 Gilmore Road ♦ Fort Erie ♦ Ontario ♦ L2A 5N3

Phone: 905-871-2100 ♦ Fax: 905-871-2722

Aug. 26 2008

To whom it may concern,

Fleet Canada Inc is a privately owned aerospace company. Our facility is located in Fort Erie Ontario with 500,000 sq ft and supplies major aerospace companies with integrated assemblies details and metal-to-metal bonded assemblies in Canada.

Our customers demand that we meet our delivery commitments and some of these are on a 24-hour delivery turnaround time frame from receipt of order. Any power disruption can cause us to lose a autoclave load of details and this can cause us to miss our shipment to our customers plus the loss of revenue. Any long turn loss of power results in a loss of revenue and could result in large financial penalties from our just in time customers.

Improving the reliability of electrical power to our facility would enhance our ability to meet our customer's timelines This could attract more customers for our business and help us meet our current commitments.

Yours truly

Jack Cunningham
Logistics Manager
Fleet Canada Inc

FORT ERIE
RACE TRACK

P.O. Box 1130 • 230 Catherine Street
Fort Erie, Ontario Canada L2A 5N9
Phone: (905) 871-3200
1-800-295-3770
Fax: (905) 994-3629

TO THE ONTARIO ENERGY BOARD July 17, 2008

Re: Power Interruption Survey;

The Fort Erie Race Track & Slots Facility is a major entertainment venue in the Niagara Region and enjoys visitations of two million people plus each year.

We understand that Canadian Niagara Power (CNP) has proposed a solution, that with new equipment and some line re-building, that in the event an outage occurs, their customers would experience no interruption. I can't stress enough how important this proposed undertaking is to our business.

It is needless to say, very important for us to have a consistent supply of electricity. Any sort of major power interruption has a significant impact on our operations, from a loss of revenue, as well as other related costs.

Improving the reliability of our main energy source for our operations has our full support.

Yours truly

Herb McGirr
Director of Operations

41 RUSSEL ST., P.O. BOX 128,
FORT ERIE ONTARIO
CANADA L2A 5M6

GARRISON TOOL & DIE LTD.

PH: (905) 871-2023
FX: (905) 871-6460

May 27, 2008

To Whom It May Concern:

Garrison Tool & Die Ltd. has been manufacturing fall-arrest hardware in Fort Erie, Ontario for more than three decades. Every day we manufacture and ship thousands of parts to harness manufacturers within Canada, the USA, and Central and South America.

Our plant is fully operational for 17 hours a day in order to meet strict shipping timelines and even a short power interruption can have serious consequences to our production schedules. The resulting loss of production can significantly affect our overheads due to added overtime costs as well as penalties from our customers. Failing to meet shipping deadlines results in premium shipping costs for the company and can diminish the trust and confidence our customers afford us.

As President of Garrison Tool & Die Ltd, and sister-company Canada Perforating Inc. which operates from the an adjoining plant, I would like to reiterate how crucial a reliable power supply is to manufacturing plants in this area. We already face huge challenges in the manufacturing sector in Ontario. A reliable power supply would be beneficial to us in our ability to control costs and effectively compete in a very competitive market.

Yours Sincerely,

D. Coulombe

Don Coulombe
President

Office of the Mayor

DOUGLAS G. MARTIN

May 28, 2008
File No. 120811

To Whom It May Concern

Re: Support for Canadian Niagara Power Project

As Mayor and a resident of the Town of Fort Erie, I am well aware of the need for the supply of safe and reliable supply of electricity that runs homes, businesses and institutions in any community. The Town of Fort Erie has had its share of power interruptions and our Local Distribution Company (LDC) Canadian Niagara Power (CNP) has always capably handled these events promptly. Of course wider scale outages such as the October 2006 storm require broader measures and resources from Emergency Measures, Public Works and assistance by other utilities and these costs are very significant. Outages of any length are an inconvenience to any community.

The Town of Fort Erie has a single source of power supply at 115,000V from Niagara Falls and a second connection with New York State in Buffalo, but this is available during emergencies only, which means when an interruption occurs on the main line, thousands of customers are without power until the cause is determined and repaired or arrangements are made for a supply temporarily from New York State. CNP has proposed an elegant solution that with new equipment on the transmission circuits and some line re-building the emergency tie can be continuously connected which means when an outage occurs on the normal supply, no interruption are experienced because electricity would flow through the tie across the new equipment. This will establish a level of reliability of supply for the Town of Fort Erie that other communities are receiving, a very important economic development benefit.

I am told from analysis done by CNP, that securing this tie will not only help with reliability of the supply to Fort Erie but will be sized to also benefit the greater Ontario grid as another source for regular imports into the Province. This will certainly help as the Province maps out its present strategy for new power supplies and transmission upgrades.

As Mayor I wish to offer my support for this CNP project as part of the overall provincial pool of transmission resources and bring the same level of reliability to our border community as other towns and cities across Ontario now enjoy.

Yours very truly,

Doug Martin
Mayor

mayor@forterie.on.ca

Our Focus: Your Future

THE PEACE BRIDGE
CROSSING PATHS BUILDING FUTURES

October 20, 2008

To Whom it May Concern:

RE: SUPPORT FOR CANADIAN NIAGARA POWER PROJECT

The Peace Bridge is a critical transportation conduit between Canada and the United States. It is the busiest border crossing for cars and the third busiest truck crossing. Over $700 million in goods cross the Peace Bridge weekly.

The Buffalo and Fort Erie Public Bridge Authority (PBA) is not only the operator of the kilometer-long bridge between Fort Erie, Ontario, and Buffalo, New York, but is also the landlord for the Canada Border Services Agency (CBSA) and Peace Bridge Duty Free. As such, we operate 24 hours a day, 7 days a week, 365 days a year.

Many sectors of the local, regional, provincial, and national economy rely on a free-flowing border with no interruptions. Many factories rely on just-in-time inventory control which would be disrupted if the border is closed. Tourist operators, particularly in the Niagara Region rely heavily on cross border traffic.

A long term power outage would have a significant negative impact on border traffic movements and the overall economy. It is imperative that the reliability of the power supply be enhanced to ensure that the border continues to operate uninterrupted. It is crucial that an alternative or a redundant power supply be achieved as quickly as possible.

Yours truly,

Ron Rienas
General Manager

RR/kak

BUFFALOAND FORT ERIEPUBLIC BRIDGE AUTHORITY
100 QUEEN STREET, FORT ERIE, ON L2A 3S6 ▪ 1 PEACE BRIDGE PLAZA, BUFFALO, NY 14213-2494
PHONE (905) 871-1608/(716) 884-6744 ▪ FAX (905) 871-9940
www.peacebridge.com

PENINSULA ALLOY INC.

3600 Eagle St., Box 240,
Stevensville ON Canada L0S 1S0
Telephone (905) 382-3011
Fax (905) 382-3019
www.penalloy.com

May 28, 2008

Canadian Niagara Power Inc.
1130 Bertie Street
PO Box 1218
Fort Erie, Ontario
L2A 5Y2

Attention: A. Orford

Re: Power Interruption Survey

Attached are the estimated costs we could incur on key equipment as a result of power outages of varying lengths.

As we briefly discussed, Peninsula Alloy, having moved into this facility a little over a year ago, is a growing company in a stagnant and declining North American industry. A major reason for the growth being experienced is the short lead time we offer our industrial customers. A relatively brief power outage can in some circumstances lead to major equipment failure, which would be detrimental to our ability to supply customers in, for example, breakdown situations. Breakdown costs on some of the equipment for which we supply components can run into the thousands of dollars a minute. Our ability to supply this heavy industrial marketplacedepends upon being a reliable supplier. A reliable supply of power is critical to maintaining our position in the marketplace, as well as that of many of our customers

Canadian Niagara Power maintaining and improving overall system reliability can only help our export driven growth to continue, and is appreciated.

Yours truly,

Roger D. Heise
President

PHARMETICS INC.
333 Jarvis Street
Fort Erie, Ontario Canada
L2A 2S9
Tel.: (905) 871-1870
Fax: (905) 871-7758

PHARMETICS

May 27, 2008

To The Ontario Energy Board,

Pharmetics is a contract and private label drug manufacturer located in Fort Erie, Ontario since 1974. As a supplier to the Canadian Retail Market and to a number of Major Pharmaceutical Companies both in the US and Canada is it imperative that the facility has stability and the constant ability to supply our clients as necessary.

We have been able to establish ourselves as the supplier of choice to our clients due to our ability to deliver with the Quality and Timing that these markets demand. We are given the trust of our clients to maintain our service and maintain the flexibility for manufacturing their products. Through the years the demands to maintain Flexibility and Service Levels has become paramount, as the Quality and Cost components of the business are now a given.

With ever increasing demands on our business to be the Low Cost and Quality Supplier, we cannot afford to have any losses of utilities. Just in Time and Make to Order are the requirements we need to maintain. Audits of our facilities by our clients are now also reviewing our contingency plans for reliable supply.

The reliability of our electrical supply is necessary to be able to maintain the service to our clients. If we cannot deliver, they cannot sell and it is a loss - loss for everyone.

We fully support the initiative of Canadian Niagara Power to provide a reliable source of supply to our site and to our community. The opportunity to communicate this with our clients will provide further assurances of delivery and service.

Sincerely yours,

Grant D. Gilker
VP Operations
Pharmetics Inc.

PUBLIC WORKS
Water & Wastewater Services
3501 Schmon Parkway, P.O. Box 1042
Thorold ON L2V 4T7
Tel: 905-685-1571 TTY: 905-984-3613
Toll-free: 1-800-263-7215
Fax: 905-685-5205
www.regional.niagara.on.ca

August 27, 2008

To Whom It May Concern:

Re: Support for Canadian Niagara Power Project

As the Associate Director of Operations for Niagara Region's Water and Wastewater Services Division, I have a great appreciation for and reliance on a reliable supply of electricity. In the Town of Fort Erie, the Region owns and operates one drinking water treatment plant, two wastewater treatment plants and a number of pumping stations.

All of the Region's water and wastewater facilities provide essential public services and operate 24 hours per day, 365 days per year. The Region's water treatment plants supply safe drinking water for consumers in Niagara. In addition, our drinking water systems provide water to hospitals and maintain fire flows. The Region's wastewater treatment plants ensure adequate treatment of wastewater to prevent harmful discharges to the environment. Since challenging conditions (i.e. high wastewater flows) are often associated with storm events, having a reliable supply of electricity during these events is of particular importance.

Our plants and larger pumping stations are equipped with standby generator sets in case of a power interruption. Some of our smaller facilities are equipped with UPS. However, an interruption in our supply of electricity is disruptive and increases our operational risks. Furthermore, some facilities must operate in a limited capacity while on standby power.

For the reasons listed, the proposed improvement to Canadian Niagara Power's transmission system in southern Niagara Region has my full support. The benefits of two sources of continuously interconnected power supplies will improve the reliability of our electricity supply, thereby decreasing our operational risks. In addition, I understand there will be other benefits for the overall Ontario electricity grid.

I would be happy to discuss our operations with you further and look forward to the success of Canadian Niagara Power's proposed project.

Yours truly,

Mike Janas
Associate Director, Operations
Water and Wastewater Services Division
mike.janas@niagararegion.ca

June 3, 2008

To Whom It May Concern:

Rich Products of Canada, a subsidiary of Rich Products Corporation of Buffalo New York, has been located in Fort Erie, Ontario, since the operation was established in 1963. The facility produces frozen breads, rolls, pizza, and sweet goods for sale in Canada and exports to the US, with exports accounting for about 70% of the business.

The plant operates six production lines, each with its own spiral freezing system, as well as large holding freezers, that consume 2.4 million kilowatt hours of electricity each month. Associates employed number approximately 300 and we run 24 hours, six days per week.

It is very important that our customers receive their products in a completely frozen state, as it is very perishable. With this in mind, and the fact we are one of Canadian Niagara Powers largest users, improvements to the reliability of uninterrupted power service to the plant definitely contributes to our relationship with our customers as a reputable supplier.

Yours truly,

Marc Chevalier, CMA
Subsidiary Controller

RICH PRODUCTS OF CANADA, LIMITED
P.O. BOX 1008, FORT ERIE, ONTARIO L2A 5N8 (905) 871-2605 FAX (905) 871-6198 WWW.RICHS.COM

S & S PLASTICS INC.

CUSTOM INJECTION MOLDING, HOT STAMP, SONIC WELD & MOULD

May 26, 2008

To Whom It May Concern:

S & S Plastics Inc. is a custom plastic injection molder. We are located in Fort Erie, Ontario.

We have 11 machines that we run on a tight schedule. A major power interruption would have a major impact on our business and affect all our customers. If one order is delayed it causes every order after it to be delayed. We supply product to food chains and also for automotive production. These orders must be delivered on time.

It would be beneficial to S & S Plastics Inc. to have a reliable source of energy. We would be able to keep our production schedule and in turn meet the needs of our customers.

Yours truly,

Son Cao Tran
President

E.MAIL: sontran@forterie.com
1011 HELENA STREET, FORT ERIE, ONTARIO L2A 4K2 TEL: 905 871-8115 FAX: 905 871-5092

Sherwin-Williams Canada Inc.
P.O. Box 218, 224 Catherine Street
Fort Erie, Ontario L2A 5M9
Phone: 905-871-2724

June 25, 2008

To whom it may concern:

Sherwin Williams - Fort Erie is a producer of premium quality wood finishes for the fine cabinetry and furniture industry under the M.L. Campbell brand. The plant, which is located in Fort Erie, Ontario produces roughly 3 million gallons of solvent and water based products annually. Approximately 85% of the products produced at the site are exported to markets in the United States.

Sherwin Williams prides itself on its ability to provide impeccable service to our customers in any market that it services. The ability to produce products precisely to our manufacturing schedule is paramount in being able to offer the high level of service that our customers have come to expect. Anything that impacts our ability to service our markets with the right product at the right time inevitably translates to lost business given the relatively low switching costs associated with our products and those of our competitors.

Aside from the business implications associated with the consistent supply of power, we must consider the health and safety repercussions associated with the loss of power at our site. Given the flammable nature of the raw materials and finished goods, great care is taken to ensure the safety features that manage the equipment that stores these products is robust and well maintained. A loss in power affects the effective operation of that equipment. Although secondary, manual systems are in place, having a consistent supply of power mitigates any risk associated with losses connected with the performance of our safety equipment.

Improving the ability to provide a consistent, high quality source of power not only supports Sherwin Williams' - Fort Erie to achieve the growth that is necessary to insure the long-term sustainability of our brand but it also provides the means necessary to effectively protect our assets.

Thank you,

Paul Sivilotti
Regional Director of Operations
Sherwin Williams Canada Inc.

Shur-Gain

2736 Stevensville Road
P.O. Box 90
Stevensville, Ontario
L0S 1S0
(905) 382-3147
(905) 382-2177 (Fax)

June 16, 2008

To Whom It May Concern:

Shur-gain, a member of Nutreco Canada Inc., located in Stevensville, Ontario is a manufacture and distributor of Animal Feed.

Our feed production is one continuous process. This means that any interruption in power will cease our operations, from our telephone lines to the operation of all equipment. Even a momentary loss of power is disruptive to our equipment and can lead to subsequent problems with production downtime to correct these issues. A power outage in the winter also creates further problems with freezing as some of our equipment relies on continual heating through our boiler system. As well, our fire protection coverage uses air compressors to activate our sprinkler system and any long periods of power outage could in turn incorrectly activate our sprinklers.

Currently our Stevensville site runs on a 5 day, 8 hours per day shift schedule and operates as a surplus facility. In the event of a power outage, our volume could be moved to our other locations without incurring a huge cost. For this reason it is difficult to outline a monetary cost of interruption to our business. Any major power outage would however be inconvenient to our customers, impacting the animals that are awaiting their feed.

Regards,

Kim T. Landers
Plant Supervisor
Shur-Gain, Stevensville

APPENDIX "C"

USNG Switching Protocols

Niagara Mohawk	Doc. No.	A-46.4
	Page	Page 1 of 2
	Date:	10/15/99

SUBJECT	SECTION
HUNTLEY-CNP STATION #18 LINE NO. 46 Controller: West Regional Control Operator	TRANMISSION LINES

I. AUTOMATIC OPERATION

A. Line Trips

1. Huntley Steam Station (Breaker R242)

a. 1st automatic reclosure
10 seconds after line trips – dead line, live bus; synchronous check

b. 2nd automatic reclosure
50 seconds – dead line, live bus; synchronous check

c. 3rd automatic reclosure
30 seconds – live line, live bus; synchronous check

NOTE 1: The other half breaker on this Huntley circuit (R245) does NOT have an automatic reclosure. If the line trips and locks out, the West Regional Control Operator will request a line patrol.

NOTE 2: INDECK Co. is a Cogenerator/I.P.P. on the circuit (49MW). If Line No. 46 (and Line No. 56) trip, INDECK generation will remain off line until Line No. 56 is re-energized. INDECK shall contact the West Regional Control Operator before attempting to synchronize with Line No. 56.

NOTE 3: Line No. 46 is an alternate source to the Canadian-Niagara Power Co. (CNP) 60-HZ system. Upon loss of the normal source due to a problem on the Ontario Hydro system, or a problem on CNP's own 115kv system, CNP station #18 can be restored from Line No. 46.

Ontario Hydro does not permit closed-transition switching by CNP that would tie the O-H system with the NMPC system though CNP even momentarily. Any switching to be performed by CNP will be drop and pick in all cases.

Any CNP 115kv switching involving NMPC Line 46 will be directed by the CNP Operator-in-charge at Rankine Station with prior notice to and permission from the NMPC-WRCC Regional Operator.

Supersedes Document Dated	Authorized By	Approved by
A-46.3 3/16/98	Regional Control	Manager-Regional Control

II. LINE TRIPS TO LOCKOUT

A. Dupont Switch Structure

1. Disconnect 359 – OPEN and check open.

B. Huntley Station

1. Breaker R242 – CLOSE and check closed.

If Line No. 46 restores, the fault is on Line No. 56. INDECK and Dupont Station 133 will be out of service until Line No. 56 is repaired.

If Line No. 46 does not restore, proceed as follows:

1. Dupont Switch Structure

   a. Disconnect 359 – check open.
   b. Disconnect 358 – check open, CLOSE and check closed energizing Line No. 56 from Line No. 47.
   c. Line No. 46/47 transfer trip control switch – PLACE in "Line No. 47" position per Line 46 "B" Instruction – pg. 1, NOTE 2.
   d. NOTIFY Indeck that they may synchronize with Line No. 56.
   e. Disconnect 359 – check open and DECLUTCH.

2. Dearborn St. Switch Structure

   a. D/S 998 – open and check open.

3. Huntley Station

   a. Breaker R242 – CLOSE and check closed.

      If Line No. 46 RESTORES, the fault is on the Dearborn St. SW STRUCTURE – CNP Sta. 18 UG/OH portion of the circuit. Notify Buffalo and CNP T&D and request a line patrol of the OH portion. Pending outcome of patrol, fault testing of the UG cable section may be required.

      If Line No. 46 DOES NOT RESTORE, the fault is on the Huntley-Dearborn St. portion of Line No. 46. Request a line patrol.

Niagara Mohawk

DOC. NO.	B-46.9
PAGE	1 OF 4
DATE	5/15/00

SUBJECT HUNTLEY-CNP STATION #18 LINE NO. 46
Controller: West Regional Control Operator

SECTION TRANSMISSION LINES

CASE NO.	SECTION	PAGE
I	Entire Line	1 - 3
II	Dearborn St. Switch Structure (Disconnect 998) - CNP Station #18	3 - 4

NOTE 1: When the line disconnect is opened at Huntley and the breakers are closed to complete loop, the automatic reclosers are to remain out of service until the line is restored to service.

NOTE 2: Using EMS display "HLOO461C", use the OPEN command on the "Control Point" to transfer the Direct Transfer Trip (DTT) functions to Line 47. Use the CLOSE command to transfer DTT functions to Line 46. **NOTE: Arrow on screen points to Line being monitored.**

NOTE 3: Line No. 46 is an alternate source to the Canadian-Niagara Power Co. (CNP) 60-Hz system. The CNP terminal is at Station #18. Required switching at Station #18 is to be coordinated with the CNP Operator-In-Charge at Rankine Station.

Transfer of CNP Station #18 to Line 46 for planned 115kVoutages on the CNP system will be coordinated between CNP and the WRCC. This switching and switching for restoration of CNP Station #18 to its normal supply (from Ontario Hydro) will be performed manually and will involve drop and pick switching. Ontario Hydro does not permit closed-transition switching by CNP that would tie the O-H system with the NMPC system through CNP, even momentarily.

Any CNP 115kv switching involving NMPC Line 46 will be directed by the CNP Operator-in-charge at Rankine Station with prior notice to and permission from the NMPC-WRCC Regional Operator.

CASE I - LINE NO. 46 - ENTIRE LINE

A. Remove Line From Service

1. Huntley Station

   a. Bus Tie Breaker R191 check closed.

2. F.M.C. Corporation

   a. Disconnect 261 check open and declutched.

3. Kenmore Terminal Station

   a. Disconnect 200 check closed.
   b. Disconnect 201 check closed.
   c. Disconnect 100 check open, CLOSE and check closed tying Line Nos. 46 and 47.
   d. Disconnect 101 OPEN and check open untying Line Nos. 46 and 47.

4. Dunlop Tire and Rubber Company

   a. Disconnect 201 check open and declutched.

5. DuPont Switching Structure

   a. Disconnect 358 check open, CLOSE and check closed tying Line Nos. 46 and 47.
   b. Disconnect 359 OPEN, check open and DECLUTCH breaking parallel and placing DuPont Station 133 and Indeck on Line No. 47.
   c. Line No. 46/47 transfer trip control switch - PLACE in the "Line No. 47" position (See NOTE 2).

6. Chevrolet (Tonawanda)

   a. Disconnect 601 check open.

7. Praxair/Linde Company

   a. Disconnect 301 check open.

8. American Brass Company

   a. Disconnect 101 check open and declutched.

9. Encogen
   a. Disconnect 801 - check open.

10. Buffalo Sewer Authority

    a. Disconnect 201 check open.

11. Canadian Niagara (Rankin Operator)

    a. NOTIFY operator that line will be deenergized (they receive alarm).
    b. CONFIRM Breaker 18R46 is open.

12. Huntley Station

    a. Breaker R245 - OPEN and check open.
    b. Breaker R242 - OPEN and check open de-energizing Line No. 46.
    c. Disconnect 249 OPEN, check open and DECLUTCH.
    d. Breaker R242 - CLOSE and check closed.
    e. Breaker R245 - CLOSE and check closed.

13. Field Disconnect 998 (Dearborn St.)

    a. Disconnect 998 - check closed, OPEN and check open isolating tap to Station 18.

B. Restore Line To Service

1. Canadian Niagara (Rankin Operator)

   a. Breaker 18R46 - CONFIRM open.

2. Field Switch 998 (Dearborn St.)

   a. Disconnect 998 - check open, CLOSE and check closed.

3. Huntley Station

   a. Disconnect 249 check open and RECLUTCH.
   b. Breaker R245 - OPEN and check open.
   c. Breaker R242 - OPEN and check open.
   d. Disconnect 249 - CLOSE and check closed.
   e. Breaker R242 - CLOSE and check closed re-energizing Line No. 46 up to Canadian Niagara Station 18.
   f. Breaker R245 - CLOSE and check closed.

4. F.M.C. Corporation

   a. Check Disconnect 261 check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

5. Dunlop Tire and Rubber Company

   a. Disconnect 201 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

6. DeNemours Switch Structure

   a. Disconnect 359 - check open, RECLUTCH, CLOSE and check closed tying Line Nos. 46 and 47.
   b. Disconnect 358 - OPEN and check open untying Line Nos. 46 and 47.
   c. Line No. 46/47 transfer trip control switch - PLACE in "Line No. 46" position (see NOTE 2; page 1).

7. Chevrolet (Tonawanda)

   a. Disconnect 601 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

8. Praxair/Linde Company

   a. Disconnect 301 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

9. American Brass Company

   a. Disconnect 101 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

10. Encogen

   a. Disconnect 801 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

11. Kenmore Terminal Station

   a. Disconnect 101 - CLOSE and check closed tying Line Nos. 46 and 47.
   b. Disconnect 100 - OPEN and check untying Line Nos. 46 and 47.

12. Buffalo Sewer Authority

   a. Disconnect 201 - check open and REMOVE lock and tag.
   b. NOTIFY the customer that Line No. 46 is available for service.

CASE II - LINE NO. 46 - DEARBORN ST. SW STRUCTURE - CNP STATION #18

A. Remove Line from Service

1. CNP Station #18

   a. Circuit Breaker 18R46 - CHECK OPEN.
   b. Disconnect 1801 - OPEN and CHECK OPEN and declutch.

2. Dearborn St. Switch Structure

   a. Disconnect 998-OPEN, check open and declutch deenergizing the combined UG/OH section of L46.

B. Restore Line to Service

1. Dearborn St. Switch Structure

   a. Disconnect 998 - Check open and reclutch.
   b. Disconnect 998 - Close and check closed reenergizing the UG/OH section of Line 46.

2. CNP Station 18

   a. Circuit Breaker 18R46 - check open.
   b. Disconnect 1801 - check open, reclutch, close and check closed.

APPENDIX "D"

Letter from the Ontario Power Authority (December 3, 2009)

Ontario Power Authority

120 Adelaide Street West
Suite 1600
Toronto, Ontario M5H 1T1

T 416-967-7474
F 416-967-1947
www.powerauthority.on.ca

December 3, 2009

Mr. Angus Orford
Vice President, Operations
Canadian Niagara Power Inc.
1130 Bertie Street
For Erie, Ontario L2A 5Y2

RE: EB-2009-0283 Board Staff Supplementary Interrogatory 7

Dear Angus,

As part of the regulatory process for your leave to construct application (EB-20090-0283), Board Staff asked that you contact the OPA with respect to the following interrogatory:

> Please provide verification from the OPA that CNP's calculated value of $36.6 million for the benefits to Ontario associated with the increased interconnection capability provided by the Project is a realistic/reasonable value. If it is not, please ask the OPA to provide an estimate of what it considers a realistic/reasonable value.

The OPA has assessed the following considerations in responding to the question:

- The value of added interconnection capacity is only one factor in the justification of this facility.
- The applicant's interpretation of the IESO's study and SNC Lavalin's report indicate that the interface capability to transfer power from New York to Ontario is increased by at least 150 MW, and possibly up to 250 MW if the impact of this project on the other interties is taken into account.
- Increased intertie capability provides planning and operating flexibility that has value to Ontario. For example, the IESO has stated that increased interconnection capability provides increased market activity and efficiency, flexibility to address situations of surplus baseload and/or renewable generation, and the flexibility to import during periods of supply shortages.
- In quantifying the value referred to the in the interrogatory above, the major assumptions used in the table where this value was derived are:
  - Avoided costs that were provided by the Ontario Energy Board to Local Distribution Companies for assessing the value of CDM programs. The OPA believes that the use of avoided costs for demand response for this case is not entirely accurate because the value of demand response takes into account the value of reduced reserve margin requirements and losses. The value of demand reduction is expected to be about 20% higher than the value of additional supply.

- The nominal discount rate that was used is 6.27 %, and this is consistent with the OPA's use of a social discount rate for evaluating projects from a social perspective. The OPA defers to the Board to assess the extent that this is consistent with the rest of the case.
- The benefits were assessed over a 30 year horizon, and that is reasonable if the lifetime of the project is expected to be at least 30 years.
- The value was calculated using an additional import capability of 150 MW. Based on information in the application, the proposed project may provide additional import capability, and therefore this could be as high as 250 MW.
- The reduction of the value of an interconnection by 90 % is directionally appropriate. The planning and operation of Ontario's System takes some consideration of the available interconnection capability, and that is consistent with this reduction. This value is on the basis that the facility operates successfully and the facility is controlled by the IESO to allow scheduling of any imports or exports.

Based on this consideration, the estimate is reasonable for the purposes it is intended.

Yours Truly,

Amir Shalaby
Vice-President
Power System Planning

Cc: Bob Chow, OPA
Michael Lyle, OPA
Charles Keizer, Tory's

APPENDIX "E"

Revised and Recalculated Figure 4.4 - Calculation of Avoided Generation Capacity Benefit

Figure 4.4 - Calculation of Avoided Generation Capacity Benefit (*Revised Dec. 8, 2009*)

Adjustment as per OPA Letter of December 3, 2009
"The value of demand reduction is expected to be about 20% higher than the value of additional supply"
i.e. 1.0 MW of Demand Reduction is equivalent to 1.2 MW of Supply
or 125 MW of Demand Reduction is equivalent to 150 MW of Supply

Capacity of Intertie	150 MW
Capacity for Purposes of Avoided Generation (divide by 1.2)	125 MW
Discount Rate	6.27%

Year	Project Year	Avoided * Capacity (CAD$/kW-yr)	% ** Change	Avoided Capacity MW	Value of Avoided Generation	Present Value ($ 000's
2013	1	154.25	-	125	19,281	18,704
2014	2	156.23	1.3%	125	19,529	17,826
2015	3	158.22	1.3%	125	19,778	16,988
2016	4	160.21	1.3%	125	20,026	16,186
2017	5	162.33	1.3%	125	20,291	15,432
2018	6	164.32	1.2%	125	20,540	14,700
2019	7	166.59	1.4%	125	20,824	14,023
2020	8	168.73	1.3%	125	21,091	13,365
2021	9	170.87	1.3%	125	21,359	12,736
2022	10	173.16	1.3%	125	21,645	12,145
2023	11	175.46	1.3%	125	21,933	11,580
2024	12	177.77	1.3%	125	22,221	11,040
2025	13	180.08	1.3%	125	22,510	10,524
2026	14	*182.42*		125	22,802	10,031
2027	15	*184.79*		125	23,098	9,562
2028	16	*187.19*		125	23,398	9,114
2029	17	*189.62*		125	23,702	8,688
2030	18	*192.08*		125	24,010	8,281
2031	19	*194.57*		125	24,322	7,894
2032	20	*197.10*		125	24,638	7,524
2033	21	*199.66*		125	24,958	7,172
2034	22	*202.25*		125	25,282	6,837
2035	23	*204.88*		125	25,610	6,517
2036	24	*207.54*		125	25,943	6,212
2037	25	*210.24*		125	26,279	5,921
2038	26	*212.97*		125	26,621	5,644
2039	27	*215.73*		125	26,966	5,380
2040	28	*218.53*		125	27,317	5,128
2041	29	*221.37*		125	27,671	4,888
2042	30	*224.25*		125	28,031	4,659
	Average (2013 to 2025)		1.3%			
					Generation Capacity NPV	**$ 304,702**
					Capacity Derating	**90%**
					Generation Capacity NPV for Project Valuation	**30,470**

Notes:

* Source: Avoided Cost of Energy, and of Generation, Transmission and Distribution Capacity
- March 28, 2008, Attachment 2, for values to year 2025

** % Change - average from 2013 to 2025 used to forecast avoided capacity for years 2026 to 2042

APPENDIX "F"

Revised and Recalculated Figure 5.2 - Calculation of Project Net Present Value

Figure 5.2 - Calculation of the Project Net Present Value (*Revised Dec. 8, 2009*)

Net Present Value (NPV) of Costs and Benefits		Proposed Project "N-1" Intertie to NYISO
1. Transmission Network Pool Rate Impact (cost)		**$ (45,695,988)**
2. Customer Avoided Costs (CNPI Customers)		
VoLL for CNPI Customers		**$ 16,120,647**
Sub-total		**$ (29,575,340)**
3. Intertie Benefits (Ontario)		
Reliability and Adequacy (avoided generation capacity)	$30,470,211	
Generation Maintenance Benefit	$ 3,378,586	**$ 33,848,797**
NPV Total		**$ 4,273,456**

APPENDIX "G"

NEB Permit EP-137

National Energy Board / Office national de l'énergie

Permit EP-137

IN THE MATTER OF section 58.11 of Division II of Part III of the *National Energy Board Act* (the Act); and

IN THE MATTER OF an application dated 8 September 1998, by Canadian Niagara Power Company, Limited (CNP) pursuant to section 58.11 of the Act, for, *inter alia*, an electricity permit, filed with the Board under File: 2200-C010-2

BEFORE the Board on 14 May 1999.

WHEREAS CNP requested authorization to rehabilitate and operate an international power line extending across the international boundary parallel to the Peace Bridge near Fort Erie, Ontario to Buffalo, New York;

AND WHEREAS CNP, on 19 September 1998, published a notice of the application in the Canada Gazette;

AND WHEREAS pursuant to the *Canadian Environmental Assessment Act* (CEAA) the Board has considered the information submitted by CNP and has performed an environmental screening for the construction and operation of the proposed international power line;

AND WHEREAS the Board has determined, pursuant to paragraph 20(1)(a) of the CEAA, that taking into account the implementation of CNP's proposed mitigative measures and those set out in the attached condition 5, that the proposed project is not likely to cause significant adverse environmental effects;

AND WHEREAS the Board has determined, after considering the information provided by CNP and the interventions and submissions of interested parties, that further public review of the application is not warranted;

IT IS ORDERED THAT CNP be and is hereby authorized to rehabilitate and operate the applied-for international power line subject to the following terms and conditions:

1. The international power line to be constructed and operated pursuant to this Permit shall be owned and operated by CNP.

2. The facilities to be constructed pursuant to this Permit shall consist of the following circuits:

   a) line 6 - from CNP Station 18 to the international boundary on the Niagara River, to be operated at 25 Hz with a voltage of 41 600 volts between phases, and

../2

b) line 7 - from CNP Station 18 to the international boundary on the Niagara River, to be operated at 60 Hz with a voltage of 115 000 volts between phases.

Both lines are to be supported on a single series of steel pole structures except for the steel lattice Queen Street and Bertie Hill towers.

3. The lines will consist of a three phase circuit of three conductors each of 759 000 circular mils of aluminum and steel and where the lines cross the Niagara River, the existing 198 000 circular mils of copperweld copper lines will continue to be used.

4. The new facilities shall be constructed, operated and maintained to meet or exceed all the relevant federal and provincial requirements.

5. Unless the Board otherwise directs, CNP shall implement or cause to be implemented all of the policies, practices, recommendations and procedures for the protection of the environment included in or referred to in its application and its undertakings made to other regulatory agencies.

6. Unless the Board otherwise directs and subject to condition 7, CNP's Line 7 shall not be connected to Niagara Mohawk Power Corporation's (NM) transmission system at the same time, even on a momentary basis, as CNP's system is connected to the transmission system of Ontario Hydro or any of its successor companies as of 1 April 1999 (OH).

7. CNP may apply to the Board to obtain the authorization to connect Line 7 to NM's transmission system at the same time as CNP's system is connected to OH's transmission system by:

a) filing for Board approval technical studies, prepared jointly with OH, demonstrating the feasibility of an arrangement under which Line 7 could be connected to NM's transmission system at the same time as CNP's system is connected to OH's transmission system, and;

b) filing with the Board any agreement CNP may have reached with OH, or any comments CNP may have received from OH with regard to the matter referred to in the present condition.

8. Regarding the possible use of the international power lines authorized under this Permit to export electricity for a third party, CNP shall:

a) obtain from any person in Canada seeking to wheel energy over facilities owned and operated by CNP a copy of the exporting permit or licence issued by the National Energy Board to the exporter, prior to providing transmission facilities to facilitate the export, and

b) not provide transmission facilities to facilitate the export of electricity from Canada without first obtaining a copy of the exporters's permit or licence issued by the National Energy Board.

9. CNP shall not make any change in the international power line authorized by this Permit without prior approval by the Board.

10. CNP shall comply with all of the conditions contained in this permit unless the Board otherwise directs.

NATIONAL ENERGY BOARD

Michel L. Mantha
Secretary