

**IN THE MATTER OF THE *UTILITIES COMMISSION ACT*  
R.S.B.C. 1996, Chapter 473**

**and**

**Re: British Columbia Transmission Corporation  
Project No. 3698395 /Order No. G-70-05  
Certificate of Public Convenience and Necessity  
Application Vancouver Island Transmission  
Reinforcement Project**

**FINAL SUBMISSION OF  
BRADLEY CAMPBELL**

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**Argument and reply to BCTC’s final submission of April 5, 2006.**

1. In the final submission of British Columbia Transmission Corporation, they state,

“BCTC is seeking an order that:

a) A CPCN be granted for the VITR project as proposed by BCTC consisting of a 230 kilovolt AC circuit between Arnott substation and Vancouver Island Terminal as described in exhibit B1-1, section 3.0, pages 28 to 39.

b) The land portions of the VITR project be constructed using overhead construction, except for segment 2 through Tsawwassen for which underground construction be approved, subject to:

(a) BCTC obtaining within 90 days of the issuance of the CPCN order, right of way agreements from at least 51% (at least 52 property owners) providing for underground rights required to construct, operate and maintain the project; and

(b) BCTC reporting to the commission within 95 days of the CPCN order that the 51% threshold has been achieved.

c) Failing achievement of the 51% threshold, the CPCN granted authorizes overhead construction for segment 2 through Tsawwassen.

d) If the commission does not find that the VITR project as proposed to be in the public interest, BCTC requests that the commission issue of CPCN for the VITR project with such modifications as the commission finds to be in the public interest and are supported by the evidence.”<sup>1</sup>

2. I respectfully submit that based on the evidence the CPCN sought by BCTC under a), b), b) (a), b) (b) or c) should not be issued. I further submit that a CPCN for d) should only be issued if, the commission deems it to be a better option than the Juan de Fuca Project and/or the VIC or VIC like project.

**What interests can be considered as part of the public interest.**

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<sup>1</sup> Final submission and argument of BCTC, page 2, at 3.

3. The commission asked parties to address “(w)hat interests can be considered as part of the public interest in respect of the matters to be decided in this proceeding? For example, property values and stigma”<sup>2</sup> and asked that we address this in the context of *Memorial Gardens Association Ltd. v. Colwood Cemetery Company*<sup>3</sup>. In its ruling the Supreme Court stated “the question whether public convenience and necessity requires a certain action is not one of fact. It is predominantly the formulation of an opinion. Facts must, of course, be established to justify a decision by the commission but that decision is one that cannot be made without a substantial exercise of administrative discretion.”<sup>4</sup> The SCC also stated in its ruling with reference to the term “public convenience and necessity” that, “(t)he meaning in a given case must be ascertained by reference to the context and to the objects and purposes of the statute in which it is found.”<sup>5</sup>

4. As BCTC has in its final submission agreed that “the public interest to be taken into account in determining whether an applied for project is in the public convenience and necessity can accommodate a broad range of interests” and “that matters to be considered part of the public interest do not need to be expressly set out in the board’s constituting legislation to be considered”, I will not commentary further unless other intervenors take exception with the view that all interests raised in the evidentiary phase may be considered by the commission in making its decision.

### **Should the commission be concerned with achieving equity among private interests?**

5. I submit that the commission should be concerned with achieving equity among private interests when considering what it is in the public convenience and necessity in this matter. Moreover I submit, that if as BCTC states” the concerns about questions of equity should always be tempered by the realization that equity can never be fully achieved”<sup>6</sup>, that the interests of those facing the greatest inequity and least able to bear that inequity should be given the greatest consideration. I as a homeowner on the ROW in Tsawwassen did not initiate this proceeding. I did not ask for a change or for the

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<sup>2</sup> Transcript 40, Page 7542, lines 11 – 15.

<sup>3</sup> [1958] S.C.R. 353.

<sup>4</sup> Paragraph 9

<sup>5</sup> Paragraph 8

<sup>6</sup> BCTC final submission, page 39, at 101.

current lines to be removed. This situation has been thrust upon me, and if, as I believe the evidence shows, my property value decreases as a result of these proceedings, even if only by what BCTC would consider a small percentage, this would have huge consequences for my personal finances. A 5% to 10% devaluation in my property will cost me \$20,000.00 to \$40,000.00, or put another way, one of my children's entire university educations.

### **Route alternatives**

6. In addressing route alternatives I will only be dealing with the alternatives proposed for the VITR project and my argument regarding route alternatives will only be germane to these proceedings should the commission decide that neither the JDF project nor a VIC or VIC like project is the best solution for the future power needs on Vancouver Island.

7. I submit that if BCTC did not already hold a 50 year old right of way which may have been grandfathered<sup>7</sup> and never required when it was initially built options 1 and 2 would not now be under consideration. What we now know and how we do things today is far different than it was 50 years ago. I submit that in Canada, in the 21<sup>st</sup> century, we should not be putting transmission lines through people's private residential backyards when viable options exist. Today we should be holding ourselves to a higher standard than we did 50 years ago, not a lower one.

8. I submit that options 1 and 2 as proposed by BCTC would impose undue hardship on homeowners along the right of way. I further submit that based on the evidence presented BCTC had made a commitment to the people of Tsawwassen not to recommend option one.<sup>8</sup> This promise was confirmed in letters from Val Roddick, MLA and Richard Neufeld, Minister of Energy and Mines. The evidence speaks for itself, it would appear Ms. Peverett's hurdle<sup>9</sup> was not all that high, and as Machiavelli wrote "a prince never lacks legitimate reasons to break his promise".

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<sup>7</sup> Utilities Commission Act, section 45 (2).

<sup>8</sup> Exhibit B1 – 1, appendix D.

<sup>9</sup> Transcript 16, page 2712, line 17.

## Right of way acquisition

9. I submit with regard to option 2 that BCTC's offer to exchange overhead for underground rights along the right of way through Tsawwassen is not a fair and equitable exchange. BCTC wants homeowners to give up the underground rights on their property and install two underground ducts while retaining the right to have an overhead line for an indeterminate period of time. This is spelled out in an exchange between Mr. Yardley and Mr. Barrett,

Mr. Yardley: Q: Is it your intention, BCTC's intention, or actually—what is BCTC's intention to do with respect to maintaining surface rights for the power line that will remain after the underground line is installed?

Mr. Barrett: A: We'll be asking for the ability to continue that line to be in service for its useful life, or until such time we replace it with an underground line.

Mr. Yardley: Q: And what is its useful life?

Mr. Barrett: A: Well, that depends on the—the actual condition of the line, and what we can do to maintain the line. But I think we can—and again, the specifics of an agreement between the parties is yet to be determined, but I believe we can, you know, give assurances that we would not rebuild that line with some other facility or even rebuild it piecemeal so would last forever. I mean, it's got a finite life.

Mr. Yardley: Q: Okay. Would BCTC agree to a sunset clause type provision that says as of a certain date the authority for BCTC to use the surface of the land for the second power line would no longer exist?

Mr. Barrett: A: Why don't I answer that this way. Of course anything is possible in an agreement between two parties, and it would be possible to put a—you know, the sunset agreement in a right of way agreement. I would caution, however, that BCTC is bound by, you know, by our regulatory framework with the commission, and we do need to continue to have a reliable service to the gulf islands. And in our view right now, that we would be not be adequate service to the gulf islands if—if we were to remove that circuit in Tsawwassen. There are other means by which we could conceivably at some future date create a reliable service to the gulf islands which wouldn't need that line. But I—and again, I'm on shaky legal ground here, what we can commit to as far as the extent it may jeopardize service to our customers. And we'd have to look at that in some kind of detail, I believe, but the answer has to be that it's possible to put that in an

agreement. Whether or not BCTC can do that or is willing to do that at this time, I don't know.<sup>10</sup>

The exchange continued later with,

Mr. Yardley: Q: It's conceivable that the line could be removed in 2017. Is that a fair statement?

Mr. Barrett: A: That is correct.

Mr. Yardley: Q: It's conceivable that the second line could be removed before 2017?

Mr. Barrett: A: That's correct as well.

Mr. Yardley: Q: And it's certainly conceivable that the second line could be removed after 2017?

Mr. Barrett: A: Yes.

Mr. Yardley: Q: Okay. What's the latest possible date that the second line could be removed?

Mr. Barrett: A: I'm not—I really don't have the ability to answer that question.<sup>11</sup>

I submit that as BCTC cannot give an answer to the question of when the second line would be removed, the homeowners are being asked to enter into an agreement that they will not know with any degree of certainty the conditions of, and that if you were to give BCTC the CPCN that they have asked for the homeowners would have to come to that agreement within 90 days, which would not be fair or equitable.

10. I submit that the CPCN application as requested by BCTC would cause an inequitable bargaining condition between the property owners and BCTC. It is my submission and I believe it is borne out in the evidence that the proposed exchange of overhead for underground rights is not a fair exchange and that if the commission were to issue an order allowing BCTC to revert to option 1 if 51% of the property owners did not agree to such an exchange within 90 days would force property owners along the ROW to negotiate from a position of weakness. This order, if given, would also exclude the possibility of any appropriate compensation that might be forthcoming to the property owners through the expropriation compensation process. BCTC testified that it would be

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<sup>10</sup> Transcript 9, pages 1370-1371, lines 9-26.

<sup>11</sup> Transcript 9, page 1377, lines 8-21.

unfair to force them to bargain with Sea Breeze from a position of weakness, yet they are asking the commission to issue an order that would put the property owners in just such a position. As property owners we will have to enter into what we feel is an unfair agreement or face the prospect of higher voltage overhead lines that by BCTC's own testimony will have a negative effect on property values, "if the lines become more visible, the change would be negative".<sup>12</sup>

### **Property value effects**

11. I submit that the expert property valuation evidence of Mr. Larry Dybvig of Grover, Elliott and company as submitted by BCTC<sup>13</sup> with respect to the effects on property values along the ROW is inadequate, irrelevant and poorly done. Mr. Dybvig used improper control groups, ignored relevant research and used insufficient and irrelevant data in formulating his conclusions.

Mr. Dybvig could or would not even address a question that BCTC had said he could and would address,

Mr. Campbell: Q: So between today and the end of phase one, and I'm assuming that would include a year or two for the vegetation to regrow and whatnot, have you done anything or look into what the effect will be on property values or is going to be on property values if this route is chosen between now and then?

Mr. Barrett: A: I think that our expert can comment on that. I'm not qualified to comment on it.

Mr. Carpenter: And I do think that Mr. Dybvig alluded to the potential effects on property values during the period of time that something might be under consideration and more in the public eye, if you will, in his report. I don't think that that was the focus of the main portion of his report, as I said, my recollection is he alluded to that and I think he's prepared to address that.

Mr. Campbell: Q: OK, that's fine, if Mr. Dybvig is prepared to address the intervening time, then that would be fine.<sup>14</sup>

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<sup>12</sup> Exhibit B1 – 37, Grover Elliott report, page 42, line 1097.

<sup>13</sup> Exhibit B1 – 37

<sup>14</sup> Transcript 15, pages 2610-2611, lines 22-14.

However when this question was put to Mr. Dybvig the exchange went as follows,

Mr. Campbell: Q: The first question I have is, were you asked by BCTC to analyze any effects on property values for the time between now and the completion of the project, if route 2 is chosen?

Mr. Dybvig: A: I did not undertake any work looking for. No. I was not asked to do that.

Mr. Campbell: Q: So the time between now and—

Mr. Dybvig: A: That's correct. I did not look at anything in the future.<sup>15</sup>

12. In his report Mr. Dybvig stated "I could locate no studies that discuss the value of facts when the nature of the transmission infrastructure changes, or when the capacity of transmission line increases, which the VITR entails."<sup>16</sup> Yet in his own list of material reviewed is the study "The Effects Of Overhead Transmission Lines On Property Values" by Kroll and Priestly a report prepared for the Edison Electric Institute Sitting and Environmental Planning Task Force dated July, 1992 subtitled "A Review And Analysis Of The Literature"<sup>17</sup> contained a study that discusses this exact situation. When I questioned Mr. Dybvig in cross examination about this study, he said,

Mr. Dybvig A: We were not able to locate copies of all the studies that were in Kroll and Priestly, this was one we couldn't locate a copy of. It's not in print, or we couldn't find.

Mr. Campbell Q: OK, but Kroll and priestly assessed that-

Mr. Dybvig A: They make comments on it, that's correct.

Mr. Campbell Q: That, and on the next page it says in the first full paragraph, about the middle, it says: " the resulting model explains over 80% of price variation, sales prices (in) the neighborhoods where the upgrade occur are consistently found to drop following the upgrade, with a decrease in order of 5%, regardless of the distance from line."

Mr. Dybvig A: Mr. Chair, it's been my experience that it can be misleading to rely on an excerpt from a study. It's best to read the study itself, and we weren't able to find a

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<sup>15</sup> Transcript 24, pages 4540-4541, lines 19-1.

<sup>16</sup> Exhibit B1 – 37, page 1, lines 16-18.

<sup>17</sup> Exhibit B1 – 37, accompanying CD.

copy of this study. So Kroll and Priestly have said what they've said, I can't comment on that.

Mr. Campbell Q: Okay, so you could—you couldn't find that study.

Mr. Dybvig A: I can't comment on this. We did actually look within British Columbia, and undertake studies of three projects to try and identify value of extra changes and infrastructure. In two we could, in the third there wasn't enough sales data.<sup>18</sup>

In an effort not to have an excerpt from a study be misleading and to answer BCTC's claim that "there was no evidence contradicting Mr. Dybvig's opinion or indicating that if overhead lines were constructed through Tsawwassen that this would result in dramatic impacts on property values"<sup>19</sup> what follows is the section from the Kroll and Priestly study that pertains to the properties affected by the upgrade of the power lines from 115 kilovolt to 230 kilovolt.

(a)another study that looks carefully at the relationship of single family home prices to transmission lines was recently completed in California (Pacific consulting services 1991). Funded by Southern California Edison, the study looks at sales in eight different northern California neighborhoods---six crossed by transmission lines and two control neighborhoods. The neighborhoods include several with 115 kilovolt power lines, one with a 230 kilovolt line, *and one where a 115 kilovolt line was upgraded to 230 kilovolt during the study period.* The analysis looks at several types of transmission line effects, including distance from the line, number of towers in view of the property, whether the property is adjacent to or crossed by the right of way, and whether the right of way has been landscaped.

The Pacific consulting services study covers over 1800 sales during a fourteen year period. Prices adjusted overtime using the U.S. CPI for home ownership, and the Mead variables by year are also included in some forms of the model to account for any local price variations beyond national trends. Detailed information on the property is included, such as the lot size, square footage of the house, street type, steepness of street, panoramic view, view of other transmission lines, and developer (which affected quality of the home). The resulting model explains over 80% of price variation. *Sales prices in the neighborhoods where the upgrade occurred are consistently found to drop following the upgrade, with a degree on the order of 5%, regardless of distance from the line. The amount of square footage of the right of way on the property also negatively affects property values.* Being adjacent to the line, however if does not have a significant effect on prices, perhaps showing a balance of the negative effects with the advantages of not having a neighbor to the rear of the house. The study finds distance effects to vary sharply by neighborhood, with no overall distance effect apparent. Some neighborhoods show

<sup>18</sup> Transcript 24, ages 4551 – 4552, lines 18-21.

<sup>19</sup> BCTC final submission, page 47, at 131.

negative effects of proximity to the line, in some forms of the model. The most consistent finding, however, is a positive effect of proximity to the line in a neighborhood where the line is landscaped and developed for recreational use. The analysis also tests for change in the impact of the right of way upgrade overtime, and finds that the effect drops off sharply several years after the upgrade was completed.

The Pacific consulting services study tries to adjust for many of the problems and limitations apparent in other studies, by using a large data set, by conducting extensive field work on home characteristics, type of you and characteristics of the line, and by using price indices and dummy variables for individual years to adjust for broader market characteristics. *By covering a fourteen year period with a line upgrade occurring in the middle, the analysis offers the opportunity to test for the effects of a major change in the line immediately after completion and at later dates.* (Emphasis added).<sup>20</sup>

For the reasons I have stated, I submit that the conclusions contained in Mr. Dybvig's report should be given little or no consideration in these proceedings.

## **EMF**

13. BCTC has testified that EMF levels under or over the proposed new lines will be higher than those currently experienced in the back yards of residents whose properties contain the right of way<sup>21</sup>. I submit that BCTC's entire argument with regard to the issue of EMF's is that they are staying within the guidelines for short term typical exposures, that they have done all they can to mitigate the EMF's and that the commission should follow previous decisions with regard to EMF's. The evidence shows that neither of the first two premises are the case in this instance, and I submit that given the uniqueness of the situation in Tsawwassen this commission may never have had to deal with an exactly analogous circumstance and even if there are similar cases the commission is not bound by precedent, under the utility commission act section 75 "the commission must make its decision on the merits and justice of the case, and is not bound to follow its own decisions". The people whose houses abut the right of way and whose yards are fully contained within the right of way do not live with short term typical exposures, and prior to the evidentiary phase of these proceedings BCTC had refused to discuss EMF mitigation, however, at the request of commissioner O'Hara, BCTC was required to

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<sup>20</sup> Exhibit B1-37, accompanying CD, "The Effects of Overhead Transmission Lines on Property Values" by Kroll and Priestly, pages 49-50.

<sup>21</sup> Exhibit B1-1, table 3-6.

produced a table<sup>22</sup> that shows by burying the cables 1m deeper, placing them closer together and installing passive shielding plates that the EMF's could be reduced by as much as 97.5% at a cost of \$2.1 to \$2.7 million. Instead BCTC's offer was to move the cables into the streets and or advance the second phase of the project if the homeowners in Tsawwassen were willing to pay between \$7 and \$13 million<sup>23</sup> as the only methods to reduce EMF on their property, even though by BCTC's own evidence reduced phase spacing alone, would reduce EMF's by 25%<sup>24</sup> and produce a cost savings due to a more compact ductbank with only a very minor reduction in transmission capacity. I submit that early in this process BCTC should have discussed with the homeowners the possibility of EMF mitigation by these methods and could have possibly, at that time, suggested a contribution towards these measures.

BCTC has stated that the situation in Tsawwassen is unique, and I submit that given this uniqueness requiring BCTC to use an option that does not go through private residential backyards will not set a precedent requiring BCTC to reroute other transmission lines.

## **TFN**

14. In its final submission BCTC states that "in the absence of a mutually agreeable arrangement with the TFN, BCTC believes that it would be virtually impossible to acquire additional right of way through the reserve if other reasonable alternatives exist."<sup>25</sup> I submit that BCTC has not engaged the TFN in any meaningful way to see whether there is, or is not the possibility of an agreement. Based upon the evidence BCTC has not tried to alleviate any of the TFN's possible concerns. In response to questioning by Mr. Arvay about possible compensation, EMF mitigation and archaeological concerns Mr. Fralick for BCTC replied "I did not have a discussion with the Tsawwassen first nation about what accommodations we would undertake if there were a route option 4."<sup>26</sup> I further submit that BCTC has not engaged the TFN in any meaningful way in an effort to make it harder for the commission to choose option 4. Since BCTC has not had any

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<sup>22</sup> Exhibit B1-111.

<sup>23</sup> Exhibit B1-1, option 7.

<sup>24</sup> Exhibit B1-111.

<sup>25</sup> BCTC final submission, page 55, at 159.

<sup>26</sup> Transcripts 25, page 4771, lines 7-9.

meaningful discussions with the TFN, the commission must now try to evaluate option 4 without the benefit of any firm information as to what the TFN's issues may be, what accommodations they might be willing to discuss and what probable cost of those accommodations would be. I submit that the commission should not eliminate this option from consideration based on what BCTC did not do to put all relevant information in front of the commission.

## **Conclusions**

15. I submit the evidence shows that options 1 and 2 are not in the public convenience and necessity as they would cause undue hardship to the homeowners along the ROW and that if the VITR project is chosen as the best solution for the future power needs on Vancouver island that a CPCN should only be granted for one of options 3 through 7.

16. The exchange of overhead for underground rights as proposed by BCTC is not a fair and equitable exchange.

17. The lines currently running through Tsawwassen could be removed while maintaining comparable reliability to the gulf islands.<sup>27</sup> And if the current lines and right of way are removed, I for one would be agreeable to owing compensation in an effort to achieve equity between the parties in these proceedings.

18. As the evidence shows, gains in the Canadian dollar versus the Euro, allows routes other than option 2 to be chosen at the same or less cost than route 2 would have cost when it was initially proposed.

19. There is no evidence to show that if option 3 were chosen it would have any affect on property values on the streets under which it would run, and as the streets are a public utility corridor this route would not present problems with having to obtain a new right of away.

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<sup>27</sup> BCUC information request, 3.171.2.

20. That when considering the issue of EMF's and all other evidence presented during the evidentiary phase of the proceedings that the commission is not bound by precedent and must make its decision on the merits and justice of the case.