Projet de construction du poste Saint-Jean à 315-25 kV et d'une ligne d'alimentation à 315 kV à Dollard-Des Ormeaux

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Projet de construction du poste Saint-Jean à 315-25kV et d'une ligne d'alimentation à 315kV à Dollard-des-Ormeaux

Brief Submitted to the BAPE - May 12, 2016

The Impact to Property market value with the installation of an aerial 315kV transmission line.

Pietro Di Leo

May 12, 2016 1

Executive Summary

Numerous studies delineated here, unquestionably conclude that home prices are negatively impacted by the installation of 315kV transmission lines that are less than 50 meters in proximity to those homes. In particular, a study as recent as 2002, which was funded by Hydro-Québec, by Professor F. Des Rosiers, concluded that "severe visual encumbrances due to a direct view of pylon or conductors does exert a significant negative impact on property prices, with depreciations ranging from 5 % to well in excess of 20 %" He further suggested that "the potential health concern and fears from perspective buyers, founded or unfounded, can exacerbate the devaluation of home prices". Furthermore the visual aspect of these towers in Dollard-des-Ormeaux will impact marketability of homes for the neighborhood, and of the city. The option to bury the transmission lines underground, although more expensive will minimize the visual impact to the environment, the citizens, property prices, and maximize the protection of the electrical grid.

Specifically, this project affects me tremendously, due to the close proximity of the towers to my property line. The distance between the property line and the new pylon tower is only 22 meters. A 52 meters pylon tower 22 meters from my property line will significantly affect the property value of my home, and my concerns regarding EMF and noise will be amplified with such short distance. Similarly, the homes along the corridor would have the same concerns.

In addition to the studies referenced here, there are pictures showing from a visual aspect, how these towers will negatively impact homes, and the landscape. (Appendix A) It is quite evident from the photos, that there will be a significant impact to the market house prices, because buyers will undoubtedly skip those house that have a 52 meters pylon directly behind their house for those that have no pylon. Equally, the other photos clearly show how the city's landscape will change forever in a negative fashion.

Recommendations

I believe the project as presented by Hydro-Québec should not be authorized. It should at least be delayed until further studies or discussions can be had with the city of Dollard-des-Ormeaux and with the residents to arrive at an acceptable option.

The requirement to upgrade the Saint-Jean substation is warranted, but implementing the proposed project will impacted the citizens, the city of Dollard-des-Ormeaux, with regard to our quality of life, environment impact of noise, visual, property values, and concern of health risks. If the transmission lines are buried, then the goal of the Saint-Jean project can be met whilst protecting our environment and the electrical grid.

The citizens and Hydro-Québec want the same ultimate goal, but the method chosen to achieve this goal is different. It's the cost factor, which impedes the project. Fortunately for us, Hydro-Québec is a great resource for all its citizens and they are very profitable. Although, cost is important, it should not be the over riding condition in this case.

We urge the BAPE Chairman and Commissioners to recommend to the Minister, that this project be modified, that an underground solution become the first choice based on the environmental, social viability, and possible negative health impacts resulting from an aerial transmission line in a densely populated residential area.

- 1. Bury the transmission lines underground where the homes are less than 50 meters from the pylons, and above ground where there is more than 50 meters.
- 2. Alternately, the maximum compensation should be given to those homeowners directly in front of the towers. Adequate compensation should be given to those homeowners adjacent to the towers.
- 3. Where possible plant large mature trees to mitigate the visual impact of the towers.
- 4. Remove the 120kV line after the 315kV line is activated.

As the expression goes: "When a problem can be resolved with money, its not a problem it's just an expense"

Introduction

In the "étude d'impact sur l'environnement, Hydro-Quebec presented only the aerial the installation of the new 315kV transmission line. The option as requested by the city of Dollard-des-Ormeaux, and the citizens to bury it underground was not seriously considered. No real study was done. Hydro-Québec presented the cost for the underground solution to be 4 times more expensive, however, the detailed cost estimated that was requested by the citizens was refused to be given. No transparency. In their étude d'impact, (vol. 1, page 25, para 2.3.1), Hydro-Québec stated that a detailed estimate was not done and not required. So with no real study, no detailed cost analysis performed, and refusal to give us a meaningful cost breakdown, how can anyone have any confidence in their \$ 59 m number for the underground option. One year later, upon request by the Mayor, Hydro-Québec gave a four line breakdown of the underground solution. This shows contempt for the Mayor and the citizens.

In their étude d'impact, (vol 1, para 9.8.1, page 9-51), *Hydro-Québec claims, that there is a low visual impact to the region and no impact to property values.* It is our contention, that there is most certainly a negative impact to property values and a visual impact to the community of Dollard-des-Ormeaux.

But first, we must define what the value of the property is based on. There is the replacement cost of the property, which is a calculated amount, and then there is the market value, which is based on the <u>perception of the buyer</u>. There are many variables that determine market value, but essentially it's this perception that translates in establishing the market value of a property. <u>Understanding this key concept is fundamental</u> to the assertion that there will be an impact to property values from these transmission lines. Perception = Value

Yes, over ten years the impact of the 52 meters pylons will be zero, but in the immediate future less than 5 years, there is a significant impact to the market value of homes. This is especially true for upscale homes in the \$ 1 million plus range. In fact, many of the residents who have homes along the servitude corridor are middle class or upper middle class people. However, there are equally many residents that count on the market value of their homes to provide a financial security for their retirement. This can materially impact their financial wellbeing.

Findings

In the Journal of Real Estate Literature, a 2010 paper reviewed six decades worth of research on the effects of power lines on property values. The authors identified first, power lines are visual ugly, second electromagnetic radiation generated by the power lines are believed to effect health, and third, there are generally more restrictions to property directly under the transmission lines and next to pylons. The electromagnetic radiation issue, although the science is inconclusive, the fear that people believe the radiation causes cancer is real. Again perception is reality when dealing with purchasing property. A 1992 survey of appraisers found that 84 % agreed that transmission wires lower property values by an average of 10%. (ref 1)

Study of the Impact of a 315kV electric transmission line in Clark County, Town of Hendren (ref 7) concluded that there was a 23 % negative impact to property values. Proximity to the transmission lines had the greatest impact.

Transmission Lines and Property Values State of the Science (Electric Power Research Institute EPRI 2003) (ref 8) essentially concluded that although the results were mixed, some cases showed a loss in value ranged from 7-15%

American Transmission Company, Zone 4, Northeast Wisconsin – High Voltage Transmission Line Sales (ref 9) concluded that there was a 12 % impact on property less than 200 feet (60 meter) of the transmission lines, and no impact for property over 60 meters.

Properties Near Power Lines and Valuation Issues: Condemnation or Inverse Condemnation (ref 10) conclude that properties adjoined to a power line easement had a 12.9 to 30.7% lower assessment than the average homes not adjoined to power lines. He found many <u>buyers refused to even look at these properties; such properties took twice as long to sell; and some sell at a 25 % loss of value</u>. Overall properties adjoining transmission lines took longer to sell and experienced a 10 to 30 % loss in value.

The Price Effects of High Voltage Transmission Lines on Abutting Homes (ref 11) concluded that the impact of the transmission lines is substantial and highly significant on higher priced homes (1 million dollars)

The study, "Power Lines, Visual Encumbrance and House Values... (ref 12) by François Des Rosiers, concluded "the position of a property along a High Voltage Transmission Line structure highly influences its marketability and therefore exerts a significant impact on its value". The impact on a global sample averages 9.6% of its house price, but it averages 14% in the study area where the setback between the power line and the boundary is only 15 meters. For upper price properties, the findings in the study suggest price drops in the 15% to 20%. In addition, the

negative visual and property value impact decreased rapidly with the distance from the pylon to the boundary. After 150 meters the impact tends to disappear.

In the paper "The Effects of Electric Transmission Lines on Property Values: A Literature Review" the authors reviewed (13) empirical studies of the effects of the presence of transmissions lines on the value of surrounding properties from various authors. In particular, the research done by Francois Des Rosiers (1998) on greater Montreal area, found that "a property both adjacent to an High Voltage Transmission Line easement and facing a pylon will see, on average a drop in value of 9.6% of mean house price, and properties located 1 to 2 lots away from the pylon usually benefit from a market premium between 7.4 to 9.2% due to increased visual clearance and privacy. The negative impact diminishes quickly beyond 100 meters from the easement external boundary, and fades away entirely after 150 meters. Luxury homes prices are more sensitive to the visual encumbrances of these High Voltage Transmission Lines structures" (ref 6)

All the studies performed over the years found a correlation that, houses near power lines sold for less than houses without the towers. There is a definite correlation to proximity to the pylons, and there is no impact to property values for homes that are beyond 200 feet (60 meters). In this particular case, there are homes situated 21 meters from the pylons. When you have identical homes, one with the towers next to it and the other without, a potential purchaser will always choose the house without the tower, thus forcing the homeowner to lower their price. Many people find these towers aesthetically unappealing and an "eyesore"

Its interesting to note that in Hydro-Québec's documentation "les atouts d'un reseau souterrain", Hydro-Québec recognizes that residential properties can increase resale value if the lines are buried under ground. "De plus, les maisons situées dans les secteurs résidentiels où les fils sont enfouls peuvent afflicher une valeur de revente plus élevée" (ref 3)

In addition, Hydro-Québec recognizes and states in documentation, "Distribution souterraine" that to improve the environmental vision, burying the electrical lines, protects the electrical grid from the weather, trees and increases space.

"En plus d'améliorer l'environment visual, l'enfouissement du réseau protégé les installations èlectriques des intempréries et de la vegetation, sans oublier qu-on gagne de l'espace. (ref 4)

Hydro-Québec recognizes and states in their documentation, that the best esthetically solution for residential and dense urban areas, is to have the electrical grid buried underground. This maximizes the visual aspect and also provides the maximan laditude for exploited the above ground terrain. " <u>La solution la plus estétique pour les centrevilles et les quartiers résidentiels. Bien adapté aux pratiques de lotissement des zones fortement urbanisées, le réseau souterrain de distribution de</u>

<u>l'électricité totalement enfoui permet l'embellissement optimal des sites piusqu'il offre advantage de latitude au-dessus du niveau du sol</u>" (ref 5)

In fact in the "BAPE rapport Project de ligne a 735kV de la Chamouchouane Bout-de-l'Ile du Saguenay-Lac Saint-Jean á Montreal, dans son rapport, le BAPE soutient "que les propriétaries devraient receiver une compensation financière d'Hydro-Québec" (ref 2)

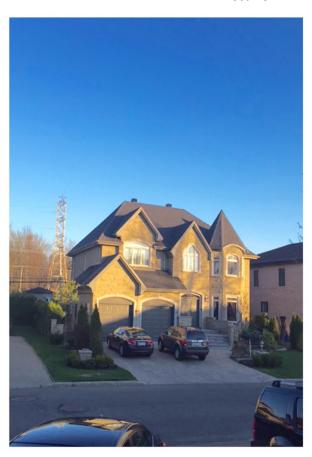
In 2009, BC Hydro purchase 104 homes from the residents who were adjacent to the new 230kV high voltage transmission line in the Tsawwassen. BC Hydro believed like Hydro-Québec, that there is no impact to property values, so they purchase the homes and intended to resell the homes over the next two years. However, in 2010, as reported by CTV Vancouver news, only 28 homes were sold. Mr Paul Eviston, who is a realtor stated that 2 out 10 buyers would consider buying those homes. 8 out of 10 buyers (or 80 %) would not buy those homes. It seems that the concept of buying these homes for resale will cost BC Hydro \$23 million, (as per BC Hydro estimate). BC Hydro's theory was proven wrong at a significant cost. It is interesting to note that burying the lines underground was estimated to be \$ 24 million. (ref 13)

It is apparent from the numerous studies, Hydro-Québec's own documentation, and the BAPE's recommendation in the Chamouchouane project, that the misconceived notion of minimal impact to house prices is unfound, and that there most certainly is an adverse impact to property values. Burying the lines underground is the most optimal solution to minimize the visual impact to the landscape. To further demonstrate the visual impact to the community and to our properties, I have attached pictures. See exhibit 1

Appendix A

Exhibits

Picture A





View facing house with new aerial tower behind house adjacent to existing tower.

The new 315kV tower being 52 meters will protrude extensively has shown in the picture. It is irrational to state that there will be no impact. A potential buyer will undoubtedly pass this house for another house without this 52 meters tower.

Picture B

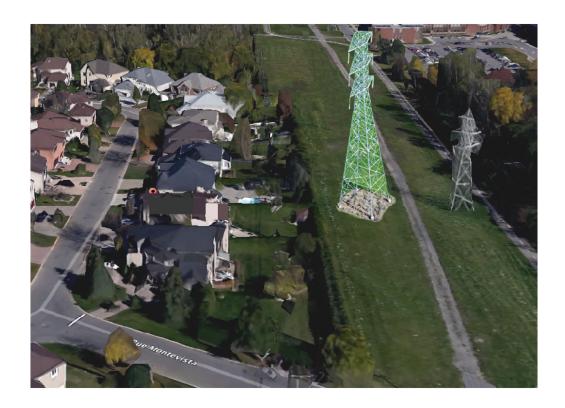


View of backyard with the new aerial tower adjacent to existing tower.

The new 315kV tower being 52 meters will protrude extensively has shown in the picture.

Again, a potential buyer will pass on this house, and go to another house without the tower. The visual impact is tremendous.

Picture C



View of new aerial tower in back of house adjacent to existing tower.

The new 315kV tower being 52 meters will protrude extensively has shown in the picture. This will have a material impact on the property value of the houses along the corridor and as well as the visual impact to the community.

Picture D





View of area near DDO Civic Centre facing North West (Hotel-de-ville/De Salaberry)

There is the 30 meters existing 120kV line behind the trees, however the new 315kV tower being 52 meters tall, will protrude extensively over the trees, has shown in the picture. It would be irrational to conclude from this picture that the new 315kV line would have a "global low visual impact to the region" as stated by Hydro-Québec.

Picture E





View from Sources boulevard overpass at A40 looking North West.

There is the 30 meters existing 120kV line behind the building, however the new 315kV tower being 52 meters will protrude extensively has shown in the picture. Again, Dollard-des-Ormeaux's landscape will be changed drastically.

Picture F



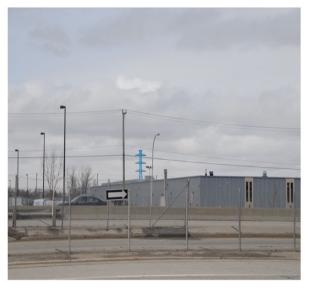


View from St-Jean boulevard, overpass at A40, looking North East.

Again, there is the 30 meters existing 120kV line behind the building, however the new 315kV tower being 52 meters will protrude extensively has shown in the picture.

Picture G





View from A40 E, looking North.

Again, there is the 30 meters existing 120kV line behind the building, however the new 315kV tower being 52 meters will protrude extensively has shown in the picture. In fact, people travelling on the A40 east or west will clearly see the new towers and they will undoubtedly recognize that they are passing the city of Dollard-des-Ormeaux.



View from Montevista looking East towards Sources substation.Again, the new 315kV tower being 52 meters will protrude extensively has shown in the picture.

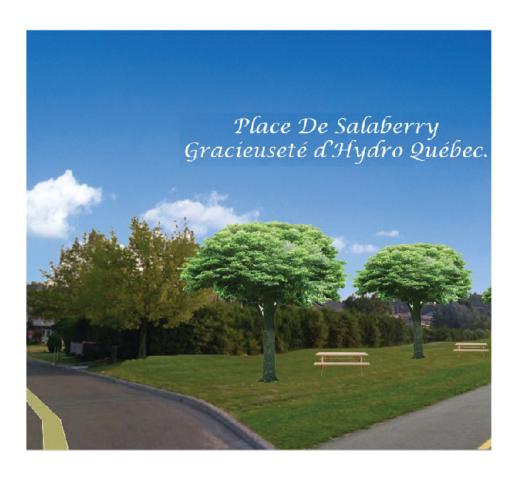
Picture I



View from Montevista looking East towards Sources substation.

Again, the new 315kV tower being 52 meters will protrude extensively has shown in the picture. To put the height in perspective, please note the person at the base of the 52 meters pylon. (Right photo)

Picture J



View from Montevista looking East towards Sources substation.

This photo is an example of what the corridor would look like if the 315kV and the 120kV lines were buried underground. It is visually beautiful, serene and it would not only increase property values but also enhance the city's landscape.

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