

### **METRO NORTH TRANSMISSION STUDY**

Summary Report of Study Phase Community Open Houses

April 2014

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#### **1.0** INTRODUCTION

This Summary Report of Study Phase Community Open Houses presents the public feedback received on the Metro North Transmission (MNT) Study during the first round of community open houses, administered and conducted by BC Hydro from January 28 to February 4, 2014; and, from phone calls, e-mails and faxes received between January 13 and March 31, 2014.

Comments, questions, advice and ideas were received regarding alternative route planning, construction and operations issues and ongoing communication. Information collected during this round of community open houses informs BC Hydro's decision of a leading route alternative for the transmission line, and the design and content of future public consultation on that alternative.

#### **STUDY BACKGROUND**

BC Hydro is planning to build a new 230 kilovolt (kV) transmission line(s) between Coquitlam and Vancouver to address load growth (growing demand for electricity) in the Metro Vancouver area and to strengthen the reliability of the network.

Three routing alternatives are under consideration. The transmission line could be built with a combination of overhead lines—using existing rights-of-way—and underground circuits in city streets wherever possible. Modifications to existing substations will be required to support the new line(s). The earliest in-service date is 2018.

#### **CONSULTATION PROGRAM SUMMARY**

The Metro North Transmission Study consultation introduced the study to the general public and property owners living along existing rights-of-way within the study area, with dialogue focusing on:

- The need for the study;
- The three proposed routing alternatives; and,
- Next steps in the consultation process, e.g., ongoing meetings with public stakeholders and posting updates to the study website

#### 2.0 METHODOLOGY

#### 2.1 NOTIFICATION

The public was informed of the community events by means of the following mechanisms:

- Ad placement in the following local newspapers:
  - o Burnaby News Leader
  - o Burnaby Now
  - o Coquitlam, Port Moody Now
  - o Tri-City News
  - o Vancouver Courier (East side)
- Invitations sent by Canada Post mail-drop to residents living in the vicinity of the potential routing alternatives in the municipalities of:
  - o Coquitlam
  - o Anmore
  - o Port Moody
  - o Burnaby
  - o Vancouver
  - o New Westminster
- Social media (Twitter) notifications
- Study website: www.bchydro.com/mnt

Notifications were also sent to mayors, councils and senior staff of municipalities; Members of the Legislative Assembly; and, Members of Parliament within the study area. A copy of the ad and invitations are included in Appendix A.

#### 2.2 EVENT LOCATIONS

Open houses were held in four communities in practical proximity within the study corridor for ease of access for participants.

Tuesday, January 28, 2014 5:00pm to 8:00pm Executive Plaza Hotel, Aspen Birch Room, 405 North Road, Coquitlam, BC

Wednesday, January 29, 2014 5:00pm to 8:00pm Italian Cultural Centre, Trattoria Room 3075 Slocan Street, Vancouver, BC

Thursday, January 30, 2014 5:00pm to 8:00pm Port Moody Civic Centre Galleria 100 Newport Drive, Port Moody, BC Tuesday, February 4, 2014 5:00pm to 8:00pm Executive Plaza Hotel, Pavilion Room 4201 Lougheed Highway, Burnaby, BC

#### 2.3 OPEN HOUSE FORMAT

All open houses were conducted in an informal, drop-by format allowing visitors to learn about the study at a pace reflecting his or her own level of interest and expertise, and to engage in dialogue with BC Hydro resource people on the issues important to them.

The focus of the information material at each open house was a set of textual and graphic display panels (see Appendix B). Copies of a large orthophoto map featuring three routing alternatives and a potential future project were displayed along with the storyboards at the open houses. Both the display panels and the map were made available to the public on the study website.

A comment form was distributed to all participants to complete and either deposit in a drop box at the event or submit to BC Hydro at a later date.

The study manager and representatives from the study team including, stakeholder engagement, engineering, properties, system planning, environment and aboriginal relations were present at all events to answer questions and hear comments. These questions and comments were recorded on large flip-charts with the intent to prompt discussion with other participants.

#### 2.4 OPEN HOUSE PARTICIPATION AND OTHER RESPONDENTS

More than 200 people attended the open houses. Attendance was as follows: Coquitlam – 55 participants Vancouver – 25 participants Port Moody – 75 participants Burnaby – 61 participants

Twenty-two (22) comment forms were submitted. As well, the study team responded to over 90 telephone calls and 40 e-mails during the period between January 13 and March 31, 2014.

#### 3.0 SUMMARY OF FINDINGS

The following summary reflects key discussion themes derived from:

- questions and comments received from one-on-one conversations between open house participants and the study team about the three alternatives presented
- comment forms
- e-mails
- telephone conversations

A more detailed summary of comments received is in Appendix C: Public Feedback.



Key substations associated with alternative descriptions:

Coquitlam:	MDN – Meridian		
	COK – Como Lake		
Burnaby:	HPN – Horne Payne		
Vancouver:	MPT – Mount Pleasant		

**ALTERNATIVE 1** – Como Lake Substation in Coquitlam to Horne Payne Substation in Burnaby (overhead)

As compared to other alternatives, little feedback was provided on this segment of Alternative 1. Of the limited feedback received, support for this alternative was based on the fact that there are very few residences along this existing right-of-way corridor. There was also some concern that the trails around the south shore of Burnaby Lake could be affected during construction.

#### **ALTERNATIVE 2**

Meridian Substation in Coquitlam to Burrard Inlet (Port Moody arm) south shore Burnaby (overhead)

Feedback for this segment of Alternative 2 highlighted concern for potential health impacts from the installation of an additional overhead circuit within the existing right-of-way and the visual effects that a new transmission line could cause. Comments were also received on the potential for property impacts during construction and environmental concerns associated with tree removal and the overhead crossing of the Burrard Inlet. Some participants preferred this alternative because this segment has the least number of residences along an existing right-of-way. There were requests to place the new transmission line underground.

Burrard Inlet (Port Moody arm) south shore to Horne Payne Substation in Burnaby (overhead and/or underground)

Feedback for this segment of Alternative 2 focused on potential health and safety effects of the new transmission line and construction near homes and schools.

### **ALTERNATIVE 3** – Como Lake Substation in Coquitlam to Horne Payne Substation in Burnaby (underground)

Most of the feedback for this segment of Alternative 3 came from Coquitlam residents and their comments were focused on Como Lake Avenue. There is much concern about the potential construction effects this project could generate along Como Lake Avenue, especially since it could occur shortly after the Evergreen Line project is completed in the same area or around the same time as a proposed FortisBC project and multiple residential development projects. There were several questions about routing options within this alternative given that there are no east-west thoroughfare streets other than Como Lake Avenue.

## **ALL ALTERNATIVES** – Horne Payne Substation in Burnaby to Mount Pleasant Substation in Vancouver (underground)

Feedback for this segment, which is common to all routing alternatives, focused on the potential for health and safety effects of a new transmission line. Because this segment would be built underground, the study team received questions about the operational considerations of an underground transmission line, such as how much maintenance is required and how often would the line need to be excavated and repaired throughout the course of its life. There were also many routing suggestions for this alternative that included building the line along the Grandview Cut (a below-grade rail line corridor that is currently used by SkyTrain and the Burlington Northern Santa Fe Railway). There were also questions around how an underground transmission line could interact with other underground utilities such as water mains and gas mains and how construction might affect existing heritage trees.

## **POTENTIAL FUTURE PROJECT** – Meridian Substation to Como Lake Substation; associated with Alternatives 1 and 3 (overhead)

This potential future project generated the most feedback from the open houses. The dominant themes were concerns about health and safety; concerns that property values would decrease; and, concerns about building an additional transmission line through a dense, residential area. There were also concerns about the environment given the number of trees that would need to be removed along the east side of the existing right-of-way. It was also noted that there are two elementary schools adjacent to the right-of-way and several play fields under the existing transmission lines and it was felt that the addition of a fourth circuit would be excessive.

#### 4.0 NEXT STEPS

The input summarized above will be considered with input from First Nations consultation activities, discussions with municipalities and other parties interested in the MNT Study, and the results of preliminary environmental and engineering studies to aid in the selection of a leading alternative for further definition.

BC Hydro will present details about the leading alternative and seek further public input on any route variations at community open houses to be held in fall 2014. Input received from these recent open houses will help us plan for these discussions. **APPENDIX A: Open House Notification** 

To address the growing demand for electricity and to strengthen the reliability of the transmission network in Metro Vancouver, BC Hydro is proposing to build a new 230 kV transmission line(s), between Coquitlam and Vancouver.

We invite you to learn more about the study, and to share your knowledge of the study area as we explore three route alternatives for the proposed transmission line. Each alternative considers using existing BC Hydro rights-of-way or road corridors.



DATE: Tuesday, January 28, 2014

TIME: Drop-in anytime between 5:00pm to 8:00pm

LOCATION: Executive Plaza Hotel, Aspen Birch Room, 405 North Road, Coquitlam, BC

For more information, please visit **bchydro.com/mnt** or contact us at **604 623 4472** or **stakeholderengagement@bchydro.com**.

Publication:Tri City News - BCNGSize:8.8125" x 80 linesInsertion date:Jan 15, 24



#### METRO NORTH TRANSMISSION STUDY-ROUTE ALTERNATIVES

4099

BC hydro

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We invite you to learn more about the study, and to share your knowledge of the study area as we explore three route alternatives for the proposed transmission line. Each alternative considers using existing BC Hydro rights-of-way or road corridors.

DATE: Wednesday, January 29, 2014

TIME:



FOR GENERATIONS

or contact us at 604 623 4472 or stakeholderengagement@bchydro.com.

Publication: Vancouver Courier – East Side GM Size: 8.562" x 85 lines Insertion date: Jan 17, 24

To address the growing demand for electricity and to strengthen the reliability of the transmission network in Metro Vancouver, BC Hydro is proposing to build a new 230 kV transmission line(s), between Coquitlam and Vancouver.

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We look forward to seeing you.

#### DATE: Thursday, January 30, 2014

Drop-in anytime between 5:00pm to 8:00pm TIME:

LOCATION: Port Moody Civic Centre Galleria, 100 Newport Drive, Port Moody, BC

For more information, please visit bchydro.com/mnt or contact us at 604 623 4472 or stakeholderengagement@bchydro.com.

Coquitlam-Port Moody Now – GM Publication: 8.562" x 82 lines Size: Insertion date: Jan 17. 22



4099

BChydro

FOR GENERATIONS

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We look forward to seeing you.

- DATE: Tuesday, February 4, 2014
- TIME: Drop-in anytime between 5:00pm to 8:00pm

LOCATION: Executive Plaza Hotel, Pavilion Room, 4201 Lougheed Highway, Burnaby, BC

For more information, please visit **bchydro.com/mnt** or contact us at **604 623 4472** or **stakeholderengagement@bchydro.com**.

JNDERGROUND TRANSMISSION LINES (DASHED) OVERHEAD TRANSMISSION LINES (SOLID) EXISTING TRANSMISSION LINES ALTERNATIVE 1 ALTERNATIVE 2 Q ALTERNATIVE 3 FUTURE TRANSMISSION LINE ASSOCIATED WITH ANMORE ALTERNATIVES 1 AND 3 O MDN 0 SUBSTATION C  $\Delta$ THERMAL GENERATING STATION • MOUNT PLEASANT SUBSTATION (UNDER CONSTRUCTION) 0 COQUITLAM MOODY HPN MPT O O COK 0 VANCOUVER BURNABY **CSNO** NEW WESTMINSTER

#### METRO NORTH TRANSMISSION STUDY-ROUTE ALTERNATIVES

contact us at **ou4 o23 4472** of **stakenotderengagement@bchydro** 

Publication:Burnaby Now - GMSize:8.562" x 82 linesInsertion date:Jan 17, 22, 31

4099

BChydro

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Publication:Burnaby News Leader - BCNGSize:8.8125" x 86 linesInsertion date:Jan 22, 29

BChydro C For generations

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January 15, 2014

FOR RESIDENTS/BUSINESSES ALONG EXISTING RIGHTS-OF-WAY IN ANMORE, COQUITLAM AND BURNABY

#### Metro North Transmission Study Invitation to Community Open House

We are writing to let you know about a study underway to address the increased demand for electricity in Metro Vancouver.

The purpose of Metro North Transmission (MNT) is to increase electrical transmission capacity between Coquitlam and Vancouver to address load growth while strengthening the reliability of the network. The study examines three alternatives that entail routing options for one or two 230 kilovolt transmission lines from Coquitlam through Burnaby to Vancouver. One of these alternatives may involve the existing right-of-way in the vicinity of your property.

Each alternative proposes routing through or nearby the Horne Payne Substation (HPN) in Burnaby and considers the use of existing BC Hydro rights of way or road corridors where possible. See map on the opposite page.

We are in the early stages of study for MNT and are determining the cost and impact of each alternative. BC Hydro is consulting with First Nations and local governments on these alternatives. Community open houses are planned for late January/early February and you are welcome to attend the event closest to you to share your thoughts and knowledge of the study area:

Tuesday, Jan 28: Coquitlam	Thursday, Jan 30: Port Moody
Executive Inn, 405 North Road	Port Moody City Hall, 100 Newport Drive
Drop-in 5:00 pm to 8:00 pm	Drop-in 5:00 pm to 8:00 pm
Wednesday, Jan 29: Vancouver	Tuesday, Feb 4: Burnaby
Italian Cultural Centre, 3075 Slocan St.	Executive Plaza Hotel, 4201 Lougheed Hwy
Drop-in 5:00 pm to 8:00 pm	Drop-in 5:00 pm to 8:00 pm

We will decide on a leading route alternative this spring, after community, public and First Nations consultation.

If you would like more information about this important study please visit our website <u>www.bchydro.com/mnt</u> or contact us at:

604-623-4472, or stakeholderengagement@bchydro.com



FOR RESIDENTS/BUSINESSES IN THE VICINITY OF CONCEPTUAL UNDERGROUND ROUTE ALTERNATIVES

January 15, 2014

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Each alternative proposes routing through or nearby the Horne Payne Substation (HPN) in Burnaby and considers the use of existing BC Hydro rights of way or road corridors where possible. See map on the opposite page.

The proposed alternatives do not immediately involve use of right-of-way in the vicinity of your property; however, we have identified that Alternatives 1 and 3 will require a <u>future project</u> which may involve the installation of an additional transmission line between the Como Lake Substation (COK) and Meridian Substation (MDN) to further reinforce the system. This future project may involve the right-of-way in the vicinity of your property. This work could occur between four and six years from the MNT inservice date which is currently estimated to be October 2018.

We are in the early stages of study for MNT and are determining the cost and impact of each alternative. BC Hydro is consulting with First Nations and local governments on these alternatives. Community open houses are planned for late January/early February and you are welcome to attend the event closest to you to share your thoughts and knowledge of the study area:

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# WELCOME TO THE BC HYDRO COMMUNITY OPEN HOUSE



# METRO NORTH TRANSMISSION STUDY

The purpose of this open house is for you to provide your comments on the information presented and to share your local knowledge of the study area. Members of the study team are available to answer your questions.

## Please take the time to fill out a comment form before you leave.



# METRO NORTH TRANSMISSION STUDY



# THE DEMAND FOR ELECTRICITY IN METRO VANCOUVER IS GROWING

In order to meet this demand, we need to transport additional power coming into the regional grid.

Adding new transmission line(s) is the most cost-effective solution to address this increasing electricity demand. New transmission line(s) will also increase electrical transmission capacity and strengthen

the reliability of the Metro Vancouver electricity network.

# **BChydro (** For generations

# THE EXISTING TRANSMISSION SYSTEM







# ADDRESSING THE GROWING DEMAND FOR ELECTRICITY

The study proposes building transmission line(s) with a combination of overhead lines—using existing rights-of-way wherever possible and underground circuits in city streets. Modifications to existing substations will be required to support the new line(s).

There are three routing alternatives currently under consideration. The proposed lines are between 27 and 30.2 km in length and extend

from Coquitlam to Vancouver. Distances are approximate.

The earliest in-service date is 2018.

The alternatives that originate at Como Lake (COK) Substation would require a future project that would involve a new 230 kV line from Meridian (MDN) Substation to Como Lake Substation. This future project would likely be required between 2022 and 2024.

Visit the large maps in the centre of the room for a closer look at the three, conceptual route alternatives.



# 3 ROUTING ALTERNATIVES UNDER CONSIDERATION

## METRO NORTH TRANSMISSION STUDY—ROUTE ALTERNATIVES

UNDERGROUND TRANSMISSION LINES (DASHED)
 OVERHEAD TRANSMISSION LINES (SOLID)





# **BChydro G** For generations

# DISMISSED ALTERNATIVES

BC Hydro reviewed other alternatives to address electricity supply constraints but these were rejected because they were uneconomical.

## Non-wire Alternative

Local generation using gas-fired generation

## Wire Alternatives

- 500 kilovolt circuit(s) with a new substation
- 230 kilovolt circuit(s) requiring Horne Payne (HPN) Substation redevelopment
- 230 kilovolt circuit(s) originating from south Metro Vancouver
- 230 kilovolt circuit(s) through the North Shore

**BChydro**  BC Hydro needs to account for demand side **POWErSMart** management in its long-term planning.



# ENVIRONMENT AND OTHER STUDIES



All routing alternatives are undergoing a preliminary environmental assessment to identify the potential effects of the potential new line(s) on:

- fisheries and aquatic habitat
- terrestrial ecosystems, vegetation and wildlife
- land use and socio-economic/socio-community conditions
- visual landscape and recreational resources
- contaminated site potential

## Other desktop assessments include:

- geotechnical
- archaeology and heritage
- right-of-way review

Detailed studies will be undertaken for the leading alternative and any routing variants.



# ANTICIPATED SCHEDULE



MILESTONE	DATE (SUBJECT TO CHANGE)	
Commence First Nation and community consultation	Summer 2013	
Public open houses	January/February 2014	
Identification of a leading alternative for further definition	Spring 2014	

# If the study proceeds into a project, it will require approval from the British Columbia Utilities Commission. We anticipate filing an application in 2015.



# NEXT STEPS



Ongoing consultation activities will involve:

- discussions with First Nations, stakeholders and property owners
- providing updates about ongoing developments on website and email

Send us your questions and comments: bchydro.com/mnt 604 623 4472

stakeholderengagement@bchydro.com





Thank you for your participation.

The information gathered this evening will be taken into consideration as the study progresses.

If you haven't done so already, please take a moment to fill out a comment form and drop it in the box provided.

Be sure to include your contact information if you would like us to send you study updates, or take the form with you to complete and return to us at your earliest convenience.

You can also provide feedback via the study website at **bchydro.com/mnt** or by contacting BC Hydro stakeholder engagement:

- Phone: 604-623-4472
- e-mail: stakeholderengagement@bchydro.com
- mail: BC Hydro Stakeholder Engagement
   Metro North Transmission Study
   333 Dunsmuir Street, 15th Floor
   Vancouver, BC V6B 5R3



### METRO NORTH TRANSMISSION STUDY—ROUTE ALTERNATIVES





### LEGEND

EXISTING TRANSMISSION LINE CIRCUITS... EXISTING UNDERGROUND CIRCUITS... SUBSTATION... MUNICIPAL BOUNDARIES...



## ALTERNATIVE 1 (OVERHEAD)... ALTERNATIVE 2 (OVERHEAD)...

ALTERNATIVE 1 (UNDERGROUND)... ALTERNATIVE 2 (UNDERGROUND). ALTERNATIVE 3 (UNDERGROUND).. FUTURE TL(ASSOCIATED WITH ALT 1&3)...

NOTE:



METRO-NORTH PROPOSED ALTERNATIVES





- Alternative routes shown above are conceptual and may vary considerably from what is shown.

GJB, VRK, DU

2009 ORTHOPHOTO

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			METRO-NORTH				
PROPOSED TRANSMISSION ALTERNATIVES							
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				NOT TO BE RE	EPRODUCED WITHOUT PE	RMISSION	

#### **APPENDIX C:** Public Feedback

The following summary is derived from:

- questions and comments received from one-on-one conversations between open house participants and the study team
- comment forms
- e-mails
- telephone conversations

Comments have been summarized and grouped into themes to show the types of input received.

#### ALTERNATIVE 1 – Como Lake Substation to Horne Payne Substation (overhead)

#### HEALTH AND SAFETY

• Concern that houses in close proximity to transmission lines are unsafe

#### LAND USE

• Preference for this alternative because it uses existing infrastructure in a right-of-way along Highway 1

#### PROXIMITY TO RESIDENCES

• Preference for this alternative because the overhead right-of-way is not through a residential area

#### RECREATION

• Concern that the trails around Burnaby Lake will be impacted

#### ROUTING

Interest in whether the Central Valley Greenway is being considered as a potential route

#### **ALTERNATIVE 2**

### Meridian Substation in Coquitlam to Burrard Inlet (Port Moody arm) south shore Burnaby (overhead)

#### ENVIRONMENT

- Concern that building the line across Burrard Inlet (Port Moody arm) will intrude on Belcarra nature areas
- Concern about environmental impact of building a transmission line across Burrard Inlet (Port Moody arm)

#### HEALTH AND SAFETY

- Concern that the new line will increase electric and magnetic field levels
- Request that the line be located away from houses and schools where possible
- Concern that the new line will be too close to houses and schools
- Interest in whether the EMF increases with a double-circuit structure

- Concern that the new line will be built over existing houses
- Concern that a super tanker could collide with the line across Burrard Inlet (Port Moody arm)
- Concern that children will not be able to play safely in back yards
- Noted that Alternative 2 will be built next to woods which will be safer for everyone
- Concern that construction along the right-of-way will be unsafe for residences
- Concern that lines could fall down in the event of an earthquake or a severe storm
- Concern that building a transmission line across Burrard Inlet (Port Moody arm) is not safe

#### LAND USE

- Noted that a transmission line corridor through a residential area is a land use conflict
- Noted that Anmore already has a right-of-way with existing lines and they oppose an additional line
- Concern that transmission lines change the landscape from rural to industrial
- Noted that Alternative 2 is preferred because Anmore has the least amount of residences along an existing right-of-way
- Noted that Alternative 2 has the least impact on roads if existing right-of-way used
- Interest in building the line around Anmore to the north

#### NOISE

• Concern that the existing transmission lines make noise and an additional line will increase the noise level

#### PROPERTY VALUES

- Concern that a new line will decrease property values
- Concern that houses could be damaged during construction

#### UNDERGROUND

- Concern that putting the lines underground are more expensive and intensive
- Request to build the line underground

#### VISUAL

- Concern that tree removal will create aesthetic impacts to the neighbourhood
- Interest in what the new structures would look like
- Concern that an additional transmission line will have an aesthetic impact to the neighbourhood

#### Burrard Inlet (Port Moody arm) south shore to Horne Payne Substation

#### CONSTRUCTION NUISANCE

 Concern that the big trucks and large machinery required to build the line will create a nuisance for homeowners

#### COST

• Concern for the high cost associated with crossing the Burrard Inlet

#### HEALTH AND SAFETY

- Concern about the proximity of transmission lines to homes and schools
- Interest in potential interaction between buried transmission lines and pipelines
- · Concern about construction impacts on roads and in close proximity to homes

#### PROJECT FATIGUE

• Concern from Westridge residents that there are too many projects happening in their neighbourhoods (other project is Kinder Morgan's Trans Mountain Pipeline Project)

#### ROUTING

- Opposed to using residential streets for the underground transmission line. Prefers using major roads
- Request that the transmission line follow the rail line from the Burrard Inlet (Port Moody arm) to Boundary Road

#### ALTERNATIVE 3 – Como Lake Substation to Horne Payne Substation (underground)

#### CONSTRUCTION NUISANCE

- Concern that the project will create traffic problems along Como Lake Avenue
- Concern that construction noise will affect residents along Como Lake Avenue
- Concern that construction could affect Como Lake Park (lake and trails on Gatensbury Street at Como Lake Avenue)

#### CONSULTATION

 Noted that additional consultation with homeowners is needed before a decision is made

#### EVERGREEN LINE CONSTRUCTION

- Questioned whether utilities relocated for the Evergreen Line Project will need to be relocated again
- Interest in how the underground line will interact with the Evergreen Line tunnel portal near Como Lake Avenue and Clarke Road
- Interest in if the underground transmission line will interact with the future Evergreen Line's Burquitlam station

#### EXISTING INFRASTRUCTURE

• Interest in whether the overhead 69 kilovolt transmission lines along Como Lake Avenue can be built underground along with the proposed 230 kilovolt transmission line

#### HEALTH AND SAFETY

- · Concern that the line will be too close to parks and schools
- Concern about electric and magnetic field levels at houses along Como Lake Avenue
- Request to avoid building the transmission line beside pipelines

#### NEIGHBOURHOOD PLANS

• Noted that there are many zoning changes in the Burquitlam Plaza/Como Lake and Clarke Road intersection that now allow for 20+ storey residential and mixed-use

buildings. Concern that there will be a lot of construction at this intersection for many years to come.

#### PROJECT FATIGUE

 Concern with the number of projects along this corridor: transmission line repair in 2012, Evergreen Line construction presently underway, Fortis' new pipeline project, residential development (20+ storey buildings planned for Como Lake Avenue and Clarke Road area)

#### RELIABILITY

 Noted preference for Alternative 3 because there is less risk of an outage during storms

#### ROUTING

- Noted that there are no east-west thoroughfares in Coquitlam other than Como Lake Avenue or Austin Avenue
- Interest in whether Austin Avenue could be used as a route
- Interest in whether the lines will be built underground along Broadway from Como Lake Avenue to Gaglardi Way
- Interest in how the line will be built along a street that turns into a dead-end. Questioned if the line would be built underneath houses

#### VISUAL

• Noted preference for Alternative 3 because, once built, the line won't be visible

### **ALL ALTERNATIVES** – Horne Payne Substation to Mount Pleasant Substation in Vancouver (underground)

#### CONSTRUCTION

• Interest in how the underground line is constructed

#### ENVIRONMENT

- Concern that the heritage elm trees on West 6th Avenue between Nanaimo and Woodland will be further harmed as they are already stressed from repeated pruning by BC Hydro to accommodate distribution lines
- Concern that the heritage oak trees on West 7th Avenue will be harmed
- Noted that East 6<sup>th</sup> Avenue between Nanaimo and Woodland has a historical site designation

#### **OPERATIONAL CONSIDERATIONS**

- Interest in knowing whether overhead or underground is the easier to maintain
- Interest in how much disruption is caused when crews need to access a cable vault
- Interest in how much maintenance is required with an underground transmission line
- Interest in how often the transmission line will need to be excavated to address a problem

#### HEALTH AND SAFETY

• Concern about the proximity of transmission lines to schools

- Request for magnetic field profiles for both overhead and underground lines
- Concern about magnetic field levels in homes along streets where the lines are underground
- Concern about dust from construction
- Concern about the safety of the construction site
- Concern that underground transmission lines could heat up a neighbouring water main and cause a bacterial growth
- Interest in whether there are health risks associated with underground transmission lines
- · Concern that there are fire explosion risks with an underground transmission line
- Concern about the interaction between underground transmission lines and underground gas lines

#### PROPERTY VALUES

- Request for compensation for building in the city streets in front of people's properties
- Concern that property values will be affected by an underground line built in a city street

#### ROUTING

- Request that the transmission line be built in the railway corridor of the Grandview Cut to avoid construction in city streets
- Interest in the street-specific route
- Interest in whether the project will interact with the SkyTrain corridor
- Request to use major roads like Broadway rather than smaller side streets with residences
- Interest in the criteria used to determine which street the line will be built
- Interest in whether an underground transmission line can be built along a steep grade
- Interest in whether trees are a deterrent when choosing a street to build the underground transmission line
- Interest in whether there are underground utilities that need to be avoided
- Interest in how the underground transmission line crosses gas lines into residences
- Concern that the route will go through McSpadden Park
- Interest in whether consideration will be given to back lanes
- Noted that there are no lanes north of East 6<sup>th</sup> Avenue between Victoria and Woodland

**POTENTIAL FUTURE PROJECT** – Meridian Substation to Como Lake Substation; associated with Alternatives 1 and 3 (overhead)

#### ARCHAEOLOGY

 Interest in how archeology sites are considered and the process if a new archeology site is found

#### CONSTRUCTION EFFECTS

• Interest in how potential damage to property during construction would be addressed

#### CONSULTATION

Request for BC Hydro to provide as much information as possible

 Request that BC Hydro communicate the potential effects of transmission lines on property values, view and health

#### ENVIRONMENT

- Concern that a new line will disrupt animals that nest/den on property
- Concern that tree removal will affect wildlife habitat
- Interest in the federal and provincial laws protecting wildlife
- Concern about potential effects to creeks adjacent to the right-of-way (Hope Creek)
- · Interest in the amount of tree removal required
- Concern that tree removal will affect migratory birds

#### EXISTING INFRASTRUCTURE

• Interested in whether there will be work performed on existing circuits as part of the potential new transmission line between Meridian and Como Lake substations

#### HEALTH AND SAFETY

- Concern that the new overhead line will increase electric and magnetic field (EMF) levels and make that corridor more unsafe
- · Concern that increased EMF levels will increase health risks for children
- Concern with building the overhead transmission line next to schools
- Concern that the homes along the right-of-way will be exposed to higher EMF levels
- Concern that the effects felt (getting "zapped") under the existing overhead lines and tower will be increased
- Interest in whether the circuits can be coated to shield the magnetic fields
- Perception that Coquitlam is paying the highest health cost whereas Burnaby and Vancouver get their transmission lines buried underground
- · Noted that the lines should be built underground near homes and schools
- Concern that increased EMF levels might affect the fetuses of pregnant mothers who live near the right-of-way
- Noted that children playing in parks and schools along the "Coquitlam Crunch" need a safe environment to play in
- Concern that the new lines and towers could fall on top of elementary schools in the event of a natural disaster
- Concern that tree removal would affect soil/drainage of property and increase the chance of a slide

#### LAND USE

- · Concern that there is not enough room to build the additional line
- Interest in which alternative has the most properties alongside it
- Interest in the distance from a property that the line can be built
- Interest in the width of the easement
- Concern that the new transmission line would go through a dense residential area
- Interest in whether the right-of-way will need to be widened
- Interest in the number of properties affected if a new line is built on this right-of-way
- Noted that the City of Coquitlam created the "Coquitlam Crunch" and the greenery is needed to enhance the area

#### LEGAL ACTION

• Noted that legal action will be taken against BC Hydro if an alternative is chosen that includes this future transmission line between Meridian and Como Lake substations

#### NOISE

• Concern that the noise level from the already buzzing lines will increase

#### PROPERTY VALUES

- Concern that an additional set of lines and towers will cause property values to decrease
- Concern that the discussion around this potential project will cause property values to decrease
- Concern that the yards along the right-of-way will be altered
- Concern that tree removal will cause property values to decrease
- Interest in whether BC Hydro will buy-out properties

#### ROUTING

- Interest in the route near Dewdney Trunk Road
- Request for the new line to be built underground
- Interest in how the new lines and towers will fit into the existing right-of-way
- Noted that all transmission lines should be built underground regardless of the cost

#### SYSTEM PLANNING

 Noted that it makes more sense to originate the transmission line from the Meridian Substation to avoid the need for the future project between Meridian and Como Lake substations

#### VISUAL

- Concern that tree removal will create a visual impact
- Interest in what the structures will look like
- Interest in the distance between towers
- Interest in how many trees will be removed
- Concern that the tree buffer between homes and the right-of-way will be removed
- Concern that views from properties will be adversely affected

#### GENERAL

#### ALTERNATIVE SELECTION

- Request that BC Hydro compare the populated sections between the alternatives that feature overhead components
- Suggest new routing alternatives where the new line would be built overhead from Meridian Substation, down the "Coquitlam Crunch" to the Evergreen Line then west within the concrete guideway to Como Lake Avenue/Clarke Road then continue west, underground to Mount Pleasant Substation
- Recommend that BC Hydro select the cheapest alternative
- Request to avoid routes that overlap or cross underground pipelines (proposed and existing)

- Noted that the leading alternatives should be identified with present economics: impact on environment, impact on neighbourhoods, keep in mind best bang for buck – do it right the first time
- Noted request to run new services along an existing route while upgrading the existing route to meet current environment and health concerns
- Noted that health concerns are more important than cost or environmental concerns

#### COST

- Interest in the costs of the three alternatives
- Interest in how the project is funded
- Noted that postponing future lines adds greatly to costs

#### FIRST NATIONS CONSULTATION

- Interest in the potential impact for First Nations and whether consultation was done
- Noted appreciation for BC Hydro's continued efforts to respect the rights of First Nations

#### **OPEN HOUSES**

- Noted that the invitation letter looked like junk mail and could be easily overlooked. Recommend that BC Hydro adopt a post-card type of mail piece that is more visually engaging
- Frustration that the map was not included in the open house invitation
- Noted that the open house maps did not include street names
- Request to add schools, pipelines, SkyTrain route and street names to the maps
- Noted that the invitation arrived late

#### **OPERATIONS**

- Interest in how BC Hydro addresses strong electromagnetic pulses caused by sunspots and nuclear explosions in space
- Interest in where the power comes from on Boundary Road
- Interest in whether the existing system will need to be upgraded or replaced once the new line is in service
- Noted that new and existing transmission lines should be placed underground to minimize exposure to electric and magnetic fields
- Interest in where the power is coming from for this region
- Interest in whether underground cables require replacement after 50 years
- Interested in the difference in lifespan between overhead and underground transmission lines
- Noted that more efficiency in the system could be capitalized. Conservation
  messaging should focus more on application rather than compact fluorescent lighting
  which has little impact on the overall grid
- Noted that underground utilities carry the most unknowns with risk, cost and time

#### PROCESS

Interest in why landowners were approached so early