

# TERRACE TO KITIMAT TRANSMISSION PROJECT

Summary of feedback received on project options, January – April 2014

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## 1.0 INTRODUCTION

BC Hydro is studying options to replace 2L99, the 287 kilovolt (kV) transmission line between Skeena Substation (near Terrace) and Minette Substation (near Kitimat). Five options are being considered – two which would provide the required capacity and three others which would provide both the required capacity and enhanced reliability.

In January and March 2014, members of BC Hydro's Terrace to Kitimat Transmission (TKT) project team publicly presented the five options to local governments, economic stakeholders and the public, through a series of meetings, presentations and two public open houses. We requested written feedback from those interested in the project, to be used as a factor in deciding which option we will advance for further studies and, ultimately, for construction.

This short report summarizes the feedback received on the options.

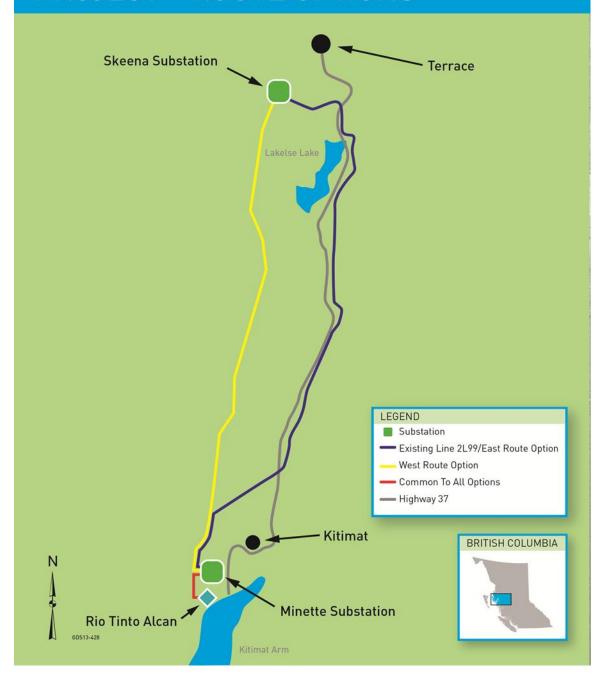
### PROJECT BACKGROUND

BC Hydro is planning to replace 2L99, the 287 kV transmission line between Skeena Substation (near Terrace) and Minette Substation (near Kitimat), as the existing line has reached end of life and does not have the capacity required to meet anticipated load growth in the Kitimat area. Five options are being studied to replace 2L99 – two which would provide the required capacity, through the construction of a single new line, and three others which would provide both the required capacity and enhanced reliability, through the construction of two new lines.

### The options are:

- Option 1: Build a new 287 kV transmission line on new right-of-way, close to the existing line on the east side of the Kitimat Valley, then remove the existing line.
- Option 2: Build a new 287 kV transmission line on new right-of-way on the west side of the valley, then remove the existing line.
- Option 3: Two new 287 kV lines build one on new right-of-way on the west side
  of the valley, then remove the existing line and build a second new line on the
  east side of the valley, mostly in the existing right-of-way.
- Option 4: Two new 287 kV lines -- build one new line on new right-of-way, close to the existing line on the east side of the Kitimat Valley. Remove the existing line and build a second new line, mostly in the existing right-of-way.
- Option 5: Two new 287 kV lines build both new transmission lines on new rights-of-way on the west side of the valley, then remove the existing line.

# TERRACE TO KITIMAT TRANSMISSION PROJECT – ROUTE OPTIONS



## 2.0 SUMMARY OF FEEDBACK RECEIVED

Most of the comments were provided by people who attended the TKT open houses in Terrace (March 12, 2014) and Kitimat (March 13, 2014), with 14 of the 63 attendees – more than 20% -- providing written comments. In addition, one person responded based on the information posted on the TKT website, and four responses were received from members of local governments after presentations given to the committees of the whole for the City of Terrace (January 15, 2014) and the District of Kitimat (January 16, 2014).

Some respondents simply stated preferences; others provided rationales for a preference, or outlined pros/cons/factors to consider for several options.

Although the results are not unanimous, the majority of respondents favored Option 2 – a single line on new right-of-way on the west side of the Kitimat Valley. Those who provided reasons for this preference mentioned improving the viewscape along Highway 37; facilitating future widening of the highway; decreasing moose habitat near the highway (lessening chances of moose/car collisions); and the perception that it would be a lower-cost alternative.

While many (though not all) respondents would prefer just one new line be constructed, a number also shared their thoughts on the best option should BC Hydro, based on study results, determine that it is necessary to construct two new lines. This was excellent feedback to receive, as one of BC Hydro's objectives is to determine how to install a single line in such a way that it will facilitate construction of a second line if needed in the future (assuming the decision made is to proceed with just one line at this time).

Among those who commented on two-line options, the results were less clear cut. A small majority preferred Option 5 (two lines on new rights-of-way on the west side of the valley); where reasons were given, they were similar to those given for Option 2. However, there was also support for Option 3 (a new line on both sides of the valley), as providing the best reliability; and for Option 4 (two new lines on the east side of the valley), as making good use of an existing right-of-way, and minimizing project footprint.

A more detailed summary of the comments received is attached as Appendix A.

# 3.0 NEXT STEPS

Public and stakeholder input will be one factor considered – along with First Nations' input and the results of initial environmental, archeological, constructability, cost, system planning and other studies – in determining a preferred option for carrying out the project.

Specific social and environmental information pertaining to various locations on the routes has also been shared within the project team so that it can be considered during the relevant technical studies.

The Terrace to Kitimat project team thanks everyone who took the time to attend our project events, look at the project website and provide their comments on this important project.

### **APPENDIX A**



## Terrace to Kitimat Transmission (TKT) Project Options Feedback Form

We would like your input into the five options we are considering for the TKT project. Information we receive from First Nations and from interested stakeholders like you will be considered, along with study results, in deciding the preferred option.

Based on your knowledge of the area, tell us about any disadvantages or advantages that you see for the options. Use more paper if you need it!

Option 1 – Build a new line, mainly on east side of valley, on new right-of-way. Remove existing transmission line.

### **Comments**

Second choice (if build just one line)

Very little space for new right of way in the stretch between foot of Airport Hill and Mt. Layton Hot Springs. Then will have to build new line in close proximity to existing live line. In the end, you abandon a good right of way.

No. Advantage may be less disruption as most [clearing] may already be done (not sure of total width)

Disadvantage – same detraction from viewing our beautiful valley from Highway 37.

Seems wise to consider a new right of way wherever necessary if the highway needs to go four- lane in the future.

# Option 2 – Build a new line on the west side of the valley, on new right-of-way. Remove existing transmission line.

### **Comments**

Disadvantage is crossing Lakelse River. This river has high recreation and fisheries values. If have to cross make it at least impacting location

One line is less maintenance costs. Only been one loss of power in history of the line, so little need for two lines. We have a lot of moose feeding on existing ROW. Twinning would increase moose collisions on the highway, especially with increased traffic with LNG lines. So prefer

- 1. Single line
- 2. West side away from highway

I like this option the best. I think one line is sufficient

### First choice (if build just 1 line)

The only thing this saves is the need to build alongside existing live line. On the west side the right of way will need to be located well back from the Lakelse River, which has a wide protected corridor.

Yes. Advantages – shorter, less expensive to build; more direct to LNG facilities, I believe. Improved views from Highway 37. Less expensive to maintain one line, not two. Improved access to backcountry.

Disadvantages – new destruction on land, habitat and new eyesore from mountain trails and peaks

(The present, worn out line is not afflicting us with too many outages so far. I don't think we can justify requiring two lines – surely we can live without power for short times? Rio Tinto probably has the direst consequences and they've been OK. It cannot all be about money anymore.

### My preferred option if only one line required

Preferred option, but should be built at 500 kV and run at half capacity until demand increases. Then upgrade the substation to 500 kV. Reforest decommissioned right of way back to original flora and fauna.

Costs also need to be considered. This option would probably require a lot of road building? If not, it would be a good thing to remove the line from the highway. Then Option 3 could be done when needed.

This is my preferred option

This is my preferred option

Route the TKT project on the west side of Kitimat Valley, but take steps to avoid clearing impacts to the "flats" area, which has high forestry values, and avoid future pipeline locations. This will also provide more flexibility should Highway 37 need to be expanded in future.

# Option 3 – Two new lines -- build one new line on the west side of the valley in a new right-of-way. Remove existing transmission line and build the second new line on east side, mostly in existing right-of-way.

### **Comments**

Like this best, but new line on east side will still likely be close to existing for much of route. Should be as much as possible set back from highway and away from places impacting creeks, etc.

### Like least (if build two lines)

Logistically and strategically this is best because: avoids need to build beside a live line. Build west side first, then replace existing line.

Provides insurance against landslide or other catastrophe

On west side, stay well back from Lakelse River. It has a wide corridor where no development is allowed

No. Transmission lines on both sides of the valley would be out-and-out disrespect for, and rape of, our land. It is unnecessary.

You don't tell us what this would do to users' costs. Could we still afford to use electricity as seniors?

This is the recommendation of the power experts to deliver the optimum combination of power and stability that uses the majority of the existing line route for one of the new transmission lines thereby minimizing the overall impact of this upgrade. It is extremely important that the Province continues to upgrade our hydro electric power grid to replace aging infrastructure and prepare in advance for the expected increase in power demand.

Option 4 – Two new lines – build one new line on the east side of the valley in a new right-of-way. Remove existing transmission line and build the second new line also on the east side, mostly in the existing right-of-way.

### **Comments**

Gives two new lines without having to build a new route on the east side. Less impact on environment and then we have a backup line

This is my second choice if we need two lines

No. I believe one line is enough and if we must have two, this is not the best option. It's an advantage to use the same corridor, but aesthetically unappealing.

This is my preferred option.

This is my preferred option of the five options. Limits footprint, uses existing right of way; less river crossings; reduces traffic to Lakelse and Wedeen River

Option 4 is my plan for 2 new lines. Building a line on the west side there is a logging road from Lakelse river White bottom area going all the way to Kitimat which comes out somewhere in the lower end of the town of Kitimat. My experience hunting in the Thunderbird area, there are a lot of clay beds – a lot more that meets the eye. As soon as the snow is gone there should be more studies done and mapped in relation to the engineers' proposal.

We have had the existing line for many years. I have lived here for over 61 years and can't remember a problem. And we already have one line cut out. Should avoid destroying the new forests being regenerated in the area.

# Option 5 – Two new lines -- build both new lines on the west side of the valley in two new rights-of-way. Remove existing transmission line on east side.

### **Comments**

This is my choice if we need two lines

This is my first choice if we need two lines

This gets you no diversity and wastes existing right of way

Yes, ONLY if we must have two lines; and assuming the new rights of way are adjacent. Double circuit preferred. But I believe one line is enough.

My preferred option of the five options

My preferred option if two lines required

My preferred option of the five options – away from roads and existing population areas.