THE ALBERTA UTILITIES COMMISSION

AltaLink Management Ltd.

Foothills Area Transmission Development ("FATD") Application Nos. 1608637, 1608642, 1608643, 1608861 and 1608862 AUC Proceeding ID No. 2001

(the "Applications")

Opening Statement of Hudson Foley on behalf of AltaLink Management Ltd.

May 15, 2013

- 1. Good morning Commissioners.
- 2. AltaLink has applied for permits to construct (or modify) and licences to operate a number of transmission facilities as part of this Proceeding. AltaLink filed five facility applications, including the South Foothills Transmission Project (SFTP), the Windy Flats Substation Project, the North Foothills Transmission Project (NFTP), the Foothills 138 kV Development and the Langdon to Janet Project.
- 3. We have provided a flight overview of the routes for many of our proposed facilities, which is available on-line at the link provided in our reply evidence (Ex. 720.01.AML-2001, paragraph 94). I will provide further specifics of each of those applications, after providing a brief overview of our consultation program and route development process.

Participant Involvement Program

- 4. In developing each of the applications, AltaLink conducted a thorough and extensive participant involvement program, compliant with AUC Rule 007.
- 5. Overall, over the past three and a half years, the participant involvement programs for the applications involved notification to more than 8100 stakeholders and personal consultations with almost 1400 stakeholders. We also hosted 45 open houses and information sessions where we had more than 860 attendees. This is in addition to the 65 government agencies, 20 municipalities, 98 companies, and 35 other community groups and organizations that we engaged with.
- 6. AltaLink incorporated feedback from stakeholders throughout this process and directly incorporated it into the project development, resulting in numerous changes to the proposed facilities. To name but three examples, we developed a triple-circuit line design on NFTP, a parallel with a major highway realignment east of Claresholm on SFTP and a new alternate Foothills substation site and stakeholder suggested route on the Foothills 138 kV Development.

Route Development

- 7. In addition to our consultation activities, AltaLink undertook an extensive route development process, fully evaluating potential locations for transmission routes and the associated substations across the projects.
- 8. In considering routes for the new transmission facilities, AltaLink used a four-stage route determination process to first identify potential routes at a conceptual level, and then carefully refine those routes into preliminary, then detailed and then final proposed routes. During its route determination process, AltaLink considered such factors as the technical requirements for the Project, the potential effects of the Project on residences, the environment and agriculture, special considerations in the area, costs and feedback garnered from a broad range of stakeholders through AltaLink's Participant Involvement

Programs. Preferred, low impact routes and substation sites have been identified and recommended to the Commission, including several alternative design options.

9. I will briefly outline the scope of work being proposed under each of those applications, followed by our reasons for our preferred developments.

South Foothills Transmission Project & Windy Flats Substation Project

- 10. SFTP involves a new double circuit 240 kV line, to be designated as 1037L/1038L, from a new Windy Flats Substation, southwest of Fort McLeod, which will be designated as 138S, to a new Foothills Substation, east of High River, which will be designated as 237S. This total length of the line is approximately 120 km. A new 240 kV series capacitor station is proposed along this line, approximately 50 km south of the Foothills Substation.
- 11. There are two SFTP routes being applied for. There is also a Claresholm Connector, an 8 km route segment located northeast of Claresholm, which provides an option to connect the Preferred and Alternate Routes.
- 12. The Preferred Route begins at the proposed Windy Flats Substation site and heads north along greenfield routing, moving to the west side of Mud Lake before paralleling the 911L line. The proposed line continues north along the existing 911L and moves east around the Town of Claresholm, following the alignment of a future highway bypass. The line meets 911L again north of Claresholm and follows 911L until south of the location of the proposed Foothills Substation, where the line proceeds north along quarter line to the substation.
- 13. The Alternate Route offers a predominantly greenfield alternative to the Preferred Route. The Alternate Route begins at the proposed Windy Flats Substation site and heads north using the same alignment as the Preferred Route. The Alternate Route deviates from the Preferred Route at Mud Lake and heads northeast. It then heads north, predominantly following quarter lines to a location approximately 20 km southeast of the Foothills Substation where it rejoins the Preferred Route.
- 14. The Preferred Route poses lower levels of potential impact for the following reasons:
 - (a) The total right-of-way length and cost is less;
 - (b) The Preferred Route crosses 8 km less cultivated land and potentially impacts fewer irrigation pivots, indicating less potential impact on agriculture. The Preferred Route does, however, cross more cultivated land when not following an existing land use division;
 - (c) The Preferred Route has 192 less ha of surface water within 800 m; and
 - (d) The Preferred Route parallels 911L for 53 more km. This factor contributes to the overall conclusion of the Environmental Evaluation that the Preferred Route has less potential for impacts on the environment.

- 15. We only have two registered interveners along the entire SFTP Preferred Route with facilities proposed on their lands.
- 16. The new Windy Flats Substation was applied for in the SFTP application. The Windy Flats Substation will connect to the new SFTP line, as well as to an existing 240 kV (967/968L) line. There are two substation locations that AltaLink has proposed, which are both southwest of Fort McLeod. The preferred substation site is located in SW-17-8-26-W4M, directly south of the Highway 3 crossing. This location allows for a more direct route, resulting in the shortest line length, fewer heavy angle structures and, consequently, the lowest estimated cost.
- 17. The Windy Flats Substation Project application involves the 138 kV portions of the substation, as well as the reconfiguration of the existing 138 kV system to connect to the substation.

North Foothills Transmission Project

- 18. The Foothills Substation, which is the north termination of the SFTP line, is included in the NFTP application. This substation is being proposed to the east of High River, with a preferred and a stakeholder suggested alternate substation location. From the Foothills Substation, a new 240 kV double circuit line, designated as 1106L/1107L, is proposed that will be approximately 51 km in length and terminate at the ENMAX No. 65 Substation in Calgary.
- 19. While both substations sites are somewhat comparable, the D8 substation target area is preferred by AltaLink as it provides a better opportunity to re-use existing infrastructure to connect to local generation with the least amount of new 240 kV line and provides better environmental route options to connect to the High River and Okotoks Substations.
- 20. At the south end of the NFTP line, the Preferred Route travels northeast, and then parallels the 500 kV 1201L from north of Frank Lake to north to the Bow River. There are two alternate route segments in this area. The first is the Frank Lake Alternate, which sites the line farther away from Frank Lake. The second alternate route segment is the Preferred Variant Route, which would parallel 1201L earlier over a portion of Frank Lake.
- 21. At the north end of the NFTP line, on the Preferred Route, we have developed two additional structure types to accommodate the existing land uses. We have a triple circuit design, where we are proposing to co-locate with an existing 138 kV line (850L) that runs diagonally north of the Bow River, towards Calgary. By replacing the existing H-frame structures along this segment of line with taller single pole structures, we can limit our impact on cultivated lands by reducing the number of structures required, increasing the clearance under the line and moving structures to less impactful locations.
- 22. The other structure type we are proposing is within Calgary, where we are utilizing double circuit tubular structures due the space constraints in the area. The tubular structures require a narrower right-of-way as we approach Calgary towards the ENMAX

No. 65 Substation. In this area, we will relocate the existing 911L/850L within an existing transmission corridor in order to make space for the NFTP line.

- 23. On the north end of NFTP, we have also applied for a North Alternate Route which follows a greenfield alignment primarily along quarter lines.
- 24. However, the Preferred Route of NFTP is preferable in the following respects:
 - (a) it parallels or utilizes existing rights-of-way:
 - (b) it parallels the 1201L 500 kV line for approximately 28 km;
 - (c) it parallels the 850L alignment for approximately 13 km;
 - (d) the 850L structures will be removed upon construction of the triple circuit line and the existing right-of-way will be utilized for the new structures;
 - (e) it utilizes approximately 3 km of the existing 911L/850L right-of-way;
 - (f) it minimizes fragmentation of the land, reducing impacts to existing land uses;
 - (g) it avoids crossing Frank Lake; and
 - (h) it has the least impact on areas with potential historical importance.

Foothills 138 kV Development

- 25. The Foothills 138 kV Development consists of a 138 kV circuit connecting the Foothills Substation to the High River (65S) Substation (434L), as well as another 138 kV circuit connecting the Foothills Substation to the Okotoks (678S) Substation (646L). The circuits will share double circuit structures for the first 14 km from the Foothills Substation to the High River Substation, and then will be constructed utilizing portions of the existing 727L and 911L rights-of-way and/or towers.
- 26. The following transmission facility modifications are being proposed under the Foothills 138 kV Development:
 - (a) the salvage of the 727L line between the Janet (74S) Substation and the Okotoks Substation;
 - (b) modifications to the 850L line so that it connects the Okotoks Substation to the Carseland (525S) Substation;
 - (c) the redesignation of approximately 7 km of the 850L to 1109L; and
 - (d) increasing the voltage from 138 kV to 240 kV between the ENMAX No. 65 Substation and the ENMAX No. 25 Substation.
- 27. The Preferred Route, when compared to the Alternate Route, has the following attributes:

- (a) A comparable number of residences within 150 m;
- (b) A fewer number of residences within 800 m;
- (c) Lower agricultural impacts;
- (d) Similar environmental impacts;
- (e) Greater length of line located within road allowance; and
- (f) A similar number of heavy angle structures.

Langdon to Janet Project

- 28. The Langdon to Janet Project involves the construction of approximately 18 km of double circuit 240 kV line (1064L/1065L) from the existing Langdon (102S) Substation to the existing Janet Substation. Approximately 7 km of the line is located in ENMAX's service territory and will be owned by ENMAX.
- 29. South of the Janet Substation, there will be modifications made to the existing 1080L/850L line. In addition to a number of substation modifications, the existing 936L/937L will also be reterminated between the proposed Crossings (511S) Substation and East Calgary (5S) Substation.
- 30. AltaLink is proposing a parallel route as the Preferred Route and a greenfield (north route) as the Alternate Route. There is a common segment east of where the two routes converge. There is also a variant option for the final portion of the route that enters into the Langdon Substation.
- 31. The Preferred Route runs parallel and adjacent to the existing 936L/937L line for almost all of its length. This route primarily utilizes previously disturbed areas including an existing transmission line right-of-way and an abandoned CP rail bed.
- 32. The Alternate Route follows a predominately greenfield alignment east from the Janet Substation adjacent to the existing CN railway before turning south and east and then sharing the alignment of the Preferred Route closer to the Langdon 102S Substation.
- 33. The Preferred Route is preferable to the Alternate Route in the following respects:
 - (a) The total right-of-way required is less, specifically 5.75 km of its length can be built within an existing right-of-way;
 - (b) The Preferred Route parallels an existing 240 kV for approximately 94% of its total length;
 - (c) The Preferred Route has less potential for impacts on the environment; and
 - (d) The Preferred Route crosses 5 km less cultivated land, indicating less potential impact on agriculture.

Environmental Evaluations

- 34. For each of the projects, AltaLink retained Stantec Consultants Ltd. (Stantec) to carry out Environmental Evaluations. In each case, Stantec has concluded that with the implementation of appropriate mitigation measures, the facilities applied for are viable from an environmental perspective.
- 35. AltaLink has developed a number of environmental mitigation measures designed to ensure that the construction of the projects is carried out in an environmentally responsible manner and that the potential environmental effects of the projects are minimized. These mitigation measures are captured in the Environmental Specifications and Requirements (ESR) filed with each application. Prior to the commencement of construction, AltaLink will require its contractor(s) to prepare and submit a Construction and Environmental Management Plan for each project that meets the requirements within the ESR.

Conclusion

- 36. Based on the information provided in the applications, AltaLink respectfully submits that the applied for facilities are in the public interest, having regard for their social and economic effects, and their effects on the environment.
- 37. AltaLink has identified preferred and alternate design options for each of the projects that avoid many potential impacts, and that reflect reasonable steps to mitigate and minimize effects where impacts cannot be avoided. AltaLink conducted thorough participant involvement programs, and has incorporated stakeholder feedback into its route determination processes. As such, AltaLink requests that the Commission approve the applications.