

**THE ALBERTA UTILITIES COMMISSION**

AltaLink Management Ltd.

Red Deer Area Transmission Development  
Application No. 1609677  
Proceeding ID. 2669

(the Application)

**Opening Statement of Keith Turriff on behalf of  
AltaLink Management Ltd.**

March 7, 2014

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.
3. The complete set of system additions and upgrades consist of seven electrically independent components. The three rebuild components of the Project are:
  - rebuilding of the existing 138 kV transmission line, 80L, between North Red Deer 217S and South Red Deer 194S (to be renamed 425L) and Red Deer 63S (to be renamed 426L);
  - rebuilding of the existing 138 kV transmission line, 755L, between Red Deer 63S and Piper Creek; and
  - rebuilding of the existing 138 kV transmission line, 637L, between Benalto 17S and Sylvan Lake 580S and the existing 138 kV 648L between Sylvan Lake 580S and Red Deer 63S.
4. The four new or greenfield components of the Project are:
  - a new 240 kV/138 kV substation to be designated as Johnson 281S, west of the Town of Didsbury and a 138 kV transmission line designated as the 417L/418L;
  - a new 240 kV/138 kV substation to be designated as Hazelwood 287S, east of the Town of Innisfail and a 138 kV transmission line designated as 419L/420L;
  - a new 240 kV/138 kV substation to be designated as Wolf Creek 288S, northeast of the Town of Ponoka and a 138 kV transmission line designated as 421L/422L; and
  - a new single-circuit 138 kV transmission line to be designated as 423L east of the Town of Lacombe, located between the existing Lacombe 212S Substation to the existing Ellis 332S Substation. The Commission has adjourned consideration of this component. AltaLink will continue its investigations of the 423L and in due course will confirm the contents of that component of the Application and present that to the Commission.
5. Each of the greenfield components of the Project also include the construction of 240 kV in-and-out connections at each of the proposed new substations and certain modifications to existing facilities, including the re-termination of existing lines, the salvage of existing lines or portions of lines, to accommodate the construction, interconnection and operation of the new or rebuilt facilities, and the salvage of the Didsbury 152S Substation.

#### **Participant Involvement Program**

6. Commencing in June 2011, AltaLink initiated a comprehensive PIP for the Project in accordance with Appendix A of AUC Rule 007: Applications for Power Plants, Substations, Transmission Lines, and Industrial System.
7. Over a period of two years, AltaLink notified over 23,900 landowners, occupants and residents; local, regional and provincial government representatives, officials and departments; certain special interest groups and associations; industry; and other parties expressing interest in the Project.

## **Route Development**

8. AltaLink developed its transmission line routes and associated substation sites by applying a systematic multi-stage route and site determination process. AltaLink identified routes at a preliminary level, and then refined the routes into detailed and final routes. During this process, AltaLink considered factors such as the electrical requirements for the Project as reflected in the NID and the AESO Functional Specification, potential effects of the Project on residences, agriculture, the environment, costs and feedback from a broad range of stakeholders.
9. I will briefly outline the scope of work being proposed under each of the three rebuild and four greenfield Project components.

### **80L**

10. 80L is an existing 138 kV single-circuit line that has been in operation since 1951 and the portion that is proposed for rebuild under the Application is between Red Deer 63S, South Red Deer 194S and North Red Deer 217S.
11. Over the course of the last 63 years, the City of Red Deer and land use patterns have changed considerably around the 80L, resulting in many buildings and city infrastructure being constructed in close proximity or encroaching into the 80L right-of-way.
12. Through its siting process, AltaLink examined alternate routes for the 80L Rebuild to try to identify solutions that address the urban interface and encroachment issues. While no low impact alternatives were identified to replace the entire existing 80L routes between the three existing substations, local route adjustments were identified in some specific locations and engineering design was developed to ensure that the lines and associated swing-out would meet current Alberta Electric Utility Code (AEUC) requirements and accommodate existing adjacent development.
13. Route adjustments were identified to address specific issues at Cronquist Close, Riverlands and the Riverside Light Industrial Park south of 67<sup>th</sup> street.

### **755L**

14. 755L is an existing single-circuit 138 kV transmission line that was constructed in 1961. At that time, the alignment was outside of the boundaries of the City of Red Deer. Over the course of the last 53 years, the City of Red Deer and land use patterns have also changed considerably around the 755L resulting in many buildings and city infrastructure being in close proximity or encroaching onto a portion of the 755L right-of-way. During this time the 755L right-of-way corridor has been expanded to include two 240 kV transmission lines, 910L and 912L/914L.
15. On its existing alignment, the northernmost conductor of 910L is 3 m inside the right-of-way and full swing-out of the conductor is not confined to the right-of-way.
16. AltaLink's proposed use of the existing right-of-way for the 755L transmission lines provides an opportunity to rebuild 755L in a manner that maintains AEUC clearances with the other existing lines in the right-of-way.
17. AltaLink proposes to consolidate the rebuilt 755L with 910L onto a set of new double-circuit structures for approximately 8 km primarily inside the City of Red Deer boundaries. This will reduce

the number of structures in the right-of-way and confine the swing-out of 910L to within the right-of-way.

18. There is a single proposed route along the existing right-of-way for 755L in the rural portions of the component.

#### **637L/648L**

19. AltaLink proposes to rebuild existing 637L and 648L between three existing substations (Benalto 17S, Sylvan Lake 580S and Red Deer 63S), on their existing alignments in road allowance.
20. Other potential route options were identified during the route determination process. However, AltaLink determined that rebuilding 637L and 648L on their existing alignments is the lowest impact alternative.

#### **Johnson Substation**

21. AltaLink proposes to build a new 240 kV/138 kV substation, to be called Johnson 281S. AltaLink proposes to connect each of the existing 240 kV transmission line 918L and existing 138 kV transmission lines 166L and 80L to the new Johnson 281S Substation, and to salvage the existing switching station Didsbury 152S.
22. AltaLink owns a parcel of land that is adjacent to the existing 240 kV transmission line 918L in NE-19-31-2-W5M. Siting Johnson 281S in this location would reduce the length of 138 kV and 240 kV transmission lines to complete the necessary connections. The 1.8 km 138 kV transmission line required to interconnect Johnson 281S and 80L would be located in a road allowance on the south side of the road opposite from the existing 166L (which currently connects Didsbury 152S and 80L). The portion of 166L between 80L and Didsbury 152S would be salvaged as a part of the Project.

#### **Hazelwood Substation**

23. AltaLink proposes to build a new 240 kV/138 kV substation, to be called Hazelwood 287S. This new substation will connect the existing 240 kV transmission line 929L to a new proposed double-circuit 138 kV transmission line, to be called 419L/420L, between the new substation and the existing Innisfail 214S Substation.
24. Innisfail 214S is on the west side of the Town of Innisfail and 929L is to the east of the Town of Innisfail in a rural area. Parcels of land that are located adjacent to 929L provide opportunities for preferred and alternate substation sites that can reduce both the amount of new 240 kV transmission lines needed to connect 929L to the new substation. Existing linear disturbances in both the urban and rural areas provide opportunities for low impact 138 kV route development between Innisfail 214S and each of the proposed Hazelwood 287S sites. The Preferred Route parallels Highway 54 through the Town of Innisfail.
25. In comparison to the Alternate Route, the Preferred Route between Innisfail 214S and the preferred site for the new Hazelwood 287S Substation would cross less land that is farmed across, would have fewer residences within 150 m, would cross fewer wetlands within the right-of-way, would be lower in cost, would require less easement on private lands, and would follow a major existing linear disturbance, Highway 54 and, accordingly, would result in lower overall impacts.

### **Wolf Creek Substation**

26. AltaLink proposes to build a new 240 kV/138 kV substation northeast of Ponoka, to be called Wolf Creek 288S. This new substation will connect existing 240 kV transmission line 910L to the existing Ponoka 331S through a new double-circuit 138 kV transmission line, to be called 421L/422L, and will re-terminate existing 138 kV transmission line, 883L, to Wolf Creek 288S.
27. The preferred and alternate substations are sited to reduce the length of the new 240 kV transmission lines needed to connect the new substation to the 910L. In addition, the 138 kV transmission lines are sited adjacent to the existing 883L transmission line or within road allowance.
28. The preferred and alternate substation sites are similar in terms of potential impacts. The Preferred Route is 500 m shorter, has fewer residences within 500 m, and has fewer residences within 800 m than the Alternate Route. The alternative substation site is on the east side of the existing 240 kV line. Connection of the proposed 421L/422L to the alternate substation site requires a crossing of the 240 kV and therefore is more complicated than the preferred site.

### **Conclusion**

29. AltaLink considers that the Project is in the public interest having regard to the social and economic effects of the development and the effects of the development on the environment. The panel looks forward to the Proceedings and is available to answer the questions of the interveners and the Commission.