FortisBC Inc. – Copper Conductor Replacement Project CPCN Application

ERRATA 2 – September 11, 2008

1. **Exhibit B-1,Section 4 , page 27, line 13**
   ". . . above 7 categories is 92 kilometres" should read ". . . above 8 categories is 160 kilometres"
   Please replace page 27 with the attached updated page 27.

2. **Exhibit B-1, Section 6, line 16.**
   ""It is assumed that 85 percent" should read "It is assumed that 65 percent"
   Please replace page 48 with the attached updated page 48.

The result of this analysis will be used as one of the factors in determining the pole replacement decisions and may influence the current estimated pole replacement quantity in the project;

- Legacy copper in 187 “Sensitive Public areas” (see table 4) will be eliminated in the first three years totalling approximately 117 circuit kilometres;
- Legacy copper conductors will be replaced with ACSR conductor as per FortisBC distribution line practices; and
- Replacement of No. 4, No. 3, No. 2, No. 1/0, No. 2/0, No. 3/0, No. 4/0 and 300 MCM copper conductors are not within the scope of this project since:
  a) the general condition of the these categories of conductors is considered to be fair;
  b) the general age profile is 40 years or less; and
  c) cumulative circuit length in the above 8 categories is 160 kilometres which is expected to be replaced in the next 10 to 15 year under normal Capital Growth and Sustaining programs.

4.2 Implementation Plan 1 – 2018 Completion (Preferred Plan)

4.2.1 General Scope and Engineering Standards

The general scope of the Copper Conductor Replacement Program is as follows:

- replacement of No. 8, No. 6 and 90 MCM copper conductor with ACSR conductor;
- poles to be assessed for age and safety and replaced subject to assessment results;
- all transformers in the work zone to be assessed for capacity and reported for system database updating;
- ensure updates to GIS Database;
- standardization as per FortisBC existing standards; and
- ensure salvage of replaced copper conductors;

6. Project Cost

The Copper Conductor Replacement Project is intended to be a long term project. As a consequence, the Company has focused on providing a planning level of accuracy estimate (+/- 20 percent) for the first two years (based on an average cost per kilometre) while recognizing that the estimates for the following years will have a lower level of accuracy due to the volatility of cost in the utility industry. The overall estimated ten year cost is provided to give an indication of the magnitude of the project. The estimate provided is for the replacement of No. 6, No. 8 and 90 MCM copper conductors with an appropriate size ACSR conductor installed on wood pole structures. The work is intended to be constructed in snow free conditions. Most of the rebuilds are expected to be done in urban areas with at least some public exposure. Existing circuit alignments are to be reused as far as practical and due to the brittle copper issue, outages have been assumed. Costs include an allocated amount for standby generation for any extended period outage or for critical customers. Due to the circuit configurations and space limitations, the structures will be replaced with single pole structures with a typical ruling span of 70 meters. It is assumed that 65 percent of the old circuits will require pole replacements and full rebuilding including anchoring. For costing purposes it is assumed that 70 percent of structures are tangents and 30 percent are either angles or deadends. The estimate is based on an average cost per kilometre multiplied by the length of the distribution line being replaced. This level of estimating is being provided ahead of any detailed engineering and specific customer requirements due to the significant number of locations that require attention and avoidance of a high pre-approval cost that would be required to refine the estimates.