Thunder Mountain Wind Project

Interconnection ERIS Feasibility Study

Report No. TGI-2012-A050-FeS-ERIS-R0

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1.0 INTRODUCTION

XXX, the Interconnection Customer (IC), proposes to develop the Thunder Mountain Wind project to deliver electric energy to BC Hydro (BCH). This project is located approximately 33 km southeast of Tumbler Ridge, BC.

In May 2011, BC Hydro performed a NRIS Feasibility Study (Report No. TGI-2011-A050-FeS-R0) that identified system modifications required to interconnect the proposed 600 MW Thunder Mountain Wind project.

The IC is now requesting an ERIS Feasibility Study to identify the potential injection at the POI that would be acceptable with only minimal system upgrades. The study used the same reference base case as the previous NRIS Feasibility Study, which included all higher queued projects and the BC Hydro DCAT project.

The Interconnection System Impact Study and Facilities Study reports will provide greater details of the Interconnection Network Upgrade requirements and associated cost estimates and estimated construction timeline for this project.

2.0 STUDY PURPOSE AND SCOPE

Using the same base case as the NRIS Feasibility study (TGI-2011-A050-FeS-RO), the scope of this ERIS study is to determine the potential power injection at Tumbler Ridge before substantial system upgrades would be required.

3.0 TERMS OF REFERENCE

BCH planning methodology and criteria are used in the studies.

The ERIS Feasibility study does not investigate stability analysis, harmonic mitigation, electro-magnetic transient analysis, operating restrictions and other factors for possible second contingency outages. Subsequent internal network studies will determine the requirements for reinforcements or operating restrictions/instructions for those kinds of events.

4.0 STUDY ASSUMPTIONS

The same base case was used as in the NRIS Feasibility Study (TGI-2011-A050-FeS-R0).

All higher queued wind farms in this area are modeled based on their most recent data submission.

The Thunder Mountain Wind Project was assumed to meet the terms of BC Hydro’s Technical Interconnection Requirements (TIR).

The BC Hydro DCAT project is in-service.
5.0 STUDY RESULTS

Based on the ERIS study results and thermal ratings, the possible power injection at Tumbler Ridge would be 30 MW before substantial system upgrades are required.

This study does not include stability analysis, harmonic mitigation, electro-magnetic transient analysis, and other analytical studies or calculations or site visits which normally form part of a comprehensive system study. Equipment that may be determined during more comprehensive studies is not included in the cost estimate or considered in the estimated schedule provided herein.

The Interconnection System Impact Study and Facilities Study reports will provide greater details of the Interconnection Network Upgrade requirements and associated cost estimates and estimated construction timeline for this project.
APPENDIX A – PROJECT LOCATION MAP

The contents of this section have been removed due to the proprietary nature of the information.