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### **Notice of joint MH-SPC Inter-Regional Planning Exploratory Study**

Manitoba Hydro (MH) and SaskPower (SPC) are providing notification of a joint inter-regional planning exploratory study to increase the transfer capability from Manitoba to Saskatchewan by up to 1000 MW.

MH and SPC participate in interregional planning activities as interconnected NERC Planning Coordinators on an adhoc basis pursuant their interconnection agreement. Interregional studies can be conducted at any time in accordance with a defined scope and may include reliability analysis, stability analysis, transfer analysis, market efficiency analysis, short circuit analysis, as well as generation and merchant transmission interconnection analysis.

#### **Purpose and Limitations of Study**

Currently, there is interest in identifying transmission plans to increase the transfer capability between MH to SPC by up to 1000 MW. The increased transfer capability could allow for the two regions to collaborate on future generation development projects, facilitate exchange of ancillary services, allow for wind synergy with hydro storage potential in MH, and assist in the transition to a sustainable non-emitting electricity generation portfolio in the region. Transmission options considered may include 230 and 500 kV AC interconnections or 500 kV DC interconnections.

Any identified transmission options may become candidates for further study by MH and SPC or for use in other industry initiatives, for example the Regional Electricity Cooperation and Strategic Infrastructure Initiative (RECSI).

This study does not eliminate the need for future transmission service studies needed to secure service under the respective MH and SPC open access tariffs.

#### **Study Assumptions**

The specific assumptions are:

- The study year will be approximately 2030. The nearest regional transmission system cases that represent this study year will be utilized.
- Generation will be dispatched to meet peak load and expected firm transmission service in MH and SPC.
- Generation additions and retirements, interchange and other assumptions will be coordinated between MH and SPC.

#### **Study Criteria**



The study criteria will use applicable planning criteria of each of the systems under study. The study will include NERC and individual NERC Transmission Owner criteria.

### **Case Development**

The latest series of regional transmission system models will be used for the base case and will include current planned system additions in MH and SPC expected to be in-service for the selected study year.

### **Study Methodology**

AC contingency analysis will be performed for N-1 and worst case N-2 disturbances. SPC, MH as well as northern MISO and SPP areas will be monitored for thermal and voltages. Voltage, stability, short circuit and transient stability studies may be performed if situations warrant.

Potential solutions to thermal and voltage constraints will be developed and tested. Approximate planning-level cost estimates will be determined for candidate solution alternatives.

### **Report**

A report will be posted on the MH and SPC OASIS sites.

### **Contacts**

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