January 2015 Revisions

Section	Description
4.1.1	Removed previous section 4.1.1
4.1.1	Added language regarding contact with MISO
4.1.1	Removed reference to submitting tags after the fact
5.0	Revised parts I and II and added language regarding contact with MISO

March 2015 Revisions

4.1.1	Added language to reflect interchange standards timing requirement
4.1.1	Revised language to reflect procedural changes
4.1.1	Removed part IV from both SK serving MB separated load and MH serving
	SK separated load.
4.1.1	Added language to ensure the HNF TSR is set to exclude.
5.0	Revised language to reflect procedural changes.

1.0 Introduction

This document contains the business practices for serving separated load and transmission of stranded generation under the Manitoba Hydro Open Access Transmission Tariff (OATT). These practices are intended to supplement the Manitoba Hydro OATT and to the extent that there is a conflict between the Manitoba Hydro OATT and these practices, the OATT will apply.

2.0 General Inquiries

For general inquiries regarding the OATT contact: Michael Fones, CET Tariff Administration Officer Transmission Services & Compliance Department Manitoba Hydro Phone (204) 360-5304 Email: <u>mfones@hydro.mb.ca</u>

Or

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3.0 Coordination of the Manitoba Hydro OATT

Manitoba Hydro is a coordinating member of the Midcontinent Independent System Operator (Midcontinent ISO or MISO).

Transmission customers should be aware that Manitoba Hydro has not implemented an energy market within Manitoba and that MISO provides some tariff coordination services for the Manitoba Hydro Open Access Transmission Tariff (Manitoba Hydro Tariff or MH OATT) for transmission service across Manitoba Hydro as defined by the coordination agreement between Manitoba Hydro and the Midcontinent ISO. Transmission customers will be charged as per the MH OATT.

4.0 Separated Load

Unless otherwise indicated, an unplanned outage shall mean an emergency or forced outage.

4.1 Serving separated load on the Manitoba - Saskatchewan Interface

This business practice describes separated load service on the Manitoba -Saskatchewan interface, which is a form of Non-Firm Point-to-Point Transmission Service provided solely for the purpose of serving the adjacent Transmission Customer's load during planned or unplanned separation of the load from the Transmission Customer's transmission system.

Manitoba Hydro (MH) will provide separated load service to Saskatchewan Power Corporation (SPC) or their designated marketing agent, subject to SPC offering comparable, non-discriminatory separated load service to MH.

For the provision of separated load service to SPC, the adjacent transmission provider or their designated marketing agent must be a Transmission Customer under MH's OATT.

The adjacent transmission provider's separated load may be served by generating resources in the supplying party's Balancing Authority (BA).

4.1.1 Separated load on the Southern Manitoba – Saskatchewan Interface

Serving separated load during an unplanned outage

In order to meet interchange standards time constraints under abnormal operating conditions, within 60 minutes from the time of the resource loss a request for an arranged interchange will be submitted, with a start time that does not exceed 60 minutes from the time of the resource loss.

When an unplanned outage occurs on either the SPC or MH system causing a separated load event, the Control Area who is responsible for the separated load will immediately contact the control room in the control center of the party providing the separated load service. This will be followed by a call to the MISO 24-hour Tariff desk to let MISO know that an hourly non-firm (HNF) transmission service reservation (TSR) is coming to the queue followed by an E-tag, for separated load service and they need to be approved for emergency purposes. On the call to the MISO 24-hour Tariff desk, the caller will provide the

MW amount, source/sink, POR/POD and a reminder that the TSR should be set to exclude. Once the calls have been placed the following shall apply:

SK Serving MB separated load

- I. Both control rooms shall contact their respective marketing agents to notify them that energy is flowing to the separated load. Scheduling of energy shall be arranged by SK, while the HNF TSR set to exclude will be submitted by an MH marketer.
- II. The dynamic tag for the flow submitted by the SPC marketing agent shall contain the identifier "MISO S/A" in the MISO field and separate TSR numbers for the MH and SPC fields. The comments field will indicate the E-tag is for "Emergency purposes (adjacent BA separated load service)," which will signify to MISO operators that it is a tag for separated load service in order for it to pass validation.
- III. The amount of service provided prior to the arranged interchange will be reconciled following the unplanned outage by MH and SPC.

MB Serving SK separated load

- I. Both control rooms shall contact their respective marketing agents to notify them that energy is flowing to the separated load. Scheduling of energy shall be arranged by SK, while the HNF TSR set to exclude will be submitted by an MH marketer.
- II. The dynamic tag for the flow submitted by the SPC marketing agent shall contain the identifier "MISO S/A" in the MISO field and separate TSR numbers for the MH and SPC fields. The comments field will indicate the E-tag is for "Emergency purposes (adjacent BA separated load service)," which will signify to MISO operators that it is a tag for separated load service in order for it to pass validation.
- III. The amount of service provided prior to the arranged interchange will be reconciled following the unplanned outage by MH and SPC.

Serving separated load during a planned outage

During a planned outage the following shall apply:

SK Serving MB separated load

- I. The NRM at MH shall enter the outage in COLA. Load serving arrangements shall be included in the TOI sent to MISO, which will be posted on OASIS, and will also indicate that it is for separated load service. MH Transmission Services & Compliance will then proceed to notify an MH marketing agent and MISO's 24-hour Tariff deskby email.
- II. The email mentioned in part I above shall specify the following outage information:
 - i) Reminder to ensure TSR is set to exclude;
 - ii) Date and estimated duration;
 - iii) The affected line;
 - iv) The party providing and the party receiving separated load service, and;
 - v) Maximum load expected to be served.
- III. MH Transmission Services & Complianceshall contact an MH marketing agent to notify them that a TSR needs to be submitted on their OASIS page.
- IV. Once the TSR is submitted, MISO shall verify the TSR to ensure it will be approved. If the TSR is not approved, MISO shall counteroffer and an MH marketing agent will need to confirm the TSR.
- V. Once the TSR is confirmed, SK will submit a dynamic E-tag using this TSR as a reference.
- VI. The dynamic E-tag shall contain the identifier "MISO S/A" in the MISO field and the TSR identifier in the Manitoba Hydro field. The comments field will indicate the E-tag is for "Emergency purposes (adjacent BA separated load service)," which will signify to MISO operators that it is a tag for separated load service in order for it to pass validation.

MB Serving SK separated load

- I. The NRM at MH shall enter the outage in COLA. Load serving arrangements shall be included in the TOI sent to MISO, which will be posted on OASIS, and will also indicate that it is for separated load service. MH Transmission Services & Compliance will then proceed to notify an MH marketing agent and MISO's control room in their control center by email.
- II. The email mentioned in part I above shall specify the following outage information:
 - i) Reminder to ensure TSR is set to exclude;
 - ii) Date and estimated duration;
 - iii) The affected line;
 - iv) The party providing and the party receiving separated load service, and;
 - v) Maximum load expected to be served.
- III. MH Transmission Services & Compliance shall contact an MH marketing agent to notify them that a TSR needs to be submitted on their OASIS page.
- IV. Once the TSR is submitted, MISO shall verify the TSR to ensure it will be approved. If the TSR is not approved, MISO shall counteroffer and an MH marketing agent will need to confirm the TSR.
- V. Once the TSR is confirmed, SK will submit a dynamic E-tag using this TSR as a reference.
- VI. The dynamic E-tag shall contain the separated load identifier "MISO S/A" in the MISO field and the TSR identifier in the SPC field. The comments field will indicate the E-tag is for "Emergency purposes (adjacent BA separated load service)," which will signify to MISO operators that it is a tag for separated load service in order for it to pass validation..

Other Schedule charges under the MH OATT will be applied as applicable. Note that Ancillary Services will be charged based on usage during the first 60 minutes of an unplanned event where no TSR is in place and then subsequently will be charged based on the reserved capacity of a separated load transmission service reservation, and calculated using the hourly rates for Schedule 1 and 2.

4.2 Serving separated load on the Manitoba – USA Interface

The Transmission Service Providers involved in provision of separated load service on the Manitoba – USA interface are Manitoba Hydro Electric Board (MHEB), Minnkota Power Cooperative (MPC) and the Midcontinent Independent System Operator (MISO). MHEB, MPC, and MISO are referred to herein individually as "Party" and collectively as "Parties."

There are four International Power Lines (IPL) that interface Manitoba and the USA.

- (1) Letellier/Drayton IPL 230 kV line from Letellier, Manitoba to Drayton, North Dakota L20D
- (2) Richer South/Moranville IPL 230 kV line from Richer South, Manitoba to Moranville, Minnesota - R50M
- (3) Dorsey/Forbes IPL 500 kV line from Dorsey, Manitoba to Forbes, Minnesota - D602F
- (4) Glenboro/Rugby IPL 230 kV line from Glenboro, Manitoba to Rugby, North Dakota G82R

However, only two IPLs have the potential for separated load service, namely the Letellier/Drayton IPL when the Drayton to Prairie 230 kV line is out of service and the Richer South/Moranville IPL during outages of any of the following 230 kV lines: Rosser to Ridgeway and Ridgeway to Richer South, Richer South to Moranville, Moranville to Lund, Lund to Running, or Running to Shannon.

By mutual agreement, the Parties agree to provide separated load service to each other during outages of key transmission elements without a special separated load service reservation or tag. The Load Serving Entity will schedule generation to serve the load that is separated onto the neighboring Transmission System, even though the direct path to that load is not intact. The load will be served by loop flow through the adjacent Transmission Provider's Transmission System.

The outage event will be posted on the MHEB OASIS page.

4.2.1 Serving separated load during a planned outage

When a Party is taking an outage of a key transmission element that causes their load to be separated, the Party is to provide as much notice as possible. Notice shall be given to other affected Parties and include date, duration and maximum load expected to be served by the other Parties. The other Parties will review the request and, if possible, make arrangements so that the load can reliably be supplied during the course of the outage of the key transmission element. If a Party cannot reliably supply its own load while supplying the separated load during the planned outage event, this Party does not have to provide a path to supply the separated load. Studies to identify transfer capability as a result of the transmission element being out of service shall include the maximum load expected to be served during the separated load event.

4.2.2 Serving separated load during an unplanned outage

When a Party is forced to take an outage of a key transmission element that causes their load to be separated, the Party is to alert the other affected Parties immediately. This alert shall include the expected duration of the separated load and the maximum load expected to be served by the other Parties. The other Parties will make arrangements so that the load can reliably be supplied during the course of the outage of the key transmission element. Studies to identify transfer capability as a result of the transmission element being out of service shall include the maximum load expected to be served during the separated load event. During unplanned separated load events, the MISO Reliability Coordinator will determine and direct actions for reliable service of loads.

4.3 Serving separated load on the Manitoba – Ontario Interface

The Transmission Service Providers involved in provision of separated load service on the Manitoba – Ontario interface are MHEB and the Ontario Independent Electricity System Operator (IESO).

The following three transmission lines interface the Manitoba – Ontario provincial border:

- a) 230 kV line from Whiteshell, Manitoba to Kenora, Ontario K21W
- b) 230 kV line from Whiteshell, Manitoba to Kenora, Ontario K22W
- c) 115 kV line from Seven Sisters-SK1 to Kenora, Ontario SK1

However, only line SK1 has the potential for separated load service. Line SK1 is a non-synchronous line that is normally operated open at the Manitoba - Ontario provincial border, as the existing market rules in the IESO make it impracticable to operate the line as an interconnection facility.

Line SK1 can be used as backup for load serving. On line SK1 Manitoba Hydro has load at Star Lake and Brereton Lake Stations and the Ontario IESO has load

at Clearwater Bay Station. When line SK1 is used as back up for load serving, load must be transferred to the backup supply and then returned to the normal supply. This transfer and return requires either a customer outage to Manitoba Hydro's Star Lake and Brereton Lake Stations or to IESO's Clearwater Bay Station.

The outage event will be posted on the MHEB OASIS page. The posting on the MHEB OASIS page will include the dates and duration of all customer outages.

4.3.1 Serving separated load during an outage

When SK1 is used as backup for load serving, and a customer outage will occur as load is transferred to and from the backup supply, the Transmission Service Provider using SK1 as backup for load serving is to provide as much notice as possible. Notice shall be given to the other affected Transmission Service Provider. Notice shall include the dates and duration of the customer outages, as well as the size of loads expected to be transferred. Manitoba Hydro requires a minimum of 24 hours notice to transfer load to and from the backup supply. This 24 hours notice period allows Manitoba Hydro sufficient time to provide necessary notices for any service interruption required at Star Lake and Brereton Lake Stations. A Transmission Service Request is not required to use line SK1 as backup for load serving. The energy consumed by the load transferred to backup supply will be treated as inadvertent energy and settlement will be through the normal inadvertent process.

5.0 Stranded Island Falls generation onto the Manitoba system due to an unplanned outage

Unless otherwise indicated, an unplanned outage shall mean an emergency or forced outage.

When an unplanned outage occurs on either the SPC or MH system, causing the forced flow of Island Falls generation into Manitoba, the Control Area experiencing the restriction in transfer capability will notify the control room of the other party, and the MISO 24-hour Tariff desk to let MISO know that an hourly non-firm (HNF) transmission service reservation (TSR) is coming to the queue followed by an E-tag, for separated load service and they need to be approved for emergency purposes. On the call to the MISO 24-hour Tariff desk, the caller will provide the MW amount, source/sink, and POR/POD. Once the calls have been placed the following shall apply:

I. Upon receiving notification of the restriction to Island Falls generation flowing into MB, both control rooms shall contact their respective marketing agents to notify them that energy is flowing. Within sixty (60) minutes after the initiating event an MH marketer will submit an HNF TSR and once confirmed, SPC will create a dynamic tag to reflect the adjustment in energy flowing into Manitoba.

Other Schedule charges under the MH OATT will be applied as applicable. Note that Ancillary Services will be charged based on usage during the first 60 minutes of an unplanned event where no TSR is in place and then subsequently will be charged based on the reserved capacity of a separated load transmission service reservation, and calculated using the hourly rates for Schedule 1 and 2.