

803 SASKPOWER EMERGENCY ASSISTANCE ENERGY

1. Purpose

To outline the terms and conditions for provision of emergency assistance between the ISO, as the Alberta balancing authority and SaskPower, as the Saskatchewan balancing authority, to define the policies and procedures for the system controller (SC); and the policies for the SaskPower system operator in meeting the requirements for the exchange of emergency assistance energy.

2. Background

Emergency assistance energy can be requested from the ISO by SaskPower or requested from SaskPower by the ISO. Emergency assistance energy is made available to assist the requesting balancing authority when it is experiencing a system emergency. The amount of emergency assistance energy that can be provided from the ISO to SaskPower depends on several conditions, including transmission constraints in the Empress area, the amount of supplemental and excess spinning reserves available, and the transfer capability of the McNeill DC converter station.

The interconnection between the Alberta balancing authority and the Saskatchewan balancing authority is via the back-to-back McNeill DC converter station. Although the DC converter is rated 150 MW in either direction, the interconnection transfer capability is limited by the transmission system connected on either side of the converter. The ISO and SaskPower post the hourly transfer capability on their respective websites.

3. Policy

3.1 Requesting emergency assistance energy

- In the event of a system emergency, the balancing authority experiencing the system emergency may request emergency assistance energy from the other party.
- The balancing authority experiencing the system emergency will usually make a verbal request for emergency assistance energy to speed up the process. This verbal request will be followed by written confirmation (see Section 4.1 and Section 4.2).
- The requesting balancing authority will submit an e-tag in accordance with the WECC after-the-fact (ATF) business practice after the use of emergency assistance energy is complete.

3.2 Providing emergency assistance

The balancing authority receiving the request for emergency assistance energy will use reasonable efforts to supply the energy from its own system, subject to conditions below.

- Emergency assistance energy will be provided for up to one hour or until the requesting balancing authority no longer requires it, whichever is the lesser.

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- The balancing authority requested to provide emergency assistance energy will not risk reliability of its own system, and specifically will not be required to:
 - Curtail firm load.
 - Reduce curtailable load, other than load used for supplemental reserve.
 - Issue directive(s) for spinning reserves that result in its system carrying less than the required amount of spinning reserve.
 - Provide emergency assistance energy from regulation reserve.
 - Violate contingency reserve obligations to the NWPP or any other obligations to the NWPP, WECC, MRO(Midwest Reliability Organization) or NERC.
- Emergency assistance energy will be provided only from supplemental reserve and from spinning reserve that is in excess of the required amount of spinning reserve.
- The balancing authority providing emergency assistance energy will include this energy as part of its supplemental reserve.
- Emergency assistance energy is considered interruptible and will be curtailed as required for a supply contingency in the supplying party's system within 10 minutes from the time of the notification to the receiving party.
- Emergency assistance energy can be curtailed when supplemental reserve is required for native load, NWPP contingency reserve obligations, or any other NWPP, WECC or MRO obligation.
- Emergency assistance energy will be supplied only to the extent that there is available transmission capacity.
- The delivery of emergency assistance energy from Alberta's balancing authority area to SaskPower must not cause the maximum Empress area load (MEAL) to be exceeded as identified in [OPP 503](#).
- The ISO will prepare a brief written report after an event when the SC requested emergency assistance energy from SaskPower. This report will include the reason for the request and other pertinent details.

3.3 Settling emergency assistance

SaskPower and the ISO will settle emergency assistance energy. Each balancing authority will have the right to audit records of the other party pertaining to emergency assistance energy transactions.

4. Responsibilities

4.1 ISO

The ISO must:

- Update this OPP as required to reflect any changes that may result from implementing an interconnection agreement or other agreements, between the ISO and SaskPower.
- Prepare a brief written report about each request for emergency assistance energy, including the reasons for the request. This report will also fulfill the requirement for written confirmation of the emergency assistance energy request described in [Section 3.1](#).

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System Controller

The SC must:

- Use reasonable efforts (see [Section 3.2](#)) to supply the requested emergency assistance energy to SaskPower.
- Request emergency assistance energy from SaskPower in the event of a system emergency in the Alberta balancing authority area, when the assistance will help to mitigate the emergency, in accordance with [Section 3.1](#).
- Record emergency assistance energy transactions and information about these transactions.

4.2 SaskPower

SaskPower will:

- Use reasonable efforts (see [Section 3.2](#)) to supply the requested emergency assistance to the Alberta balancing authority area.
- Request emergency assistance from the SC in the event of a system emergency in the SaskPower balancing authority area, when the assistance will help to mitigate the emergency, in accordance with [Section 3.1](#).
- Prepare and issue to the ISO a brief written report about each request for emergency assistance, including the reasons for the request. This report will also fulfill the requirement for written confirmation of the emergency assistance request described in [Section 3.1](#).

4.3 ATCO Electric Transmission Operator

The ATCO Electric transmission operator must operate the McNeill DC Converter station under the direction of the SC.

5. System Controller Procedures

5.1 Sending emergency assistance energy to SaskPower

When the SaskPower system operator requests emergency assistance energy, the SC must:

1. Determine the available Empress area transmission capacity by:
 - a. Determining the maximum Empress area load (MEAL); refer to [OPP 503](#).
 - b. Subtract the actual Empress area load, which is the AMC load value on the video wall, from the MEAL; that is:
$$\text{Available Empress area transmission capacity} = \text{MEAL} - \text{AMC load}$$
2. Determine the amount of emergency assistance energy to send to SaskPower as the lesser of:
 - a. The requested amount of emergency assistance energy.
 - b. The available Empress area transmission system capacity.
 - c. The amount of energy available from supplemental and excess spinning reserves.

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- d. The available capacity of the McNeill converter station.
3. Call the SaskPower system operator and confirm:
 - a. The amount of emergency assistance energy to be sent to SaskPower.
 - b. The new net interchange schedule amount (MW).
 - c. The ramp start time, as agreed to by both parties.
 - d. The ramp duration, as agreed to by both parties.
4. Call and notify the ATCO Electric transmission operator of:
 - a. The net interchange schedule amount (MW).
 - b. The ramp start time.
 - c. The ramp duration.
5. Issue ancillary service directives for supplemental and excess spinning reserves equal to the amount of emergency assistance energy being provided.
6. Notify the manager of AESO Tools and Applications by an e-mail prior to the end of the shift that emergency assistance energy has been scheduled and enter in the shift log (see [OPP 1301](#)) that emergency energy was sent to SaskPower, the time when the schedule started, the MW amount, the reason for the request (if known).

5.2 Requesting emergency assistance energy from SaskPower

When emergency assistance energy is required for the Alberta balancing authority area, the SC must:

1. Call the SaskPower system operator and request the amount of emergency assistance energy required, up to the import available transfer capability (ATC) on the Alberta – Saskatchewan interconnection.
2. Confirm with the SaskPower system operator:
 - a. The new net interchange schedule amount (MW).
 - b. The ramp start time, as agreed to by both parties.
 - c. The ramp duration, as agreed to by both parties.
3. Call and notify the ATCO Electric transmission operator of:
 - a. The net interchange schedule amount (MW).
 - b. The ramp start time.
 - c. The ramp duration.
4. Notify the manager of AESO Tools and Applications and enter in the shift log (see [OPP 1301](#)) that emergency energy was received from SaskPower, the time when the schedule started, the MW amount, the reason for the request and select the Major Events checkbox.

5.3 Terminating or curtailing emergency assistance energy to SaskPower

The SC must:

1. If a supply contingency occurs in the Alberta balancing authority area and curtailment of emergency assistance energy is required to recover, determine the amount to curtail and go to Step 3.

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2. After one hour, or upon notification from the SaskPower system operator, discontinue sending emergency assistance energy to SaskPower.
3. Confirm with the SaskPower system operator:
 - a. The new net interchange schedule amount in MW.
 - b. The schedule start time.
 - c. The ramp start time (assume to be five minutes before the scheduled start time unless otherwise agreed to).
 - d. The ramp duration (assume to be 10 minutes unless otherwise agreed to).
 - e. The integrated energy amount in MW for the hour(s).
4. Call and notify the ATCO Electric transmission operator of:
 - a. The net interchange schedule amount in MW.
 - b. The ramp start time (assume to be five minutes prior to schedule start time unless otherwise agreed to).
 - c. The ramp duration (assume to be 10 minutes unless otherwise agreed to).
5. Cancel or issue new ancillary service directive(s) to the supplemental and spinning reserve assets as required.
6. Request SaskPower to create an ATF e-tag for the integrated energy amount of the emergency assistance energy sent to SaskPower.
7. Enter in the shift log (see [OPP 1301](#)) when the schedule for the delivery of emergency assistance energy to SaskPower ended and select the Major Events checkbox.

5.4 Terminating or curtailing emergency assistance energy from SaskPower

The SC must:

1. If notified by the SaskPower system operator that emergency assistance energy must be curtailed, go to Step 3.
2. Request termination of emergency assistance energy by the SaskPower system operator within one hour from the start of the schedule.
3. Confirm with the SaskPower system operator:
 - a. The new net interchange schedule amount (MW).
 - b. The ramp start time (assume to be five minutes before the scheduled start time unless otherwise agreed to).
 - c. The ramp duration (assume to be 10 minutes unless otherwise agreed to).
 - d. The integrated energy amount (MWh) for the hour(s).
4. Call and notify the ATCO Electric transmission operator of:
 - a. The net interchange schedule amount (MW).
 - b. The ramp start time (assume to be five minutes before the scheduled start time unless otherwise agreed to).
 - c. The ramp duration (assume to be 10 minutes unless otherwise agreed to).

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5. Create an ATF e-tag for the integrated energy amount of the emergency assistance energy received from SaskPower.
6. Enter in the shift log (see [OPP 1301](#)) when the schedule for the receipt of emergency assistance energy from SaskPower ended and select the Major Events checkbox.

6. Revision History

Issued	Description
2009-09-01	Supersedes 2004-03-03
2004-03-03	Supersedes 2003-07-28
2003-07-28	Revised to ISO Operating Policies and Procedures