



# OPERATING RESERVES

## Technical Requirements




**Technical Requirements for the Provision of  
Supplemental Reserves from Resources that are  
External to the Alberta Control Area**

**Version 2.0**

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# Change History

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## **1.0 INTRODUCTION**

A party offering Supplemental Reserve Resources (SURR) to the Alberta Electric System Operator (AESO) must satisfy the technical requirements outlined in the sections below. A party offering SURR that is external to the Alberta Control Area (hereinafter referred to as ESURP) must be in a location subject to the jurisdiction of the North American Electric Reliability Council (NERC) but not located in the Alberta Control Area. As real-time Control Area operators implement interconnection schedules, the Control Area that will Deploy and schedule the Supplemental Reserves into Alberta is referred to as the "Host Control Area". The Host Control Area shall be equipped with the necessary facilities to receive and respond to the System Controller (SC) AS Dispatches and AS Directives.

For the definition of the meanings of capitalized words in this document please refer to the Glossary of Terms for Technical Requirements for Ancillary Services.

## **2.0 GENERAL**

An ESURP that wishes to make offers for a Supplemental Reserve Resource(s) must meet the following conditions:

1. The ESURP shall demonstrate that it has entered into any required arrangements with the Host Control Area in which the SURR is located to carry out the Activation and Deployment of the Supplemental Reserves to Alberta.
2. The Host Control Area, from which the Supplemental Reserves are being provided, must comply with NERC Operating Policies and any applicable Regional Reliability Council criteria.

## **3.0 TECHNICAL REQUIREMENTS**

The technical requirements listed below apply to all ESURPs offering Supplemental Reserve service from Resources located outside of the Alberta Control Area.

### **3.1 EXTERNAL SUPPLEMENTAL RESERVE PROVIDER (ESURP)**

1. The ESURP must be capable to provide a minimum of ten (10) MW of Supplemental Reserve.
2. The ESURP shall submit upon request from the AESO, a copy of the Host Control Area's Area Control Error (ACE) chart or 4-second interval data following Deployment of Supplemental Reserves. The time interval for the ACE chart or data is from the time of the System Controller AS Directive to Deploy Supplemental Reserves to ten (10) minutes following the time of the System Controller AS Directive.

### **3.2 HOST CONTROL AREA**

1. The ESURP must secure confirmation from its Host Control Area operator that when it offers Supplemental Reserve to the Alberta Control Area, it schedules an equivalent amount of Contingency Reserve for its own Control Area. This is so as to continue to meet the requirements for Contingency Reserve of the Regional Coordinating Council it belongs to.

2. The ESURP must confirm that its Host Control Area and the Alberta Control Area shall be capable of maintaining the interchange schedule for up to sixty (60) minutes following the System Controller AS Directive.
3. The ESURP must confirm that its Host Control Area is willing to accept an AS Directive of a portion of the maximum Supplemental Reserve amount declared.
4. During the period of time from ten (10) minute to sixty (60) minutes following a System Controller AS Directive to schedule the Supplemental Reserves, the ESURP must confirm that the Host Control Area must be willing to accept a System Controller AS Dispatch to re-Activate and re-Position the Supplemental Reserves.

### **3.3 TELEMETRY AND COMMUNICATIONS**

1. Both primary and backup voice communications between the control center of the System Controller and the control centre of the Host Control Area must be provided.
2. The Host Control Area shall be able to communicate with the System Controller using voice or electronic means, as required by the System Controller and as set out in the AESO's Operating Policies and Procedures (OPPs).
3. The ESURP shall communicate with the System Controller using voice or electronic means, as required by the System Controller and as set out in the AESO OPP's.
4. The ESURP shall maintain a "control centre" for the Supplemental Reserve Resource being offered that is staffed 24 hours a day, 7 days a week.

## **4.0 OPERATIONAL REQUIREMENTS**

### **4.1 GENERAL**

1. The ESURP must follow all applicable AESO OPP's published by the AESO with respect to the operation of Supplemental Reserve.

### **4.2 ESURP INTERCHANGE SCHEDULING**

1. The ESURP shall respond to a System Controller request to activate a Supplemental Reserve amount. The ESURP response shall confirm:
  - whether the Supplemental Reserves are available to Activate;
  - the time when Activation can occur [maximum of fifteen (15) minutes from System Controller AS Dispatch]; and
  - that firm transmission service is available from the Host Control Area to the Alberta Control Area for the Supplemental Reserve energy if required by the System Controller.
2. The ESURP shall notify the Host Control Area operator, and the Host Control Area operator shall confirm with the System Controller that Supplemental Reserves are Activated.

3. When the System Controller issues an AS Directive to Deploy the Supplemental Reserve amount offered, the following shall take place:
  - The Host Control Area operator shall coordinate and implement a new interchange schedule with the System Controller such that the Supplemental Reserve energy is delivered to the Alberta Control Area within ten (10) minutes from the time of the AS Directive issued by the System Controller.
  
4. When the System Controller cancels the AS Directive to Deploy the Supplemental Reserve amount offered or sixty (60) minutes have passed since the AS Directive (whichever occurs first), the following shall take place:
  - The Host Control Area operator shall coordinate with the System Controller and terminate the energy schedule such that the Supplemental Reserve energy ceases to be delivered to the Alberta Control Area as soon as possible after the cancellation of the AS Directive.