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Applicability

- 1 Section 502.17 applies to:
 - (a) the following market participants:
 - the operator of a generating unit with a maximum authorized real power of 5 MW or greater;
 - (ii) the operator of an aggregated generating facility with a maximum authorized real power of 5 MW or greater;
 - (iii) the operator of a transmission facility;
 - (iv) the operator of an electric distribution system;
 - (v) a pool participant; and
 - (b) the ISO.

Market Participant Requirements for Primary Voice Communication Systems

- 2 Each market participant must have a primary voice communication system that is:
 - (a) a direct access telephone on the public telephone network;
 - (b) not degraded by any other communication functionality or any other data transfer activities if there is any shared equipment;
 - (c) automatically forwarded to another direct access telephone if the primary direct access telephone is unavailable and does not utilize voicemail; and
 - (d) located at its control centre and control room.

Market Participant Requirements for Backup Voice Communication Systems

- **3(1)** Each **market participant** must have the type of backup voice communication systems identified in Appendix 1 for communicating with the **ISO**.
- (2) Each operator of an electric distribution system, operator of a generating unit, and operator of an aggregated generating facility must have the type of backup voice communication system for communicating with each adjacent market participant as identified in Appendix 2.
- (3) Each **operator** of a **transmission system** must have the type of backup voice communication system for communicating with each adjacent **market participant** as identified in Appendix 3.
- (4) Each operator of a generating unit and operator of an aggregated generating facility must locate its backup voice communication system at its control room.
- (5) Each operator of a generating unit and operator of an aggregated generating facility that controls its facility remotely must locate its backup voice communication system at its control centre.
- (6) Each **operator** of an **electric distribution system** must have a backup voice communication system that is located at its **control centre**.
- (7) Each operator of a transmission facility must have a backup voice communication system that is located at its control centre.

Satellite Telephone Service and Utility Orderwire Service Specific Requirements

4(1) Each market participant must, where its backup voice communication system is a satellite

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telephone service, use an AESO approved satellite network system as identified in [the ĀĒSO document that identifies the names of approved satellite network systems].

- (2) Each market participant must, where its backup voice communication system is an utility orderwire service, ensure that its backup voice communication system has an availability greater or equal to 98%.
- (3) Each market participant must, where its backup voice communication system is a satellite telephone service or utility orderwire service, ensure that its backup voice communication equipment located within its control centre or control room remains operational for a minimum of 8 hours in the event of an extended power outage to its facilities.

Backup Voice Communication System Testing

- **5(1)** Each **operator** of a **generating unit**, **operator** of an **aggregated generating facility**, and **operator** of an **electric distribution system** required to have a backup voice communication system must test its backup voice communication systems at least once each **month** to verify successful two-way voice communication.
- (2) Each operator of a generating unit, operator of an aggregated generating facility, and operator of an electric distribution system must, if the monthly test conducted pursuant to subsection 5(1) is unsuccessful, initiate or coordinate action to repair, or designate a temporary replacement voice communication system, within 2 hours of the unsuccessful test.

Appendices

Appendix 1 –	Requirements for Backup Voice Communications Systems with the ISO
Appendix 2 -	Requirements for Backup Voice Communications Systems with Adjacent Operators of Transmission Facilities –Operator of Non-Transmission Facilities
Appendix 3 –	Requirements for Backup Voice Communications System with Adjacent Market Participants – Operator of a Transmission Facility

Revision History

Date	Description
xxxx-xx-xx	Initial release

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Appendix 1 Requirements for Backup Voice Communication System with the ISO

Market Participant Category	Market participant subcategory	Market Participant Backup Voice Communication System Options For Communicating with the ISO Control Centre
A pool participant	who may receive a dispatch for	(1) Utility orderwire service
	ancillary services or a directive.	(2) Satellite telephone service
		(3) Direct access telephone service
An operator of a	less than 50 MW based on the total	(1) Utility orderwire service
generating unit or	amount of generation controlled by the	(2) Direct access telephone service
aggregated	control centre or control room.	
generating	equal to or greater than 50 MW and less	(1) Utility orderwire service
facilities connected	than 300 MW based on the total amount	(2) Satellite telephone service
to the transmission	of generation controlled by the control	
system or to	centre or control room.	
transmission	equal to or greater than 300 MW based	(1) Utility orderwire service
facilities within the	on the total amount of generation	(2) Satellite telephone service
City of Medicine Hat	controlled by the control centre or	
where the maximum	control room, where the total	
authorized real	synchronous generation is less than 300	
power is	MW.	
	equal to or greater than 300 MW based on the total amount of synchronous generation controlled by the control centre or control room.	(1) Utility orderwire service
An operator of a	providing a black start capability	(1) Utility orderwire service
generating unit	service.	
An operator of a	that operates a transmission facility,	(1) Utility orderwire service
transmission	unless it only operates a radial circuit.	
facility	that only operates a radial circuit.	(1) Utility orderwire service
		(2) Satellite telephone service
		(3) Direct access telephone service
An operator of an	who contributes load additions for black	(1) Utility orderwire service
electric distribution	start capability process requirements.	(2) Satellite telephone service
system		(3) Direct access telephone service

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Appendix 2

Requirements for Backup Voice Communications with Adjacent Operators of Transmission Facility – Operator of a Non-Transmission Facility

Market Participant Category	Market Participant Subcategory	Market Participant Backup Voice Communication System Options For Communicating With The Adjacent Operator Of A Transmission Facility
An operator of a generating unit or aggregated	less than 50 MW based on the total amount of generation controlled by the control centre or control room.	(1) Utility orderwire service(2) Direct access telephone service
generating facilities connecting to the transmission system or to transmission facilities within the City	equal to or greater than 50 MW and less than 300 MW based on the total amount of generation controlled by the control centre or control room.	(1) Utility orderwire service(2) Satellite telephone service
of Medicine Hat where the maximum authorized real power is:	equal to or greater than 300 MW based on the total amount of generation controlled by the control centre or control room, where the total synchronous generation is less than 300 MW.	(1) Utility orderwire service(2) Satellite telephone service
	equal to or greater than 300 MW based on the total amount of synchronous generation controlled by the control centre or control room.	(1) Utility orderwire service
An operator of a generating unit	providing a black start capability service.	(1) Utility orderwire service
An operator of an electric distribution system		 (1) Utility orderwire service (2) Satellite telephone service (3) An operator of electric distribution system connected only to a substation that is part of a radial circuit may use direct access telephone service, except those that contribute load additions for black start capability.

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Appendix 3

Requirements for Backup Voice Communications with Operators of Adjacent Market Participants

Operator of a Transmission Facility

Market	Adjacent Market	Adjacent Market Participant	Operator of a Transmission
Participant	Participant	Subcategory	Facility Backup Voice
Category			Communication System Options
			For Communicating With Each
			Adjacent Market Participant
An operator	An operator of a	less than 50 MW based on the total	(1) Utility orderwire service
of a	generating unit	amount of generation controlled by	(2) Direct access telephone service
transmission	or aggregated	the control centre or control room.	
facility	generating	equal to or greater than 50 MW and	(1) Utility orderwire service
	facility	less than 300 MW based on the	(2) Satellite telephone service
	connecting to the	total amount of generation	
	transmission	controlled by the control centre or	
	system or to	control room.	
	transmission	equal to or greater than 300 MW	(1) Utility orderwire service
	facilities within	based on the total amount of	(2) Satellite telephone service
	the City of	generation controlled by the control	
	Medicine Hat	centre or control room, where the	
	where the	total synchronous generation is less	
	maximum	than 300 MW.	
	authorized real	equal to or greater than 300 MW	(1) Utility orderwire service
	power is	based on the total amount of	
		synchronous generation controlled	
		by the control centre or control	
		room.	
	An operator of a	providing a black start capability	(1) Utility orderwire service
	generating unit	service.	
	An operator of a	that operates a transmission	(1) Utility orderwire service
	transmission	facility, unless it only operates a	(2) An operator of a transmission
	facility	radial circuit.	facility that only operates a radial
			circuit may use satellite telephone
		/	service or direct access telephone
			service
		that only operates a radial circuit.	(1) Utility orderwire service
			(2) Sateillite telephone service
			(3) Direct access telephone service
	An operator of		(1) Utility orderwire service
	an electric		(2) Satellite telephone service
	distribution		(3) An operator of electric
	system		distribution system connected only
			to a substation that is part of a radial

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circuit may use direct a	ccess
telephone service, exce	ept those who
contribute load addition	s for black
start capability.	

