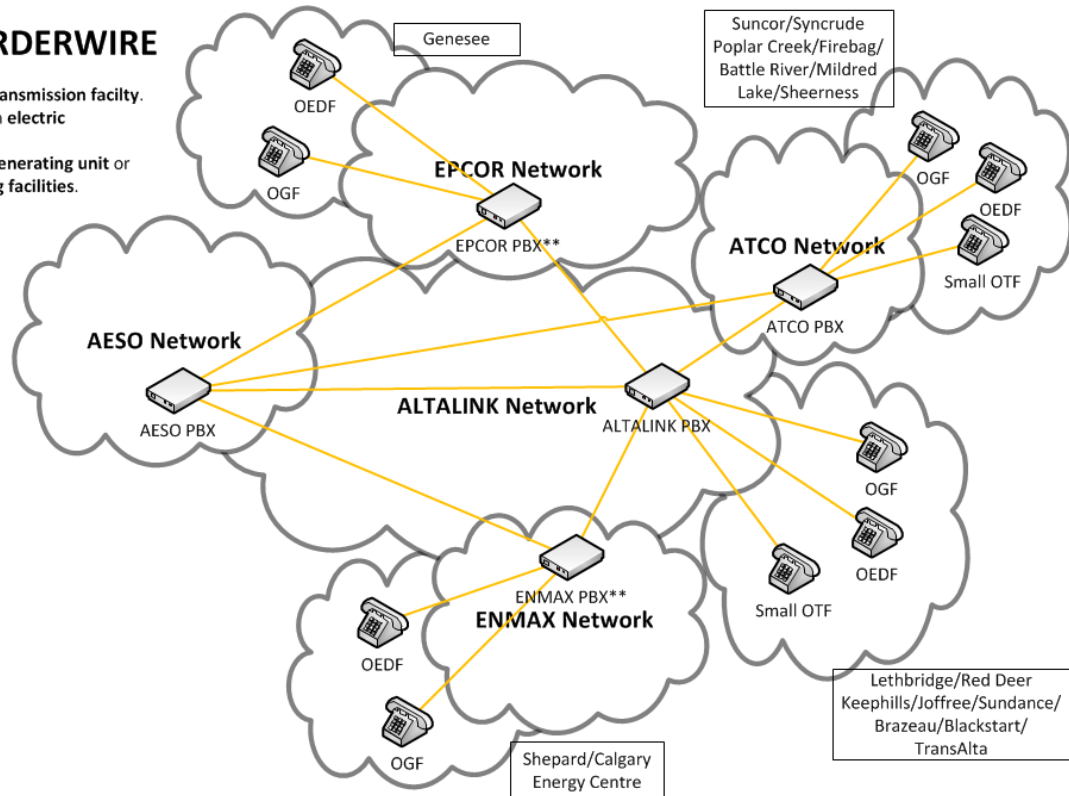


Stakeholder Comment Matrix for Additional Feedback Attachment – July 25, 2019

AESO's Preferred Orderwire Architecture – Mesh Option

UTILITY ORDERWIRE

OTF – Operator of a transmission facility.
 OEDF – Operator of an electric distribution system.
 OGF – Operator of a generating unit or aggregated generating facilities.



AESO Assumptions

- In this arrangement, EPCOR Distribution & Transmission Inc. (“EPCOR”), ENMAX Power Corporation (“ENMAX”), ATCO Electric Ltd. (“ATCO”), and AltaLink Management Ltd. (“AltaLink”) are the upstream market participants. The upstream market participants will provide the private branch exchange (“PBX”) to support the orderwire phones of connecting operators of transmission facilities, generating units, and aggregated generating facilities (“downstream market participants”).
- The PBX interconnections and the quantity of supported lines between market participants will be selected based on anticipated traffic during a restoration event. The PBX and telecommunication infrastructure are capable of interconnections and multiple line support.
- Downstream market participants will be responsible for the costs and infrastructure associated with reaching the network edge of the upstream market participants.
- All market participants will leverage and provide access to the telecommunication infrastructure they own and operate and will construct the necessary utility orderwire interconnections for all market participants.
- Where redundant, the same PBX can be used to carry both the utility orderwire service and direct access phone service as long as there is no single point of failure.
- Requirements for extended power outages do not apply to intermediate sites.

Stakeholder Comment Matrix for Additional Feedback Attachment – July 25, 2019



Market Participant Assumptions Requested

For Items #1 and #3 of the *Stakeholder Comment Matrix for Additional Feedback*, please provide all assumptions used to estimate the costs and implementation timelines of the variables found in the Variable List below.

Variable List

1. Amount of PBX additions required
2. Amount and type of new interconnections with the AESO
3. Number and type of new interconnections or phone connections with adjacent operators of transmission facilities
4. Number and type of new phone connections with industrial system designations (“ISD”)
5. Number and type of new phone connections with operators of generating units
6. Number and type of new phone connections with operators of aggregated generating facilities
7. Number and type of new phone connections with blackstart resources
8. Variances to Section 502.17 requirements assumed
9. Other variables that impact the cost and/or implementation timeline

An example for an operator of transmission facility

As an example, below is the type of information that the AESO would like stakeholders to provide.

1. Existing redundant PBX capable of supporting utility orderwire system with the addition of one interface card
2. Redundant interconnections with the AESO PBX exist and three new services to be provisioned to the AESO
3. New interconnections with two adjacent operators of transmission facilities and new phone connections with three adjacent operators of transmission facilities
4. New phone connection with two ISDs
5. New phone connection with three generating units
6. No new phone connections with aggregated generating facilities need
7. No new phone connection with blackstart resources
8. Costs and timelines assume that two downstream facilities will receive a variance to allow them to use satellite phone instead of utility orderwire

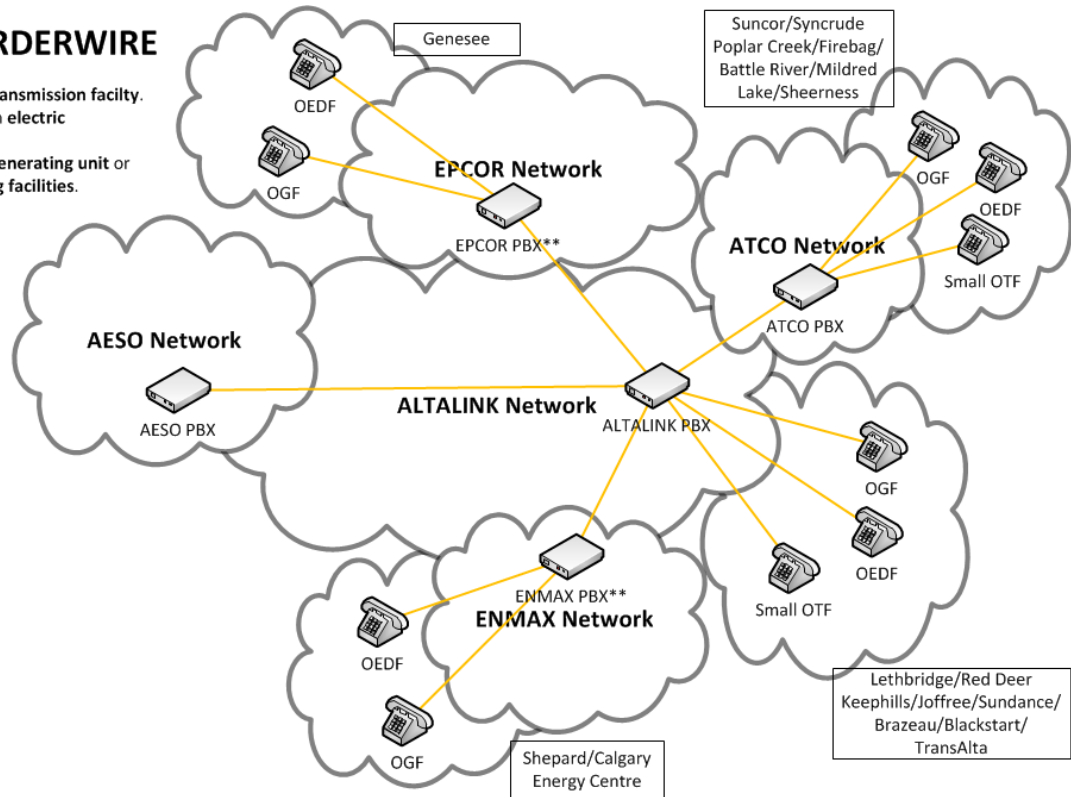
Stakeholder Comment Matrix for Additional Feedback Attachment – July 25, 2019



Other Considered Orderwire Architecture – Operator of a Transmission Facility Hub Option

UTILITY ORDERWIRE

OTF – Operator of a transmission facility.
 OEDF – Operator of an electric distribution system.
 OGF – Operator of a generating unit or aggregated generating facilities.



Stakeholder Comment Matrix for Additional Feedback Attachment – July 25, 2019



Other Considered Orderwire Architecture – AESO Hub Option

UTILITY ORDERWIRE

OTF – Operator of a transmission facility.
 OEDF – Operator of an electric distribution system.
 OGF – Operator of a generating unit or aggregated generating facilities.

