

Meeting Minutes – October 16, 2014

Time: 9:30 am to 3:00 pm

Location: AESO Offices, 2500 330 5th Ave SW, Room 2538

Attendance List:

Attended	Name	Company	Email
X	[REDACTED]	AESO	[REDACTED]
	[REDACTED]	AESO	[REDACTED]
X	[REDACTED]	AESO	[REDACTED]
X	[REDACTED]	AltaLink	[REDACTED]
X	[REDACTED]	AltaLink	[REDACTED]
X-CC	[REDACTED]	EPCOR	[REDACTED]
	[REDACTED]	ENMAX	[REDACTED]
X	[REDACTED]	ENMAX	[REDACTED]
X	[REDACTED]	ATCO Electric	[REDACTED]
X	[REDACTED]	ATCO Electric	[REDACTED]
	[REDACTED]	ATCO Electric	[REDACTED]
	[REDACTED]	TFCMC	[REDACTED]
X	[REDACTED]	UCA	[REDACTED]

CC = via Conference Call

1 Review of Needs List

- Item 92: ATCO to propose revisions to rule with regard to the use of lightning arrestors when unable to use overhead shield wires – ATCO ([REDACTED]) proposed revisions to the WG. The WG reviewed and discussed. General discussion - the original intent was to deal with areas where use of OHSW was restricted either due to environmental concerns or other reasons such as line crossings. Ultimately, the committee accepted the revision proposed by ATCO ([REDACTED]) if the words, “cost or” are removed. ATCO ([REDACTED]) will re-propose revisions based on the WG’s discussion. Item carried forward.
- Item 93: Regarding Line Optimization – AESO ([REDACTED]) engaged AESO Cost Allocation Committee in addressing the question, should an industrial customer be reimbursed for additional capital costs incurred to optimize conductor and reduce losses? [AESO] and the committee determined that this was reasonable but should be considered on a per project basis so as to take into consideration all the factors involved. It was determined that it’s not appropriate to put this in the rules. [AESO] and the committee also determined that the actual difference in project price due to conductor could be very small. Item 93 declared complete.
- Item 97: Meeting Minutes - AESO ([REDACTED]) asked the WG members if they would prefer to review and approve the previous meetings minutes at each meeting. He wanted to ensure that the WG was confident in the way the minutes are currently being recorded. The WG discussed and decided that approving the minutes at each meeting wasn’t necessary. The WG will continue with the current practice of sending out the minutes by email and any WG member with comments will contact [AESO]. [AESO] also mentioned to the WG that the AESO may soon need to comply with the Freedom of Information and Protection of Privacy (FOIP) Act. This could require the release of documents related to these meetings and this underlines the need for accuracy.

- Item 99: Galloping Outages –AltaLink (██████) circulated a map to the WG members containing the data AltaLink has collected on where galloping is occurring in their territories in Alberta. The AltaLink map has data from the year 2000. The map showed that galloping is more widely dispersed across Alberta than was initially thought. AESO (██████) observed this finding was consistent with the draft galloping report currently with the committee for final review.

AltaLink (██████) noted that provision of galloping clearances on support structures reduces outages but does not mitigate the wear and tear on hardware and support structures which results from galloping. He also advised the WG that AltaLink is currently investigating different technology that may prevent or reduce galloping. Some discussion regarding sharing of the results; what would it take? Speculation that direction from the AESO to undertake the work might be sufficient.

ACTION: AESO (██████) will a draft scope of work for a direction to AltaLink to investigate galloping mitigation methods. The WG can review the scope at the next meeting.

- Item 103: Review the wording in existing right of way standards- The WG engaged in further discussion regarding the right of way width requirements of clause 19(1) and 19(2). ATCO (██████) expressed some concern with the exemption of lines on road allowance since it does not prevent landowners from constructing grain bins adjacent and does not provide access for maintenance. AltaLink (██████) noted that AltaLink uses alternate approaches and maintenance agreements. No consensus on removing the exemption in clause 19(2).The WG agreed to incorporate wording proposed by EPCOR (██████) previously. Item carried forward in item 108. For clarity, Item 103 declared complete.

ACTION: AESO (██████) will update the rules with Wilf’s suggestions for next meeting.

- Item 105: S2 - Loading cost comparison draft report – AESO (██████) has received comments from WG members and will be incorporating the comments into the draft report. The delivery date is scheduled for Monday, Oct 20th, and will include all scope additions. The WG can then do a final review. Item carried forward.
- Item 108: Propose new language in the ID regarding full swing – Item discussed in item 103. Item 108 carried forward.
- Item 109: Change Order for S2 – The change order was signed. Item declared complete.
- Item 110: Report S2 - Addition of single pole and discussion on sequence of failure – AESO (██████) is incorporating the change in the report. The WG engaged in further discussion. [AESO] will update the report based on the WG’s discussion. Item 110 relates to Item 105. For clarity, item 110 declared complete.

ACTION: AESO (██████) will update loading report with recommendation concerning sequence of failure applications to direct embedded structures.

- Item 111: Clean Copy of the Rules and ID – AESO (██████) has sent out the rules and ID with the most current revisions redlined (except [ATCO] and [UCA]'s recent proposals). The WG requested that [AESO] send out a clean copy with no red line (all changed accepted) as well.

ACTION: [AESO] will send out a copy incorporating [ATCO] and [UCA]'s revisions as well as a clean copy. Item 111 declared complete.
- Item 112: S1 – Galloping Draft Report - AESO (██████) posted the final report on the FTP site and hasn't received any further comments. Further discussion of the air gap analysis; [AESO] requested the Facility Owners to carefully review Appendix C, Air gap, to determine if the assumptions are valid for their system operation. ATCO (██████) commented that they would typically use reduced clearances from those computed in Appendix C. UCA (██████) proposed that a phase to phase clearance for design purposes is needed as this same question reoccurs frequently. Further discussion – should a table be included in the Information Document? Unresolved; carried forward to next meeting.
UCA (██████) shared with the WG his brief analysis of the cost savings that could be gained incorporating reduced clearances if the galloping requirements of the 502.2 technical requirements are removed. These cost savings were projected to be minimal.
ACTION: [AESO] will send a copy of the analysis to the WG.
ACTION: ATCO, AltaLink, Enmax will review phase to phase air gaps with their organizations and bring comments to next meeting.
- Item 113: S3 - 240 kV Conductor Sizing Draft Report – AESO (██████) hasn't done any further work on the study. Item carried forward.
- Item 114: S4 - Optimized Conductor, Phase 1 - This item is dependent on completion of item 113 and therefore is carried forward.
- Item 116: Review the Scope for the S3 – 240 kV Conductor Sizing Report - Item carried forward. [AESO] and [AESO] to meet to discuss shortly.
- Item 117: Summary on the 5 Selected Projects for the S3 Report – AESO (██████) hasn't yet sent this information to the WG. The WG requested a total list of projects. The total list of projects is listed on the AESO website. [AESO] will send the information on the 5 projects chosen for the report and send to [AESO] within the day, who will forward to the WG. Item carried forward.

2 Review of UCA (██████)'s revisions

- AESO (██████) distributed UCA's proposed revisions to the WG for their review. UCA (██████) gave a background to the WG. With the evidence presented at ATCO's recent hearings it appears there is a better opportunity to document the discussions which occur at the early (planning) stages of a project. What opportunities for cost savings are investigated? What project parameters are challenged for opportunities to save cost? Documentation of this work was not produced to the satisfaction of some. Accordingly, he tabled a proposal for expansion to clause 12(1)(d) of the Requirements providing for a clearer description of the minimum requirements for the optimization study for discussion. There was extensive discussion including:
 - A concern for the wide inclusiveness to be addressed in the optimization study.
 - General support for this initiative, but a concern for the perceived workload this would generate

	<p>for the TFOs</p> <ul style="list-style-type: none"> ○ ISD should not be used as an excuse for reducing scope of the optimization; ISDs can be challenged. So could AESO Planning’s proposed line loads. ○ Could create a situation that every line has different tower type. Like California - so what? ○ Intent of the revision to formalize the “front end” discussions and document the results. ○ AUC’s new definition of TFO’s responsibility includes Environment and Reliability. <p>Item 116: Review the Scope for the S3 – 240 kV Conductor Sizing Report - Item carried forward. [AESO] and [AESO] to meet to discuss shortly</p> <p>ACTION: AltaLink (██████) will send out link on AUC website.</p> <p>ACTION: AESO (██████) will propose revisions to the UCA proposal based on discussion with the WG and further discussions with [UCA].</p>
3	<p>Review of Outstanding Items from the Meeting with the Transmission Facilities Cost Monitoring Committee Member (TFCMC), [CCA]</p> <ul style="list-style-type: none"> • AESO (██████) acknowledged that he still needed to issue the minutes from the meeting. • AESO (██████) asked the WG to respond to [CCA]’s request to attend future meetings. The WG discussed and agreed that they have been under the impression that the TFCMC has been represented by [TFCMC] from the beginning of these meetings. UCA (██████) noted that he sends [UCA], a UCA member of the TFCMC, a copy of his monthly report which [UCA] normally forwards to [TFCMC] and the rest of the TFCMC. On this basis, [TFCMC] has decided that his attendance is not necessary. The WG agreed that the TFCMC can nominate someone other than [TFCMC] as representative if they choose to do so. • AESO (██████) let the WG know that he will set up a second meeting between the AESO and the TFCMC to cover topics that were not addressed in the meeting due to time constraints. These topics that will be discussed are AESO-specific and will not require the WG’s attendance. However, [AESO] asked the WG if they thought a second meeting with the entire WG would be needed. The WG discussed and declined, but requested feedback from [CCA] on any outstanding questions or concerns he may still have after the meeting with the AESO.