



Alternative Power Technical Committee (APTC)

Location: TEAMS

Date: June 4, 2024

Minutes

I.	<p>Call to Order, Welcome</p> <p>Anti-trust statement</p> <p><i>The exchange of many types of information between AEM members that concerns common problems is legal, proper and essential to fulfilling the legitimate purposes of AEM. However, some subjects are not proper for discussion, either directly or indirectly. Antitrust laws preserve and promote free competition, the basis of a free-market economy. AEM unequivocally supports the policy of competition and reaffirms its uncompromising intent to comply strictly in all respects with those laws.</i></p>	
II.	<p>Approval of Agenda and Minutes</p> <ul style="list-style-type: none"> • Agenda - Approved • Minutes - Approved <p>Minutes - 2024.3.28 - APTC.docx</p>	<p>John Hunter - Komatsu</p>
Old Business		
III.	<p>Update from TC 127/WG 17 – If needed</p> <ul style="list-style-type: none"> • WG 17 is looking at the suite of standards under 127. • This group is looking to review electrification activity for EMM that involve replacing the diesel engine, powering earthmoving equipment as defined in ISO 6165, with a battery(s) and electrical components i.e., Traction motors, electric actuators, electric pumps etc., and how those activities impact standards that support the EMM industry. <ul style="list-style-type: none"> ○ Intent is to use ISO 5757 and distribute to the other technical committees and use as a template to form working groups to perform these types of assessments in other technical committees. <p>Notes:</p> <ul style="list-style-type: none"> • Interest from the group to address the gaps within ISO14990, particularly as it relates to hydrogen pressure vessels <p>Action Items:</p> <ul style="list-style-type: none"> • All interested committee members – Request to be on WG17, WG that will red line existing ISO14990 <ul style="list-style-type: none"> ○ Sam will send an invite to committee members and then forward responses onto WG17 • Look at the automotive industry and address whether or not it meets the needs and standards of the offroad industry <p>Other Standards Related Issues:</p>	<p>Kevin Lueschow – Caterpillar and/or Jon Spomer – Doosan Bobcat</p>

	<ul style="list-style-type: none"> • Link to the Google docs spreadsheet • ISO 22543 – Bystander awareness: document is approved. • Update on ISO 14990 – Discussion <p>Notes:</p> <ul style="list-style-type: none"> • None <p>Action Items:</p> <ul style="list-style-type: none"> • 	
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Updates from working groups		
IV.	<p>BEHM Symbols – Updates</p> <ul style="list-style-type: none"> • Only needed if there is a relevant update. <p>Notes:</p> <ul style="list-style-type: none"> • Current focus has been on battery symbols <p>Action Items:</p> <ul style="list-style-type: none"> • 	Steve Neva – Doosan Bobcat
V.	<p>Alternative Power Position Paper</p> <ul style="list-style-type: none"> • Only needed if there is a relevant update. <p>Notes:</p> <ul style="list-style-type: none"> • Messaging has been approved through the AEM boards • This has been made available to the DOE and EPA • https://www.aem.org/getmedia/1e30c2bd-738e-4857-b653-2e4292479d38/AEM-Alternative-Power-Technologies.pdf <p>Action Items:</p> <ul style="list-style-type: none"> • Member – Review paper and provide feedback to AEM (if interested) 	Jason Malcore - AEM
	<p>Emergency Response Guide – Li-ion Batteries</p> <ul style="list-style-type: none"> • The existing ERG directs users to a link that is no longer being actively maintained by the NFPA. Therefore, the WG would like to make the two following proposals: • Change the existing phrasing to the following: ERG Rephrasing Proposal.docx • To investigate alternative opportunities for partnership on the maintenance of a site similar to the previous NFPA site: C:\Users\rathburn\Downloads\AEM APTC Draft Proposal - ERG Hosting Partner and Grant Funding.pdf <p>Proposal 1 – Phrasing</p> <p>Notes:</p> <ul style="list-style-type: none"> • Postponed to next meeting <p>Action Items:</p> <ul style="list-style-type: none"> • 	<p>Sam Rathburn – AEM</p> <p>Jason Flanagan – CAT</p> <p>Peter Schecter – John Deere</p>

	<p>Proposal 2 – Partnership</p> <p>Notes:</p> <ul style="list-style-type: none"> • Motion, seconded and approved <p>Action Items:</p> <ul style="list-style-type: none"> • Sam – Send invitation to APTC for participation in a WG to pursue this proposal 	
VI.	<p>DC Arc Flash WG</p> <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> • <i>WG is currently waiting for letter from Australian regulator to define the specifications of his request.</i> <p>Notes:</p> <ul style="list-style-type: none"> • While many industry accepted methods exist for AC and DC <1000V, there is no consensus test method for DC >1000V • These calculations are required to determine proper level of PPE and distance from equipment <p>Action Items:</p> <ul style="list-style-type: none"> • Members – Discuss internally to understand your companies best practices • Sam – invite members to join the WG by summarizing concern and thoughts expressed today 	John Hunter - Komatsu
	<p>EU Battery Regulation WG</p> <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> • <i>WG recently participated in and supported Euromot’s comments to recent EV Battery implementing regulation regarding Carbon Footprint Methodology</i> <p>Notes:</p> <ul style="list-style-type: none"> • WG is continuing to monitor Euromot and other developments concerning the regulation • Euromot is soon expected to release an FAQ document <p>Action Items:</p> <ul style="list-style-type: none"> • 	Dan Willy - Komatsu
New Business		
VII.	<ul style="list-style-type: none"> • 	
Parking Lot Items		
VIII	<p>PFAS – Update</p> <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> <p>Notes:</p> <ul style="list-style-type: none"> • An overview was provided on the existing regulations impacting the use of PFAS and the Substance Compliance Council’s (SCC) efforts to address these regulations • Recent conversations between AEM and EPA indicate that the EPA does not intend on creating universal bans, rather bans will be scoped on a case by case basis. 	Discussion – all

	Action Items: <ul style="list-style-type: none"> • 	
IX.	Battery Charging Standards for Construction Equipment Fleets - OPEI, ARA & AEMP <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> Notes: <ul style="list-style-type: none"> • AEM is currently in communication with OPEI, ARA, and AEMP • AEM is asking the APTC for recommendations on what the charging recommendation should be. • APTC agrees that the industry is currently evolving too rapidly for a definite solution, Therefore, at this time, the industry would recommend patience. Action Items: <ul style="list-style-type: none"> • Jason – complete letter to ARA & AEMP and send out to group 	Discussion – all
X	Vermont S. 254 – Battery EPR <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> Notes: <ul style="list-style-type: none"> • None Action Items: <ul style="list-style-type: none"> • 	Discussion – all
	EU - Industrial trucks – TC 110 Hydrogen standards <ul style="list-style-type: none"> • <i>Only needed if there is a relevant update.</i> Notes: <ul style="list-style-type: none"> • Action Items: <ul style="list-style-type: none"> • AEM – reach out to ITA to better understand the work being done in TC 110 regarding hydrogen standards. 	Discussion – all
Other Business		
XI.	<ul style="list-style-type: none"> • 	
Adjourn		
XII.	<ul style="list-style-type: none"> • Meeting adjourned at 4:08 	