

WWMA Specifications and Tolerances (S&T) Committee 2020 Annual Meeting Report

Mr. Robert Weidler, Committee Chair
Wyoming

INTRODUCTION

The Specifications and Tolerances (S&T) Committee (hereinafter referred to as “Committee”) submits its Report to the Western Weights and Measures Association (WWMA). The Report consists of the WWMA Agenda (NCWM Carryover and NEW items) and this Addendum. Page numbers in the tables below refer to pages in this Addendum. Suggested revisions to the handbook are shown in **bold face print** by ~~striking out~~ information to be deleted and **underlining** information to be added. Requirements that are proposed to be nonretroactive are printed in **bold-faced italics**.

Presented below is a list of agenda items considered by the WWMA and its recommendations to the NCWM Specifications and Tolerances Committee.

Subject Series List

NIST Handbook 44 – General Code	GEN Series
Scales	SCL Series
Belt-Conveyor Scale Systems	BCS Series
Automatic Bulk Weighing Systems	ABW Series
Weights	WTS Series
Automatic Weighing Systems	AWS Series
Weigh-In-Motion Systems used for Vehicle Enforcement Screening	WIM Series
Liquid-Measuring Devices	LMD Series
Vehicle-Tank Meters	VTM Series
Liquefied Petroleum Gas and Anhydrous Ammonia Liquid-Measuring Devices	LPG Series
Hydrocarbon Gas Vapor-Measuring Devices	HGV Series
Cryogenic Liquid-Measuring Devices	CLM Series
Milk Meters	MLK Series
Water Meters	WTR Series
Mass Flow Meters	MFM Series
Carbon Dioxide Liquid-Measuring Devices	CDL Series
Hydrogen Gas-Metering Devices	HGM Series
Electric Vehicle Refueling Systems	EVF Series
Vehicle Tanks Used as Measures	VTU Series
Liquid Measures	LQM Series
Farm Milk Tanks	FMT Series
Measure-Containers	MRC Series
Graduates	GDT Series
Dry Measures	DRY Series
Berry Baskets and Boxes	BBB Series
Fabric-Measuring Devices	FAB Series
Wire-and Cordage-Measuring Devices	WAC Series
Linear Measures	LIN Series
Odometers	ODO Series
Taximeters	TXI Series
Timing Devices	TIM Series
Grain Moisture Meters (a)	GMA Series
Grain Moisture Meters (b)	GMB Series
Near-Infrared Grain Analyzers	NIR Series
Multiple Dimension Measuring Devices	MDM Series
Electronic Livestock, Meat, and Poultry Evaluation Systems and/or Devices	LVS Series
Transportation Network Measuring Systems	TNS Series
Other Items	OTH Series

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Table B
Glossary of Acronyms and Terms

Acronym	Term	Acronym	Term
ABWS	Automatic Bulk Weighing System	NEWMA	Northeastern Weights and Measures Association
AAR	Association of American Railroads	NIST	National Institute of Standards and Technology
API	American Petroleum Institute	NTEP	National Type Evaluation Program
CNG	Compressed Natural Gas	OIML	International Organization of Legal Metrology
CWMA	Central Weights and Measures Association	OWM	Office of Weights and Measures
EPO	Examination Procedure Outline	RMFD	Retail Motor Fuel Dispenser
FHWA	Federal Highway Administration	S&T	Specifications and Tolerances
GMM	Grain Moisture Meter	SD	Secure Digital
GPS	Global Positioning System	SI	International System of Units
HB	Handbook	SMA	Scale Manufacturers Association
LMD	Liquid Measuring Devices	SWMA	Southern Weights and Measures Association
LNG	Liquefied Natural Gas	TC	Technical Committee
LPG	Liquefied Petroleum Gas	USNWG	U.S. National Work Group
MMA	Meter Manufacturers Association	VTM	Vehicle Tank Meter
MDMD	Multiple Dimension Measuring Device	WIM	Weigh-in-Motion
NCWM	National Conference on Weights and Measures	WWMA	Western Weights and Measures Association

Details of All Items
(In order by Reference Key)

GEN – GENERAL CODE

GEN-20.1 D G-T.3. Application and Appendix D – Definitions: true value

GEN-20.1
No report due to the constraints of holding a virtual meeting.

GEN-21.1 Use-for-Fee Vehicle and Axle-Load Scales

GEN-21.1
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>2020 WWMA Open Hearing Notes:</p> <p>The committee heard comments from: John Barton (NIST-OWM) Not all vehicles do not fit on a single draft weighment resulting in multi draft weighments. HB 44 requires a single draft weighment for commercial draft transaction. In addition there is confusion whether or not an axle weight is a commercial transaction when there is a fee applied to the weighment process. NIST recommends it is a developing item.</p> <p>Mr. Barton further clarified the different approach requirement between axle scales and vehicle scales. Eric Golden (Cardinal Scales) Discussed weighing sector a whether or not it was a commercial transaction. Cardinal scale views these axle load weighments as a commercial transaction.</p> <p>Lou Straub (Fairbanks Scale) He wanted data on how many oversized vehicles there really are being weighed. On a CAT scale printout if it is a multi-draft ticket has a statement that the weight listed are not certifiable.</p> <p>Steven Harrington (Oregon W&M) Axle Weight with a fee is a commercial transaction. He stated many different axel configurations are available. Oregon ODOT uses axle weight for law enforcement.</p> <p>The Committee agreed to assign this item with a developing status with recommendation that the submitter poll jurisdictions on whether these are commercial transactions.</p>

GEN-21.3 G-UR.4.1. Maintenance of Equipment

This item was not submitted to your region.

**BLOCK 2 ITEMS (B2) DEFINE TRUE VALUE FOR USE IN ERROR
CALCULATIONS**

ITEM BLOCK 2
No report due to the constraints of holding a virtual meeting.

SCL – SCALES

SCL-16.1 A Sections Throughout the Code to Include Provisions for Commercial Weigh-in-Motion Vehicle Scale Systems

SCL-16.1
No report due to the constraints of holding a virtual meeting.

SCL-21.1 S.1.1. Zero Indication

SCL-21.1
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input checked="" type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>Steven Harrington (Oregon) commented to look at the retroactive date and give plenty of time for adjustments/modifications.</p> <p>John Barton (NIST-OWM) John commented that there is a 1993 amendment to an existing requirement in place that allows for display other than zero and it would not be allowed to display other than zero if it was not on zero. That requirement requires an interlock that would not allow any weightments to take place unless a zero balance exists.</p> <p>Eric Golden (Cardinal Scale) Echoes Johns comments and stated it would not be that hard to accomplish. However, there may be a cost for the operators of such devices.</p> <p>Russel Vires (Mettler Toledo) commented that NTEP scales are tested for the functionality described by NIST. Additionally, he concurs with Steven Harrington and feels a 2027 retroactive date would be appropriate.</p>

The Committee agrees that this item does not have merit and should be withdrawn.

SCL-20.9 D S.1.1.3. Zero Indication, Load Receiving Elements Separate from Weighing Elements. and Appendix D – Definitions: no load reference value

SCL-20.9

No report due to the constraints of holding a virtual meeting.

SCL-20.10 V S.1.2.2.2. Class I and II Scales Used in Direct Sale and S.1.2.2.3. Deviation of a “d” Resolution.

SCL-20.10

No report due to the constraints of holding a virtual meeting.

SCL-17.1 V S.1.8.5. Recorded Representations, Point of Sale Systems

SCL-17.1

No report due to the constraints of holding a virtual meeting.

SCL-20.13 V N.1.5. Discrimination Test.

SCL-20.13

No report due to the constraints of holding a virtual meeting.

SCL-19.2 V UR.5. Coupled-in-Motion Railroad Weighing Systems.

SCL-19.2

No report due to the constraints of holding a virtual meeting.

SCL-20.12 D Multiple Sections to Add Vehicle Weigh-in-Motion to the Code and Appendix D – Definitions; vehicle scale and weigh-in-motion vehicle scale.

SCL-20.12

No report due to the constraints of holding a virtual meeting.

ABW – AUTOMATIC BULK WEIGHING SYSTEMS

ABW-16.1 D A. Application, S Specifications, N. Notes, UR. User Requirements and Appendix D – Definitions: automatic bulk weighing system.

ABW-16.1
No report due to the constraints of holding a virtual meeting.

BLOCK 4 ITEMS (B4) ELECTRONICALLY CAPTURED TICKETS OR RECEIPTS

ITEM BLOCK 4
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>No comments were received during open hearings. However, the submitter did provide additional changes and continues to develop the item.</p> <p>The Committee recommends this block be assigned a developing status.</p>

BLOCK 1 ITEMS (B1) TERMINOLOGY FOR TESTING STANDARDS (VERIFICATION STANDARDS, FIELD STANDARDS, TRANSFER STANDARDS, FIELD REFERENCE STANDARDS, ETC.,) TOLERANCES ON TESTS WHEN TRANSFER STANDARDS ARE USED, MINIMUM QUANTITY FOR FIELD REFERENCE STANDARD METER TESTS

ITEM BLOCK 1
No report due to the constraints of holding a virtual meeting.

LMD – LIQUID MEASURING DEVICES

LMD-20.2 V S.1.6.10. Automatic Timeout – Pay-at-pump Retail Motor-Fuel Devices.

LMD-20.2
No report due to the constraints of holding a virtual meeting.

LMD-19.1 V UR.4.2. Security for Retail Motor-Fuel Devices.

LMD-19.1
No report due to the constraints of holding a virtual meeting.

BLOCK 5 ITEMS (B5) CATEGORY 3 METHODS OF SEALING

ITEM BLOCK 5
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports)</p> <p>LMD-21-1 CATEGORIES OF DEVICE AND METHODS OF SEALING</p> <p>Brent Price (Gilbarco) commented this is a little different than other proposals. Gas pumps have limited printing capabilities on receipts so they would like the option for electronic printing. Suggests combining into one proposal with Wayne Pump.</p> <p>Steven Harrington (Oregon) commented he was concerned about how this will affect device testing efficiency by adding additional testing steps in the field. He is also concerned about time and structure of how this information is received in the field.</p> <p>Committee recommends this to be assigned developing status. The Committee recommends that the submitter work with other stakeholders and vets this through the other regions for further development.</p>

VTM – VEHICLE TANK METERS

VTM-18.1 D S.3.1 Diversion of Measured Liquid and S.3.1.1. Means for Clearing the Discharge Hose and UR.2.6. Clearing the Discharge on a multiple-product, single discharge hose.

VTM-18.1
No report due to the constraints of holding a virtual meeting.

VTM-20.1 S.3.1. Diversion of Measured Liquid.

VTM-20.1
No report due to the constraints of holding a virtual meeting.

VTM-20.2 A Table T.2. Tolerances for Vehicle Mounted Milk Meters.

VTM-20.2
No report due to the constraints of holding a virtual meeting.

LPG – LPG AND ANHYDROUS AMMONIA LIQUID-MEASURING DEVICES

LPG-20.1 V S.2.5. Zero-Set-Back Interlock and S.2.6. Automatic Timeout.

LPG-20.1
No report due to the constraints of holding a virtual meeting.

WTR – WATER METERS

WTR-20.2 V S.1.1.4. Advancement of Indicating and Recording Elements.

WTR-20.2
No report due to the constraints of holding a virtual meeting.

WTR-21.1 S.2.2. ~~Batching Measuring Systems~~ Air/Vapor Elimination.

WTR-21.1
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input checked="" type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>Clark Cooney (CA DMS) stated CA is opposed it is impractical and unnecessary.</p> <p>Kevin Merritt (ID) stated Idaho also opposes this item as impractical and unnecessary. The cost may exceed any consumer benefit on water meter applications. If it moves forward, he suggest it become a developing item to allow the submitter time to provide data supporting their position to the Conference.</p> <p>Committee agrees this item lacks merit and recommends it be withdrawn from the agenda.</p>

WTR-20.1 V S.3.2. Meter size and Directional Flow Marking Information.

WTR-20.1
No report due to the constraints of holding a virtual meeting.

MFM – MASS FLOW METERS

MFM-20.1 V S.1.3.3. Maximum Value of Quantity Divisions.

MFM-20.1
No report due to the constraints of holding a virtual meeting.

MFM-21.1 UR.3.3. Ticket Printer: Customer Ticket

MFM-21.1
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports) Matthew Douglas (CA DMS) believes the paragraph needs to be “Wordsmithed”.</p> <p>Committee agrees to recommend the item be given a developing status. Recommendations to the submitter to further define the intent of the item and continued vetted through the regions.</p>

EVF – ELECTRIC VEHICLE FUELING SYSTEMS

EVF-21.1 A.1. General

EVF-21.1
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports) Tesla, EV Connect, EV Go – Francesca Wahl – presentation: Sec 3.4 charging evolves and technology changes. They are trying to address the tentative code CA is now using. Charging involves many different speeds and levels. Trying to fit charging into what consumers are doing rather than making it a separate event (based on convenience). Metering technology is now becoming more commercial. Retro-fit costs are excessive. Add the 10 year phase-in that CA currently recognizes. Copy of the presentation that was provided is available on the WWMA website.</p> <p>Kevin Schnepf (CA DMS) commented that the 10-year extension was political in CA and may not be necessary at the national level. He believes the indicator should not be solely tied to a mobile device. The extension of the accuracy may not be necessary for the national level. Note that some areas have sub-meters at residential units</p>

that fall under commercial device applications. CA-DMS would ask the committees look at the concessions that CA made as to whether this should be applied to HB 44.

Mahesh Albuquerque (CO) supports all the proposals to move on to a voting item. He agrees with the comments made but wants to keep the process moving forward. Perhaps change the exception time to say “up to 10 years” allowing jurisdictions to make their own determination.

Juana Williams (NIST OWM) submitted written comment after open hearings and will be posted on the WWMA website.

The Committee agrees to recommend this item be assigned a developing status. The Committee also recommends the submitter continue to work with their stakeholders and jurisdictions to develop the item and consider language with regards to the 10-year period.

EVF-21.2 A.2. Exceptions

EVF-21.2
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>Kurt Floren (LA County) commented his concerns regarding exceptions when charges are being imposed when private installations are later opening up to the general public. Initially they may fall under the exception but if they change their position from a private to a public site, how would this be addressed? Suggests the proposal needs to be clarified. A blanket exemption is not sufficient. Thought needs to be given to devices falling under the exception may not be appropriate nationwide.</p> <p>Jeremy Whaling (EVgo) commented in response to Kurt Floren (LA) that if a business went from private to public their devices would have to comply.</p> <p>Brad Juhasz (EVConnect) commented that most charging ports are level 2 charging sites. The goal is to avoid unnecessary costs to participants in controlled applications. Fleet sales and contract sales are common in private work and living spaces and the interest to the general public is not in play.</p> <p>Matthew Douglas (CA DMS) concurred with Kurt Floren’s concerns. Also added 21.2, A.2.(e), should be amended to stay under jurisdictional regulation.</p> <p>Tina Butcher (NIST OWM) commented, if the device is being used commercially, NIST handbook 44 applications will apply. The general approach to HB 44; consumers and businesses expect to see the amount, cost and final amount the device charges. Fleet and contract sales are common exceptions throughout HB 44. The current proposal is an exception to all the requirements. A better method is to identify solutions where they may</p>

not comply with current code. Rather than allow a blanket exception it may be better to pinpoint areas where exceptions need to be addressed.

She also commented that the US national working group on EVF fueling discussed these items and did not reach a consensus. Lots of debate. If a device is not being used commercially it's not covered by HB 44. Comment on exceptions: consumers and businesses expect to determine how much they receive and pay. The transactional info still needs to be provided but how it is provided may be different. Fleet sales for example do not need to show pricing because that has already been agreed upon maybe through a contract. Maybe identify those code sections where compliance needs to be met. Rather than give a blanket exception, consider whether specific points can be given exceptions.

Kevin Schnepf (CA DMS) Fleet sale accuracy needs to be clarified noncommercial and non-public can easily become public. Concerned to the blanket exclusion regarding multiunit residences.

Mahesh Albuquerque (CO) added all comments are good but still recommends moving forward. Additionally, he would like to harmonize all the dates.

Francesca Wahl (Tesla) clarified the blanket exception was chosen because it was straight forward but realizes it may need to be more specific. They are open to working on this moving forward.

The Committee agrees, and recommends this item be assigned a developing status. The Committee also recommends the submitter continue to work with their stakeholders and jurisdictions to develop the item.

EVF-20.1 D S.1.3.2. EVSE Value of the Smallest Unit.

EVF-20.1
No report due to the constraints of holding a virtual meeting.

EVF-21.3 S.1.2. EVSE Indicating Elements, S.2.4.1. Unit Price, S.2.5. EVSE Money-Value Computations., S.2.7. Indication of Delivery

EVF-21.3
Regional recommendation to NCWM on item status:
<input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports)
Francesca Wahl (Tesla), Jeremy Whaling (EVgo) and Brad Juhasz (EVConnect) commented that there is confusion as to where the primary indicator should be located. Technology is rapidly changing, and the movement is towards different formats. This addresses the ability to have the display on mobile devices.

Looking at this issue as a global issue rather than US transportation companies. Most customers exit the vehicle while charging and want to be informed real time as to the charging process.

Matthew Douglas (CA DMS) stated the indicator should not be a burden to the consumer. The indicating element should be part of the device. If they want additional displays that are appropriate, that's okay, but the primary indicator should be part of the device.

Juana Williams (NIST OWM) submitted written comment after open hearings and will be posted on the WWMA website.

The Committee agrees, and recommends this item be assigned a developing status. The Committee also recommends the submitter continue to work with their stakeholders and jurisdictions to develop the item. The Committee further recommends the submitter revise the item to make the primary indicating element be an integral part of the device with any other indicating elements being secondary.

EVF-21.4 S.3.3. Provision for Sealing

EVF-21.4
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>Kevin Schnepf (CA DMS) commented that CA is in support of this item. It recognizes the changes of tech and will not have to add any costs of having a physical printer on the device.</p> <p>Tina Butcher (NIST OWM) commented that this item originated from the national working subgroup. This is a desire to move to alternative formats. The group recognizes this is the way of the future. It also recognizes these types of installations do not have people on site. W&M inspectors may be impeded during their inspection. The General Code allows the owner to assist.</p> <p>Mahesh Albuquerque (CO) supports this item.</p> <p>The Committee agrees the item is fully developed and recommends assigning this item a voting status.</p>

EVF-19.1 V S.3.5. Temperature Range for System Components. and S.5.2. EVSE Identification and Marking Requirements.

EVF-19.1
No report due to the constraints of holding a virtual meeting.

EVF-21.5 T.2. Load Test Tolerances.

EVF-21.5
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input checked="" type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
<p>Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports)</p> <p>During the open hearings for these items a presentation by Tesla, EVConnect and EVgo was given in which a slide spoke to this item stating the need to separate the requirements for AC and DC systems. Extending the tolerances based on the extension of time allowing time for higher accuracy phase in.</p> <p>Kevin Schnepf (CA DMS) believes the phase in for tighter tolerances may be too long. Accuracy will become a greater issue as this becomes more prevalent. Clarification needs to be made; the submitter references public access; we deal with commercial use. The term public access should be changed to commercial use. Also, with technology changing so rapidly, 13-year phase in period is too long.</p> <p>Kurt Floren (LA County) agrees with Kevin’s comments.</p> <p>Tina Butcher (NIST OWM) agrees with Kevin and consumers generally expect the tolerances be the same. Look at a shorter period of time to avoid consumer confusion.</p> <p>The Committee agrees, and recommends this item be assigned a developing status. The Committee also recommends the submitter continue to work with their stakeholders and jurisdictions to develop the item. The Committee further recommends the submitter provides additional data beyond their original justification to support the necessity for two separate tolerances.</p>

EVF-21.6 Definitions: minimum measured quantity (MMQ)

EVF-21.6
<p>Regional recommendation to NCWM on item status:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>

<p>Comments and justification for the regional recommendation to NCWM: <i>(This will appear in NCWM reports)</i></p> <p>Tina Butcher (NIST OWM) commented, they think it's a housekeeping item, not technically substantial. There has been some discussion in the national working group as to whether the MMQ is relevant. But this is only dealing with the definition.</p> <p>The Committee agrees this item is fully developed and recommends a voting status. The Committee noted that an editorial correction needs to be made removing the word "to".</p>
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EVF-20.2 V Definitions: submeter

EVF-20.2
No report due to the constraints of holding a virtual meeting.

TXI – TAXIMETERS

See Block 3 Items: Tolerances for Distance Testing.

TIM – TIMING DEVICES CODE

TIM-20.1 V S.1.1.3. Value of Smallest Unit.

TIM-20.1
No report due to the constraints of holding a virtual meeting.

GMA – GRAIN MOISTURE METERS 5.56 (A)

GMA-20.1 V S.2.5. Provisions for Sealing.

GMA-20.1
No report due to the constraints of holding a virtual meeting.

GMA-19.1 D Table T.2.1. Acceptance and Maintenance Tolerances Air Oven Method for All Grains and Oil Seeds.

GMA-19.1
No report due to the constraints of holding a virtual meeting.

MDM – MULTIPLE DIMENSION MEASURING DEVICES

MDM-20.1 V S.1.3. Negative Values, S.1.6. Customer Indications and Recorded Representations, S.1.7. Minimum Measurement, S.1.8. Indications Below Minimum and Above Maximum, S.2. Design of Zero Fare
Dimensional Offset
and Appendix D – Definitions: dimensional offset

MDM-20.1
No report due to the constraints of holding a virtual meeting.

BLOCK 3 ITEMS (B3) TOLERANCES FOR DISTANCE TESTING IN TAXIMETERS AND TRANSPORTATION NETWORK SYSTEMS

ITEM BLOCK 3
No report due to the constraints of holding a virtual meeting.

OTH – OTHER ITEMS

OTH-16.1 D Electric Watthour Meters Code under Development

OTH-16.1
No report due to the constraints of holding a virtual meeting.

OTH-21.1 Appendix A – 2.1. Acceptance and Maintenance Tolerances.

Source:

OTH-16.1
Regional recommendation to NCWM on item status:
<input checked="" type="checkbox"/> Recommend as a Voting Item on the NCWM agenda <input type="checkbox"/> Recommend as an Information Item on the NCWM agenda <input type="checkbox"/> Recommend as an Assigned Item on the NCWM agenda <i>(To be developed by an NCWM Task Group or Subcommittee)</i> <input type="checkbox"/> Recommend as a Developing Item on the NCWM agenda <i>(To be developed by source of the proposal)</i> <input type="checkbox"/> Recommend Withdrawal of the Item from the NCWM agenda <i>(In the case of new proposals, do not forward this item to NCWM)</i> <input type="checkbox"/> No recommendation from the region to NCWM <i>(If this is a new proposal, it will not be forwarded to the national committee by this region)</i>
Comments and justification for the regional recommendation to NCWM: (This will appear in NCWM reports)
Michelle Wilson (AZ), submitter of the item, gave some background; in AZ, they've had debate on acceptance tolerance after calibration. Last year we submitted to clarify that acceptance tolerance would be applied following adjustment. Majority felt that that was not appropriate. This is a form 15 to clarify appendix A, sect. 2.1. - currently says acceptance tolerance is applied to new or adjusted. This leaves it open to interpretation. Removing

"or adjusted" and add language to match the appendix with General code. Recommend the item to move forward with Voting status.

John Barton (NIST OWM) commented is not convinced this is the only change needed to be made. For example, G.T.I. needs clarification when and when not to apply.

Brent Price (Gilbarco) agrees to remove "when adjusted". He supports this item.

The Committee agrees the item is fully developed and recommends voting status.

OTH-20.1 V Appendix D – Definitions: submeter (Now Item EVF-20.2)

OTH-20.1 (Now Item EVF-20.2)

No report due to the constraints of holding a virtual meeting.

Mr. Robert Weidler, Wyoming | Committee Chair
Mr. Wayne Reinert, Colorado | Member
Mr. Kipp Blauer, Nevada | Member
Mr. Matt Douglas, California | Member
Mr. Kevin Merritt, Idaho | Member
Mr. Chad Pilie, Arizona | Member
Mr. Josh Nelson, Oregon | Ex-Officio

Specifications and Tolerances Committee