PROCEDURE TITLE: INSPECTION AND MEASURING TEST EQUIPMENT

Mechanical Department MQPP Procedure # MQPP-9.01

1. PURPOSE

1.1. To implement a policy for the calibration program, assign responsibilities, and establish standard operating procedures for the maintenance of Precision Measuring Equipment (PME). To ensure all PME are properly maintained and calibrated in a timely manner.

1.2. The PME fall into two groups:

1.2.1. PME calibrated at vendor – These are PME that are critical for regulatory inspections, are master PME, or can't be calibrated in-house.

1.2.2. PME calibrated in-house – These are PME that are calibrated in-house using master PME (e.g. air gauges).

2. TERMS AND DEFINITIONS

2.1. Accuracy – The closeness of agreement between an observed value and an accepted reference value.

2.2. Active PME – Serviceable equipment in use.

2.3. Calibration – Method of comparing PME with measurement standards of known accuracy, for the purpose of detecting and adjusting deviations from the standards.

2.4. Calibration Certificate – Document that presents calibration results and other information relevant to calibration.

2.5. Calibration Coordinator – Employee assigned to oversee Calibration Program.

2.6. Calibration Notification – A notification generated in the Daily Bad Order Tools and Meters Report that a PME is due for calibration.

2.7. Deleted PME – Defective equipment that is unserviceable and permanently out of service, has to be scrapped.

2.8. Inactive PME – Serviceable equipment not in use.

2.9. Interval – Frequency of calibration in a year.

3. PROCEDURE

3.1. District Site Administrator will maintain and update the Calibration information in Maximo Calibration Data System.

3.1.1. Ensure all vendor calibrated PME are included in the Maximo Calibration Data System and are properly maintained and calibrated as recommended by the manufacturer.

3.1.2. Ensure all vendor calibrated PME are sent out for calibration are properly tracked and accounted for through the Maximo Calibration Data System.

3.1.3. Insure that calibration records for PME calibrated in-house are maintained at each field location.

3.1.4. Assure that the tool inventories are kept up to date.

3.1.5. Maintenance and calibration information must be entered into the calibration database.

3.1.6. Create the Calibration Maintenance Plan and Master List in Bad Order Tools and Meters database, based on the calibration schedule and vendor calibrated PME are inventory.

3.1.6.1. Vendor calibrated PME are established in the Bad Order Tools and Meters database with associated task list. Notifications to have the vendor calibrated PME calibrated are created designated intervals for each district. Vendor calibrated PME will come up on the database list to be calibrated before they are due.

3.1.6.2. Update the Calibration Maintenance Plan and Master List in Bad Order Tools and Meters database to reflect addition and deletion of vendor calibrated PME, and any changes in PME status (active, inactive, or deleted).

3.1.7. Notify the Mechanical System Administrator of any addition or deletion of PME to the program as changes occur.

3.1.8. Train the employees to be aware of the program and their responsibilities, and to use only PME that is properly calibrated and labeled.

3.1.9. Ensure each PME is properly identified with a unique Serial Number (SN).

3.1.10. Maintain the vendor calibrated PME Issue Log to reflect the description of the PME, it's SN, model number, the name of the shop to which a specific PME has been assigned and the employee to which the PME has been assigned(if applicable).

3.1.11. Decide when a vendor calibrated PME is ready to be sent out for calibration. The Site Administrator shall make this determination by checking the PME's calibration due date and speaking with employees that work with the PME.

3.1.12. Collect all vendor calibrated PME that are due for calibration as listed in the notification, and ensure equipment's probe, AC adapter, manual (if available) and other accessories are complete and available for calibration.

3.1.13. Sign the notification to acknowledge receipt and screen each vendor calibrated PME's general condition upon return from calibration.

3.1.14. Approve field hours noted by the Vendor on the notification. Review invoices and provide input to the District director on program expenses and other budgetary matters.

3.1.15. Properly identify and quarantine all deleted, inactive and any uncalibrated PME to prevent usage unless it is brought back to calibrated status.

3.1.16. File a copy of the Calibration Certificate for each vendor calibrated PME in the Maximo data system and original copy in the Calibration Master folder.

3.1.17. Site Administrator will send information to the Mechanical Department System Administrator for updating Maximo Data system of new tool arrivals and removal of tools.

3.1.17.1. Site Administrator shall provide applicable information of new tool, which includes but not limited to, Manufacturer, Serial Number, Model Number, Calibration Frequency, Location, Status, in use Date and etc., to the Mechanical Department System Administrator.

3.1.18. Site Administrator shall regularly verify the Calibration Data in Maximo Data System of Bad Order Tools and Meters to assure the following information is correct:

3.1.18.1. Manufacturer, Serial Number, Model Number, Frequency, Location, Status (active, inactive, or deleted), Calibration Date, Calibration Due Date,

3.1.19. The Site Administrator acknowledges receipt of the vendor calibrated PME, and screens the PME's general condition upon return from calibration.

3.1.20. The Site Administrator inspects each PME for completeness of accessories and appropriate decals.

3.1.21. The Site Administrator updates Maximo Data System with the completed Calibration Certificates and Date. Shall file the original documents in its file.

3.2. District shall coordinate vendor and the District's calibration schedule.

3.2.1. Ensure vendor calibrated PME with limited calibration are properly tagged so that only functions that pass calibration will be used.

3.2.2. Retain calibration records for a minimum of three (3) calibration cycles, for traceability and trend analysis purposes.

3.2.3. Determine proper calibration intervals or frequencies for all PME based on manufacturer's recommendation, usage and wear, adjustment frequency and out-of-tolerance condition or trend. The following guideline shall be used to ensure calibration frequency is within a respectable confidence level.

3.2.3.1. Decrease Interval: When inspection records indicate that the PME requires frequent adjustments, the interval should be shortened and the pertinent data shall be evaluated to determine their impact on out-of-tolerance conditions.

3.2.3.2. Increase Interval: If the results of the previous accuracy of the PME will not be adversely affected, the interval maybe lengthened.

3.3. Project Quality Control Specialist.

3.3.1. Project Quality Control Specialist shall send out a monthly Tool and Meters Calibration Report of vendor calibrated PME that are overdue and vendor calibrated PME that are due for the following month to all three of the districts. This monthly report will be communicated electronically to all three District Directors.

3.3.2. Calibration results are monitored and reviewed to ensure program compliance.

3.3.3. Inspect vendor for capability, and compliance with the calibration standards traceable to the National Institute of Standards and Technology (NIST) or other nationally recognized standards.

3.3.4. Shall handle any revision made to the calibration program by updating the Metra Mechanical Department Calibration Program document and making all districts and proper personnel aware of the revision.

3.4. Vendor shall:

3.4.1. Perform calibration in accordance with procedures and tolerances traceable to reference standards maintained by NIST or other nationally recognized standards

3.4.2. Prepare a written quote for approval of any vendor calibrated PME repairs.

3.4.3. Affix calibration decal showing the last calibration date, the next calibration due date and calibrated by. This information must also be applied to the calibration certificate furnished to Metra.

3.4.4. Upon completion of calibration, issue a calibration certificate for each vendor calibrated PME to document compliance with applicable standards.

3.4.5. Calibration Certificate shall contain:

3.4.5.1. Name of manufacturer, Model Number, Serial Number, Date Calibrated, Next calibration due date, Name, phone number, and address of calibration vendor.

3.4.6. Ensure the Calibration Certificate reflects the specific amount of adjustments made for historical record and trend purposes.

3.4.6.1. In-tolerance, adjustment to optimum value, if applicable.

3.4.6.2. Out-of-tolerance, adjustment value to bring within tolerance.

3.4.7. Tag, both failed PME and PME with limited calibration, so that only functions that pass calibration will be used. Provide specific instruction on PME's limited calibration capability.

3.4.8. Notify the District Director if repair is needed on a vendor calibrated PME that will exceed price quoted for the calibration. The District Director's approval should be given in writing before any repair of a vendor calibrated PME will begin.

3.4.9. Ensure expeditious return of PME upon completion of calibration and/or repair in accordance with the contract requirement.

3.4.10. Ensure timely submission of invoice for payment, and appropriate notification number is indicated on the invoice to facilitate traceability of actual work performed.

3.5. For historical and trend analysis purposes, the original calibration records shall be maintained at each field location for a minimum of three (3) calibration cycles.

PROCEDURE TITLE: NONCONFORMANCE

Mechanical Department MQPP Procedure # MQPP-11.01

REVISION HISTORY

DOCUMENT REVISION HISTORY				
REVISION DATE	**REVISION NUMBER**	**SECTION NUMBER**	**REASON FOR REVISION**	**DESCRIPTION**
5/5/16	**N/A**	N/A	**N/A**	**NEW PROCEDURE**

PROCEDURE TITLE: NONCONFORMANCE

Mechanical Department MQPP Procedure # MQPP-11.01

1. SCOPE

1.1. The purpose of this section is to provide for a system and instructions, and to assign responsibilities for identifying, documenting and evaluating a nonconforming product, and disposition for a nonconforming product.

2. PROCEDURE

2.1. PROGRAM IMPLEMENTATION

2.1.1. Identification and Documentation

2.1.1.1. The Lead Carman or Project Quality Control Specialist personnel are responsible for identifying nonconforming products during their inspection activities. Foremen or the Lead Carman are responsible for identifying nonconforming products that are found during production. All personnel are encouraged to watch for and identify nonconforming products regardless of their other responsibilities.

2.1.1.2. When a nonconformity is identified, it is documented on a Material and Service Problem Form, which is the equivalent of a nonconforming report (example of this form is Appendix "A"). This report shall contain the identification of the product (manufacturer, model number, and serial number), a description of the nonconformity, and any applicable cause for the nonconformity. Foremen, the Lead Carmen, or Project Quality Control Specialist personnel are authorized to initiate a nonconformance report. Other personnel shall report any observed nonconformity to their foremen or the Lead Carmen.

2.1.1.3. After a nonconformity is reported, the product shall either be marked as bad-order or have some kind of rejection tag affixed to the product. It will be the responsibility of the designated field

materiel person to verify that non-conforming product is tagged or segregated. If it is a received product, it should be physically segregated into a designated rejected materials area for disposition.

2.1.1.4. The Project Quality Control Specialist will be in charge of tracking Material and Service Problem Forms. The Project Quality Control Specialist will keep a database of all Nonconformity reports and their resolutions. The Material and Service Problem Forms will be kept as quality records.

2.1.2. Reworked material shall be inspected using a Material Inspection Form. (An example of this form is in Appendix "B").

2.1.3. Nonconformity Review and Disposition

2.1.3.1. The disposition and acceptance of the nonconforming material may be accomplished by:

2.1.3.1.1. 'Reworking' to complete or correct to the original requirement of a drawing, procedure, or specification. The Mechanical Department engineering group shall furnish a description of the rework required to the party responsible for performing the rework. This description shall be contained in an Engineering Change Notice (ECN) (Appendix "C").

2.1.3.1.2. 'Repairing' the defective item, by restoring to a condition such that the capability of an item to function reliably and safely is unimpaired, even though that material still does not conform to the original requirement. 'Use-as-is' without any repair or rework, when it can be established that the material is satisfactory for its intended use.

2.1.3.1.3. Returned to vendor for credit.

2.1.3.1.4. 'Scrapped', the product shall either be removed from the premises or disposed of according to environmental laws or the product shall be saved for possible use in alternate applications.

2.1.3.2. The decision on whether to rework, repair, use-as-is, return to vendor for credit, or scrap a nonconforming product by the Material Review Board (MRB), or shall be made handling with vendor without calling a MRB at the discretion of the Senior Director - Capital.

2.1.3.2.1. The MRB will consist of representatives from the quality, engineering, and production departments. An MRB form will be used to track these activities. (An example of this form is in Appendix "D").

2.1.3.3. Material Review Board – Procedure

2.1.3.3.1. It is the responsibility of the MRB to perform product evaluations of all nonconformance material at least monthly. However, an MRB may be called earlier for critical material.

2.1.3.4. An Engineering Change Notice (ECN) will be initiated by the Mechanical Department Engineering for material that deviates from the required specifications or requirements, but can safely be used. This ECN will change the actual requirements of the material. An ECN form will be used to track these activities.

2.1.3.4.1. Materials will maintain their non-conformance status until an ECN is approved. Items that will not be reworked or repaired until an ECN is approved by the Senior Director - Capital (or designated individual).

2.1.3.4.2. The MRB may decide that material that cannot be reworked or that will be too expensive to rework shall be scrapped.

2.1.3.4.3. The MRB may also decide that the nonconformance of a material does not affect its functionality or aesthetics. Therefore, the material may be deemed use-as-is by the MRB.

2.1.4. Reinspection

2.1.5. Reworked products are inspected again to verify that they comply with the new requirements that were specified in the ECN. This inspection will be performed by the Lead Carman under the supervision of the Project Quality Control Specialist or performed directly by the Project Quality Control Specialist. The inspection will be documented using a Material inspection Form. (An example of this form is in Appendix "B").

3. ATTACHMENTS

3.1. **Appendix A: Material Problem Form**

3.2. **Appendix B: Material Inspection Form**

3.3. **Appendix C: Engineering Change Notice (ECN)**

3.4. **Appendix D: Material Review Board (MRB)**

APPENDIX A

Project Material Problem Form

Control No. MPF_____

Date:_____ Car Number_____

Your Name:_____ Project:_____

Vendor:_____ Station_____

Part Number:_____ Qauntity_____

Part Description:_____ B/O Tag #_____

Serial Number:_____ Pictures Taken ☐

Code	Cause
1	Metra Damage
2	Metra Lost
3	Warrenty, B/O
4	Metra Request
5	Shipping
6	Other

Description of Problem / Issue:

Materials Team

Has the part been replaced? (circle) **Yes** **No**	Station:_____	Date:_____	

Intials of Materials Person _____

Form Revision B Date 1/9/2013

APPENDIX B

Metra - Mechanical Department

QA/QC

[ ] First Article
[ ] First Article Audit
[ ] Material Inspection

Inspection Report # : _____

Project #: _____ [ ] Capital [ ] Operating

Part #: _____ **Serial # / Lot #:** _____

Description: _____ **Drawing:** _____

Purchase Order / Work Order Number: _____ **Revision:** _____

Supplier: _____ **Reference:** _____

Qty Received: _____ **Date Received:** _____ **Qty Inspected:** _____

Item	Dimension or Specification - IN	Min	Max	Actual	Within Spec	Out of Spec
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						

[ ] **First Article Approved** This is Authorization to Proceed
[ ] **First Article Rejected** Correct Defects & Resubmit Article
[ ] **Inspection Passed** Material Accepted
[ ] **Inspection Failed** Material Rejected

Remarks & Comments:

Inspector Signature: _____ **Date:** _____

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APPENDIX C

ECN number: ECN--

Next ECN Number:

Drawing number:

Note: Do not use any letters, only numbers for drawing numbers. For non-Metra ECNs, please contact management to determine how to proceed.

Current DWG Rev:

To Revision:

Metra Drawing? ☑

# of Sheets:

Comments:

Sheet Number that changes:

Name: Date:

Prepared by:

Review 1

Prepared by Date:

Closing Approved by:

Closing Approved by Date:

Review 2

Current Requisition Open? Please Select

Review 3

Description of Change:

Reason for Change:

Effectivity:

Add Another ECN

Save and Exit

APPENDIX D

Metra - Mechanical Department

Material Review Board

MRB Report No. : _____

MRB is in Response to the following:

[ ] Material & Service Problem - No. _____

[ ] Material Inspection Report - No. _____

Project #: _____ **[ ] Capital** **[ ] Operating**

Part #: _____ **Serial # / Lot #:** _____

Description: _____ **Drawing:** _____

Purchase Order / Work Order Number: _____ **Revision:** _____

Supplier: _____ **Reference:** _____

Qty Received: _____ **Date Received:** _____ **Qty Inspected:** _____

Corrective Action

[ ]	**Use As Is**	This is Authorization to use material as is.
[ ]	**Rework**	This is Authorization to rework material in-house.
[ ]	**Repair**	This is Authorization to repair material in-house.
[ ]	**Return to Vendor**	Material to be sent to vendor for replacement or credit.
[ ]	**Scrap**	This is Authorization to scrap material.

Description of Problem and Corrective Action

Remarks & Comments:

MRB Members:

Engineer Signature: _____

QA/QC Signature: _____

Project Manager Signature: _____

Engineering Manager Signature: _____ **Date:** _____

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CONTRACT DOCUMENTS
Section 5

Contract No. PA0002045

NEW BATTERY POWERED TRAINSETS

- **Section 5: Certificates, Affidavits, Schedules, & Execution Page**

Exhibit II

Proposal Form

Acknowledgement of Addenda

Failure to acknowledge receipt of all addenda may cause the proposal to be considered nonresponsive to the solicitation. Acknowledged receipt of each addendum must be clearly established and included with the proposal.

The undersigned acknowledges receipt of the following addenda to the documents:

Addendum No. 1	Dated: May 26, 2022
Addendum No. 2	Dated: June 30, 2022
Addendum No. 3	Dated: July 1, 2022
Addendum No. 4	Dated: July 20, 2022
Addendum No. 5	Dated: August 26, 2022
Addendum No. 6	Dated: October 12, 2022
Addendum No. 7	Dated: October 27, 2022
Addendum No. 8	Dated: December 13, 2022

Proposal

By execution below by a duly authorized representative of the proposer, the proposer hereby offers to furnish equipment and services as specified in its proposal submitted to Metra in response to RFP No. 97728 in its entirety and that proposal shall remain valid for a period of 270 days.

Proposer/Firm: Stadler US, Inc.

Street Address: 5880 West 150 South

City, State, Zip: Salt Lake City, UT, 84104

Phone: 801-854-7771

Name of Authorized Signer: Martin Ritter

Title of Authorized Signer: Chief Executive Officer

Authorized Signature

December 16, 2022

Date

547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metrarail.com

August 24, 2023

Mr. Martin Ritter
Chief Executive Officer
Stadler US, Inc.
5880 West 150 South
Salt Lake City, UT 84104

Sent via email

SUBJECT: Proposal Extension Letter
Request for Proposal No. 97728
New Battery Powered Trainsets

Dear Mr. Ritter:

Metra requests that Stadler US, Inc. extend its proposal from September 12, 2023 to December 15, 2023, to allow for additional time for review and negotiations.

Please confirm your acceptance for extending your proposal by Close of Business August 31, 2023.

If you have any questions, please contact me at (312) 322-1541 or by email at PPapanikolau@metrarr.com.

Regards,

Peter Papanikolau
Sr. Contracting Agent,
Construction and Facilities Maintenance Procurement

ACKNOWLEDGMENT

Stadler US, Inc. hereby agrees to extend the proposal expiration date of Request for Proposal No. 97728 to December 15, 2023.

NAME: Martin Ritter

TITLE: CEO & President

SIGNATURE:

DATE: 08/30/2023

547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metrarail.com

November 30, 2023

Mr. Martin Ritter
Chief Executive Officer
Stadler US, Inc.
5880 West 150 South
Salt Lake City, UT 84104

Sent via email

SUBJECT: Proposal Extension Letter
Request for Proposal No. 97728
New Battery Powered Trainsets

Dear Mr. Ritter:

Metra requests that Stadler US, Inc. extend its proposal (second extension) from December 15, 2023 to January 17, 2024.

Please confirm your acceptance for extending your proposal by Close of Business December 8, 2023.

If you have any questions, please contact me at (312) 322-1541 or by email at PPapanikolau@metrarr.com.

Regards,

Peter Papanikolau
Sr. Contracting Agent,
Construction and Facilities Maintenance Procurement

ACKNOWLEDGMENT

Stadler US, Inc. hereby agrees to extend the proposal expiration date of Request for Proposal No. 97728 to January 17, 2024.

NAME: Martin Ritter

TITLE: Chief Executive Officer

SIGNATURE: _____

DATE: 12/01/2023

547 W. Jackson Boulevard, Chicago, IL 60661 312-322-6900 metrarail.com

January 5, 2024

Sent via email

Mr. Martin Ritter
Chief Executive Officer
Stadler US, Inc.
5880 West 150 South
Salt Lake City, UT 84104

SUBJECT: Proposal Extension Letter
Request for Proposal No. 97728
New Battery Powered Trainsets

Dear Mr. Ritter:

Metra requests that Stadler US, Inc. extend its proposal (third extension) from January 17, 2024 to February 21, 2024.

Please confirm your acceptance for extending your proposal by Close of Business January 9, 2024.

If you have any questions, please contact me at (312) 322-1541 or by email at PPapanikolau@metrarr.com.

Regards,

Peter Papanikolau
Sr. Contracting Agent,
Construction and Facilities Maintenance Procurement

ACKNOWLEDGMENT

Stadler US, Inc. hereby agrees to extend the proposal expiration date of Request for Proposal No. 97728 to February 21, 2024.

NAME: Martin Ritter

TITLE: Chief Executive Officer

SIGNATURE:

DATE: 01/05/2024