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Karyn E. Polito, Lieutenant Governor
Jamey Tesler, MassDOT Secretary & CEO
Steve Poftak, General Manager



December 22, 2022

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A/I: N/A

Xianyi Jiang
Project Director
CRRC MA Corporation
108 Myrtle Street 3rd Floor
Quincy, MA 02171

SUBJECT: Formal RFP No. CAP 27-10
New Orange and Red Line Vehicles
Quality Management Concerns

Dear Mr. Jiang:

The MBTA writes this letter in the backdrop of several significant lapses in overall quality management for the Red and Orange Line project. The MBTA has drawn CRRC's attention to these lapses at Weekly Production Review Meetings, Monthly Quality Review Meetings, at Directors' Meetings and through numerous project letters. Unfortunately, no meaningful progress has been made by CRRC to address these concerns despite several commitments by CRRC's Management to address these over the period of the last several years.

The following list describes major areas where issues/concerns have remained unresolved despite ongoing reminders and follow-up by the Authority:

1. Open FAI Action Items for the Orange Line and Red Line Cars
2. Excessive number of open NCRs with worsening trend; Several NCRs are many years old
3. High number of repetitive Shipping Exceptions for cars leaving Springfield, listed as non-conformances left open and deferred for commercial resolution
4. Deficiencies in configuration management within CRRC and at supplier organizations; FMI/ECP implementation status for each car
5. Chronic workmanship quality issues with electrical assembly work, wire crimping, wire terminations, etc.

6. Chronic workmanship quality issues with mechanical assembly work, torque control
7. Failure to address concerns with fasteners Certification and Test Reports in a timely manner resulting in major rework/disruption in production
8. Chronic and repetitive deficiencies in submitted Car History Books
9. Failure to provide configuration details of Printed Circuit Boards
10. Failure to manage handling, maintenance, and storage requirements for critical equipment (Gear Units) in accordance with the manufacturer's instructions
11. Failure to respond to MBTA's Quality Audit Reports
12. Delayed ISO 9001:2015 Certification (Certification received only in 2022 although this is a Contract requirement from the start of the project)
13. Failure to monitor/report status of ISO 9001-2015 Certification of system suppliers
14. Failure to respond to many letters from MBTA for quality related issues/concerns
15. Failure to submit Monthly Quality Reports and hold Monthly Quality Meetings in a consistent and timely manner, lack of follow-up on Action Items from Monthly Quality Meetings
16. Failure to plan and conduct need based Quality Audits for CRRC MA and its system suppliers

Selected Quality Management Requirements – Red and Orange Line Project

- A. ISO 9001:2015, Section 9.3 – Management Review requires CRRC's Management to periodically review its Quality Management System to ensure its continuing suitability, adequacy, and effectiveness. This section also requires that Management address decisions and actions related to opportunities for improvement, any need for changes to the Quality Management System and resource needs.
- B. ISO 9001:2015, Section 9.1.2 – Customer Satisfaction requires CRRC's Management to monitor customers' perceptions of the degree to which their needs and expectations have been fulfilled. CRRC MA's Management is also required to determine the methods for obtaining, monitoring, and reviewing this information.
- C. CRRC MA's Quality Manual (PL-01.01-MA, Rev. 00), Sections 3 and 9.3 provide an outline of CRRC Management's role, commitment for quality and a matrix of responsibility.

Given the breadth, number and age of chronic quality issues that have remained unresolved, it becomes abundantly clear that CRRC MA's Management has completely abandoned its core responsibility and commitment to lead, monitor, mentor, and support quality management (QA and QC) functions within CRRC MA. This situation has already caused major disruptions, rework and delays in production and delivery of Orange and Red Line Cars.

The MBTA remains greatly concerned that the situation will only degrade further unless CRRC Senior Management intervenes immediately to develop a plan of interim short-term and long-term actions to remedy the situation.

Please respond within 7 days of this letter detailing CRRC's plan of actions, responsible personnel, due date commitments and resources allocated to accomplish the goals by due dates.

Sincerely,



Mark DeVitto
Deputy Director - Vehicle Engineering
MBTA

MCL

Chieh-Yu Chen (CRRC), Adam DaCruz (CRRC), Dongni Han (CRRC), Chris Gangadeen (CRRC), Andrey Gnidenko (CRRC), Ming Huang (CRRC), Xianyi Jiang (CRRC), Ka Cheong Jim (CRRC), Jing Jing (CRRC), Holden Krueger (CRRC), Pengyu Li (CRRC), Ted Lin (CRRC), Jin Liu (CRRC), Zongmin Liu (CRRC), Joseph Nacco (CRRC), Vishnu Pusapati (CRRC), Mo Tang (CRRC), Clarence L. Walker (CRRC), Eamon Walsh (CRRC), Zhaofu Wang (CRRC), Haifeng Zhang (CRRC), Wang Zhaofu (CRRC), Shopping Sun (CRRC CRC), Christopher W. Collins (Jacobs), Jacob Finch (Jacobs), Gavin Fraser (Jacobs), Susan Cobb (MBTA), Mark DeVitto (MBTA), Aidan Flynn (MBTA), Stephen Hicks (MBTA), Amanda Munson (MBTA), Bruce Shand (MBTA), Richard Staples (MBTA), Michael Walsh (MBTA), William Wolfgang (MBTA), Evelyn Holley (STV), Scott Krieger (STV), Matthew Lorenz (STV), Jeremy Lim (WSP), Christopher McIsaac (WSP), Michael Slaven (WSP)

