
PROPOSAL EVALUATION WORKSHEET---*INDIVIDUAL SRC MEMBER EVALUATION*---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

PROPOSER: MBCR

DATE: 9/2/13

CONSENSUS RATING: Acceptable

NARRATIVE SUMMARY: Based on the material provided by MBCR in response to each of the **four major requirement areas** of the RFP, an overall rating of **ACCEPTABLE** was deemed appropriate. MBCR's mechanical plan, while meeting the stated criteria, was based on two overarching themes: (1) their knowledge of the equipment, and associated maintenance needs, as a result of their current contract as operator; and, (2) the incorporation of Bombardier's *World Class Operations and Maintenance* plan into their work plan. While said to have achieved success at several other properties over the last three years, there is a lack of quantitative data currently available for review. Additionally, it is said that the process of initial integration will take at least through the first three years of the new contract...with some significant upgrades needing to be made to the internal Trapeze EAM software. Attention needs to be given to the verification that MBCR is committed to Life Cycle Maintenance, since it states that LCM will evolve into a Reliability Centered Maintenance plan based on Bombardier's *WCOM* maintenance philosophy.

Generally, MBCR has placed responsibility for fleet maintenance improvement onto a Fleet Management Team, and through defect analysis, tracking and subsequent repair. A wide ranging set of KPI's were presented in the proposal. However, it was not clear who, other than a Transportation/Maintenance team, would be routinely using and/or reacting to them. Finally, a number of the items that were presented as either innovative and/or best practice were really seen as things that should have already been incorporated into the daily work plan. As noted, based on all these factors, an overall rating of Acceptable was deemed appropriate.

Objective:

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

The following are the objectives for the Mechanical Services Plan evaluation factor:

- 1) To identify Proposers that have a plan that best maximizes equipment availability and reliability;
- 2) To ensure that Proposers have an integrated approach to customer and employee safety and hazard reduction;
- 3) To ensure that Proposers have a mechanical services approach that preserves and prolongs asset lifespans;
- 4) To ensure that Proposers have a plan for providing cost effective facility utilization, work scheduling and integration of new training and technology; and
- 5) To ensure that Proposers understand the economies of the integration of the new fleet as it is introduced to the Commuter Rail Services and the associated maintenance changes that will accompany changes to the fleet.

Evaluation Criteria:

The Proposer has submitted a plan that best maximizes equipment availability and reliability and that provides for cost effective facility utilization, work scheduling and integration of new training and technology. The Proposer has described an integrated approach to customer and employee safety and hazard reduction, as well as an approach that preserves and prolongs asset lifespans. Additionally, the Proposer has demonstrated that it understand the economies of the integration of the new fleet as it is introduced to the Commuter Rail Services and the associated maintenance changes that will accompany changes to the fleet.

Instructions:

Evaluators must rate each requirement outlined in the table below as one of the following: (i) Exceptional; (ii) Good; (iii) Acceptable; (iv) Potential to Become Acceptable; or (v) Unacceptable. Please note the following explanations when rating each requirement:

- 1) A rating of Exceptional is appropriate when the Proposer has demonstrated an approach that is considered to significantly exceed stated criteria in a way that is beneficial to the MBTA. This rating indicates a consistently outstanding level of

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

quality, with very little or no risk that this Proposer would fail to meet the requirements of the solicitation. There are no weaknesses.

- 2) A rating of Good is appropriate when the Proposer has demonstrated an approach that is considered to exceed stated criteria. This rating indicates a generally better than acceptable quality, with little risk that this Proposer would fail to meet the requirements of the solicitation. Weaknesses, if any, are very minor. Correction of the weaknesses would not be necessary before the Proposal would be considered further.
- 3) A rating of Acceptable is appropriate if the Proposer has demonstrated an approach that is considered to meet the stated criteria. This rating indicates an acceptable level of quality. The Proposal demonstrates a reasonable probability of success. Weaknesses exist but can be readily corrected through requests for Clarification or Communications.
- 4) A rating of Potential to Become Acceptable is appropriate if the Proposer has demonstrated an approach that fails to meet stated criteria as there are weaknesses, but they are susceptible to correction through Discussions. The response is considered marginal in terms of the basic content and/or amount of information provided for evaluation, but overall the Proposer is capable of providing an acceptable or better Proposal.
- 5) A rating of Unacceptable is appropriate if the Proposer has demonstrated an approach that indicates significant weaknesses and/or unacceptable quality. The Proposal fails to meet the stated criteria and/or lacks essential information and is conflicting and/or unproductive. There is no reasonable likelihood of success; weaknesses are so major and/or extensive that a major revision to the Proposal would be necessary.

Ratings for each requirement must be recorded in the associated Rating column, and a detailed explanation of why a particular rating was given to a requirement must be recorded in the associated Comments/Justification for Rating column. The Appendix B Section column identifies relevant sections of Appendix B (Operations and Management Proposal Instructions) to the Instructions to Proposers.

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
1.	B5.2(A)	The Proposer shall provide a Mechanical Services Plan that describes in detail the Proposer's approach to providing the mechanical services described in the Contract, including the mechanical services described in Schedule 3.3 (Mechanical Services) of the Commuter Rail Operating Agreement. Elements of the Mechanical Services Plan shall include, but not be limited to, proposed approaches to the following:	Acceptable	<p>On page 4-1 of MBTA's Mechanical Services Plan proposal they indicate that....."<i>going forward we propose an entirely new approach to the maintenance of equipment for greater efficiency and quality.</i></p> <p>Generally speaking I would agree that their proposal does introduce a number of "new concepts" under the broader overarching initiative of implementing Bombardier's <i>World Class Operations and Maintenance</i> plan. However, in too many instances of program description, the initiatives are things that should have been implemented long before now. Examples include:</p> <ul style="list-style-type: none"> ➤ Engaging employees to take ownership of their own safety; ➤ Ensuring that "teams" have the tools necessary to be successful; ➤ Reallocating staff, and changing work hours on various tours of duty to better match availability of staff to vehicle down time; ➤ Implementing a Fleet Management Team; and, ➤ Implementing a failure review process with the aim of reducing unscheduled maintenance. <p>These examples, while very much needed in a fleet maintenance plan are very basic and at the core of the plan itself. This point not-with-standing, there were other</p>

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		<p>1) Developing and implementing complete maintenance planning,</p>		<p>examples, and descriptions, of revenue and non-revenue fleet maintenance that provided information covering and supporting the various requirements detailed in the Mechanical Services Plan of the RFP. In summary, MBCR's mechanical proposal met the stated criteria and presented what is considered to be an ACCEPTABLE submission.</p> <p>The proposal, however, was substantially based---as noted above---upon incorporating Bombardier's <i>World Class Operations and Maintenance</i> plan into their organization over a period of years. This, they state, requires a management team re-structuring effort. Additionally, they place major emphasis on the fact that they have gained a unique knowledge base on/of the service equipment through their maintenance work over the current contract period. They, and their parent Bombardier, also cite a competitive advantage in maintaining both the MPI locomotives and the Rotem coaches given their maintenance agreements on them with various properties over the last three years. No mention was made of any significant findings on fleet performance, or fleet defects or warranty issues obtained over the last three years.</p> <p>The following provides additional comments on Items 1-12 of Requirement #1.</p> <p>Items 1-5: The MBCR proposal states that"<i>as part of LCM evolution, we will transition the LCM in year three</i></p>

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		<p>tracking and recordkeeping systems to maximize vehicle availability and reliability;</p> <p>2) Inspecting, maintaining and repairing of the MBTA commuter rail fleet of passenger coaches and locomotives;</p> <p>3) Maintaining, operating and repairing non-revenue rail vehicles;</p> <p>4) Providing daily cleaning, inspection, fueling, servicing and light repairs of revenue equipment;</p> <p>5) Providing periodic overhauls and minor upgrading work, as required;</p>		<p><i>from OEM based (repair) periods to Reliability Centered Maintenance.</i>” It is open whether this approach sufficiently matches the RFP’s stated emphasis on implementing a Life Cycle Maintenance program that ensures the asset is fully available through its service life. As noted, MBCR is “evolving” to a WCO&M plan that was developed by Bombardier, and is in use at several other transit properties; however, in terms of rating risk, there is a lack of readily accessible empirical data by which to evaluate this program and its effectiveness.</p> <p>The MBCR proposal included a significant migration of work to the South Side. Given the additional out of service time associated with vehicle movement to and back from the North side for cleaning and maintenance, the plan to more strategically place and distribute work is a good one. Care needs to be given to this re-distribution in terms of work force planning, changes in shift hours and material availability. The changes in cleaning cycle content, allowing for improved cleaning standards, is acceptable. It should be noted that MBCR has proposed an interesting element in their maintenance plan.....the creation of a Maintenance Operations Control Center staffed with key staff over planning, production and materials who will be working together on a real-time basis to ensure all maintenance activities are on schedule.</p>

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		<p>6) Enforcing third-party warranties;</p> <p>7) Maintaining a comprehensive and up-to-date inventory control system;</p> <p>8) Providing information management, material management, performance analysis and reporting;</p>		<p>Item #'s 6 & 7: A series of enhancements to Trapeze EAM will provide the necessary tools for focused efforts on the part of MBCR staff to execute tight control over both warranty administration and inventory control.</p> <p>Item # 8: Pages 4-35 through 4-40 provide a detailed description of the Trapeze EAM system, with its upgrades, that will allow for a wide array of functionality in the recording of information, and the production of detailed reporting, on....</p> <ul style="list-style-type: none"> ➤ Asset management; ➤ SOGR; ➤ Capital Planning; ➤ Maintenance Operations; ➤ Parts Inventory; ➤ Automated procurement; ➤ Materials management; ➤ Real-time Failure analysis; and ➤ An Extensive Set of KPI's.
		<p>9) Integrating new technologies and work practices as introduced by the Operator or the MBTA;</p>		<p>Item #9: While several of the items presented in this section were actually considered to be “good”, the overriding number of them were things that should have been in place already (especially on site technical; support; all items relating to safety; failure review process; material kitting; and others).</p>

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		<p>10) Implementing, operating and maintaining FRA approved Diesel Multiple-Unit cars (each, a "DMU") that the MBTA may purchase (during the Term of the Agreement) and require the Operator to place into service in lieu of locomotive-coach train sets. The Proposer shall address, at a minimum: (i) the potential impact on train operations; (ii) potential changes, if any, required to collective bargaining agreements with respect to on-board train operations (focusing on minimum crew size for on-board crews for single and multiple unit DMU train sets); (iii) fueling issues; (iv) training issues; (v) maintenance for DMU cars (including any required changes at maintenance facilities); and (vi) procedures to calculate the "net financial impact" due to the introduction of DMU cars and/or retirement of locomotives and coaches;</p>		<p>Item # 10: The section on implementing DMU service was well written, had a comprehensive plan and was rationally presented.</p> <p>Item #'s 11 & 12: both sections were deemed acceptable as</p>

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		11) Operating the re-railing crane; and 12) All reporting required by US DOT, FRA, EPA, MDTE, APTA, FTA as well as other applicable laws, rules and regulations.		presented.
2.	B5.2(B)	The Proposer shall submit Maintenance Plans and provide corresponding Maintenance Cost Schedules (each, an "MCS") for all MBTA rolling stock that provides revenue service (excluding non-revenue fleet) (see B5.2(B)(i) – (xvi)). The Proposer shall prepare a Maintenance Plan for new or overhauled fleet (as set forth in the Instructions to Proposers, Appendix B (Operations and Management Proposal Instructions) Section B5.2(B)) that complies with the maintenance requirements set forth by the locomotive or coach builder or overhaul contractor. The Maintenance Plans shall be based on life cycle maintenance principles and be woven into the FRA-mandated inspection cycles. The contents of the Maintenance Plan shall comply with and be representative of the requirements of Schedule 3.3 (Mechanical Services) of the Commuter Rail Operating	Acceptable	The Maintenance plans presented for both the new and overhauled fleets appear to meet the requirements of the RFP.

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		Agreement. With respect to Maintenance Plans for <u>new fleets only</u> , the Proposer shall submit a generic plan for each type of new locomotive and coach (locomotives, BTCs and CTCs only) with its Proposal.		
3.	B5.2(B)	<p>An MCS shall also be developed and submitted for each fleet providing revenue service. For fleets that have both cab and trailer cars, a separate MCS shall be developed for cab cars and trailer cars. The MCS for each fleet type shall be developed using the forms provided in Attachments 1 through 6, which are incorporated to this Appendix B (Operations and Management Proposal Instructions):</p> <ul style="list-style-type: none"> a) Attachment 4 – MCS for New Locomotives (Annual Unit Cost); b) Attachment 5 – MCS for New Coaches (Annual Unit Cost); and c) Attachment 6 – MCS for Overhauled Coaches (Annual Unit Cost). <p>It should be noted that the total annual MCS costs for the existing locomotive and coach</p>	Acceptable	<p>Not having worked with the project team on pricing the annual cost of maintenance for these fleets of locomotives and coaches, I used a reasonability approach to the annual costs per fleet presented by MBCR. If you accept the initial year one pricing in all of the 4 fleet costing sheets as appropriate, there are two areas of concern I would like addressed:</p> <ul style="list-style-type: none"> ➤ New Rotem Coaches (CTC-5): Why is year 8 of the first coach that was placed in service @ a cost of \$405.6K? At that price, it is 2x the cost of its 7th year maintenance cost and similarly, almost 2x the cost of the vehicle entered one year later and entering into its 7th year of service. ➤ New Rotem Coaches (BTC-4D): What causes the cost of maintenance to increase substantially for cars entering their 5th year of service? Is it a pre-planned overhaul of some sort?

PROPOSAL EVALUATION WORKSHEET---INDIVIDUAL SRC MEMBER EVALUATION---TJB

EVALUATION FACTOR: MECHANICAL SERVICES PLAN (RATED)

Requirement No.	Appendix B Section	Requirement	Rating	Comments/Justification for Rating
		fleet (as summarized in Attachment 3) must equal the Proposer's price for "Mechanical Services" on Form FFP (Firm Fixed Price) for each of the respective years.		
4.	B5.2(C)	The Proposer shall: (i) identify those portions of the information that it provided in response to Section B5.2(A) through B5.2(B) of Appendix B that it considers to be innovative, best practice, beneficial to MBTA Customers and/or cost efficient, and (ii) submit information supporting or otherwise validating its position that said portions are innovative, best practice, beneficial to MBTA Customers and/or cost efficient.	Acceptable	<p>As noted in Item #9 of Requirement # 1 above, a number of innovative and/or best practices have been incorporated into MBCR's presentation. Some of these included:</p> <ul style="list-style-type: none"> ➤ ACFM Technology for use in wheel truing; ➤ SENTIO Technology for use in maintenance troubleshooting and repair diagnostics; ➤ Implementing a Maintenance Control Center. <p>However, the overriding number of items included things that should have been in place already (especially on site technical support; all items relating to safety; failure review process; material kitting; and others. For this reason, an overall rating of Acceptable was given this section of the proposal.</p>

MBCR---INDIVIDUAL SRC TEAM MEMBER EVALUATION---TJB

#25368523_v1

