



## Board Report

File #: 2023-0496, File Type: Contract

Agenda Number: 30.

### OPERATIONS, SAFETY, AND CUSTOMER EXPERIENCE COMMITTEE NOVEMBER 16, 2023

**SUBJECT: HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT**

**ACTION: APPROVE RECOMMENDATIONS**

#### **RECOMMENDATION**

AUTHORIZE the Chief Executive Officer to:

- A. AWARD Contract No. HR5000-2023 to the Hyundai Rotem Company for the manufacturing and delivery of 182 heavy rail vehicles (HRVs), in the amount of \$663,688,303 for the base contract buy, exclusive of one (1) contract option for an additional 50 HRVs, totaling 232 HRVs, subject to the resolution of any properly submitted protest(s), if any;
- B. APPROVE a combined Life of Project (LOP) budget of \$730,057,133, which includes the cost of the vehicle contract of \$663,688,303 and Contract Modification Authority of \$66,368,830; and
- C. NEGOTIATE AND EXECUTE future contract modifications to the Contract up to \$1,000,000.

#### **ISSUE**

New HRVs are required to meet the revenue service requirements and enhanced service capacity for Westside Purple Line Extensions (PLE) 2 & 3, as specified in the 30/10 Initiative, as well as replace the existing A650 HRV fleets when they have reached the end of their useful lives.

#### **BACKGROUND**

In December 2022, the Board authorized staff to issue a federally funded solicitation for a Best Value Request for Proposals (RFP) utilizing competitive negotiations pursuant to PCC § 20217 for the procurement of the 182 Base Order and 50 Option HRVs. Metro's Rail Fleet Management Plan FY2020-FY2040, describes the rail fleet requirements to accommodate anticipated growth in ridership, support line extensions and replace vehicles reaching the end of their useful revenue service lives.

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The existing A650 HRV fleets consist of 100 vehicles; 30 Base Buy, DC-motor HRVs of which four (4) have been retired and 74 Option Buy, AC-motor HRVs. Based on a 30-year useful life, the Base Buy vehicles are scheduled to be retired between 2022 and 2023, and the Option Buy vehicles between 2027 and 2029.

The HR4000 HRV procurement project will deliver 64 new HRVs by mid-2025; thirty will be used to replace the original 30 A650 Base Buy HRVs, and the remaining 34 HRVs will be used to support the expanded service with the opening of Purple Line Extension 1.

The intent of the HR5000 program is to procure the additional one hundred eighty-two (182) Base Order HRVs anticipated to be needed for PLE Sections 2 & 3, System Service Expansion, and replacement of the existing seventy-four (74) A650 Options Order vehicles.

## **DISCUSSION**

Staff's recommendation presents the firm that is most advantageous to Metro. Hyundai Rotem Company's offer represents the Highest Rated and Best Value to Metro when all technical and price factors are considered in accordance with the RFP evaluation criteria, including US content and Employment Plan. The Best Value evaluation is inclusive of the vehicle quantities for the Contract Base and Contract Option. The Procurement Summary (Attachment A) further provides the detailed evaluation results and rankings for all proposers, including the weighted scores associated with each evaluation factor.

The 182 HRV Base Order will address the operational service requirements of PLE Section 2 with 20 HRVs; PLE Section 3 with 40 HRVs, replacement of the 74 A650 Option vehicles, which will be reaching the end of their useful revenue service lives in approximately ten (10) years; the remaining 48 HRVs will be used to support Metro's planned HRV Line service expansion.

If the Board approves this Contract, Hyundai Rotem Company will deliver 46 new HRVs by July of 2027. The balance will be delivered to support committed levels of service for service expansions as well as the 2028 Olympics.

The contract includes incentives to complete delivery of the first three married-pairs (6 pilot HRVs) by February 1, 2027, thirty-nine (39) months following the issuance of NTP. Thirty-six production vehicles are scheduled to be delivered by the end of July 2027 at a rate of minimally four (4) vehicles per month. The contract also includes provisions to impose liquidated damages for late deliveries.

The Contract contains one (1) option, for up to 50 additional vehicles, as part of this procurement action, but the authority to award the options is not included in the staff recommendation. Should Metro determine the need to exercise this option, approval to do so will be requested.

This procurement is in compliance with Buy America and Metro's Manufacturing Careers Policy.

## **DETERMINATION OF SAFETY IMPACT**

The approval of this contract award will have a direct and positive impact on system safety, service

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quality, system reliability and overall customer satisfaction. The procurement of 182 new HRVs will feature the most current safety systems and augment service levels in addition to replacing the existing A650 series HRVs.

### **FINANCIAL IMPACT**

The total requested LOP budget is a combination of contract amount of the 182 Base Order HRVs of \$663,688,303 and 10 percent (10%) Contract Modification Authority which equals \$730,057,133.

Since this is a multi-year contract, the cost center Manager, project manager, and Chief Operations Officer will ensure that costs will be budgeted in future years.

#### **Impact to Budget**

The FY24 planned expenditure of \$32,000,000 is included in the combined annual budgets for the aforementioned projects in Project 206037, Cost Center 3043, Rail Vehicle Acquisition, and Projects 865522 and 865523, Cost Center 8510, Construction Contracts/Procurement. The current sources of funds for this action affecting PLE Sections 2 and 3 is a combination of Federal New Starts, TIFIA, and Measure R 35%. Due to the four minute headway requirement for the PLE projects and difference between estimated vs. actual cost per vehicle, it is anticipated that PLE may seek an increase to their LOP in the future to reflect the new vehicle cost and number of vehicles needed, contingent upon receipt of the temporary FTA waiver. Funding sources for the PLE Sections 2 and 3 are planned for the design, construction and procurement efforts; these funds are not eligible for operations. Funding for the replacement vehicles share of the procurement (project 206037) is Proposition A 35%, which is eligible for Rail Operations. The funding sources under this Project (inclusive of Project 865522 and Project 865523) for the 182 HRV Base Order HRVs are sufficient to award the base contract of this recommendation. Staff is actively pursuing additional eligible federal sources. Staff is also pursuing additional State and Local funding sources as they become available to meet the funding needs of this project.

### **EQUITY PLATFORM**

Part of the new HR5000 rail vehicles will be used to replace the existing aged A650 Option vehicles and the remaining will be used on the Purple Line Extensions. Approving the recommendations in this board report will support the identified fleet expansion and service needs and will encourage fair, competitive bidding processes for the selection of best value, qualifying contractor to deliver new vehicles on Metro's existing heavy rail vehicle lines that are currently serving passengers in majority Equity Focus Communities who rely on public transportations to commute to their jobs and other life commitments. Based on the 2019 Customer Survey, the Red and Purple heavy rail lines serve the following ridership:

- 27.7% below the poverty line
- 56.4% had no car available

Rider Ethnicity:

- Latino 38.9%;
- Black 13.1%;
- White 25.8%;
- Asian/Pacific Islander 15.2%;
- Other 6.5%

In addition, these areas include Union Station to Downtown LA, Koreatown (Wilshire/Western), Hollywood, Universal City, and North Hollywood.

### **IMPLEMENTATION OF STRATEGIC PLAN GOALS**

These recommendations support Metro Strategic Plan Goal No. 5) to “provide responsive, accountable, and trustworthy governance within the Metro organization”. This goal strives to position Metro to deliver the best possible mobility outcomes and improve business practices so that Metro can perform more effectively and adapt more nimbly to the changing needs of our customers.

### **ALTERNATIVES CONSIDERED**

The Board of Directors may choose not to authorize the contract award for this project; however, this alternative is not recommended as this project is critical to support the Purple Line Extensions, committed level of service to FTA, Olympic service need, and retirement the oldest HRVs in the fleet.

### **NEXT STEPS**

Upon Board award approval, a Contract will be executed and a Notice-to-Proceed will be issued to the Hyundai Rotem Company once all insurance and bonding requirements are met. Metro and the Hyundai Rotem Company will then mobilize required resources to ensure timely completion of deliverables by the Vehicle Contractor. Staff will also begin solicitation for consultant services to assist Metro with the Project Management/Control and Technical Support Services.

### **ATTACHMENTS**

Attachment A - Procurement Summary  
Attachment B - DEOD Summary  
Attachment C - Funding & Expenditure Plan

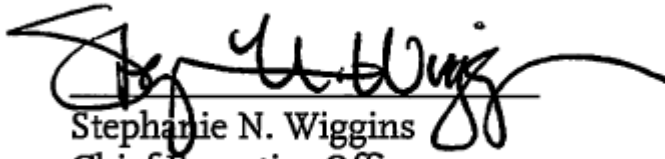
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Stephanie N. Wiggins  
Chief Executive Officer

## ATTACHMENT A

### PROCUREMENT SUMMARY

#### HR5000 Heavy Rail Vehicle (HRV) Procurement

1.	<b>Contract Number:</b> HR5000		
2.	<b>Recommended Vendor:</b> HYUNDAI ROTEM		
3.	<b>Type of Procurement (check one):</b>	IFB	RFP
	Non-Competitive	Modification	RFP-A&E Task Order
4.	<b>Procurement Dates:</b>		
	<b>A.Issued:</b> 12.05.22		
	<b>B.Advertised/Publicized:</b> 12.10.22		
	<b>C.Pre-proposal/Pre-Bid Conference:</b> 12.15.22		
	<b>D.Proposals/Bids Due:</b> 04.17.23		
	<b>E. Pre-Qualification Completed:</b> 10.24.23		
	<b>F. Conflict of Interest Form Submitted to Ethics:</b> 04.18.23		
	<b>G.Protest Period End Date:</b> 11.30.23		
5.	<b>Solicitations Picked up/Downloaded:</b> 121	<b>Bids/Proposals Received:</b> 3	
6.	<b>Contract Administrator:</b> Robert Pennington	<b>Telephone Number:</b> (213) 922-5527	
7.	<b>Project Manager:</b> Annie Yang	<b>Telephone Number:</b> (213) 922-3254	

#### **A. Procurement Background**

LACMTA is currently expanding its rail network and services, including extending the Purple Subway Line (PLE). The Westside Purple Line Extension, previously named the Westside Subway Extension, extends service from the terminus at Wilshire and Vermont Station to Westwood (UCLA and Veteran's Administration Hospital). This extension, consisting of nearly nine (9) miles of track and seven (7) stations, is planned to be constructed in three (3) segments.

To meet this extension of service, LACMTA anticipates procuring a Base Order of one hundred eighty-two (182) Heavy Rail Vehicles (HRVs). Included in its solicitation is an Option quantity of fifty (50) to meet future HRV fleet needs for service expansions and new extensions.

The Contractor's primary responsibility under the Contract is to deliver to LACMTA up to two hundred thirty-two (232) HRVs (Base Order plus Options subject to Board approval) Model HR5000 Heavy Rail Vehicles ready for revenue service. The Contractor shall design, test for design conformance, manufacture, test for production conformance, Deliver, perform First Article acceptance tests on the first three (3) Married-Pair Vehicles (the Pilot Vehicles) pursuant to the HR5000 Validation and Testing, furnish Spare Parts and tooling as listed in the Contractual Requirements, and warrant the quality, performance, maintainability, interface,

operational reliability and intended purpose of all HR5000 HRVs produced and delivered to LACMTA.

This Board Action is to approve Contract No. HR5000 issued in support of the HR5000 Heavy Rail Vehicle (HRV) Program, subject to the resolution of any properly submitted protest(s), if any.

The RFP was issued in accordance with Metro’s Acquisition Policy and the contract type is a firm fixed unit price.

Ten (10) Amendments were issued during the solicitation phase of this RFP:

<b>Amend.</b>	<b>Date</b>	<b>Document Title</b>	<b>Section</b>	<b>Revision/Change</b>
<b>No. 1</b>	<b>7-Dec-22</b>	Letter of Invitation	Section One	Letter of Invitation – Correction of the Solicitation Title
<b>No. 2</b>	<b>24-Jan-23</b>	Letter of Invitation	Paragraph 2	Change date: Proposal submission clarifications, and TF-3 Form
<b>No. 3</b>	<b>4-Feb-23</b>	Technical Specifications	Multiple Technical Specifications	Modify requirements
<b>No. 4</b>	<b>24-Feb-23</b>	Price Sheet	PF-1 through PF-7	Replace all pricing forms to clarify column header
		Commercial Terms	Liquidated Damages, Compensation, General Conditions	Correct references to other clauses
		Technical Specifications	Multiple Requirements	Modify requirements
<b>No. 5</b>	<b>7-Mar-23</b>	Technical Specifications	Multiple requirements	Modify requirements
<b>No. 6</b>	<b>15-Mar-23</b>	Letter of Invitation	Section One	Change proposal submission date and number of proposal copies
<b>No. 7</b>	<b>29-Mar-23</b>	Commercial Terms	General Conditions	Modify requirements
		Technical Specifications	Multiple Requirements	Modify requirements
<b>No. 8</b>	<b>2-Oct-23</b>	Letter of Invitation	BAFO Proposal Submittal Instructions	New instructions for BAFO submission
		Commercial Terms	General Conditions and Escrow	Modify requirements
<b>No. 9</b>	<b>9-Oct-23</b>	Commercial Terms	General Conditions	Modify requirements
<b>No. 10</b>	<b>10/12/2023</b>	Commercial Terms	General Conditions	Modify requirements

A Pre-Proposal Conference was held on December 15, 2022, at the USG Building and was also conducted via Microsoft Teams for those proposers that could not attend in person.

Three (3) qualified proposals were received on Monday, April 17, 2023. Proposer Site Visits and Interviews were conducted at each proposers manufacturing facility located in the United States and overseas between July 17, 2023, and September 2, 2023. The purpose of the visit was to inspect and qualify the proposed manufacturing and assembly facilities and interview the Proposers prospective Project Team.

Responses to proposer's questions were received throughout the solicitation period. Those questions not resulting in an Amendment were grouped and posted to the project data repository accessible to all planholders as Clarification responses. Six (6) sets of Clarification responses were uploaded to the site from January 10, 2023, to March 28, 2023. All available drawings, manuals, and other reference material were also posted to the site.

## **B. Evaluation of Proposals/Bids**

A Source Selection Committee (SSC) consisting of staff from LACMTA Operations convened and conducted a comprehensive technical evaluation of the proposals received.

The proposals were evaluated based on the following evaluation criteria and weights:

Proposal Evaluation Criteria	Points
1. Past Experience and Past Performance	300
2. Technical Compliance	250
3. Project Management Experience	200
4. Price	200
5. U.S. Employment Plan (USEP)	50
Total Available Points	1,000

The evaluation criteria are appropriate and consistent with criteria developed for other similar vehicle acquisition and overhaul procurements. The USEP is included as a mandatory criterion in accordance with the January 2018 Board Motion (File 2017-0904 Agenda Number 45). Proposers were provided with the opportunity to augment their proposal



scoring by participating in an additional Evaluation Criteria element by proposing additional U.S. component content greater than the Federal Buy America requirement of 70%. Proposers may choose not to participate in this element and may still be considered responsive if they meet all other requirements of the RFP.

The evaluation criteria and their Subfactors were numerically scored and ranked for all responsive Proposers. Numerical scores will indicate the degree to which the Proposer's technical and price offer has met the standard for each criterion evaluated. The standard for each numerical value defined was used by the SSC as a guide during the evaluation process. Each SSC member also provided brief narratives in their evaluation that supports the numerical scoring they presented. Several factors were considered when developing these weights, giving the greatest importance to past experience and past performance on rail vehicle overhaul and integration or new rail vehicle acquisition.

All three of the proposals received were determined to be within the competitive range. The firms are listed below in alphabetical order:

1. Hitachi Rail, Los Angeles
2. Hyundai Rotem
3. Stadler US

The proposal evaluation kick-off meeting was conducted on April 25, 2023, with the SSC and Subject Matter Experts (SMEs) present, however the SSC evaluation process did not start until May 30, 2023. The SMEs were used to support the SSC with their expertise in the relevant subject matter on various subsystems. Comments from the SMEs were compiled and presented to the SSC on June 15, 2023. Request for Clarification, instructions for oral presentations and site inspection visits agendas were sent to the Proposers the week of June 26, 2023.

For scheduling purposes, site inspection visits were defined by geographic area into U.S. manufacturing/assembly facilities, Asia manufacturing facilities, and European manufacturing facilities. Proposer oral presentations and LACMTA clarification requests were combined with site inspection visits. Except for requests for clarifications, the meeting agenda for each Proposer was identical. The SSC conducted site visits to each of the firms proposed manufacturing and assembly locations. The first site was to Hyundai Rotem fabrication facility in Korea, the week of July 15, 2023. The SSC team next visited Stadler's U.S. manufacturing/assembly facility in Salt Lake City, UT the week of July 24, 2023. SSC visits to Hyundai Rotem's and Hitachi's U.S. assembly facilities were conducted the week of August 14, 2023. The last round of site visits occurred the week of August 26, 2023, to Hitachi's and Stadler's manufacturing facilities in Italy, Switzerland and Hungary. The SSC were able to evaluate and assess each of the Proposer's facilities along with the corresponding capability and capacity of the location.

On September 8, 2023, the SSC met to consider the proposals, oral presentations, and the site visits in their initial proposal evaluation score. The SSC Chair compiled the SSC evaluation scores based on technical merit. The price proposals were then revealed to the SSC members and the SMEs to review and discuss the technical merit against the prices. Pre-negotiation positions were established based on technical clarifications and proposer deviations/exceptions, and using pricing variations from LACMTA's Independently Cost Estimate (ICE). Although Proposer pricings was within the overall ICE and project budget, certain component pricing needed to be reviewed. The basis of LACMTA's ICE was reexamined and determined to be sound.

Notices were sent to all three of the Proposers targeting September 24 through September 26, 2023, for the discussions/negotiations to be held virtually due to scheduling constraints. The Proposers were notified of their respective strengths and weaknesses that could be enhanced in a Best and Final Offer (BAFO), this would also include any Proposer deviation/exception to the RFP documents or Technical Specifications. Negotiations were completed on October 12, 2023, after reviewing with County Counsel to finalize agreements on outstanding Proposer commercial exceptions. Amendment numbers nine (9) and ten (10) were the results of these agreements. The BAFO request was released on October 2, 2023, with a due date of October 16, 2023.

The SC Team met on October 23, 2023, with the SME's updated report on the technical merits of each Proposer's BAFO submittal and all previously presented factors. The SSC Team was charged to evaluate and score each of the Proposers' technical proposals and provide their score to the SSC Chair to be compiled. The SSC team and Chair met on October 26, 2023, to review the Teams' evaluation and scores. The Team discussed the factors in the scores and reached a consensus on a final technical evaluation. The SSC Chair then revealed the BAFO price proposals to the SSC Team for review and discussion.

Final evaluations and discussion of the BAFO submittals were held on Friday, October 27, 2023, and were used as the basis of the recommendation for award.

### **C. Qualifications Summary of Firms:**

#### **Hitachi Rail, Los Angeles LLC**

Hitachi Rail STS Los Angeles LLC, an incorporated Joint Venture between Hitachi Rail STS USA Inc. and Hitachi Rail STS S.p.A., both of which are a part of the Hitachi Rail STS global organization. Hitachi Rail was created to allow Hitachi to utilize the TVM certification of Hitachi Rail STS USA and the car building experience from Hitachi Rail SYS S.p.A, leveraging the capabilities and facilities of both regional divisions of Hitachi Rail STS on this project. Hitachi Rail recently built a new \$70M US permanent and fully owned rail car manufacturing facility and test rack in Washington County in the City of Hagerstown,

Maryland where Hitachi Rail proposes to complete final assembly and testing of the HR5000 vehicles.

Hyundai Rotem

Hyundai Rotem USA Corporation (HRU) will be the main contractor for LACMTA HR5000 Project, a subsidiary of Hyundai Rotem Company (HRC), which is the parent company of the HRU for engineering, subsystem procurement, quality assurance and pilot car and carbody manufacturing. Hyundai Precision Industry, founded in 1977, was relaunched in 1999 as Hyundai Rotem Company (“Hyundai Rotem”) as a consequence of the Korean Government’s ‘Bid Deal No.1’. This deal merged three domestic companies in the railway vehicle sector to reinforce the competitiveness of the business through a single Hyundai Rotem brand. Then, in 2001 Hyundai Rotem was incorporated into Hyundai Motor Group and has become a global top tier railway systems provider in a relatively short period of time due to its world-class technology and high-quality products. Hyundai Rotem entered the North American market in 1998, Hyundai Rotem USA Corporation was established in 2005 in advance of the first equipment orders from Southeastern Pennsylvania Transportation Authority (SEPTA). Hyundai Rotem is the parent company of Hyundai Rotem USA Corporation

Stadler US

Stadler Rail US is the US based manufacturing facility for Stadler Rail which produces railway rolling stock. Stadler Rail is headquartered in Bussnang, Switzerland. In June of 2015, Stadler was awarded an order for 8 new FLIRT model diesel-electric low-floor multiple unit vehicles. Since federal funds were being used for the order made it subject to the Buy America Act, and Stadler quickly found a former Union Pacific plant in Salt Lake City, and built a permanent 230,000 ft2, \$50 million state-of-the-art facility on a 62-acre property, just five minutes from the Salt Lake City International Airport completed in 2018.

Technical Evaluation Scores (alphabetical order)

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
HITACHI RAIL LOS ANGELES, LLC				
Proposal Evaluation Criteria				
Past Experience & Past Performance	73.5	300	222	
Project Management Experience	75.2	250	188	

Technical Compliance	77.9	200	163	
TOTAL		750	573	3

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
HYUNDAI ROTEM				
Proposal Evaluation Criteria				
Past Experience & Past Performance	84.3	300	255	
Project Management Experience	83.5	250	208	
Technical Compliance	82.7	200	172	
TOTAL		750	635	1

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE	RANK
STADER RAIL US				
Proposal Evaluation Criteria				
Past Experience & Past Performance	80.8	300	234	
Project Management Experience	78.1	250	189	
Technical Compliance	75.2	200	159	
TOTAL		750	581	2

US Employment Program

All Proposers were required to propose a level of participation in the United States Employment Program (USEP). This participation resulted in a normalized distribution of the 50 points allocated in accordance with their respective commitment value of the new and sustained jobs retained by each firm and the value of U.S. facility investments and added to the final evaluation score. The Proposer with the highest combined USEP commitment value and therefore received the maximum incentive score.

<b>FIRM</b>	<b>Hitachi Los Angeles</b>	<b>Hyundai Rotem</b>	<b>Stadler US</b>
USEP Labor (Prime/Sub)	\$ 104,000,000	\$ 107,903,918	\$ 100,613,875
USEP Facility Improvement	\$ 77,000,000	\$ 13,996,082	\$ 2,000,000
Net Evaluation Amount	\$ 181,200,000	\$ 121,900,000	\$ 102,613,875
Evaluation Points	50	34	28

Buy American Pre-Award Audit

As required by the RFP Buy America Requirements and in accordance with FTA requirements as stated in 49 CFR 663, an initial Buy America Pre-Award Audit was conducted during the weeks of August 17, 2023, through September 2, 2023. As a precaution, all three proposer firms were audited, and all were determined to satisfy the stated Buy America requirements. As part of the Audit process, the auditor confirmed the proposer’s Enhanced U.S. Component Content valuation. A second Buy America Pre-Award Audit was conducted the week of October 24 through October 27, 2023, to reconfirm the Buy America content and the Enhanced U.S. Component Content value.

Enhanced U.S. Component Content Program

All the Proposers participated in the Enhanced U.S. Component Content Program, submitting proposals with additional U.S. component content above that required by R-15 Buy America, currently at seventy percent (70%), and were verified by an independent pre-award audit in accordance with 49 C.F.R. Part 663. The U.S. Component Content was not part of any direct evaluation scoring, but was considered in the overall pricing evaluation and its Best Value trade-off analysis on a dollar-for-dollar formula of “Total Price – (Value of U.S. content greater than 70%) = Evaluation Price.

LACMTA conducted Buy America Audits after receipt of the initial proposal submittal and after the BAFO proposal submittal to verify the cost component of the Enhanced U.S.

Component Content Program. The value of participation was included in the overall price evaluation.

FIRM	Hitachi Los Angeles	Hyundai Rotem	Stadler US
BAFO PRICE	\$ 751,854,859	\$ 835,527,427	\$ 821,909,985
Enhanced US Component %	74.6%	77.1%	94.5%
Enhanced US Component \$	\$ 17,579,405	\$ 27,861,558	\$ 98,655,168
Net Evaluation Price	\$ 734,275,454	\$ 807,257,427	\$ 723,254,817
Evaluation Points	197	179	200

#### **D. Cost/Price Analysis**

The proposed prices have been determined to be fair and reasonable based upon adequate competition, technical evaluation, fact finding, and negotiations. All the proposed price offers submitted were below LACMTA's ICE and project budget. All proposed pricing was at least 3.7% below LACMTA's ICE and were within 11.7% from the highest to lowest price. The SSC considered all price aspects in relationship to their technical evaluations and analysis to develop their evaluation that would present LACMTA with its best overall value when all evaluation factors are considered, including schedule risk, past performance, technical expertise, project management and U.S. jobs creation.

	<b>Proposer</b>	<b>Base Proposal</b>	<b>Option 1 Proposal</b>	<b>Combined Proposal</b>
	ICE	\$693,244,129	\$165,070,250	\$858,314,379
	Hitachi Los Angeles	\$600,946,082	\$150,911,777	\$751,857,859
	Hyundai Rotem	\$663,688,303	\$171,430,682	\$835,118,985
	Stadler US	\$658,877,133	\$163,430,682	\$821,909,985

The RFP for the new HRV acquisition project contained work elements that could be exercised as an option. The Option 1 elements consisted of 50 HRVs and PF-7 Alternate Technology which were included in the technical and price evaluation. These options can be unilaterally exercised at Metro's discretion. The following table provides the Option 1 and Alternate Technology pricing.

	Proposer	Option 1 HRVs	Alternate Tech	Total
1.	Hitachi Los Angeles	\$150,911,777	\$ 4,780,695	\$155,692,472
2.	Hyundai Rotem	\$171,430,682	\$ 7,792,744	\$179,223,424
3.	Stadler US	\$163,032,852	\$ 8,863,000	\$172,293,682

## **E. Technical and Price Evaluation**

The tables below combine the technical evaluation scores with the price scores achieved based on calculations.

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE
HITACHI RAIL LOS ANGELES, LLC			
Proposal Evaluation Criteria			
Past Experience & Past Performance	73.5	300	222
Project Management Experience	75.2	250	188
Technical Compliance	77.9	200	163
Price		200	197
U.S. Employment Plan Evaluation		50	28
TOTAL		1000	798

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE
HYUNDAI ROTEM			
Proposal Evaluation Criteria			
Past Experience & Past Performance	84.3	300	255

Project Management Experience	83.5	250	208
Technical Compliance	82.7	200	172
Price		200	179
U.S. Employment Plan Evaluation		50	34
TOTAL		1000	848

FIRM	AVERAGE SCORE	WEIGHT FACTOR	WEIGHTED AVERAGE SCORE
STADER RAIL US			
Proposal Evaluation Criteria			
Past Experience & Past Performance	80.8	300	234
Project Management Experience	78.1	250	189
Technical Compliance	75.2	200	159
Price		200	200
U.S. Employment Plan Evaluation		50	50
TOTAL		1000	831

**F. Recommended Contractor**

In following the instructions in the RFP document, Instructions to Proposer (IP-25) the SSC Team will make its recommendation for an award a contract resulting from responses to this RFP to a responsive and responsible Proposer whose offer conforms to the RFP and will be most advantageous to LACMTA, with price and other factors specified elsewhere in this RFP being considered.

Recommendation for award may or may not be made to the lowest-priced Proposal. Although technical, project management, past performance and experience are considered vital to a successful project, LACMTA may not necessarily make an award to the Proposer



with the highest technical ranking nor award to the Proposer with the lowest price proposal if doing so would not be in the overall best interest of LACMTA.

Based on the technical evaluation and economic analysis, the recommended price addresses all cost elements and presents the best overall value when all evaluation factors are considered, including schedule risk, past performance, technical expertise, project management and U.S. jobs creation, the SSC Team recommends an award to Hyundai Rotem. Although the recommendation for award is being recommended to a proposer other than the lowest price offeror, the SSC Team believes that Hyundai Rotem proposal represents the best opportunity to meet LACMTA's project goals.

DEOD SUMMARY

HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT

**A. Small Business Participation**

Hyundai Rotem USA, a Transit Vehicle Manufacturer (TVM), is on the Federal Transit Administration's (FTA) list of eligible TVMs. Hyundai Rotem USA has submitted its overall Disadvantaged Business Enterprise (DBE) goal of 5.30% to FTA, in compliance with 49 Code of Federal Regulations (CFR) Section 26.49(a)(1). TVMs submit overall DBE goal methodology and semi-annual reports directly to FTA.

**B. Living Wage and Service Contract Worker Retention Policy Applicability**

The Living Wage and Service Contract Worker Retention Policy is not applicable to this contract.

**C. Prevailing Wage Applicability**

Prevailing wage is not applicable to this contract.

**D. Project Labor Agreement/Construction Careers Policy**

Project Labor Agreement/Construction Careers Policy is not applicable to this Contract. PLA/CCP is applicable only to construction contracts that have a construction related value in excess of \$2.5 million.

**ATTACHMENT C  
FUNDING EXPENDITURE PLAN  
HR5000 HEAVY RAIL VEHICLE (HRV) PROCUREMENT**

**ATTACHMENT C - Funds Uses and Sources Tables**

	From Inception to Date (ITD) thru FY23 Jun	7/1/23 - 6/30/24	7/1/24 - 6/30/25	7/1/25 - 6/30/26	7/1/26 - 6/30/27	7/1/27 - 6/30/28	7/1/28 - 6/30/29	7/1/29 - 6/30/30	7/1/30 - 6/30/31			
<b>Use of Funds</b>		<b>FY24</b>	<b>FY25</b>	<b>FY26</b>	<b>FY27</b>	<b>FY28</b>	<b>FY29</b>	<b>FY30</b>	<b>FY31</b>	<b>Total</b>	<b>% of Project</b>	
1												
2	HR5000 New HRV Procurement: 122 Vehicles	\$0	\$32,000,000	42,000,000	52,030,619	52,000,000	104,000,000	82,000,000	53,860,000	26,999,341	\$444,889,960	60.9%
3	Purple Line Extension 2: 20 Vehicles	\$0		45,150,000	27,782,781						\$72,932,781	10.0%
4	Purple Line Extension 3: 40 Vehicles	\$0			47,186,600	98,678,961					\$145,865,561	20.0%
5	10% CMA/Contingency	\$0				\$8,000,000			\$29,184,415	\$29,184,415	\$66,368,830	9.1%
	<b>Base Order Total</b>	<b>\$0</b>	<b>\$32,000,000</b>	<b>\$87,150,000</b>	<b>\$127,000,000</b>	<b>\$158,678,961</b>	<b>\$104,000,000</b>	<b>\$82,000,000</b>	<b>\$83,044,415</b>	<b>\$56,183,756</b>	<b>\$730,057,132</b>	<b>100.0%</b>

# HR5000 New Heavy Rail Vehicle Procurement



RFP No. HR5000 - New Heavy Rail Vehicle  
Procurement Procurement Evaluation Team  
Award Recommendation



**Metro**

## SCOPE & PLAN

- Base Order | 182 HRVs
  - Replace Existing Fleet (74 Cars)
  - Support Purple Line Extensions – Section 2 & 3
  - Add Capacity for 4 Minutes Headway as committed to FTA
- Option Order | 50 HRVs
  - Support Service Expansion on future HRT lines, requested LOP does not included the option.

# PROCUREMENT EVALUATION PROCESS

- RFP Issued Date December 5, 2022
- Proposals received April 17, 2023
- Initial Interviews Conducted July 17, 2023
- Proposer Site Visits conducted July 17, 2023
- Agency reference checks conducted September 2023
- Negotiations completed September 28, 2023
- Best and Final Offer (BAFO) received October 16, 2023
- Final Price & Technical Evaluation completed October 26, 2023
- Issue Notice of Intent to Award November 15, 2023

# AWARD RECOMMENDATION SUMMARY

Award to Hyundai Rotem Company (HRC) for \$663,688,303 as rated highest in accordance with approved evaluation criteria.

Category	Weight Factor	Hitachi Rail Los Angeles, LLC	Hyundai Rotem Company (HRC)	Stadler Rail US
Past Experience & Past Performance	300	222	255	234
Project Management Experience	250	188	208	189
Technical Compliance	200	163	172	159
Price	200	197	179	200
US Employment Plan Evaluation	50	28	34	50
<b>Total</b>	<b>1000</b>	<b>798</b>	<b>848</b>	<b>831</b>

# PROJECT SCHEDULE – GOING FORWARD

## Milestones:

## Completion Date:

Board Award Approval

November 2023

Issue NTP

December 2023

Pilot Car Delivery & Acceptance

August 2027

Complete delivery of 36 base order cars  
(minimally 4 cars /month)

April 2028

Open PLE, Section 2

Open PLE, Section 3

Complete delivery of all 182 base order cars by December 31, 2029  
(NTP + 75 months, at 6 HRVs/month delivery rate)





Thank you



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