CITY AND COUNTY OF SAN FRANCISCO MUNICIPAL TRANSPORTATION AGENCY ONE SOUTH VAN NESS AVE, 7TH FLOOR SAN FRANCISCO, CA 94103

MODIFICATION NO. 2 TO AGREEMENT BETWEEN SIEMENS INDUSTRY, INC. AND THE CITY AND COUNTY OF SAN FRANCISCO FOR PROCUREMENT OF NEW LIGHT RAIL VEHICLES (LRV4)

(SFMTA No. 2013-19)

This Modification No. 2 to Agreement is made and entered into this 30th day of October, 2015, by and between Siemens Industry Inc. (Contractor) and the City and County of San Francisco, a municipal corporation (City), acting by and through its Municipal Transportation Agency (SFMTA).

RECITALS

- **A.** On September 30, 2014, the City entered into an agreement with Contractor (Agreement) to provide 175 light rail vehicles (LRVs), together with associated equipment and spare parts, as well as Options for additional LRVs and parts.
- B. On March 31, 2015, the City modified the Agreement to exercise Option 1 in accordance with Section 64.1 of the Agreement, for 40 additional LRVs to be delivered after the Phase 1 delivery of 24 vehicles, and to exercise Options for additional Spare Parts and Equipment, in accordance with Sections 64.2, 64.3 and 64.4 of the Agreement.
- C. The parties now wish to modify the Agreement to update the list of approved major suppliers listed in Section 29, clarify the purpose of Item 1.1 (Allowance) in Exhibit 2 of Volume I and specify the payment structure for changes to the LRVs paid under Item 1.1.

Now, therefore, the parties agree that the Agreement shall be amended as follows:

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1. Section 29 (Subcontracting) of the Agreement is deleted and replaced in its entirety with the following:

29. Subcontracting

Contractor may subcontract portions of the Work only upon prior written approval of City. Contractor is responsible for its subcontractors throughout the course of the performance of the Work. City's execution of this Agreement constitutes its approval of the major subcontractors/suppliers listed below. Neither party shall, on the basis of this Agreement, contract on behalf of or in the name of the other party. Any agreement made in violation of this provision shall be null and void.

	Commodity	Supplier
1	Propulsion	Siemens PD LD
2	Friction Brake	Wabtec
3	HVAC (Air Comfort)	Thermo King Corp.
4	Event Recorder	Hasler Rail
5	Door Operators & Controls	Ultimate Transportation N. America
6	ATCS (Train Control)	Thales
7	Coupler	Voith
8	Radio	Harris
9	Communication	Televic
10	CCTV	Kratos
11	APC	INIT

- 2. Exhibit 1.A (Schedule of Prices) is deleted and replaced in its entirety with the revised Exhibit 1 attached to this Modification.
- **3.** Exhibit 2 (Payment Schedule) is deleted and replaced in its entirety with the revised Exhibit 2 attached to this Modification.
- 4. Release. The compensation (time and cost) set forth in this Modification comprises the total of all compensation due to Contractor, and all Subcontractors and Suppliers (collectively, Contractor), as a result of the events giving rise to the Modification and for the additional Work described in this Modification, including, but not limited to, costs for labor, materials, equipment, delay, escalation, profit, inefficiency, overhead and administration. The execution of this Modification constitutes a release and accord and satisfaction of any claim that Contractor may bring, as of the date of this Modification, for additional compensation or time arising from, or related to, the procurement and delivery of work as described in this Modification.
- 5. Effective Date. Each of the modifications set forth above shall be effective on and after all parties have signed the Modification.

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6. Legal Effect. Except as expressly modified by this Modification No. 2, all other terms and conditions of the Contract remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties hereto have entered into and executed this Modification No. 2 on the date set forth on page 1 above.

CITY

San Francisco Municipal Transportation Agency

Edward D. Reiskin Director of Transportation

Approved as to Form:

Dennis J. Herrera City Attorney

By

Robin M. Reitzes

CONTRACTOR

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Michael Cahill President Siemens Industry, Inc. Mobility Division 7464 French Road Sacramento, CA 95828

Christopher Halleus Vice President, FBA Siemens Industry, Inc. Mobility Division 7464 French Road Sacramento, CA 95828

City vendor number: 50009 Federal Taxpayer ID No.13-2762488

Attachments

Exhibit 1.A – Schedule of Prices Exhibit 2 – Payment Schedule

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EXHIBIT 1 A. Schedule of Prices

ITEM	DESCRIPTION	UNIT PRICE	QUANTITY	EXTENDED PRICE
Item 1	Engineering Design, Project Management and Design Qualification Testing	Lump Sum	x 1	\$37,541,102
Item 1.1	Allowance for (a) regulatory mandated changes, (b) passenger enhancements, and (c) system modifications in order for Vehicle to Interface with other SFMTA projects (e.g., radio project)	Lump Sum	x 1	\$10,000,000
Item 2.1	Vehicle Price for Base Order Phase 1	\$3,327,250	x 24 cars	\$79,854,000
Item 2.2	Vehicle Price for Base Order Phase 2	\$3,327,250*	x 151 cars	\$502,414,750
Item 3	Operating, Maintenance and Parts Manuals	Lump Sum	x 1	\$809,478
Item 4.1	Training	Lump Sum	x 1	\$361,557
Item 4.2	Train Simulator (1) (In accordance with Section 22.2.8 of Technical Specifications)	Lump Sum	x 1	\$1,704,650
Item 5.1	Spare Parts (Total of Exhibit 1.B, Phase 1)	Lump Sum	x 1	\$14,153,840
Item 5.2	Spare Parts (Total of Exhibit 1.B, Phase 2*)	Lump Sum	XI	φ14, 100,040
Item 6	Special Tools, Test and Diagnostic Equipment (Total of Exhibit 1.D)	Lump Sum	x 1	\$1,792,624
Item 7.1	Option 1 for 40 Additional New Light Rail Vehicles	\$3,349,270**	x 40 cars	\$133,970,800
Item 8.1	Additional Spare Parts (Exhibit 1.C Phase 1)			
Item 8.2	Additional Spare Parts (Exhibit 1.C Phase 2*)	Lump Sum	x 1	\$11,269,527
Item 9	Spare parts for Option Cars*	Lump Sum	x 1	\$15,000,000
Item 10	Train Simulator (2) (In accordance with Section 22.2.8 of Technical Specifications)*	Lump Sum	x 1	\$1,704,650
Total Base: Items 1 – 10				\$810,576,978

Notes: *The prices do not include escalation. Escalation will be applied in accordance with Agreement Section 7.5.

**Price includes escalation.

OPTIONS

ITEM	DESCRIPTION	UNIT PRICE	QUANTITY	EXTENDED PRICE
Item 7.2	Option 2 for 1 to 45 Additional New Light Rail Vehicles	\$3,329,011	x 45 cars	\$149,805,495
Total Options:				\$149,805,495

Note: The Price for Item 7.2 does not include escalation. Escalation will be applied in accordance with Agreement Section 7.5.

Exhibit 1-1a

Exhibit 2 PAYMENT SCHEDULE (All Item references are to Exhibit 1.A)

Item 1 - Engineering Design, Project Management and Design Qualification Testing

	Milestone	Percent of Bid Item
A	Submittal and Approval of Test Program, System Safety, Reliability, Maintainability and other plans as negotiated with SFMTA	2%
В	Completion and Approval of Preliminary Design Review	2%
С	Completion and Approval of Final Design Review	35%
D	Completion and Approval of Vehicle Performance Qualification Testing	30%
Е	Completion and Approval of Test Program as specified	26%
F	Completion and Approval of all Contract Requirements (Retention)	5%
Tota	I for Item 1	100%

Item 1.1 - Allowance for (a) regulatory mandated changes, (b) passenger

enhancements, and (c) system modifications in order for Vehicle to Interface with other SFMTA projects (e.g., radio project).

Progress payments will be made in accordance with Items 1, 2A, 2B, 3, 4.1, 4.2, and 7 listed in this exhibit, as applicable.

Item 2 – Vehicle Price for Base Contract

Item 2A - Vehicle Price for Base Contract (Cars 1 - 24)

	Milestone	Percent of Bid Item
A	 Placement of contracts with the following major subcontractors (Cars 1 - 24).* Propulsion Friction Brake Air Comfort Door Operators & Controls Carbody Train Control Coupler Communication 	2%

	Milestone	Percent of Bid Item
В	Delivery of complete set of subsystems to site of installation.	20%/Vehicle
С	Vehicle structure complete and ready for shipment to final assembly site	20%/Vehicle
D	SFMTA Acceptance for shipment of Vehicle from final assembly site to SFMTA property	25%/Vehicle
Е	Conditional Acceptance of Vehicle by SFMTA	30%/Vehicle
F	Completion and Approval of all Contract Requirements for Phase 1 (Retention)	3%
Tota	I for Item 2A	100%

*Payment will be made only to the extent that deposits have been paid to suppliers and up to the amount of the deposits or 2%, whichever is the lesser value; in addition Contractor must provide security for payment under Section 7.3 of the Agreement.

Item 2B – Vehicle Price for Base Contract (Cars 25 – 175)

	Milestone	Percent of Bid Item
A	 Placement of contracts with the following major subcontractors (Cars 25 – 175).* Propulsion Friction Brake Air Comfort Door Operators & Controls Carbody Train Control Coupler Communication 	2%
В	Delivery of complete set of subsystems to site of installation.	20%/Vehicle
С	Vehicle structure complete and ready for shipment to final assembly site	20%/Vehicle
D	SFMTA Acceptance for shipment of Vehicle from final assembly site to SFMTA property	25%/Vehicle
Е	Conditional Acceptance of Vehicle by SFMTA	30%/Vehicle
F	Completion and Approval of all Contract Requirements for phase 2 (Retention)	3%
Tota	for Item 2B	100%

*Payment will be made only to the extent that deposits have been paid to suppliers and up to the amount of the deposits or 2%, whichever is the lesser value; in addition, Contractor must provide security for the payment, as required under Section 7.3 of the Agreement.

Item 3 - Operating, Maintenance and Parts Manuals

	Milestone	Percent of Bid Item
А	Acceptance of Draft Manuals	5%
В	Delivery and Acceptance of Operating, Maintenance and Parts Manuals	90%
С	Completion and Approval of all Contract Requirements (Retention)	5%
Tota	l for Item 3	100%

Item 4.1 - Training

	Milestone	Percent of Bid Item
A	Completion of Training Program and delivery and acceptance of all deliverables	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Tota	I for Item 4.1	100%

Item 4.2 - Train Simulator

	Milestone	Percent of Bid Item
A	Delivery and Acceptance of Train Simulator	95%
В	Completion and Acceptance of all Contract Requirements (Retention)	5%
Tota	Il for Item 4.2	100%

Item 5 - Spare Parts

	Milestone	Percent of Bid Item
А	Delivery and acceptance of spare parts. Delivery and payment will be on a line-item basis.	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Tota	l for Item 5	100%

Item 6 - Special Tools, Test and Diagnostic Equipment

	Milestone	Percent of Bid Item
А	Delivery and acceptance of Diagnostic Test Equipment, Special Tools, Bench Test Equipment	95%
В	Completion and approval of all Contract Requirements (Retention)	5%
Tota	I for Item 6	100%

<u>Item 7 - Option for 1 to 85 Additional New Light Rail Vehicles</u> Progress payments will be made in accordance with Item 7.1 and 7.2 below:

<u>Item 7.1 – Option 1 for 40 Additional New Light Rail Vehicles</u> Progress payments will be made in accordance with Item 2A

<u>Item 7.2 – Option 2 for 1 to 45 Additional New Light Rail Vehicles</u> Progress payments will be made in accordance with Item 2B

Item 8 – Additional Spare Parts

Progress payments will be made in accordance with Item 5.

Item 9 – Spare Parts for Options

Progress payments will be made in accordance with Item 5.

Item 10 – Train Simulator

Progress payments will be made in accordance with Item 4.2.

Contract Modification No. 2 n:\ptc\as2015\1000417\01047069.docx Exhibit 2-4