

## **MOTION NO. M2013-33**

### **Tacoma Link Light Rail Vehicle Communications System and Warning Device**

<b>MEETING:</b>	<b>DATE:</b>	<b>TYPE OF ACTION:</b>	<b>STAFF CONTACT:</b>	<b>PHONE:</b>
Operations and Administration Committee	06/06/2013	Final Action	Bonnie Todd, Executive Director of Operations <b>Robert Blackburn, Tacoma Link Operations Manager</b>	206-398-5367 206-370-5674

### **PROPOSED ACTION**

Authorizes the chief executive officer to execute a contract with Woojin I.S. America Inc. to provide a new vehicle communications system for Tacoma Link light rail vehicles in the amount of \$340,183, with an 8% contingency of \$27,215 for a total authorized contract amount not to exceed \$367,398.

### **KEY FEATURES SUMMARY**

- Under this contract, Woojin I.S. America Inc. will design and provide a replacement communications system for the Tacoma Link light rail vehicle (LRV) fleet.
- The LRV communications system controls the light rail vehicle electronic message signs, automatic voice announcements, and public address system. The manufacturer has gone out of business, making parts and support for the current system extremely difficult to obtain.
- The new communications system will enable technicians to make voice announcement changes and perform troubleshooting on message signs more efficiently.
- This procurement will also provide a replacement pedestrian warning device. The current LRV warning device is comprised two separate units, an air horn and mechanical bell, which require frequent maintenance. The new warning device will combine the horn and bell into one electronic unit with no moving parts, minimal maintenance and increased reliability.
- The scope of work includes integration of the new system into three light rail vehicles, any necessary modifications, warranty support, and training.

### **BACKGROUND**

Tacoma Link light rail opened August 22, 2003 and operates three trains on a 1.6 mile line that runs from the Tacoma Dome station to the Theater District. There are six station stops along the line.

The current communication system includes an analog based announcement system, public address system, passenger emergency intercom system, and electronic destination and interior signs. The original system manufacturer is no longer in business. Sourcing replacement parts has become increasingly difficult as existing stock is exhausted.

The new communication system will include a modern operating system (Windows) making updates to the passenger communications and troubleshooting equipment more efficient.

The horn and bell functions on the new system will be combined into one electronic unit to increase reliability and significantly reduce maintenance cost. The new electronic warning devices will meet state and federal regulations and will duplicate the sound of the horn and bell currently in use.

The contract includes design, manufacture of the communications system, passenger information and horn and bell equipment. The contractor will also provide training to operate and maintain the system as well as detailed documentation. The contract includes a two-year warranty.

A Request for Proposals (RFP) was issued on November 11, 2012. Four proposals were received and evaluated. Woojin IS America Inc. was the highest ranked and lowest cost proposer.

Woojin I.S. America Inc. is an international supplier of electrical and electronic equipment to the mass transit industry based in Irwindale, California that has been in business since 1974.

**FISCAL IMPACT**

The proposed action is within the lifetime budget of the project.

The action will be funded from the construction phase of the project. The lifetime budget of the construction phase is \$350,000 and the estimated costs are at \$367,398, which results into a phase budget shortfall of \$17,398. The short fall will be funded from the administration phase of the project.

The budget table below illustrates the budget impact of the proposed action.

**Project Budget: Tacoma Link Announcement/Sign Sys**

Project Budget	2013 TIP	Board Approvals	This Action	Board Approved Plus Action	Uncommitted/ (Shortfall)
Agency Administration	21	-	-	-	21
Preliminary Engineering	-	-	-	-	-
Final Design	-	-	-	-	-
3rd Party	-	-	-	-	-
Right of Way	-	-	-	-	-
Construction	350	-	367	367	(17)
Construction Management	-	-	-	-	-
Vehicles	-	-	-	-	-
Contingency	-	-	-	-	-
<b>Total Project Budget</b>	<b>\$ 371</b>	<b>\$ -</b>	<b>\$ 367</b>	<b>\$ 367</b>	<b>\$ 4</b>

**Phase Detail**

**Construction**

Woojin I.S. America Inc.

Construction Phase	350	-	367	367	(17)
<b>Total Phase</b>	<b>\$ 350</b>	<b>\$ -</b>	<b>\$ 367</b>	<b>\$ 367</b>	<b>\$ (17)</b>

**Contract Detail**

Woojin I.S. America Inc.	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
Contract	-		340	340
Contingency				27
<b>Total Contract Amount</b>	<b>\$ -</b>	<b>\$ -</b>	<b>\$ 340</b>	<b>\$ 367</b>
Percent Contingency	0%	0%	0%	8%

**Budget Shortfall**

	(17)
Agency Administration	17
<b>Total Funding</b>	<b>\$ 17</b>

**Notes:**

Amounts are expressed in Year of Expenditure \$000.

Board Approvals = Committed to-date + Contingency, and includes pending Board Actions.

Project budget is located on page 148 of the 2013 Transit Improvement Plan.

**SMALL BUSINESS PARTICIPATION**

Not applicable to this action.

**EQUAL EMPLOYMENT WORKFORCE PROFILE**

6 employees in the United States; 17% women; 83% minorities.

**PUBLIC INVOLVEMENT**

Not applicable to this action.

**TIME CONSTRAINTS**

A one month delay would not create a significant impact to the project schedule.

**ENVIRONMENTAL REVIEW**

Jl 5/17/2013

**LEGAL REVIEW**

JW 5/30/2013

**MOTION NO. M2013-33**

A motion of the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority authorizing the chief executive officer to execute a contract with Woojin I.S. America Inc. to provide a new vehicle communications system for Tacoma Link light rail vehicles in the amount of \$340,183, with an 8% contingency of \$27,215 for a total authorized contract amount not to exceed \$367,398.

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**MOTION:**


It is hereby moved by the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority that the chief executive officer is authorized to execute a contract with Woojin I.S. America Inc. to provide a new vehicle communications system for Tacoma Link light rail vehicles in the amount of \$340,183, with an 8% contingency of \$27,215 for a total authorized contract amount not to exceed \$367,398.

APPROVED by the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on June 5, 2013.

  
Paul Roberts

Operations and Administration Committee Chair

ATTEST:

  
Marcia Walker  
Board Administrator