

MOTION NO. M2018-159
Sounder Head End Power Unit Contract

MEETING:	DATE:	TYPE OF ACTION:	STAFF CONTACT:
Operations and Administration Committee	12/06/2018	Final Action	Bonnie Todd, Executive Director of Operations Robin Braziel, Director of Commuter Rail, Bus and Paratransit Richard Williams, Mechanical Superintendent

PROPOSED ACTION

Authorizes the chief executive officer to execute a contract with Peterson Power Systems, Inc. to convert analog Head End Power units on Sounder locomotives to digital in the amount of \$1,089,972, with a 5% contingency of \$54,499, for a total authorized amount not to exceed \$1,144,471, plus applicable taxes contingent upon Board approval of the 2019 Budget.

KEY FEATURES SUMMARY

- The Head End Power (HEP) units on Sounder locomotives generate electricity for passenger cars, supplying air conditioning, heating, lights, and power outlets for a more comfortable commute.
- The existing analog control system on the HEP units was part of the original locomotive procurement and has reached the end of its useful life and is outdated, unreliable, and unable to be programmed.
- The proposed action would authorize the conversion of the analog control system to a digital control system on all 12 of Sounder’s HEP units.
- Each control system conversion will take up to 12 days to complete for a total repair length of approximately five months.
- The conversion will reduce Sounder service delays and annulments as a result of unexpected HEP shutdowns.
- This proposed action includes a 5% contingency.
- Applicable taxes are currently estimated to be \$115,592.

BACKGROUND

Sound Transit is responsible for maintaining Sounder vehicles to ensure availability and passenger comfort. The Sounder HEP units require ongoing maintenance and periodic rebuilds/upgrades in order to maintain reliability.

This would be Sounder’s first HEP control system conversion. Since the locomotives were first acquired, service has expanded, adding flip trains and extending operations to Lakewood, increasing HEP usage and the need for improved reliability.

The conversion will include removing the tachometer, voltmeter, EMD annunciator panel, murphy and pressure switches, and all relays. The contractor will install a new Caterpillar CAT annunciator panel, digital voltage regulator, current transformers, and a CAT input/output module. After the

contractor has installed the new control system, the system will be tested to ensure it functions as designed.

The contract has a one-year warranty on parts and 90 days on workmanship. The rebuild is expected to last about 15 years.

PROCUREMENT INFORMATION

Prior to issuing the solicitation for these services, Sound Transit considered the project scope, the determining factors for contract award, and the need for proposal discussions and revisions, and determined that a Request for Proposals procurement method was the most advantageous.

Sound Transit advertised Request for Proposals No. RTA/RP 0234-18 on September 18, 2018. Two firms submitted a proposal, and the proposals were evaluated based on the advertised evaluation criteria including capacity, project approach and schedule, firm and key personnel experience and qualifications and commitment to and compliance with equal opportunity employment law. Peterson Power Systems, Inc. was identified as the top ranked firm.

Sound Transit recommends award of this contract based upon the determination that Peterson Power Systems, Inc.'s negotiated proposal best meets the evaluation criteria and offers the best value, and this contract award is in the best interest of the Sounder HEP upgrade project.

FISCAL INFORMATION

This action is within the authorized project allocation to date for the above project and sufficient monies remain after approval of this action to fund the remaining project work.

The authorized project allocation to date for the Sounder Vehicle Overhaul program is \$46,208,926 in the Proposed 2019 TIP. Within that amount, \$33,976,327 has been allocated to the vehicle phase. The proposed action would commit \$1,260,063 and leave a remaining budget balance of \$21,362,769 in the vehicle phase.

While this action has no impact on the construction phase, upon re-balancing of the authorized project allocation to date in 2019, the budget shortfall of \$386,302 in the construction phase will be eliminated.

Sounder Vehicle Overhaul - 700770

(in thousands)

Project Phase	Authorized Project Allocation to Date	Board Approvals	This Action	Board Approved Plus Action	Uncommitted / (Shortfall)
Agency Administration					
Preliminary Engineering					
Final Design					
Right of Way					
Construction	\$12,233	\$12,619		\$12,619	(\$386)
Construction Services					
Third Party Agreements					
Vehicles	\$33,976	\$11,354	\$1,260	\$12,614	\$21,362
Contingency					
Total Current Budget	\$46,209	\$23,973	\$1,260	\$25,233	\$20,976

Peterson Power Systems	Board Approvals to Date	Current Approved Contract Status	Proposed Action	Proposed Total for Board Approval
Contract Amount	\$	\$	\$1,090	\$1,090
Contingency			\$54	\$54
Taxes			\$116	\$116
Total Contract Amount	\$	\$	\$1,260	\$1,260
Percent Contingency	0%	0%	5%	5%

Budget Shortfall Funding - Construction Phase	(\$386)
2019 phase adjustment: vehicles to construction phase	386
Adjusted Phase Budget Construction	\$12,619
Adjusted Phase Budget Vehicles	\$33,590

Notes:

Amounts are expressed in Year of Expenditure \$000s.
 Board Approvals = Committed To-Date + Contingency as of Oct 2018.
 For detailed project information, see page 217 of the Proposed 2019 Budget.
 Authorized project allocation to date is contingent upon approval of the Proposed 2019 Budget.

SMALL BUSINESS/DBE PARTICIPATION

Sound Transit promotes and encourages small business participation, which also includes Disadvantaged Business Enterprises (DBEs). Small Business and DBE goals are based upon an examination of subcontracting opportunities contained in the work of this contract and the number of Small Businesses/DBEs available to perform such subcontracting work.

Peterson Power Systems is the only CAT dealer who has performed the retrofit outlined in this proposal. Disadvantaged Business Enterprises (DBE and Small Business goals were not established.

PUBLIC INVOLVEMENT

Not applicable to this action.

TIME CONSTRAINTS

The current HEP control systems have reached the end of their useful life; delaying this procurement may increase the risk of HEP failures in existing service.

ENVIRONMENTAL REVIEW

KH 11/29/18

LEGAL REVIEW

AJP 11/30/18

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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 Peterson Power Systems, Inc. to convert analog Head End Power units on Sounder locomotives to digital in the amount of \$1,089,972, with a 5% contingency of \$54,499, for a total authorized amount not to exceed \$1,144,471, plus applicable taxes contingent upon Board approval of the 2019 Budget.

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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 Peterson Power Systems, Inc. to convert analog Head End Power units on Sounder locomotives to digital in the amount of \$1,089,972, with a 5% contingency of \$54,499, for a total authorized amount not to exceed \$1,144,471, plus applicable taxes contingent upon Board approval of the 2019 Budget.

APPROVED by the Operations and Administration Committee of the Central Puget Sound Regional Transit Authority at a regular meeting thereof held on December 6, 2018.


Paul Roberts
Operations and Administration Committee Chair

ATTEST:


Kathryn Flores
Board Administrator