



**COMMISSION
AGENDA MEMORANDUM**

Item No. 8k

ACTION ITEM

Date of Meeting November 14, 2023

DATE: October 16, 2023

TO: Stephen P. Metruck, Executive Director

FROM: Kelly Purnell, Capital Project Manager
Jennifer Maietta, Director, Real Estate Asset Management
Kenneth Lyles, Director of Maritime Operations and Security

SUBJECT: Maritime Industrial Center Electric Equipment Procurement (C801241)

Amount of this request: \$1,810,000

Total estimated project cost: \$8,590,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to approve additional funding in the amount of \$1,810,000 for the procurement of long-lead major electrical equipment for the Maritime Industrial Center Electrical Infrastructure Replacement project.

EXECUTIVE SUMMARY

This project will replace the electrical infrastructure at the Maritime Industrial Center (MIC). The site, located just west of Fishermen’s Terminal, currently has a tenant mix of storage, warehouse, maintenance and repair shops, boatyard and marine services, and fishing vessel support operations. A large majority of the electrical infrastructure that serves the tenants is approximately 25 years old. Though electrical systems generally last 20 to 30 years, their proximity to water has caused it to deteriorate at an expedited rate. An arc flash study and condition assessment were performed on the property in 2020 and determined that several pieces of equipment need replacement for safety reasons as they are not compliant with National Electrical Code (NEC) standards and are too dangerous to service properly.

The replacement of the infrastructure is critical to maintaining reliable and resilient electrical service to the MIC facilities, ensure that the Port meets its tenant obligations, and continues to leverage the economic opportunities that result in well managed and maintained assets. To not further delay this essential work, early purchasing of large electrical equipment is necessary due to extensive long-lead times for procuring the equipment.

In October 2022 the Port Commission authorized staff to proceed with the design and permitting phase of the project, and to proceed on long lead material procurement in March 2023. Staff bid

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the long-lead electrical equipment in August 2023. Three bids were received in response to the procurement advertisement. Acceptance of any bid would exceed the previously authorized total procurement budget of \$1,800,000. The lowest bid received of \$3,610,000 (including sales tax) which is \$1,810,000 over the Engineer’s Estimate of \$1,800,000. This overage can be chiefly attributed to the current market conditions and very high demand for low and medium voltage electric equipment.

The additional funds requested in this action will be used to cover the difference of the bid amount including Washington state sales tax.

The recommendation is to accept the low bid of Access Electric Supply, Inc. Their bid has been reviewed and confirmed that they are the lowest and responsible bidder.

JUSTIFICATION

This project supports the following Century Agenda and Maritime Division strategic goals:

Century Agenda:

1. Responsibly Invest in the Economic Growth of the Region and All Its Communities.
2. Be a Highly Effective Public Agency.

Maritime Division:

1. Asset Management
2. Sustainability

The project will include necessary upgrades to the electrical system by replacing current equipment that is dangerous to work on and at risk of failure. This investment will increase the asset value of the MIC by ensuring that the site facilities are functioning well and efficiently, removing dangerous water intrusion into electrical areas, and increasing the reliability of power to the Port’s tenants. Additionally, the upgraded electrical equipment will provide the flexibility to utilize electrical capacity for future sustainable EV charging capabilities and potential additional shore power that is not currently possible with the existing equipment.

Purchasing the equipment in advance of construction contracting will mitigate risks to the project schedule due to long-lead times in electrical equipment procurement times, currently estimated between 72 and 85 weeks.

Diversity in Contracting

WMBE aspirational goals have not been established for purchasing of the electrical equipment. The procurement of the equipment from available suppliers will be very prescriptive and based on technical credentials and performance. WMBE goals will be established for the larger general construction contract that will be solicited when the project is ready to be constructed.

DETAILS

Maritime Industrial Center – 2700 Commodore Way, Seattle, WA 98199

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The project scope consists of demolishing existing switchboards and structural concrete pads; decommissioning conduits and wire; and replacing all with new structural infrastructure, conduits, wires, switchboards, and associated equipment. The switchboards will be upsized from existing capacity of between 400 and 600 amps to 2000 amps for the smaller switchboards and from 2500 Amps to 4000 Amps for the main switchboard for future capacity needs (e.g., EV chargers, shore power). This project will not increase the electrical load at the site at this time.

To maintain the project schedule, the critical path equipment procurement timeline is paramount. After an evaluation of the three bids, the technical review team has concluded that the lowest bidder is responsible and responsive.

Scope of Work

The following electrical equipment will be replaced:

1. Switchboard 4SP and 2SPN (service entry to site)
2. Switchboard 4W and 2W (wharf)
3. Switchboard 4P and 2P (NE side of Building A-1)
4. Switchboard EY4 (east side of Building A-1)
5. Switchboard SEY4 (lighting connection for east lot)
6. Switchboards EY4 and SEY4 will be consolidated with 4P and 2P in one location that has better access. Additionally, this will eliminate a stormwater intrusion point at EY4.

Site work:

1. Provide new conduits and conductors from Seattle City Light to new MIC main distribution switchgear.
2. Provide new conduits and conductors from new MIC main distribution switchgear to:
 - a. New electrical switchboard at Mooring Pier
 - b. New electrical switchboard at Wharf
3. Provide new electrical vaults.

The following equipment will be purchased in advance per this authorization:

1. New main electrical distribution
 - A. Main switchgear, switchboards including main circuit breakers and feeder circuit breakers, transformer.
2. New electrical distribution at mooring pier
 - A. Switchboards including main circuit breaker and feeder circuit breakers, transformer.
3. New electrical distribution at wharf
 - A. Switchboards including main circuit breakers and feeder circuit breakers, transformer.

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Schedule

Activity

Commission design authorization	October 11, 2022
Design start	October 21, 2022
Commission authorization for major electrical equipment procurement	March 28, 2023
Commission authorization for additional electrical equipment procurement funds	2023 Quarter 4
Commission construction authorization	2024 Quarter 3
Construction Start	2024 Quarter 4

Cost Breakdown

This Request

Total Project

	This Request	Total Project
Design	\$0	\$850,000
Electric Equipment Procurement	\$1,810,000	\$3,610,000
Construction	0	\$4,130,000
Total	\$1,810,000	\$8,590,000

ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Cancel bid and require electrical equipment to be procured by general contractor.

Cost Implications:

- Additional \$3.1M overall project cost (due to additional escalation and GC markup on equipment).
- Total estimated project cost \$12.3M.

Pros:

- (1) Transfers risk to the contractor.
- (2) Advances Century Agenda goals and Maritime Division strategic goals.

Cons:

- (1) Very high probability of causing project delays due to estimated 72–85 week procurement lead times for electrical equipment.
- (2) Potential for longer equipment design duration due to Port quality control process.
- (3) More expensive due to overheads applied to the equipment purchase.

This is not the recommended alternative.

Alternative 2 – Rebid the electrical equipment procurement

Cost Implications:

Cost may increase between \$50k and \$150k due to 4% escalation of overall project for two-month delay. Potential that rebidding could lower bids and negate escalation increase.

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Pros:

- (1) Potential to negotiate faster delivery of equipment.

Cons:

- (1) Cost implications do not outweigh schedule impacts. Lead times have not been improving. While possible to negotiate faster delivery, will be offset due to rebid timeline.
- (2) The equipment is already in a state of advanced disrepair due to the proximity to maritime environments and areas of stormwater intrusion. Additional delays to project are not optimal and increases risk of failure and need for temporary power.

This is not the recommended alternative.

Alternative 3 – Approve additional funds and proceed with awarding contract based on lowest responsible and responsive bid.

Cost Implications:

Increase in procurement costs of \$1.8M. No additional escalation and GC mark-up on electrical equipment.

Pros:

- (1) Maintains critical path schedule by proceeding with procurement of long-lead electrical equipment.
- (2) Less expensive due to escalation and GC mark-up avoidance.
- (3) Advances Century Agenda goals and Maritime Division strategic goals.

Cons:

- (1) Maintains Port risk if equipment is delayed or damaged during delivery.
- (2) May require temporary storage of equipment if procurement times come down.
- (3) Adds some complexity to timing GC construction contract procurement.

This is the recommended alternative.

FINANCIAL IMPLICATIONS

<i>Cost Estimate/Authorization Summary</i>	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$1,500,000	\$0	\$1,500,000
Current Change	\$1,810,000	\$0	\$1,810,000
Revised estimate	\$8,590,000,00	\$0	\$8,590,000
AUTHORIZATION			
Previous authorizations	\$2,650,000	\$0	\$2,650,000
Current request for authorization	\$1,810,000	\$0	\$1,810,000
Total authorizations, including this request	\$4,460,000	\$0	\$4,460,000
Remaining amount to be authorized	\$4,130,000	\$0	\$4,130,000

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Annual Budget Status and Source of Funds

This project was included in the 2023 Capital Plan under CIP C801241 Maritime Industrial Center Electrical Infrastructure Replacement at an estimated total project cost of \$6,413,000. The additional cost of the project will be covered by the Maritime Management Reserve C800002.

This project will be funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	\$8,590,000
Business Unit (BU)	Maritime Portfolio Management
Effect on business performance (NOI after depreciation)	This project will increase annual depreciation by approximately \$287K.
IRR/NPV (if relevant)	NA
CPE Impact	NA

Future Revenues and Expenses (Total cost of ownership)

This project will provide for reliable and resilient electrical power to the MIC facilities for the next 25-30 years. This upgrade will provide protection of Port assets and extend their useful life, provide for additional future electrical capacity to support Port sustainability goals, and increase economic development potential. Maintaining existing assets will preserve the economic vitality of our operations and serve the Port, tenants, and their customers well by providing a safe and sustainable working environment.

ADDITIONAL BACKGROUND

None.

ATTACHMENTS TO THIS REQUEST

- (1) Presentation slides

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

October 11, 2022 – The Commission authorized design.

March 28, 2023 – The Commission authorized procurement of the electrical equipment for \$1.8 million.