



**COMMISSION
AGENDA MEMORANDUM**

Item No. 10a

ACTION ITEM

Date of Meeting September 9, 2026

DATE: August 11, 2026

TO: Stephen P. Metruck, Executive Director

FROM: Linda Springmann, Director, Cruise and Elliot Bay Operations
Kelly Purnell, Capital Project Manager, Waterfront Project Management

SUBJECT: Terminal 91/Pier 66 Cruise Shore Power Extension (CIP#s C801983, C802116) GMP Contract Amendment and DU#9202 Rehabilitation Validation Funding

Amount of this request: \$49,330,000

Total estimated project cost: \$116,480,000

ACTION REQUESTED

Request Commission authorization for the Executive Director to approve funding to:

1. Execute a Guaranteed Maximum Price (GMP) Contract Amendment to the alternative public works Progressive Design Build contract, MC-0322060, for the T91/P66 Cruise Shore Power Extension project to complete construction of the Pier 66 and Pier 91 East shore power extension systems, bollards, and limited deck panels replacement.
2. Authorize funding for a Validation Phase to include the rehabilitation of the section of Pier 91 delineated as Development Unit (DU) #9202.

Total amount requested for this action is \$49,330,000 for a total project authorization of \$69,980,000, and an estimated total project cost of \$116,480,000.

EXECUTIVE SUMMARY

In July 2024, the Port passed Commission Order No. 2024-08 mandating all homeport cruise ships to connect to shore power by 2027, three years earlier than the 2030 goal set in the Port's adopted Maritime Climate and Air Action Plan. The provision of shore power for cruise ships is the Port's greatest opportunity to improve local air quality and reduce Maritime greenhouse gas (GHG) emissions from ocean going vessels at berth.

Currently, the Port's Smith Cove Cruise Terminal at Terminal 91 at Pier 91 (P91) which opened in 2009 provides shore power at its two cruise berths. The single berth at the Bell Street Pier Cruise Terminal at Pier 66 (P66) which opened in 1999 has a new shore power system completed in September 2024. While all three of the Port's cruise berths are now electrified, upgrades to the shore power systems are required to provide the additional flexibility needed to accommodate all vessels and berthing configurations to meet Commission Order No. 2024-08.

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The project utilizes the Progressive Design Build (PDB) alternative delivery method and selected Skanska USA Building, Inc. (Skanska) as the design-builder. In December 2025, Commission approved funding to execute a Post-Validation Amendment to move forward with design and final Guaranteed Maximum Price (GMP) development. In May 2026 Commission approved funding to execute an Early Work Amendment for early procurement of long lead materials.

In June 2026 shore power construction on the west berth of Pier 91 was reprioritized to address accelerating deterioration of the concrete precast deck panels in the section of the pier delineated as DU #9202 that falls within the project footprint. Further investigation into the condition of the panels has shown delamination, spalls, exposed/corroded reinforcing steel bar, and elevated concentration of chloride ions. Operational load restrictions have been implemented on twelve of the most deteriorated panels with further condition assessments required every six months. DU #9202 will be rehabilitated in conjunction with the shore power installation as the most expeditious option to eliminate the risk of additional load restrictions and subsequent operational impacts. In addition, through collaboration with the design-builder, an innovative structural solution was developed that will significantly reduce the cost of the structural rehabilitation, which will result in an estimated net cost reduction to the capital plan of \$20M. P91 west berth shore-power extension and DU #9202 will be complete by the start of the 2028 cruise season. Two ships with approximately thirty calls each will not be able to connect in cruise season 2027. Temporary shore power solutions were evaluated by the Design-Builder in coordination with Watts Marine and proved to be unfeasible.

The contract will now proceed with two (2) separate milestone scopes for which separate GMPs will be negotiated:

Milestone 1: completion of the Pier 66 and Pier 91 east shore power extension systems by the start of 2027 cruise season, including bollards and limited deck panel replacements (today's funding request).

Milestone 2: completion of the Pier 91 west berth shore power extension and rehabilitation of DU #9202 by the start of 2028 cruise season (validation phase in today's request; GMP in future request).

Final GMP for Milestone 1 has been successfully negotiated between the Port and the Design-Builder with review by an Independent Cost Estimator. A GMP amendment is to be executed pending authorization of today's request.

Validation of the scope, schedule, and budget for Milestone 2 will begin pending authorization of today's request.

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JUSTIFICATION

The Port of Seattle is an industry and regional leader in economic development and sustainability. The Port's investment in cruise terminals at P66 and P91 results in a significant contribution to the region's economy, generating more than 5,500 jobs and nearly \$1.2 billion in total local business revenue each cruise season. The Port also recognizes its responsibility and the importance of concerted efforts to balance economic growth with sustainability. The Seattle Waterfront Clean Energy Strategic Plan and the adopted Maritime Climate and Air Action Plan provide a Port investment strategy to protect the environment and improve community health.

As a global leader in sustainability, the Port is committed to addressing global climate change and improving local air quality. In 2017 the Port's Commission adopted GHG reduction targets in alignment with the Paris Climate Agreement, then updated goals in October 2021 in recognition of the climate crisis. In November 2021, the Port Commission adopted the Maritime Climate and Air Action Plan which identifies strategies and actions the Port can take through 2030 to achieve Port's Century Agenda GHG target to reduce GHG emissions 50% by 2030 and to position the Port to phase out seaport-related emissions entirely by 2050. The plan includes a specific commitment to install shore power at all cruise berths and maximize connections by 2030. In May 2022, the Port launched a collaborative effort to explore the feasibility of a maritime green corridor aimed at accelerating the deployment of low and zero GHG emission cruise ships and operations between Alaska, British Columbia, and Washington. Most recently, the Port passed Commission Order No. 2024-08 mandating that all home ported cruise ships must connect to shore power by 2027, three (3) years earlier than the Maritime Climate and Air Action Plan 2030 goal.

Shore power can significantly reduce GHG and air pollution emissions with each connection. Staff estimate shore power can avoid approximately 268 thousand metric tons of carbon (CO₂e) cumulatively through 2050. Assuming a 25-year infrastructure life and \$44 million cost, that represents a cost per ton of carbon reduced over the full lifespan to range from \$164 to \$406 per metric ton CO₂e. This range is based on the 2025 cruise schedule with the current ability to connect cruise ships to shore power at P91 and P66 (86% of homeport calls). If 100% of homeport ships plug-in consistent with the Commission Order No. 2024-08 in 2027, shore power use would result in an additional 45 thousand metric tons of cumulative carbon emissions avoided over a 25-year infrastructure life.

Diversity in Contracting

The project team in coordination with the Diversity in Contracting Department has included a 6% WMBE aspirational goal in the Progressive Design Build major work contract for this work to design and construct the pathway for the shore power system and other structural elements of the project and to install the Watts designed and procured shore power equipment.

The additional Milestone 2 scope was discussed with Diversity in Contracting. After review, the 6% WMBE goal will be maintained for the overall project, inclusive of both Milestone 1 and Milestone 2. While the additional scope represents a significant increase in the project value,

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some of the major added work, particularly the concrete-related scope, provides limited opportunities for additional WMBE utilization. However, there are other elements within the added scope that provide continued WMBE opportunities and should support the contractor in achieving the established 6% goal. Based on the review of the overall scope and available WMBE opportunities, the 6% goal remains appropriate for the project.

Community Engagement

Staff will brief Magnolia and Queen Anne community leaders at the Port's Neighbors Advisory Committee meeting on September 16 including project details and construction schedule. Similar outreach is scheduled for waterfront businesses and neighbors near Pier 66.

Status:

The T91/P66 Cruise Shore Power Extension project is on schedule to meet the Commission order to plug-in all shore-power equipped homeported ships by 2027 at Pier 66 and on the East berth of Pier 91 (Milestone #1). The extension of the shore-power system on the west berth of Pier 91 (Milestone #2) will be completed the following year to plug-in all remaining homeport ships by 2028. Following completion of the Validation phase in November that resulted in the development of a Basis of Design, Target Budget, and Target Schedule, the project returned to Commission in December 2025 and received authorization to proceed into the design and GMP Development phase of the contract, and in May 2026 for authorization of an Early Work Amendment for long lead material procurement. The project has now progressed through final design for Milestone 1 and a GMP has been negotiated between the Port and the Design-Builder. Milestone 2 will progress through a Validation period once a Contract Amendment has been executed. The project will return to Commission in Q4 2026 for authorization to proceed to GMP Development for that scope of work.

Due to the proprietary nature of the electrical shore power equipment and the anticipated long lead time, a sole source purchasing contract with Watts Marine was executed to ensure that design and procurement of the equipment is completed and ready for installation in Q4 of 2026. Since the Commission authorization to purchase Watts shore power equipment, the equipment has been designed and ordered, and its delivery is scheduled to begin in late September 2026.

Scope:

This funding request is for the GMP for Milestone 1 scope package to be completed by cruise season 2027.

Milestone 1:**- Pier 91****○ East Berth**

- Construct two (2) new sawtooth boxes at footmark 450' and 849' and replace one (1) existing sawtooth box in place.
- Construct conduit duct bank from existing electrical substations to each new sawtooth box.

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- Pull electrical conductor to each sawtooth box and complete electrical terminations.
 - Install new substation equipment and reconfigure existing equipment that will remain.
 - Commission new shore power equipment
- West Berth
 - Replace 90 precast deck panels along the bull rail between footmark 200' and 780' and reconstruct the bull rail.
 - Install new substation equipment and reconfigure existing equipment that will remain
 - Install two (2) new 100-ton bollards on north end of west berth
- South Bollards
 - Construct two (2) new 100-ton bollards on the south end of Pier 91.
- **Pier 66**
 - Construct under-pier scaffolding
 - To maximize construction efficiency, scaffolding must be installed under the pier for approximately 1,125 feet. To meet the in-use date at the start of cruise season 2027, installation of scaffolding must be completed prior to the end of the tribal fishery. Tribal concurrence negotiations are in progress to accommodate the schedule of this work.
 - Construct under-pier duct bank and install one under-pier splice vault
 - Construct one (1) new sawtooth box at footmark 352'
 - Pull new electrical conductor from existing electrical substation to new sawtooth box and complete electrical terminations
 - Install new ground switch in electrical substation
 - Commission new shore power equipment

Remaining Project Risks:

- Milestone 1 schedule is aggressive and has very little float to accommodate unforeseen conditions. Risk contingency has been allocated to mitigate, as well as shift differential allowance to allow for more days per week to work. Tribal concurrence is still being negotiated for Pier 66.
- Milestone 2 schedule is aggressive and has very little float to accommodate unforeseen conditions. This will require tribal concurrence to complete in a single season. West berth shore power will be prioritized for in-use by cruise season 2028, however potential need for a third season to complete all structural work exists.
- DU #9202 structural solution costs are preliminary. Costs could increase due to escalation, feasibility, and constructability. Cost estimates will be updated at contract phases, and design milestones and mitigation measures implemented as feasible and as needed.

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Schedule

The schedule to meet Commission Order No. 2024-08 is aggressive. Project constraints including other concurrent or overlapping critical projects at P91, design and permitting schedule, supply chain uncertainty, and highly constrained construction work windows due to cruise and commercial fishing operations create the risk of schedule slippage. Schedule assumptions account for best case permitting scenarios, including avoidance of in-water work (work completed in the dry) and successful tribal negotiations to maximize work window between cruise seasons and the tribal fishery. Due to critical repairs required for DU #9202 of Pier 91 dock, the dock repairs have been added to the shore power scope, and the scope has been divided to be completed over two seasons. A Progressive Design Build project delivery with a sole source contract to Watts Marine for shore power equipment design and procurement was selected to mitigate schedule risk to the extent possible. This Progressive Design Build contract with Skanska allows for some acceleration of the design process and minimizes potential for unknown construction risks that cause delays assuming that all milestone dates are met, including this authorization of funding for the GMP for Milestone 1.

Activity

Commission Authorization – T91 Mobile Cable Positioning Devices (CPDs) and T91 Cruise Shore Power Extension North initial design funding	August 8, 2023
DORA – Progressive Design Build Procurement and Preliminary Design	October 16, 2024
Commission Authorization – Watts Marine, LLC Purchasing Contract	April 22, 2025
Commission Authorization - Progressive Design Build Contract – Validation Phase	July 8, 2025
Progressive Design Build Validation Period Execution	August 22, 2025
Commission Authorization – Post-Validation Amendment funding	December 9, 2025
Commission Authorization – Early Work Amendment funding	April 28, 2026
Commission Authorization – GMP - Milestone 1 Amendment funding	Q3 2026
Construction – Milestone 1	September 9, 2026
In-use date – Milestone 1	April 2027
Commission Authorization – Milestone 2 Validation funding	September 9, 2026
Commission Authorization – GMP – Milestone 2 Amendment funding	Q3 2027
Construction – Milestone 2	Q4 2027 – Q2 2028
In-use date – Milestone 2	April 2028

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Cost Breakdown

	This Request	Total Project
Planning through Validation: Milestone 1	\$0	\$2,450,000
Pier 91	\$0	\$1,620,000
Pier 66	\$0	\$830,000
GMP Development: Milestone 1	\$0	\$5,000,000
Pier 91	\$0	\$3,800,000
Pier 66	\$0	\$1,200,000
Material Pre-Procurements (Watts)	\$0	\$8,000,000
Pier 91	\$0	\$7,000,000
Pier 66	\$0	\$1,000,000
Early Work Amendment	\$0	\$5,200,000
Pier 91	\$0	\$4,377,000
Pier 66	\$0	\$700,000
P91 South Bollards (C802116)	\$0	\$123,000
Construction-Final GMP (Milestone 1)	\$48,164,000	\$48,164,000
<u>Pier 91</u>	<u>\$33,724,000</u>	<u>\$33,724,000</u>
DU#9202*	\$16,704,000	\$16,704,000
Shore Power	\$17,020,000	\$17,020,000
<u>Pier 66</u>	<u>\$13,074,000</u>	<u>\$13,074,000</u>
<u>P91 South Bollards (C802116)</u>	<u>\$1,366,000</u>	<u>\$1,366,000</u>
Validation: Milestone 2	\$1,166,000	\$1,166,000
Remaining to be authorized: Milestone 2*	\$0	\$46,500,000
Pier 91 DU#9202	\$0	\$40,000,000
Pier 91 West berth shore power		\$6,500,000
Estimated Total Project Cost		\$116,480,000

*Overall funding for DU#9202 has been accounted for through cash flow reduction in CIP #801294 T91 Dock Rehabilitation project. Funding for Validation scope will be accounted for in reduction of scope for T91 Programmatic Design contract P-00322462 SD1 – T91 Dock Rehab 30% Design. Overall Capital cost reduction of \$20M is anticipated by combining west berth shore power and DU #9202 under the Progressive-Design-Build contract.

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ALTERNATIVES AND IMPLICATIONS CONSIDERED

Alternative 1 – Advance GMP for full shore power scope without rehabilitation of DU #9202.

Cost Implications: \$20M+ higher costs for full dock rehabilitation under separate project contract.

Pros:

- (1) Targets implementation of complete shore power capability at all cruise berths by 2027.

Cons:

- (1) Precludes consideration of all structural solutions for the rehabilitation of DU #9202 and would likely require rework of the shore power during the dock repair.
- (2) Moves the repair of DU #9202 to the original schedule for completion by 2029, eliminating the opportunity to accelerate the project and avoid additional operational constraint.
- (3) Adds risk probability that additional operational restrictions will be applied to DU #9202 deck panels as they continue to deteriorate.

This is not the recommended alternative.

Alternative 2 – Execute a GMP amendment for Milestone 1 scope to be completed by cruise season 2027, and authorize funding for Milestone 2 Validation scope and return to Commission to execute a GMP amendment for Milestone 2 scope by Q3 2027 for completion in 2028.

Cost Implications: Cost savings of \$20M+ to integrate DU #9202 Rehabilitation into T91 shore power project.

Pros:

- (1) Meets the mandate of Commission Order No. 2024-08 for Milestone 1.
- (2) Provides additional time for design advancement and cost certainty for Milestone 2, primarily the development of a structural solution for DU #9202 of Pier 91.
- (3) Accelerates the rehabilitation of DU #9202 by one year, minimizing risk of further operational restrictions as the deck panels deteriorate.
- (4) Avoids potential rework of the west berth cruise shore power by integrating the shore power infrastructure with the dock rehabilitation solution.

Cons:

- (1) Requires additional Commission authorizations for contract amendment milestones for Milestone 2 scope.
- (2) Reprioritizes the schedule for west berth shore power to 2028.

This is the recommended alternative.

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FINANCIAL IMPLICATIONS

Cost Estimate/Authorization Summary	Capital	Expense	Total
COST ESTIMATE			
Original estimate	\$4,000,000	\$0	\$4,000,000
Previous changes – net	\$55,800,000	\$0	\$55,800,000
Current change*	\$56,680,000		\$56,680,000
Revised estimate	\$116,480,000	\$0	\$116,480,000
AUTHORIZATION			
Previous authorizations	\$0	\$0	\$20,650,000
Pier 91	\$0		\$9,797,000
Pier 66	\$0		\$2,730,000
P91 South Bollards (C802116)	\$0		\$123,000
Watts Marine Sole Source Contract	\$0		\$8,000,000
Current request for authorization	\$49,330,000	\$0	\$49,330,000
<u>Pier 91</u>	<u>\$33,724,000</u>	<u>\$0</u>	<u>\$33,724,000</u>
DU#9202 – limited deck panels	\$16,704,000	\$0	\$16,704,000
Shore Power	\$17,020,000	\$0	\$17,020,000
<u>Pier 66</u>	<u>\$13,074,000</u>	<u>\$0</u>	<u>\$13,074,000</u>
<u>P91 South Bollards (C802116)</u>	<u>\$1,366,000</u>	<u>\$0</u>	<u>\$1,366,000</u>
<u>Milestone 2 Validation</u>	<u>\$1,166,000</u>	<u>\$0</u>	<u>\$1,166,000</u>
Remaining amount to be authorized * *	\$46,500,000	\$0	\$46,500,000

* The work completed through the design of the GMP Development phase of the contract resulted in the determination that the rehabilitation of DU #9202 should be constructed with the west berth shore power, two (2) 100-ton bollards will be added to the south end of P91 (funded under a separate CIP, C802116), and tie-downs for the new passenger gangways as these must be integrated in the shore power concrete work rather than waiting for construction of projects currently funded separately. Certain scope of the DU#9202 repair must be completed during Milestone 1.

**Remaining amount to be authorized is slated for Milestone 2 including majority scope of DU#9202 repair, and west berth shore power construction.

Annual Budget Status and Source of Funds

This project was included in the 2026 Capital Plan C801983 P66/P91 Shore Power Extension with a total project cost of \$33,000,000 and C802116 P91 South Bollards with a total project cost of \$650,000. C801294 T91 Dock Rehabilitation budget was included in the 2026 Capital Plan with a total project cost of \$104,225,000. The Dock Rehabilitation budget has been further reduced to \$18,400,000, and \$52,000,000 has been transferred to C801983 P66/P91 Shore Power & DU9202 Rehab to integrate the repair work into the shore power project.

C801983 P66/P91 Shore Power & DU9202 Rehab is included in the draft 2027 Capital Plan with a total cost of \$114,300,000. C802116 P91 South Bollard Upgrade is included in the draft 2027 Capital Plan with a total cost of \$1,600,000.

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This project will be funded by the General Fund.

Financial Analysis and Summary

Project cost for analysis	\$116,480,000
Business Unit (BU)	Cruise Operations
Effect on business performance (NOI after depreciation)	No incremental operating revenue or cost-savings is directly associated with this project. • On-going maintenance expenses, if any, are not yet known. • Estimated annual depreciation is \$4.7M
IRR/NPV (if relevant)	N/A
CPE Impact	N/A

ADDITIONAL BACKGROUND

Originally, P91 and P66 cruise shore power projects were envisioned as two separate projects under two CIP #s. Initial funding for the P91 Cruise Shore Power Extension North was authorized by Commission on August 8, 2023, inclusive of the purchase of two (2) mobile cable positioning devices (CPD) under CIP # C801293. P66 Cruise Shore Power Extension was under CIP # C801983. As part of a DORA executed on October 16, 2024 for a Progressive Design Build procurement and early design for both projects, P91 Cruise Shore Power Extension, except for the costs associated with the purchase of the CPDs which remained under C801293, was transferred to CIP # C801983 with P66 to consolidate the projects under a single CIP and to help expedite both projects to meet the mandate of Commission Order No. 2024-008 to connect all home ported cruise ships to shore power by 2027.

ATTACHMENTS TO THIS REQUEST

(1) Presentation

PREVIOUS COMMISSION ACTIONS OR BRIEFINGS

April 28, 2026 – Funding authorization in the amount of \$5,200,000 for execution and funding of an Early Work Amendment for procurement of long-lead materials.

December 9, 2025 – Funding authorization in the amount of \$5,000,000 for execution and funding of the Post-Validation phase of the major public works Progressive Design Build project.

July 8, 2025 – Funding authorization in the amount of \$1,100,000 for award and execution of the Validation Period of the major public works Progressive Design Build project.

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April 22, 2025 – Funding authorization in the amount of \$8M for Watts Marine contract to purchase shore power equipment.

August 8, 2023 - The Commission authorized funding for P91 Cruise Shore Power Extension and CPDs in the amount of \$2,500,000 for the purchase of the CPDs and early design funding of the extension.