



CONNECTICUT
Port Authority

Connecticut Port Authority

Request for Proposals

**Long Lead Electrical Equipment
for
Shore Power Connections
and
Cable Management System**

RFP No. CPA0026-NLSP-SPP-SPC

Key Dates:

RFP Released:	Monday, March 23 rd , 2026
Deadline for Questions:	Thursday, April 2 nd , 2026: 4:00 PM EDT
Responses to Questions:	Wednesday, April 15 th , 2026: 4:00 PM EDT
RFP Submission Deadline:	Friday, April 24 th , 2026: 4:00 PM EDT

I. INTRODUCTION

Created in 2014, Connecticut Port Authority (“Authority”) is a quasi-public agency of the State of Connecticut (“State”) whose primary responsibility is to market and coordinate the development of the State’s ports and maritime economy.

The Authority is specifically responsible for (i) coordinating port development, focusing on private and public investments; (ii) pursuing State and federal funds for dredging and other infrastructure improvements and maintain navigability of all ports and harbors; (iii) working with the Department of Economic and Community Development and State, local, and private entities to maximize the ports’ and harbors’ economic potential; (iv) supporting and enhancing the overall development of maritime commerce and industries; and (v) coordinating the State’s maritime policy and serve as the Governor’s principal maritime policy advisor.

The Authority is undertaking a project titled New London State Pier Shore Power Project (the “Project”) which consists of purchasing mobile shore power equipment, furnishing and installing supporting shore power infrastructure at the New London State Pier (the “NLSP”) as more particularly described herein (collectively, the “Work”). This will enable docked marine vessels to connect to the local electric grid to power onboard services instead of running their diesel engines.

This system will reduce diesel emissions by providing power to vessels at berth and decrease health risks and noise pollution for port workers and near-port communities in a non-attainment and disadvantaged area. The Project will further reduce the carbon footprint of port operations and actively and consistently engage stakeholders in the New London community to increase awareness, facilitate public education, and encourage communication on emission reduction initiatives.

As part of the recently completed construction works at the NLSP, shore-to-ship power plug-in capabilities were provided at both berths (Northeast and East). The plug-in at the Northeast berth can support vessel hotel loads (lighting, climate control, ward rooms, kitchen) only, whereas the plug-ins at the East berth can support both hotel and vessel operations (excluding installation main crane) loadings. The Project includes furnishing and installing an additional power vault at the East Berth and procuring and installing a Mobile Cable Management System (CMS) that can connect to the power vault, or to one of the two existing vaults, and supply cabling to the docked vessels. The additional power vault to be installed at the East Berth will allow the mobile unit to serve a wider variety of vessel types and sizes.

The Authority as a pass-through entity as defined by 2 CFR 200.74 entered into a subaward agreement with Orsted Wind Power Environmental LLC (“Orsted”) as a subrecipient as defined by 2 CFR 200.92 for Orsted to contribute to the goals and objectives of the Project. In accordance with the subaward agreement, Orsted shall provide support to the Authority regarding procurement of the Long Lead Equipment under this RFP, including, but not limited to (i) development of scope of work and selection support for the successful Proposer, and, (ii) serve as the Authority’s designated representative regarding Long Lead Equipment by providing coordination and oversight of the suppliers directly or indirectly contracted by the Authority, including, but not limited to, regular technical/fabrication completion communications with suppliers and one site visit to the mobile power unit supplier’s location during fabrication.

The Authority engaged with engineering firm Moffatt & Nichol for the provision of services in support of Equipment specifications, Engineering & Design and Installation & Support services for the Mobile CMS.

The contract for the manufacture and supply of a Low Voltage Mobile Cable Management System (Type ZPP115) and a High Voltage Cable Management System (Type BFCMS-MRO-H1-B) was awarded to Zinus Power, LLC.

II. SCOPE OF SERVICES

The Authority seeks proposals (“Proposals”) from firms (“Proposer”) for the supply of long lead electrical equipment for the modification of the existing high-voltage shore power outlet (SPO) at the southern station and an additional high-voltage SPO and low-voltage SPO on the northern side of the berth.

A Shore Power System (SPS) is a complete electrical power supply system that provides utility or facility-sourced electrical power to a berthed vessel to allow shutdown of onboard generators while at berth. The SPS includes all equipment and components required to safely receive, transform (if required), protect, monitor, and deliver electrical power from the utility or facility distribution system to the SPO.

The SPOs will be mounted on pads at an elevation of +13 ft NAVD88, with the deck height of East Berth being +9 ft NAVD88. In addition to installing additional SPOs, the general project goal is to install a mobile CMS that will be used to facilitate the cable connection from both the existing southern and proposed northern high-voltage SPO stations to a berthed vessel, given the location. For clarification this RFP does not include the procurement and installation of the CMS and SPO’s.

The long lead electrical equipment requested are listed below:

- Medium-Voltage Pad-Mounted Transformer (2.5 MVA, Dual Secondary)
- Low-Voltage Pad-Mounted Step-Up Transformer (400V to 480V)
- Medium-Voltage Shore Power Switchgear (11 kV)
- Neutral Grounding Resistor (Medium Voltage System Grounding)

Definitions for each item are explained in greater detail in Exhibit A. The items must be compliant with the Build America, Buy America (BABA) Act, which is also described further in Exhibit A. In addition to product information, total equipment cost, including installation, and procurement schedule, is requested.

The terminal will be utilized by general cargo vessels. The current IEC 80005 standards do not cover this type of vessel. For this reason, and to provide optimal flexibility, the following performance specification is detailed in Exhibit A. The Proposer may bid on either one or all the items listed below.

III. CONTRACT TERMS

The Authority intends to enter into an agreement with a Proposer for the provision of the goods and completion of the services as described in this Request for Proposals (RFP). The Agreement term shall not exceed eighteen (18) months, unless otherwise agreed to by the Authority and selected Proposer in writing, and; provided, further, the selected Proposer shall comply with the terms and provisions of that certain EPA Grant Agreement dated December 18, 2024, and, to the extent applicable, the Best Practices Guide for Procuring Services, Supplies, and Equipment under EPA Assistance Agreements (Issue Date: November 22, 2022), all as set forth in Article XI of the Agreement attached thereto and incorporated into and made part of the Agreement.

IV. CONTRACTOR QUALIFICATIONS

The Proposer should have knowledge working with governmental agencies or entities with a preference for Proposers with experience or significant knowledge of shore-to-ship power (or other reasonably comparable experience).

V. PROPOSAL CONTENT

Proposals should be clear and thorough, but concise, and include any information and materials requested in this RFP. Proposals must, at a minimum, include the following information in the order in which it is requested in this section:

A. Proposer Profile

1. The Proposal must contain the official name, address and phone number of the Proposer, the principal contact person for the Proposal, and the name and signature of the person (or persons) authorized to execute contracts.
2. Proposer will provide a general overview of itself, including history, office locations, and total number of professional and support staff.
3. Proposer will provide evidence of experience, capability, and references to deliver critical components.
4. Describe any material assignments or relationships (including employment relationships) that the Proposer or any employee has with any entity, state or local government, or other person or entity that may constitute or create the appearance of a conflict of interest. Discuss any measures Proposer has taken or would take to resolve any possible conflicts of interest.
5. Soundness of legal standing with regard to other projects: (i.e. record of complying with contracts (including number and nature of contract breaches, defaults and terminations, compliance with performance guarantees, and imposition of liquidated damages or fines);
6. Similar Engagements with Other Quasi-Public Agencies: List the most significant engagements performed in the last five years that are similar to the engagement described in this RFP.

B. Service Proposal

1. Describe the Proposer's understanding of the Authority's desired services and experiences with respect to the services outlined in the Scope of Services.
2. Clearly identify which long lead items in the Scope of Services that you are bidding on and the reason for such.
3. Include detailed, finalized, or preliminary technical specifications for the long lead equipment.
4. Provide a detailed timeline for the provision of the long lead items to be supplied, inclusive of ordering, manufacture, shipping and delivery.

5. Clear definition of applicable terms and conditions, inclusive of payment milestones, warranties, and penalties for delays (liquidated damages).
6. Identification of risks, such as potential delays, and contingencies in place, such as plans for alternative, "equal" products or temporary, stop-gap solutions.

C. Fee Proposal

Compensation: The total amount of compensation for services reflecting the fee structure proposed for this scope sealed in a separate envelope (or, if submitting electronically, as a separate file attachment). A detailed breakdown of person-hours by task as well as associated billing rates shall also be included.

D. Declarations and Required Forms

1. Identify any circumstance involving the Proposer that could materially affect the viability of its Proposal, its ability to perform the services, its operations, or its financial stability, or that could harm or subject the Authority to public scrutiny if the Authority contracts with the Proposer.
2. Complete and submit the following forms:
 - [OPM Form 1 – Campaign Contribution Certification](#)
 - [Notice to Executive Branch State Contractors and Prospective State Contractors of Campaign Contribution and Solicitation Limitations](#)
 - The Authority's Vendor Form ([VIF-v4](#)) and [W-9 Form](#)
 - [CHRO Employment Information Form](#)
 - The appropriate [Nondiscrimination Certification](#)
 - [Notice Concerning Contract Compliance Responsibilities](#)
 - **Iran Certification (See Exhibit B)**
[Exhibit B](#) attached hereto to this RFP (incorporated into and made part of this RFP)
 - **Debarment or Suspension Certification**
[Exhibit C](#) attached hereto to this RFP (incorporated into and made part of this RFP)
 - **Anti-Lobbying Certification**
[Exhibit D](#) attached hereto to this RFP (incorporated into and made part of this RFP)

VI. RFP PROCEDURES

A. Inquiries

Official Authority Contact: The Authority's contact person for the purpose of this RFP is:

Jill Dowling-Moreno
Office Manager
Connecticut Port Authority
455 Boston Post Road, Suite 204
Old Saybrook, CT 06475
860-577-5174
info@ctportauthority.com

Any and all communications or contacts with the Authority regarding this RFP must be limited to and directed in writing to the Official Authority Contact via email. Any violation of this requirement by Proposers or their representatives will result in disqualification.

Inquiry Procedures: All questions regarding this RFP and submission requirements must be directed by e-mail to the Official Authority Contact by 4:00 PM (EDT) on Thursday, April 2nd, 2026. Proposers are required to limit their contact regarding this RFP to the person named herein. Please include this reference in the Subject line of the email "RFP No. CPA0025-NLSP-SPP-SPC-Questions".

Written responses to all questions received will be anonymized and posted to the Authority website www.ctportauthority.com by 4:00 PM (EDT) on Wednesday, April 15th, 2026.

B. Submission of Proposals

Proposers shall submit one (1) original hard copy and (1) electronic copy of their Proposal by 4:00 PM (EDT) on Friday, April 24th, 2026. The Proposal must be clearly labeled as the "Original" and must contain the original signature forms and other original documents. Late submissions or Proposals transmitted by facsimile will not be accepted.

The hard copy of the original Proposal shall be addressed to:

Jill Dowling-Moreno
Office Manager
Connecticut Port Authority
455 Boston Post Road, Suite 204
Old Saybrook, CT 06475

The electronic copy of the Proposal shall be submitted to:

Jill Dowling-Moreno
Office Manager
Connecticut Port Authority
info@ctportauthority.com

Please include this reference in the Subject line of the email "RFP No. CPA0025-NLSP-SPP-SPC-Proposal".

Packaging and Labeling Requirements: All Proposals must be submitted in sealed envelopes or packages. All Proposals must be addressed to Jill Dowling-Moreno, Connecticut Port Authority, 455 Boston Post Road, Suite 204, Old Saybrook, CT 06475. The full name and address of the Proposer must appear in the upper left-hand corner of the envelope or package.

The following material is required for a Proposer to be considered:

1. A Title Page that must show the request for Proposal's subject; the Proposer's name; the name, address, and telephone number of a contact person; and the date of the Proposal.
2. Table of Contents
3. A signed Letter of Transmittal briefly stating the Proposer's understanding of the scope of Work to be done, the commitment to perform the Work within the Agreement term, a statement why the Proposer believes itself to be best qualified to perform the engagement and a statement that the Proposal is a firm and irrevocable offer for the period covered.
4. Service Proposal
5. Fee Proposal

The Authority will not, under any circumstances, be responsible for any expenses incurred in preparing and submitting the Proposal.

6. Declarations and Required Forms

Minimum Submission Requirements: At a minimum, Proposals must: (1) be submitted before the deadline; (2) satisfy the packaging and labeling requirements; (3) follow the required format; (4) be complete; (5) include all required forms; and (6) be signed by an authorized person.

Scope and Price Negotiable with Selected Proposer: The Authority shall negotiate the final scope and cost of this Work with the selected Proposer.

Revisions to the RFP: Only written modifications to this RFP issued in the form of one or more addenda will be considered to be alterations to this RFP. Oral comments are not binding. An Addendum may be issued by Authority for any revisions, modifications, clarifications or alterations to this RFP. Any such Addendums shall be posted to the Authority's website. It is the responsibility of potential Proposers to keep track of postings on the Authority's website regarding this solicitation.

Errors: If any Proposer discovers an error after submitting its Proposal, but prior to the Proposals Due date, the Proposer may request that the Proposal be withdrawn. This request must be submitted in writing to the Authority and signed by an authorized representative of the Proposer. If the request is approved, the Proposer may submit a revised Proposal as long as it is received prior to the Proposals Due date.

Technicalities: The Authority may waive any technicalities or non-material deficiencies in a Proposal and seek clarification from any or all Proposers for the purpose of clarifying any terms contained within the Proposals.

VII. SELECTION COMMITTEE

A Selection Committee will evaluate qualified Proposals submitted in response to this RFP and recommend finalists for consideration. The Selection Committee shall evaluate all Proposals that meet the Minimum Submission Requirements. Proposals not meeting the minimum submission requirements will not be reviewed. As part of its selection process, the Selection Committee, at its sole discretion, will invite one or more Proposers to make oral presentations.

VIII. TIMELINE

The following timeline, up to and including the deadline for submitting Proposals, shall be changed only by written amendment to this RFP.

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|---|------------------------|
| • Monday, March 23 rd , 2026 | RFP Released |
| • 4:00 PM EDT, Thursday, April 2 nd , 2026 | Deadline for Questions |
| • 4:00 PM EDT, Wednesday, April 15 th , 2026 | Responses to Questions |
| • 4:00 PM EDT, Friday, April 24 th , 2026 | Proposals Due |

The RFP will remain open for at least thirty (30) days after it is released.

IX. EVALUATION CRITERIA

Proposals will not be opened publicly. Proposers will be evaluated on the basis of their written responses to this RFP, additional written information requested by the Authority and interviews, if any. All Proposals will be evaluated using the following criteria:

1. Cost (40%)
The cost of performing the proposed scope of Work (Fee Proposal). All things being equal, the cost will be the determining factor in the selection.
2. Schedule (30%)
The ability to achieve completion of the specified scope in a timely and cost-efficient manner.
3. Economies of Scale (10%)
The ability to provide more than one long lead equipment resulting in reduced contractual engagements and reduced costs.
4. Proposer Qualifications and Experience (10%)
Technical expertise, quantitative skill and experience of the Proposer and the staff responsible for this Work. Quality and capacity of the Proposer's systems, technology infrastructure and equipment to be used in the delivery of services. A comprehensive description of the Proposer's history inclusive of past and current contracts, list of clients, and experience within the industry.
5. Equal Employment Opportunity (5%)
Equal employment opportunity record as evidenced by the composition of Proposer personnel and the Proposer's affirmative action and equal employment opportunity policies and practices.
6. Quality of Proposal (5%)
Overall quality of the written Proposal, and oral presentation, if any.

Proposals submitted in response to this RFP will be evaluated based on the quality and the reasonableness of the responses for each item above. Amongst substantially equally qualified Proposers, rates and efficiency will be heavily weighted in making a selection.

Proposers must provide copies of the following required licenses, certifications and/or registrations for the proposed lead personnel for the Project that evidence that they are in good standing: State of Connecticut Professional Engineer.

X. SUBCONTRACTING OR ASSIGNMENT

In the event a Proposal proposes to subcontract some or all of the Work to be performed described in this RFP, it shall state so in its Proposal and attached for approval a list of said subcontractors and an itemization of the services to be furnished by them. Nothing contained in this RFP or the Agreement shall be construed as creating any contractual relationship between any subcontractor and the Authority. The Agreement may not be subcontracted or assigned by the selected Proposer, in whole or in part, to any subcontractor or other entity without the prior written consent of the Authority. Such consent, if granted, shall not relieve the selected Proposer of its responsibilities under the Agreement, except as otherwise expressly provided therein. The selected Proposer agrees and warrants that it will incorporate all of the terms and conditions of the Agreement, including, but not limited to, all of its exhibits and addenda, in its subcontract agreements, if any, and that any subcontractor will be subject to the same terms and conditions as the selected Proposer and that it will be bound to the selected Proposer in the same way and manner that the selected Proposer is bound to the Authority. The selected Proposer shall be fully and solely responsible for the performance of and payments to any subcontractors.

XI. CONDITIONS

Any Proposer must be willing to, and affirmatively certify to, adhere to the following conditions in its Proposal:

1. **Acceptances or Rejection by the Authority:** The Authority, in its sole and absolute discretion, reserves the following rights (without limitation of waiver):
 - a. To reject any or all Proposals.
 - b. To conduct investigations or request further information relating to the qualifications of any or all the Proposers.
 - c. To supplement, amend or cancel this RFP without notice or substitution of another such request at any time.
2. **Ownership of Proposals:** All materials submitted in connection with any Proposal are considered public information with the exception of information properly excluded pursuant to Conn. General Statutes §1-210(b) and applicable law. Following the execution of one or more contracts in connection with this RFP, Proposals will be available for review upon request. All Proposals in response to this RFP will be the sole property of each of the State and the Authority and subject to the provisions of Connecticut's Freedom of Information Act, CGS §1-200 et seq.
3. **Ownership of Subsequent Products:** Any product, whether acceptable or unacceptable, developed under the Agreement, or any other contract awarded as a result of that Agreement or this RFP will be the sole property of each of the State and the Authority unless stated otherwise in the Agreement or other contract and subject to the provisions of Connecticut's Freedom of Information Act, [CGS §1-200 et seq.](#)
4. **Stability of Proposed Prices:** Any price offerings must be valid for a period of 180 days from the due date of the Proposals.
5. **Oral Agreements:** No contract, unless it shall be in writing, executed by an authorized representative of the Authority following the obtaining of all necessary approvals and in accordance with all applicable law, shall be binding on the Authority. No oral agreement or arrangement made with the Authority or any Authority member shall be binding on the Authority.
6. **Rejection for Default or Misrepresentation:** The Authority reserves the right to reject any Proposal if any Proposer or any proposed subcontractor was or is in breach of any contract entered into with the State or the Authority, or for any misrepresentation made to the State or the Authority.
7. **State's Clerical Errors in Awards:** The Authority reserves the right to correct inaccurate awards resulting from its clerical errors.
8. **Presentation of Supporting Evidence:** Any Proposer, if requested, must be prepared to present evidence of experience, ability, service capacity, and financial standing.
9. **Changes to Proposal:** Except as otherwise permitted by the Authority, no additions or changes to a Proposal will be allowed after submittal to the Authority under the terms of this RFP.
10. **Collusion:** By responding, the Proposer implicitly states that its Proposal is not made in connection with any other Proposer submitting a separate Proposal to this RFP, and is in all respects fair and without collusion or fraud. It is further implied that the Proposer did not participate in the RFP development process, had no knowledge of the specific contents of the RFP prior to its issuance, and that no member of the Authority participated directly or indirectly in the Proposer's Proposal preparation.
11. **EEO-4 Form:** The Proposal shall include a copy of the company's latest EEO-4 report as well as a copy the Proposer's equal employment policy statement.
12. **Debarment or Suspension:** Pursuant to 2 CFR Parts 180 and 1532, the Proposer shall execute and deliver a sworn statement, in the form attached hereto as **Exhibit C**, that the Proposer has not been debarred or suspended or otherwise excluded from or ineligible for participation in any Federal assistance program and that it is not listed on the government-wide exclusions in the System for Award Management (SAM) list of parties excluded from federal procurement or non-procurement programs.

13. **Anti-Lobbying:** Pursuant to [40 CFR Part 34](#) and [31 U.S.C. 1352](#), the Proposer shall execute and deliver a sworn statement, in the form attached hereto as **Exhibit D**, that the Proposer will not use any funds under the Agreement to pay any person or organization for influencing an officer or employee of any agency, a member, officer or employee of Congress in connection with the EPA Grant Agreement.

XII. NOTIFICATION OF AWARD

The Authority shall issue a Notice of Award to the selected Proposer, if any. The Notice may contain certain contingency requirements that must be satisfied within a designated period of time. Failure to comply with all provisions of the Notice of Award will disqualify that selected Proposer and the Authority, in its sole and absolute discretion, may issue a new Notice of Award to another Proposer.

EXHIBIT A

**Performance Specifications for
Long Lead Electrical Equipment
Required for Shore Power
Connections and Cable
Management System**

(See Attached)

INTRODUCTION

The Connecticut Port Authority (Authority) is seeking to install additional shore power connection capabilities at the East Berth of State Pier in New London, CT. As part of the recently completed construction works at the New London State Pier (NLSP), shore-to-ship power plug-in capabilities were provided at the southern end of the East Berth. The existing shore power outlets (SPOs) at this southern station consist of a single 6.6Kv (high-voltage) 150 A, 60Hz plug-in and a single 480V (low-voltage) 400A, 60Hz plug-in. There is currently no cable management system for the currently installed southern plug-ins. The existing utility service is 13.2 kV. This voltage is distributed to the southern station and stepped down at this location.



Figure 1: East Berth at State Pier Facility



Figure 2: Southern Shore Power Station

The intent of this specific bid is to procure the necessary long lead items for the modification of the existing high-voltage shore power outlet (SPO) at the southern station and the installation of an additional high-voltage SPO and low-voltage SPO on the north side of the berth. To note, the SPOs will be mounted on pads at an elevation of +13 ft NAVD88, with the deck height of East Berth being +9 ft NAVD88. In addition to installing additional SPOs, the general project goal is to install a mobile cable management system (CMS) that will be used to facilitate the cable connection from both the existing southern and proposed northern high-voltage SPO stations to a berthed vessel, given the location.

The long lead items requested are listed below. Definitions for each item are explained in greater detail in section 3. In addition to product information, total equipment cost, including installation, and procurement schedule, is requested.

- Medium-Voltage Pad-Mounted Transformer (2.5 MVA, Dual Secondary)
- Low-Voltage Pad-Mounted Step-Up Transformer (400V to 480V)
- Medium-Voltage Shore Power Switchgear (11 kV)
- Neutral Grounding Resistor (Medium Voltage System Grounding)

The terminal will be utilized by general cargo vessels. The current IEC 80005 standards do not cover this type of vessel. For this reason, and to provide optimal flexibility, the following performance specification is detailed in the following sections.

BACKGROUND

A Shore Power System (SPS) is a complete electrical power supply system that provides utility or facility-sourced electrical power to a berthed vessel to allow shutdown of onboard generators while at berth. The SPS includes all equipment and components required to safely receive, transform (if required), protect, monitor, and deliver electrical power from the utility or facility distribution system to the Shore Power Outlet. The Project includes four independent Shore Power Systems:

- Two Medium-Voltage Shore Power System (11 kV class)
- Two Low-Voltage Shore Power System (480 V class)

Each Shore Power System may include, but is not limited to:

- I. Utility service connection or facility feeder,
- II. Switchgear and/or metal-clad switchgear assemblies,
- III. Protective relaying and coordination equipment,
- IV. Power transformers (where voltage conversion is required),
- V. Metering and power quality monitoring equipment,
- VI. Grounding and bonding system,
- VII. Harmonic mitigation equipment (if required),
- VIII. Control and monitoring system,
- IX. Shore Power Outlet (SPO) enclosure and termination equipment,
- X. Interlocking and safety systems,
- XI. Arc-flash mitigation measures,
- XII. SCADA interface (if required),

SPS shall comply with applicable IEEE, NEC, IEC/ISO/IEC 80005 (where applicable), and local utility interconnection requirements.

Build America Buy America (BABA)

This project is subject to the Build America Buy America (“[BABA](#)”) Act, but may also make use of approved [waivers](#).

To be considered produced in the United States under BABA, manufactured products must be “manufactured in the United States”, and the cost of the components mined, produced, or manufactured in the United States must be greater than 55 percent (55%) of the total cost of all components of the manufactured product.

BABA also requires that all iron and steel used in the project are produced in the United States—this means all manufacturing processes, from the initial melting stage through the application of coatings.

EQUIPMENT

- A. Medium-Voltage Shore Power Switchgear (15 kV):** A three-phase, metal-clad medium-voltage switchgear assembly rated 15 kV, designed to distribute and control shore power to berthed vessels. The switchgear shall provide isolation, protection, and operational control of each shore power feeder.

The switchgear shall include all components required for safe and reliable operation in a marine port environment.

This system shall include:

- I. Medium-voltage draw-out circuit breakers,
- II. Visible isolation means for maintenance and safety verification,
- III. Load-interrupting capability suitable for the connected CMS load,
- IV. Mechanical and/or key interlocking to prevent unsafe switching operations,
- V. Protective relaying as required for feeder protection,
- VI. Metering for voltage, current, and power monitoring,

- VII. Grounding disconnect switch and provisions per NEC and IEEE standards,
- VIII. Surge arrestors as required,
- IX. Dead-front construction suitable for outdoor installation as specified.

The disconnect switches shall:

- I. Be rated for 11 kV class service, 60 Hz operation,
- II. Have interrupting ratings coordinated with available short-circuit current at the point of installation,
- III. Provide a clearly visible open position or equivalent isolation verification method,
- IV. Be capable of being locked in the open position for maintenance.

The switchgear assembly shall:

- I. Be designed for continuous operation at full rated load,
- II. Be suitable for installation in a corrosive marine environment,
- III. Comply with applicable ANSI, IEEE, and NEMA standards for medium-voltage switchgear,
- IV. Be coordinated with upstream transformer protection and downstream CMS equipment.

Each shore power feeder shall be independently isolated via its dedicated disconnect switches to allow safe maintenance and operational flexibility without impacting other shore power circuits.

[See specification 261300](#)

- B. Medium-Voltage Pad-Mounted Transformer (2.5 MVA, Dual Secondary):** A three-phase, outdoor, pad-mounted, liquid-filled, dual-winding transformer rated 2.5 MVA, designed for medium-voltage shore power service. The transformer shall convert utility distribution voltage to selectable medium-voltage outputs suitable for multiple vessel classes.

The transformer shall include all components required for safe, reliable, and continuous operation in a marine port environment.

This system shall include:

- I. Primary winding rated 13.2 kV,
- II. Dual secondary windings rated 11Y/6.4 kV and 6.6Y/3.8 kV,
- III. Load break or dead-front terminations as specified,
- IV. Tap changer,
- V. Medium-voltage bushings,
- VI. Grounding provisions in accordance with NEC and IEEE standards,
- VII. Aluminum Windings,
- VIII. Integral overpressure relief device,
- IX. Liquid level gauge and temperature monitoring devices,
- X. Nameplate and rating identification per ANSI/IEEE requirements.

The transformer shall:

- I. Be suitable for outdoor installation in a corrosive marine environment,
- II. Be designed for 60 Hz operation,
- III. Meet applicable ANSI, IEEE, and NEMA standards,
- IV. Be capable of continuous operation at rated capacity without exceeding temperature rise limits,
- V. Provide electrical isolation between primary and secondary windings.

Where dual secondary voltages are provided (11 kV and 6.6 kV), the configuration shall allow safe selection and isolation of the required output voltage for the connected Cable Management System (CMS) and vessel class.

[See specification 261200](#)

- C. Low-Voltage Pad-Mounted Transformer (400V to 480V):** A three-phase, outdoor, pad-mounted transformer designed to step up 400V to 480V for isolation to the low-voltage shore power connection.

This system shall include:

- I. Primary winding rated 400V delta,
- II. Secondary winding rated 480Y/277V,
- III. Appropriate overcurrent protection coordination with upstream and downstream devices,
- IV. Grounding provisions per NEC Article 250,
- V. Aluminum Windings,
- VI. Pad-mounted enclosure suitable for outdoor installation,
- VII. Nameplate data indicating kVA rating, impedance, temperature rise, and winding configuration.

The transformer shall:

- I. Be rated for continuous duty at full load,
- II. Be suitable for 60 Hz operation,
- III. Be designed for installation in a marine or industrial environment,
- IV. Provide galvanic isolation between primary and secondary systems unless otherwise specified,
- V. Be coordinated with upstream 400V distribution and downstream 480V panelboards or motor control equipment.

[See specification 262200](#)

D. Neutral Grounding Resistor (Medium Voltage System Grounding): It is designed to limit ground-fault current in medium-voltage electrical distribution systems serving shore power infrastructure. The resistor shall be a high-resistance grounding type, suitable for connection between the transformer neutral point and ground to control ground-fault current levels and enhance system protection and safety.

The Neutral Grounding Resistor shall be designed for installation in **marine port environments**, suitable for both indoor and outdoor mounting on a concrete pad or directly adjacent to the transformer neutral grounding system.

The system shall be designed, manufactured, and tested in accordance with **IEEE 32 – Standard Requirements, Terminology, and Test Procedures for Neutral Grounding Devices**.

This system shall include:

- I. Stainless steel or nickel-chromium resistive elements with low temperature coefficient,
- II. Resistive elements rigidly supported to accommodate thermal expansion during fault conditions,
- III. Corrosion-resistant support frame constructed with stainless steel hardware,
- IV. Insulator-mounted resistor assembly for medium-voltage applications,
- V. Stainless steel terminals and interconnections between resistor elements,
- VI. High-current connections welded or mechanically secured as required,
- VII. Copper or stainless steel bus connections between resistors, bushings, or current transformers,
- VIII. Medium-voltage rated ceramic or porcelain bushings for cable termination,
- IX. Vented enclosure for adequate heat dissipation during fault operation,
- X. Bottom-mounted or side-mounted cable connection provisions with NEMA two-hole connectors,
- XI. Removable access panels for installation and maintenance,
- XII. Structural steel enclosure frame designed for outdoor installation,
- XIII. Stainless steel or corrosion-resistant enclosure suitable for marine environments,
- XIV. Expanded metal screening at enclosure base to prevent debris intrusion,
- XV. Lifting provisions including eye bolts for installation handling,
- XVI. Durable nameplate identifying manufacturer and complete equipment rating.

The Neutral Grounding Resistor shall:

- I. Be rated **48 ohms**,
- II. Limit ground fault current to **50 amperes for 10 seconds**,
- III. Be suitable for **systems up to 5 kV**,
- IV. Operate within ambient temperature range of **-55°C to +760°C**,
- V. Maintain resistance tolerance within **±10%**,
- VI. Provide reliable fault current limitation to protect transformers, switchgear, and connected shore power systems,
- VII. Be suitable for continuous service in corrosive coastal and marine environments.

The Neutral Grounding Resistor enclosure shall:

- I. Be constructed of **stainless steel or corrosion-protected steel**,
- II. Include a **vented bottom and sloped top for environmental protection**,
- III. Provide **structural rigidity for outdoor installation**,
- IV. Allow safe access for inspection and maintenance.

[See specification 262300](#)

PERFORMANCE SPECIFICATIONS

- A. All proposed systems must comply with the general requirements of the International Standard IEC/IEEE DIS 80005-1 with the project specific exceptions in this section,
- B. System commissioning, personnel training, and ongoing maintenance shall be discussed in the bid, and included as desired,
- C. Warranty and maintenance information shall be provided, and Proposers should explain their approach to commissioning the equipment plus post-installation operations & maintenance. This should detail the support needed for operations (personnel, training, monitoring service, tools/equipment, etc.) and include a proposed warranty period.
- D. Information on performance monitoring capabilities, if any, shall be included,
- E. All bids shall include an itemized lump sum cost breakdown,
- F. Sketches of proposed SPO locations and existing site details are attached.

REFERENCE Sketches

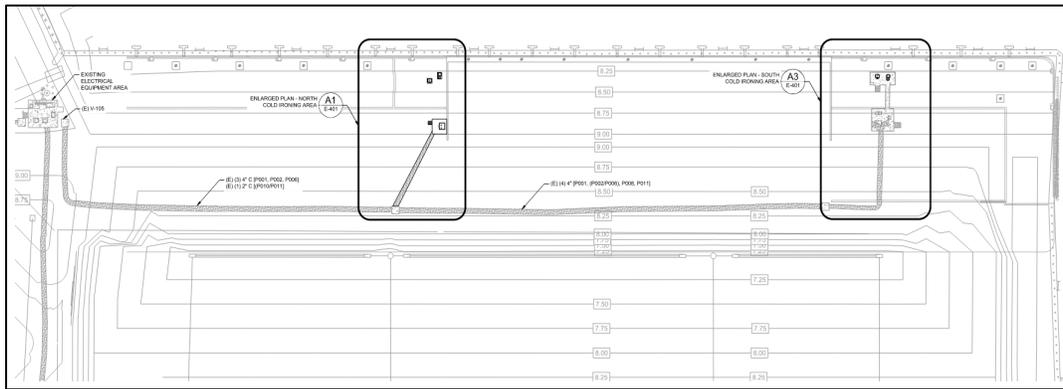


Figure 3: Electrical Plan of State Pier Electrification

The electrical plan illustrates the existing and proposed duct bank layouts at the berth. The plan also indicates that power is routed through existing Vault V-105. Enlarged views are provided for both the South Cold Ironing Area and the North Cold Ironing Area. This information is provided for reference purposes only. Installation of this equipment is not part of this procurement.

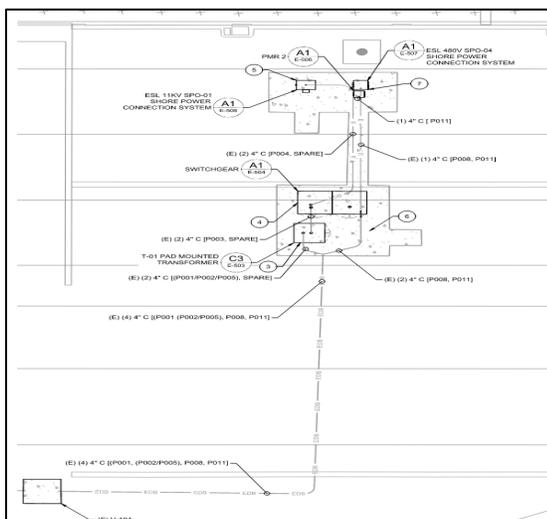


Figure 4: South Electrical Equipment Area at State Pier Facility

The existing primary feeder previously serving the decommissioned cold-ironing transformer has been re-terminated on the primary winding of the new pad-mounted 2.5 MVA dual-winding transformer (13.2 kV – 11 kV / 6.6 kV).

From the transformer secondary, the medium-voltage feeder is routed to the main circuit breaker of the associated 11 kV switchgear utilizing existing conductors where feasible. From Switchgear Disconnect Switch No. 1, a dedicated medium-voltage feeder supplies the South Cold Ironing Area medium-voltage shore power connection system.

From the switchboard at the north cold ironing area, a low-voltage feeder is routed through the duct bank system to supply the low-voltage shore power connection located at the South Cold Ironing Area.

Additionally, from the existing Vessel P-32 switchboard, a branch circuit is extended to serve the pole-mounted receptacle (PMR-2) at the South Cold Ironing Area.

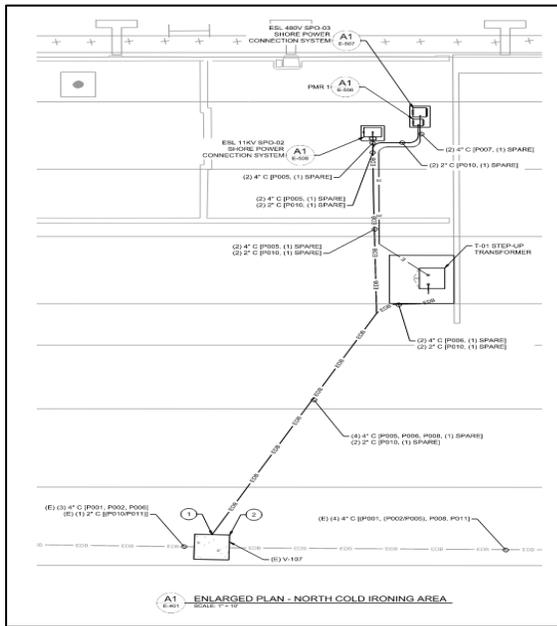


Figure 5: North Electrical Equipment Area at State Pier Facility

From Switchgear Disconnect Switch No. 2, install a dedicated medium-voltage feeder to serve the medium-voltage shore power connection system at the North Cold Ironing Area.

Pull the existing primary conductors formerly serving decommissioned Isolation Transformer T-22 back to existing Vault V-107. Re-route these conductors to the primary winding of Step-Up Transformer T-02 located at the North Cold Ironing Area.

From the secondary winding of Step-Up Transformer T-02, extend a low-voltage feeder to the associated switchboard. The low-voltage shore power connection system at the North Cold Ironing Area shall be supplied from this switchboard.

Additionally, from the existing Vessel P-32 switchboard, extend a branch circuit to supply Pole-Mounted Receptacle PMR-1 at the North Cold Ironing Area.

EXHIBIT B

IRAN CERTIFICATION

INSTRUCTIONS:

Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of submission of your bid or Proposal (if no bid or Proposal— submit this completed form with the earliest submittal of any document to the state or quasi-public agency prior to the execution of the contract), and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or Proposal for a contract, whichever is earlier.

Check One:

- Initial Certification

- Updated Certification because of change of information contained in the most recently filed certification

IRAN CERTIFICATION:

I certify that the entity has not made a direct investment of twenty million dollars or more in the energy sector of Iran on or after October 1, 2013, as described in Section 202 of the Comprehensive Iran Sanctions, Accountability and Divestment Act of 2010, and has not increased or renewed such investment on or after said date. The entity makes a good faith effort to determine whether it has made such an investment described above, and if the entity makes such good faith effort it shall not be subject to the penalties of false statement pursuant to section 4-252a of the Connecticut General Statutes. A “good faith effort” for purposes of this certification includes a determination that the entity is not on the list of persons who engage in certain investment activities in Iran created by the Department of General Services of the State of California pursuant to Division 2, Chapter 2.7 of the California Public Contract Code. Nothing in this certification shall be construed to impair the ability of the Authority to pursue a breach of contract action for any violation.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Entity Name

Printed Name of Authorized Official

Signature of Authorized Official

Subscribed and acknowledged before me this ____ day of _____, 20 ____.

Commissioner of the Superior Court (or Notary Public)

_____ My Commission Expires

EXHIBIT C

DEBARMENT OR SUSPENSION CERTIFICATION

INSTRUCTIONS:

Sign and date the form, under oath, in the presence of a Commissioner of the Superior Court or Notary Public. Submit the completed form to the awarding State agency at the time of submission of your bid or Proposal (if no bid or Proposal— submit this completed form with the earliest submittal of any document to the state or quasi-public agency prior to the execution of the contract), and if there is a change in the information contained in the most recently filed certification, such person shall submit an updated certification either (i) not later than thirty (30) days after the effective date of such change or (ii) upon the submittal of any new bid or Proposal for a contract, whichever is earlier.

Check One:

- Initial Certification

- Updated Certification because of change of information contained in the most recently filed certification

DEBARMENT OR SUSPENSION CERTIFICATION:

I certify that the entity, pursuant to 2 CFR Parts 180 and 1532, has not been debarred or suspended or otherwise excluded from or ineligible for participation in any Federal assistance program and that it is not listed on the government-wide exclusions in the SAM list of parties excluded from federal procurement or non-procurement programs. Nothing in this certification shall be construed to impair the ability of the Authority to pursue a breach of contract action for any violation.

Sworn as true to the best of my knowledge and belief, subject to the penalties of false statement.

Printed Entity Name

Printed Name of Authorized Official

Signature of Authorized Official

Subscribed and acknowledged before me this ____ day of _____, 20 ____.

Commissioner of the Superior Court (or Notary Public)

_____ My Commission Expires

EXHIBIT D

ANTI-LOBBYING CERTIFICATION

CERTIFICATION REGARDING LOBBYING

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents of all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, United States Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

Organization: _____

Street address: _____

City, State, Zip: _____

CERTIFIED BY: (type or print)

TITLE:

(signature)

(date)

Disclosure of Lobbying Activities

Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352
(See reverse for public burden disclosure)

1. Type of Federal Action: a. contract _____ b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	2. Status of Federal Action: a. bid/offer/application _____ b. initial award c. post-award	3. Report Type: a. initial filing _____ b. material change For material change only: Year _____ quarter _____ Date of last report _____
4. Name and Address of Reporting Entity: _____ Prime _____ Subawardee _____ Tier _____, if Known: Congressional District, if known:	5. If Reporting Entity in No. 4 is Subawardee, Enter Name and Address of Prime: Congressional District, if known:	
6. Federal Department/Agency:	7. Federal Program Name/Description: CFDA Number, if applicable: _____	
8. Federal Action Number, if known:	9. Award Amount, if known: \$	
10. a. Name and Address of Lobbying Registrant (if individual, last name, first name, MI):	b. Individuals Performing Services (including address if different from No. 10a) (last name, first name, MI):	
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be reported to the Congress semi-annually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date: _____	
Federal Use Only	Authorized for Local Reproduction Standard Form - LLL (Rev. 7-97)	

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitations for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Included prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.

(b) Enter the full names of the individual(s) performing services, and include full address if different from 10(a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503