

City of Tacoma, WA

TACOMA POWER/TRANSMISSION & DISTRIBUTION

100

REQUEST FOR BIDS

25KV POLE MOUNT GANG-OPERATED DISTRIBUTION SWITCHES

SPECIFICATION NO. PT24-0200F



City of Tacoma Tacoma Power/Transmission & Distribution

REQUEST FOR BIDS PT24-0200F 25kV Pole Mount Gang-Operated Distribution Switches

Submittal Deadline: 11:00 a.m., Pacific Time, Tuesday, November 26, 2024

Submittals must be received by the City's Procurement and Payables Division by 11:00 a.m. Pacific Time.

For electronic submittals, the City of Tacoma will designate the time of receipt recorded by our email server, as the official time of receipt. This clock will be used as the official time of receipt of all parts of electronic bid submittals. Include the specification number in the subject line of your email. Your submittal must be sent as an attachment, links to your electronic submittal will not be accepted.

For in person submittals, the City of Tacoma will designate the time of receipt recorded by the timestamp located at the lobby security desk, as the official time of receipt. Include the specification number on the outside of the sealed envelope. Late submittals will be returned unopened and rejected as non-responsive.

Submittal Delivery: Sealed submittals will be received as follows:

| By Email: | In Person: |
|---|--|
| sendbid@cityoftacoma.org | Tacoma Public Utilities Administration Building North, |
| Maximum email size including attachments: 35 MB. | Main Floor, Lobby Security Desk |
| Multiple emails may be sent for each submittal. | 3628 South 35th Street |
| | Tacoma, WA 98409 |
| Note: Email may pass through multiple servers before arriving | Monday – Friday 8:00 am to 4:30 pm |
| at its destination. Please allow sufficient time for email delivery | |
| of submittals. Timely electronic delivery is at the risk of the | |
| supplier. | |

Bid Opening: Submittals must be received by the City's Procurement and Payables Division prior to 11:00 a.m. Pacific Time. Sealed submittals in response to a RFB will be opened Tuesday's at 11:15 a.m. by a purchasing representative and read aloud during a public bid opening held at the Tacoma Public Utilities Administrative Building North, 3628 S. 35th Street, Tacoma, WA 98409, conference room M-1, located on the main floor. They will also be held virtually Tuesday's at 11:15 a.m. Attend a Zoom meeting <u>via this link</u> or call 1 (253) 215 8782, using meeting ID # 884 0268 0573, passcode # 070737.

Submittals in response to an RFP, RFQ or RFI will be recorded as received, but not read at bid opening. As soon as possible, after 1:00 PM, on the day of submittal deadline, preliminary results will be posted to www.TacomaPurchasing.org.

If you believe your submittal was sent timely and was not read at bid opening, please contact sendbid@cityoftacoma.org immediately.

Solicitation Documents: An electronic copy of the complete solicitation documents may be viewed and obtained by accessing the City of Tacoma Purchasing website at <u>www.TacomaPurchasing.org</u>.

- Register for the Bid Holders List to receive notices of addenda, questions and answers and related updates.
- Click here to see a list of vendors registered for this solicitation.

Pre-Proposal Meeting: A pre-proposal meeting will not be held.

Project Scope: The City of Tacoma (City) / Tacoma Public Utilities (TPU) is soliciting bids to establish one or more contracts with qualified vendors to fulfill the City's needs for 25kV Pole Mount Gang-Operated Distribution Switches. Contract(s) will be awarded to the lowest responsive and responsible bidder(s) based on price, product quality and availability.

Estimate: \$600,000

Paid Sick Leave: The City of Tacoma requires all employers to provide paid sick leave in accordance with State of Washington law.

Americans with Disabilities Act (ADA Information: The City of Tacoma, in accordance with Section 504 of the Rehabilitation Act (Section 504) and the Americans with Disabilities Act (ADA), commits to nondiscrimination on the basis of disability, in all of its programs and activities. Specification materials can be made available in an alternate format by emailing the contact listed below in the *Additional Information* section.

Title VI Information:

"The City of Tacoma" in accordance with provisions of Title VI of the Civil Rights Act of 1964, (78 Stat. 252, 42 U.S.C. sections 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, national origin in consideration of award.

Additional Information: Requests for information regarding the specifications may be obtained by contacting Hailey Erichsen by email to HErichsen@cityoftacoma.org.

Protest Policy: City of Tacoma protest policy, located at <u>www.tacomapurchasing.org</u>, specifies procedures for protests submitted prior to and after submittal deadline.



Meeting sites are accessible to persons with disabilities. Reasonable accommodations for persons with disabilities can be arranged with 48 hours advance notice by calling 253-502-8468.

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SUBMITTAL CHECK LIST

This checklist identifies items to be included with your submittal. Any submittal received without these required items may be deemed non-responsive and not be considered for award. Submittals must be received by the City of Tacoma Purchasing Division by the date and time specified in the Request for Bids page.

| The following items make up your complete electronic submittal | |
|--|--|
| package (include all the items below): | |
| Signature Page (Appendix B) | |
| To be filled in and executed by a duly authorized officer or representative of the bidding entity. If the bidder is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted. | |
| Price Proposal Form (Appendix B) The unit prices bid must be shown in the space provided. Check your computations for omissions and errors. | |
| Technical Data Sheet (Appendix B) | |
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| Supplemental Information – Section 1.05 | |

1. MINIMUM REQUIREMENTS

Manufacturers experienced in the supply of materials as detailed within this Specification over a period of five (5) years or more will be considered responsive. A responsive submittal will demonstrate a record of successful completion of contracts similar in scope and size to that outlined in this Specification. See Section 1 of the Special Provisions for detailed qualification information.

2. STANDARD TERMS AND CONDITIONS / GENERAL PROVISIONS

City of Tacoma Standard Terms and Conditions apply.

3. DESCRIPTION OF WORK

The City of Tacoma (City) / Tacoma Public Utilities (TPU) is soliciting bids to establish one or more contracts with qualified vendors to fulfill the City's needs for 25kV Pole Mount Gang-Operated Distribution Switches. Contract(s) will be awarded to the lowest responsive and responsible bidder(s) based on price, product quality and availability.

4. ANTICIPATED CONTRACT TERM

Contract term will be for three (3) years with two (2) optional one-year (1) extensions.

5. CALENDAR OF EVENTS

This is a tentative schedule only and may be altered at the sole discretion of the City.

Contract may be issued after Public Utility Board and/or City Council approval.

The anticipated schedule of events concerning this RFB is as follows:

| Question Deadline: | 11/4/2024 |
|---|------------|
| City response to Questions: | 11/8/2024 |
| Approved Equivalent Deadline: | 11/18/2024 |
| Submittal Due Date: | 11/26/2024 |
| Anticipated Award Date, on or about: | 12/6/2024 |
| Public Utility Board/City Council Approval, on or about: | 1/8/2025 |

6. INQUIRIES

- 6.1 Questions can be submitted to *Hailey Erichsen*, Senior Buyer, via email to herichsen@cityoftacoma.org. Subject line to read:
 PT24-0200F 25kV Pole Mount Gang-Operated Distribution Switches VENDOR NAME
- 6.2 Questions are due by 3 pm on the date included in the Calendar of Events section.
- **6.3** Questions marked confidential will not be answered or included.

- **6.4** The City reserves the discretion to group similar questions to provide a single answer or not to respond when the requested information is confidential.
- 6.5 The answers are not typically considered an addendum.
- 6.6 The City will not be responsible for unsuccessful submittal of questions.
- **6.7** Written answers to questions will be posted alongside these specifications at www.tacomapurchasing.org.

7. PRE-BID MEETING

No pre-proposal meeting will be held; however, questions and request for clarifications of the specifications may be submitted as stated in the <u>inquiries</u> section.

8. DISCLAIMER

The City is not liable for any costs incurred by the Respondent for the preparation of materials, or a proposal submitted in response to this RFB, for conducting any presentations to the City, or any other activities related to responding to this RFB, or to any subsequent requirements of the contract negotiation process.

9. **RESPONSIVENESS**

Bid submittals must provide ninety (90) days for acceptance by City from the due date for receipt of submittals. All submittals will be reviewed by the City to determine compliance with the requirements and instructions specified in this RFB. The Respondent is specifically notified that failure to comply with any part of this RFB may result in rejection of the submittal as non-responsive. The City reserves the right, in its sole discretion, to waive irregularities deemed immaterial. The City also reserves the right to not award a contract or to issue subsequent RFB's

10. AWARD

Awardee shall be required to comply with 2 CFR part 25 and obtain a unique entity identifier and/or be registered in the federal System for Award Management as appropriate.

Award will be made to the lowest responsive, responsible bidder. All bidders shall provide unit or lump sum pricing for each line item. Each line item will be added up for a subtotal price. The subtotal price will be compared amongst each bidder, including any payment discount terms offered twenty (20) days or more. The City may also take into consideration all other criteria for determining award, including evaluation factors set forth in Municipal Code Section 1.06.262.

All other elements or factors, whether or not specifically provided for in this specification, which would affect the final cost to and the benefits to be derived by the City will be considered in determining the award of the contract. The final award decision will be based on the best interests of the City.

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The City reserves the right to let the contract to the lowest responsible bidder whose bid will be the most advantageous to the City, price and any other factors considered. In evaluating the proposals, the City may also consider any or all of the following:

- 1. Compliance with specification.
- 2. Proposal prices, listed separately if requested, as well as a lump sum total
- 3. Time of completion/delivery.
- 4. Warranty terms.
- 5. Bidder's responsibility based on, but not limited to:
 - a) Ability, capacity, organization, technical qualifications and skill to perform the contract or provide the services required.
 - b) References, judgment, experience, efficiency and stability.
 - c) Whether the contract can be performed within the time specified.
 - d) Quality of performance of previous contracts or services

11. COMPLIANCE WITH SPECIFICATIONS

All products shall be new and unused. Any product that does not comply with any part of these technical specifications shall be rejected and the vendor shall, at its own expense, including shipping, replace the item.

12. MATERIALS AND WORKMANSHIP

The successful bidder shall be required to furnish all materials necessary to perform contractual requirements. Materials and workmanship for this contract shall conform to all codes, regulations and requirements for such specifications contained herein and the normal uses for which intended. Material shall be manufactured in accordance with the best commercial practices and standards for this type of goods. All literature and products must be packaged and labeled to sell in the United States.

13. ENVIRONMENTALLY PREFERABLE PROCUREMENT

In accordance with the <u>City's Sustainable Procurement Policy</u> and <u>Climate Action Plan</u>, it is the policy of the City of Tacoma to encourage the use of products or services that help to minimize the environmental and human health impacts of City Operations. Respondents are encouraged to incorporate environmentally preferable products or services that have a lesser or reduced effect on human health and the environment when compared with competing products or services that serve the same purpose. This comparison may consider raw materials acquisition, products, manufacturing, packaging, distribution reuse, operation, maintenance or disposal of the product or service.

The City of Tacoma encourages the use of sustainability practices and desires any awarded contractor(s) to assist in efforts to address such factors when feasible for:

• Durability, reusability, or refillable

Request for Bids Template Revised: 07/23/2023

- Pollutant releases, especially persistent bioaccumulative toxins (PBTs), low volatile organic compounds (VOCs), and air quality and stormwater impacts
- Toxicity of products used
- Greenhouse gas emissions, including transportation of products and services, and embodied carbon
- Recycled content
- Energy and water resource efficiency

14. LEAP REQUIREMENTS

This project has no LEAP Requirements.

15. EQUITY IN CONTRACTING

This project has no EIC requirements, however, the City of Tacoma is committed to encouraging firms certified through the <u>Washington State Office of Minority and Women's</u> <u>Business Enterprise</u> to participate in City contracting opportunities. See **TMC 1.07 Equity in Contracting Policy** at the City's <u>Equity in Contracting Program website</u>.

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SUBMITTAL CHECKLIST

This checklist identifies items to be included with your submittal. Any submittal received without these required items may be deemed non-responsive and may not be considered for award. *Please do not include the entire specification document with your submittal.*

Submittals must be received by the City of Tacoma Purchasing Division by the date and time specified in the Request for Quotation at the front of this Specification or subsequent addenda.

| The following items, in this order, make up your submittal package: | | | | |
|---|--|--|--|--|
| 1 | One electronic copy of your complete submittal package. | | | |
| | Signature Page with <u>signature</u> , including acknowledgement of any addenda. | | | |
| 2 | 2 This form is intended to serve as the first page(s) of your submittal. Do not alter it in any way or add it to letterhead paper or present cover letters or blank pages ahead of it. | | | |
| 3 | Proposal Sheets – Appendix B | | | |
| | Supplemental Information - Section 1.05 | | | |
| | > Product Data Sheets | | | |
| 4 | > Assembly & Operation Manual | | | |
| | > Manufacturer's Quality Assurance Policy | | | |
| | > Factory Test Data | | | |
| | > Drawings | | | |



SUBMITTAL INSTRUCTIONS

PRE-SUBMITTAL QUESTIONS

- A. Questions and requests for clarification of these Specifications may be submitted in writing by 3:00 p.m., Pacific Time, Monday, November 4, 2024, via email addressed to the Purchasing contact below. Questions received after this date and time may not be answered.
- 1. Please indicate the specification number and title in the email subject line.
- 2. Present your questions in MS Word format or directly in the body of the email message. If applicable, cross reference the specific section of the RFB.
- 3. Questions will not be accepted by telephone or fax.
- 4. Questions marked confidential will not be answered.
- 5. Individual answers will not be provided directly to Respondents.
- 6. The City reserves the discretion to group similar questions to provide a single answer or not to respond when the requested information is confidential.
- 7. The City will not be responsible for unsuccessful submittal of questions.
- B. Written answers to all questions will be posted on the Purchasing website at <u>www.TacomaPurchasing.org</u> on or about **November 8, 2024**. Navigate to *Contracting Opportunities / Supplies*, and scroll to this RFB. A notice will not be posted with the Specification if no questions are received.
- C. The answers are not typically considered an addendum.
- D. To receive notice of the posted answers, you must register as "bid holder" for this solicitation.

| Communication | Addressee |
|---|--|
| For all questions regarding Specification PT24-0200F | Hailey Erichsen Senior Buyer <u>HErichsen@cityoftacoma.org</u> - email |



SUBSTITUTION REQUESTS

A. If the Respondent elects to bid alternative equipment, materials, or processes where allowed, a Substitution Request Form must be submitted by email to Hailey Erichsen, HErichsen@cityoftacoma.org, a minimum of **five (5) business days** prior to the submittal deadline. Substitution Request Forms received after this time will not be accepted. Respondents will be notified of an approved or rejected Substitution Request Form no later than **three (3) business days** prior to the submittal deadline. See Sections 1.04.2B and 1.04.2C.

REVISIONS TO SPECIFICATION

- A. All revisions to this specification will be in the form of written addenda, and no oral revision should be relied upon for any purpose. In the event it becomes necessary to revise any part of this RFB, addenda will be issued to registered plan holders and posted on the Purchasing website at <u>www.TacomaPurchasing.org</u>: Navigate to Current Contracting Opportunities / Supplies Solicitations, and scroll to this RFB. Failure to acknowledge addenda may result in a submittal being deemed non-responsive.
- B. The information provided during the question and answer timeframe listed above is not typically considered an addendum.

RESPONSIVENESS

- A. Respondents agree to provide a minimum of 90 days from the submittal deadline for acceptance by the City.
- B. Submittals will be reviewed by the City to determine compliance with the requirements and instructions specified in this RFB. The Respondent is specifically notified that failure to comply with any part of this RFB may result in rejection of the submittal as nonresponsive. The City reserves the right, in its sole discretion, to waive irregularities deemed to be immaterial. The City also reserves the right to not award a contract or to issue a subsequent RFB.
- C. The final selections, if any, will be that submittal which, after review and in the sole judgment of City, best meets the requirements set forth in this RFB.



Note that the provisions found in Section 1 and Section 2 will prevail over any conflicting provisions found in the City of Tacoma Standard Terms and Conditions of this RFB.

SECTION I – SPECIAL PROVISIONS

1.01 - SCOPE OF BID

1.01.1 - PURPOSE

The purpose of these Specifications is to define the scope of supply of materials that meet the minimum requirements as to quality, function, and capacity as outlined in the Special and Technical Provisions that follow.

1.01.2 - DEFINITIONS

For the purposes of this specification, the following definitions shall apply:

| Term | Definition | | |
|---|---|--|--|
| RESPONDENT | A potential Supplier offering a submittal to supply equipment in accordance with these Specifications | | |
| SPECIFICATION | This document, detailing the scope of supply | | |
| SUPPLIER | The Respondent(s) awarded a contract pursuant to these Specifications | | |
| SUBVENDOR | Any Supplier of parts, materials, and/or services to the vendor under these Specifications | | |
| EQUIPMENT/ MATERIALA fully functional piece of equipment/material su tested in accordance with these Specifications | | | |
| MANUFACTURER | The original manufacturer of the equipment/material | | |
| ENGINEER | The project engineer and/or contract administrator | | |
| СІТҮ | The City of Tacoma, Tacoma Power | | |
| DELIVERY TIME | The length of time starting at the date of Supplier receipt of a purchase order, purchase order release, or Notice to Proceed and ending at the time that the item(s) are received at Tacoma Power | | |

1.01.3 - QUALIFICATIONS

To further detail the requirements of Section 1.20 of the City of Tacoma Standard Terms and Conditions, only submittals which offer products from manufacturers experienced in the supply of materials as detailed within this Specification over a period of five (5) years or more will be considered responsive. A responsive submittal will demonstrate a record of successful completion of contracts similar in scope and size to that outlined in this Specification. The City shall be the sole judge of the Respondent's ability to meet the requirements of this paragraph.



1.01.3A - REFERENCES

Each Respondent shall complete the "References Data Sheet" as required in the proposal section. A minimum of five (5) references over the past five (5) years is required.

1.01.3A.1 - CHANGE OF OWNERSHIP

References are intended to be for material/equipment currently supplied under the proposed manufacturer's name. References for material/equipment that has been previously supplied under a different Company's name shall be clearly noted on the reference list.

1.01.3A.2 - DEFINITION OF REFERENCED UTILITIES

The Respondent shall list as references, only those utilities that have purchased material/equipment as the Respondent proposes to offer to the City, from these Specifications.

1.01.3B - RESPONDENTS ORIGINATING FROM OUTSIDE THE UNITED STATES

Respondents that originate bids from outside the legal jurisdiction of the United States of America will be subject to the City of Tacoma's Legal Department opinion as to the viability of possible litigation pursuant to a supply contract resulting from this Specification. If it is the opinion of the City of Tacoma's Legal Department that any possible litigation would be beyond reasonable cost and/or enforcement the bid may be excluded from evaluation.

1.01.3C - MANUFACTURER REPRESENTATION

The Supplier shall have available to Tacoma Power a representative or agent who will provide field and technical support. The agent shall be authorized to coordinate returns and repairs as well as provide support for any matter pertaining to non-compliance with the terms of the Specification.

1.01.4 - SUB-VENDORS

The Respondent shall list, on the form provided, all sub-vendors it intends to use to fulfill requirements in any part of this Specification. Included in the listing shall be the sub-vendor's name, address, and telephone number; contact name; and description of work they will perform. It shall be the responsibility of the awarded Supplier to police, enforce, and ensure that all work performed by any sub-vendor shall be in accordance with this Specification.



1.02 <u>– CONTRACT</u>

1.02.1 - CONTRACT PERIOD

The contract is intended for a minimum of three (3) years from the award date of the contract. Two (2) one-year (1) optional extensions may be offered to a successful contract awardee at the same terms and conditions as the original contract.

1.02.2 - AWARD DATE OF CONTRACT

The Award Date of Contract is the date that the City of Tacoma Purchasing Division issues the contract. This occurs after the Tacoma Public Utilities Board approves the award of this Contract and all documents (if required) have been returned to the Purchasing Division.

1.03 - PRICING AND PURCHASE ORDERS

1.03.1 - FREIGHT ALLOWANCES

The Respondent shall provide prices including delivery F.O.B. Destination as noted on the bid proposal sheet.

1.03.2 - QUANTITIES AND PURCHASE ORDERS

The quantities listed on the Proposal Pricing Sheets are an estimate only using historical data gathered from the previous six (6) years. Delivery will be according to purchase order on an as-needed basis throughout the period of the contract. The City reserves the right to increase or decrease quantities under this contract and pay according to the unit prices quoted in the proposal. The purchase order will be delivered to the Supplier by email.

1.03.2A - WORKING DAYS

Working days are weekly Monday through Friday. City observed holidays as listed in City of Tacoma Standard Terms and Conditions Section 1.24 are not included.

1.03.3 - ANNUAL PRICING ADJUSTMENT

Pricing shall remain firm for the initial twelve months (one-year) of the contract; subsequently the prices may be adjusted annually on the anniversary date of the contract award as described below.

On the anniversary date of the award of the contract the unit prices of the items bid will be adjusted reflecting the percent change of Series ID PCU33531335313 – "Switchgear and Switchboard Apparatus mfg" of the Producer Price Index as published by the Bureau of Labor Statistics of the U.S. Department of Labor. Refer to "Appendix C" for historical index data. The value of the PPI index at time of award will be used as the base for the annual adjustments.



1.04 – RESPONDENT'S PROPOSAL

1.04.1 – RESPONDENT REQUIREMENTS

Submittals must be received by the City of Tacoma Purchasing Division by the date and time specified on the Request for Quotation or subsequent addenda.

The bid package submitted must be returned with the Respondent's proposal filled in as directed, including all data requested by the Provisions of these Specifications. All blank spaces on the Proposal forms will be properly filled in, printed in ink or typewritten.

1.04.2 - ALTERNATE BIDS

All bids including alternates shall include the Request for Quotation. Each bid package submitted must be returned with the Respondent's proposal completed as directed, including all data requested.

1.04.2A - ALTERNATE BID PROPOSALS

Alternate bid proposals must be submitted as a separate bid package and identified as "ALTERNATE".

1.04.2B - ALTERNATE MATERIALS

If the Respondent elects to bid alternative equipment, materials, or processes where allowed, a Substitution Request Form must be submitted by email to Hailey Erichsen, HErichsen@cityoftacoma.org a minimum of five (5) business days prior to the submittal deadline. Respondents will be notified of an approved or rejected Substitution Request Form no later than three (3) business days prior to the submittal deadline.

An approved Substitution Request Form shall not indicate acceptance of the alternate by the City. Complete data of the alternate materials must be submitted with the bid. This data shall demonstrate that the alternative item or process is of a quality equal to or better than that specified and has the required characteristics for the intended use. Failure to submit such data will render the bid non-responsive.

1.04.2C - ALTERNATE EVALUATION

Upon request, the Respondent shall furnish to the City, within five (5) working days, additional information relating to such alternative items as the City may require. In the event that the equivalency is not readily ascertained from the information supplied by the Respondent, the City may test the material/equipment or have it tested. The Respondent shall bear all expenses of the City's determination of whether or not alternative equipment, materials, or processes are equal to those designated.



1.04.3 - RESPONDENT'S RESPONSIBILITIES FOR TERMS AND CONDITIONS

Failure to complete and supply all of the requested information on the proposal forms shall in no way relieve the Respondent of the responsibility of supplying all of the necessary items and/or complying with all of the terms and conditions in this document.

1.04.4 - ENGLISH LANGUAGE REQUIREMENTS

All drawings, correspondence, catalogs, submittals, nameplates, etc., shall be in the English language as used in the U.S. Dimensions and tolerances shall conform to ANSI Y14.5M and shall be in the U.S. customary units. If units are fabricated utilizing SI units (metric system), both units shall be shown on the drawings, nameplate, etc. U.S. units shall be shown above the SI units. Conversion tolerances shall have a maximum tolerance of 1/32-inch (2.70 mm) and/or one ounce (28.4 grams).

1.04.5 – SUBMITTAL CLARIFICATION

Respondents may be asked to clarify their submittal. This action shall not be construed as negotiations or any indication of intentions to award. If called upon, the Respondent must respond to such requests within two business days, or the timeframe set forth by the City in its request for clarification. A Respondent's failure to respond to such a request may result in rejection of its submittal.

1.04.6 - CONTRACT OBLIGATION / ACCEPTANCE OF SUBMITTAL CONTENTS

The bid submittal contents of the successful Respondent will become contractual obligations if a contract ensues.

1.04.7 – CONFIDENTIAL OR PROPRIETARY INFORMATION

Information that is confidential or proprietary must be clearly marked. Further, an index must be provided indicating the affected page number(s) and location(s) of all such identified material. Information not included in said index will not be reviewed for confidentiality or as proprietary before release. (See item 1.06 of the Standard Terms and Conditions.)

1.04.8 - EXPANSION CLAUSE

Any resultant contract from this RFB may be further expanded in writing to include other related services or products normally offered by the Contractor, as long as the price of such additional services or products have a profit margin equal to or less than that in place at the time of original submittal. Such additions and prices will be established in writing. New items not meeting these criteria will not be added to the contract. Contractor profit margins are not to increase as a result of contract additions.

Any new products or services accepted by the City may be added to this contract and/or substituted for discontinued products or services. New products and services shall meet or exceed all Specifications of original award.



1.05 – SUPPLEMENTAL INFORMATION

The information requested in the following section shall be included with the submittal and will be referenced during evaluation process (Refer to Special Provisions Section 1.07).

1.05.1 - PRODUCT DATA SHEETS

The Respondent shall provide manufacturer product data sheets (cut sheets) for each material to be supplied. Manufacturer data furnished must be sufficient in detail and clarity to enable making a complete and positive check with compliance of the Technical Provisions of this Specification.

1.05.2 – ASSEMBLY & OPERATION MANUAL

The Respondent shall provide two (2) copies of the operating, maintenance and installation instruction manuals for the equipment offered.

1.05.3 - MANUFACTURER'S QUALITY ASSURANCE POLICY

The Respondent shall provide one copy of the manufacturer's internal "Quality Assurance" policy for the equipment to be supplied. The documentation shall include third party certification of ISO 9000 series qualifications if it has been achieved. The policy documents shall include examples of inspection processes and quality control measures utilized to insure supply of a reliable product.



<u> 1.05.4 – FACTORY TEST DATA</u>

The Respondent shall provide one (1) certified copy of each of the following test reports. Tests shall be made on switches that have identical ampere ratings and voltage classes as the switches that the Respondent proposes to offer to the City on this proposal.

| Characteristic | Definition/Requirement |
|--------------------------------|--|
| FAULT CLOSE | The Respondent shall supply the appropriate test data that documents both one-time and three-time fault close ratings as described in Section 8.5 of IEEE 1247-2005. |
| CONTINUOUS CURRENT | The switches shall be tested in accordance with Sections 6 and 7 of ANSI C37.34 and Section 8.2 of IEEE 1247-2005 and meet the requirements of Section 2.02.1 of this document. |
| LOAD CURRENT INTERRUPTING | The interrupter shall meet the requirements of Table 5 of IEEE 1247-2005 and tested in accordance with Section 8.3.2 |
| ICE BREAKING ABILITY | Tests shall be performed in accordance with Section 10 of ANSI C37.34. |
| MECHANICAL OPERATIONS | The minimum number of mechanical operations for which the switch shall satisfactorily perform, is described in Section 6.1.1.5 of ANSI C37.30.1 and shall be tested in accordance with Section 11 of ANSI C37.34. |
| SHORT TIME WITHSTAND RATING | The tests shall be performed as described in Section 8 of ANSI C37.34. |

1.05.5 - DRAWINGS

The Respondent shall provide one copy of drawings for the equipment offered on this proposal. At least one, dimensioned view, shall show the proposed switch in both the open and closed position.

1.05.5A - REQUIRED VIEWS

The following views and details shall be required on the drawings.

- Front
- Side
- Terminal Pads
- Pole Attachment Method
- Interrupter
- Erection
- Vertical and Horizontal Operating Rods
- Torsional Operating Handle & Hook Stick Mechanism
- Completely assembled operating mechanism
- Single Point Lifting Provision



1.06 - SAFETY AND STANDARDS

The Items supplied shall meet appropriate ANSI, OSHA, WISHA, and all federal, state, and local standards for its intended use. Refer to Section Technical Provisions 2.00.1 for specific industry standards that apply to the Specifications of this bid.

1.07 - EVALUATION & AWARD

Respondents are to provide unit or lump sum pricing for each line item, which will be summed for a subtotal price. Subtotals will be compared amongst each Respondent, including any offered payment discount terms of 20 days or more.

1.07.1A - PRICING CONDITIONS OF SPECIAL SECTION 1.03.3

Those bids that do not accept the pricing conditions of Special Provisions Section 1.03.3 may be considered non-responsive.

1.08 - DELIVERY DATE

Respondents must guarantee delivery times as stated on their Proposal Pricing Summary Sheet. The delivery time will be enforced for all releases of this contract and any contract renewals.

1.08.1 - NOTIFICATION

Notification to deliver product will be by the issuance of a City of Tacoma purchase order (per Special Provisions Section 1.03.3) for the materials described in this Specification).

1.08.1A - DELAYS BEYOND THE CONTROL OF THE SUPPLIER

Delays caused by problems beyond the control of the Supplier, if fully documented and submitted to the city, may be excused. This allowance shall in no way be construed to apply to or excuse delays caused by negligence on the part of the Supplier. (For additional information, refer to the Force Majeure portion, located in Special Provisions Section 1.08.3 of this document).



1.08.2 - CLAIMS BY THE CITY

Nothing contained herein shall preclude claims by the City for damages caused by Supplier errors, omissions, or negligence unrelated to delay in completing the contract on time.

1.08.3 - FORCE MAJEURE

Unavoidable delays in the prosecution of the work shall include only delays from causes beyond the control of the Supplier and which he/she could not have avoided by the exercise of due care, prudence, foresight and diligence.

The Supplier shall not, be responsible for delays in delivery due to acts beyond his/her or manufacturer's reasonable control, or due to act of god, fire, strikes, epidemics, war, riot, unavoidable delay in transportation or rail car/transport shortages, or documented unavoidable material shortages, provided the City is notified in writing by the Supplier of such pending or actual delay and the reasons, therefore. If deemed excusable, the City shall authorize an extension of time. In the event of such an excusable delay, the date of delivery shall be extended for a period equal to the time lost due to the reason for delay. Any damage assessment or extensions of time are to be authorized by written purchase order changes issued by the City of Tacoma.

1.08.3A - TERMINATION OF PURCHASE ORDER RELEASE(S)

If the delay will extend beyond 10 working days, the City may exercise the right to terminate any and all purchase order releases that are affected by the delay and obtain the items required materials from other sources.

1.08.3B - DUE DILIGENCE

It shall be the responsibility of the Supplier to supply the City with adequate documentation to demonstrate that the Supplier exercised due diligence in endeavoring to avoid the delay.

1.09 – PACKING AND SHIPPING

The Supplier shall be responsible for industry standard packing that conforms to the requirements of the carrier's tariffs and the ICC regulations.

1.09.1 - LABELING

Each pallet shall be labeled with:

- Tacoma Power MID #XXXXX
- Destination
- Quantity
- City of Tacoma Purchase Order Number

1.09.2 – PACKAGING

All material/equipment shall be enclosed in wooden crates.

1.09.2A - BALANCED LIFT



Crates shall be designed and constructed for movement by forklift or pallet jack lifting equipment. When the lifting equipment is placed at the center and perpendicular to the long axis of the crate a balanced lift of the crate and its contents shall be accomplished.

1.09.2B - CRATE CONSTRUCTION

1.09.2B.1 - OUTDOOR STORAGE

All crates shall be suitable for extended outdoor storage.

1.09.2B.2 - STACKING

All crates shall be constructed of sufficient strength so that the crates may be stacked two units high, without switch damage, in the City's warehouse.

1.09.2C - GROUND CLEARANCE

The minimum vertical clearance for lifting forks shall be as indicated in the following table:

Minimum Clearance for Forks (in inches)

4" with at least 2 runners

1.09.2D - PROTRUSIONS

No portion of the switch assembly or ancillary component shall protrude beyond the confines of the crate.

1.09.2E - COMPONENTS IN CRATE

All components required for each switch installation shall be shipped with the associated switch.

1.09.2E.1 – SECURING COMPONENTS

All individual components within the crate shall be secured to the crate or the switch assembly.

1.09.2E.2 – WEATHERPROOFING

All components susceptible to weather damage shall be protected by plastic wrap or City approved alternatives.

1.09.2E.3 – UNPROTECTED CARDBOARD

Unprotected cardboard cartons or boxes will not be accepted.

1.09.3 - SHIPPING REQUIREMENTS

Materials shall be shipped in such a fashion that they will arrive at the City without transit-associated damage. A complete packing list must be included.



Tacoma Power reserves the right to request and require a change in shipping company utilized by the Supplier based upon history of damaged goods delivered to Tacoma Power and/or evidence of unsafe work practices by the shipping company.

1.09.4 - SHIPPING NOTICE

The shipper shall notify the Tacoma Power Warehouse a minimum of 24 hours prior to arriving at delivery destination. This notice may be sent via phone or email and is required to convey final delivery information and ensure sufficient staff available to unload cargo.

| Tacoma Power Warehouse | | | | | |
|------------------------|--------------------------|--|--|--|--|
| Contact Keith Wawrin | | | | | |
| Phone Number | (253) 502-8760 | | | | |
| Email Address | kwawrin@cityoftacoma.org | | | | |

<u> 1.10 – DELIVERY</u>

1.10.1 - DELIVERY TIME

The completed items shall be delivered between 9:00 a.m. and 3:00 p.m. Monday through Friday excluding City observed holidays.

1.10.2 - DELIVERY LOCATION

Deliver completed items F.O.B. as directed by the purchase order release to either:

Tacoma Power Warehouse 3628 South 35th Street (rear) Tacoma, Washington 98409 Attention: TPU Light Stores - South End

Tacoma Power South Service Center 3002 224th St. E Spanaway, WA 98387

1.10.2A – ALTERNATE DELIVERY LOCATION

The City retains the option to have the merchandise delivered to an alternate facility or on-site within a 35-mile radius of the Tacoma Power Warehouse. Notification of any change will be on the purchase order release.

1.11 - INSPECTION & WARRANTY

All goods are subject to final inspection and acceptance by the Engineer and/or the appropriate shop supervisor.

1.11.1 - FAILURE OF INSPECTION

Material failing to meet the requirements of this specification will be held at Supplier's risk and may be returned to Supplier. If so returned, the cost of transportation, unpacking, inspection, repacking, reshipping, or other like expenses are the responsibility of the Supplier.



Charges for dismantling and reinstallation of materials furnished pursuant to the Contract will be the responsibility of the Supplier only when a change out or replacement is required because of a suspected or known design defect or large-scale failure of manufacturer's quality control system.

1.11.2 - FACTORY INSPECTION

The Engineer/Contract manager shall be permitted to witness the manufacture of items supplied per this contract and to perform a "quality audit" of the facility manufacturing.

1.11.2A - QUALITY ASSURANCE AUDITS

The City or its representative may audit the quality assurance program at any time prior to and during the Contract period or its extensions.

1.11.2B - QUALITY ASSURANCE DOCUMENTATION

The manufacturer shall provide, when requested, access to and copies of quality assurance documents such as material certificates, inspection and test results obtained in the course of quality assurance, control charts, and other quality documents compiled during the work.

1.11.2C - FACTORY ASSISTANCE DURING INSPECTION

The manufacturer shall have engineering, manufacturing, quality control, and operational factory personnel available who speak technical and conversational English without the need of an interpreter.

1.11.3 - WARRANTY

Unless a longer period is specified, the Supplier and/or manufacturer of the supplies, materials and/or equipment furnished pursuant to this Contract agrees to correct any defect or failure of the supplies, materials and/or equipment which occurs within one year from the date of commencement of use, however, said warranty period shall not extend beyond eighteen months after date of receipt by the City.

When the Supplier is not the manufacturer of the item of equipment, Supplier agrees to be responsible for this warranty and Supplier is not relieved by a manufacturer's warranty.

1.11.3A - WARRANTY PERIOD EXTENSION

The Contract warranty period shall be suspended from the time a significant defect is first documented by the City until the material is repaired or replaced by Supplier and accepted by the City. In addition, in the event less than ninety (90) days remain on the warranty period (after recalculating), the warranty period shall be extended to allow for at least ninety (90) days from the date the work or equipment is repaired or replaced and accepted by the City.



1.11.3B - WARRANTY WORK

All materials requiring warranty work will be returned to the manufacturer at its expense or the manufacturer may replace the defective materials. All replaced materials will be held for pick up (no more than) 30 days after the arrival of replacement materials. Tacoma Power at its discretion will dispose of any materials not picked up within 30 days.

1.11.3B.1 - RETURN TIME FRAME

All warranty repair work on returned material/equipment shall be accomplished within the specified lead-time for delivery listed in the Supplier's bid submittal. Warranty repair time will be calculated from the time the material/equipment defect or failure is reported to the Supplier.

1.12 - INVOICES & PAYMENT

1.12.1 - INVOICES

Invoices shall be emailed to: (Per Section 1.39 of the Standard Terms and Conditions)

accountspayable@cityoftacoma.org

1.12.2 - PAYMENT

Upon certification by the Engineer and/or appropriate warehouse personnel that the items have been received in accordance with the Specifications and are in satisfactory condition, a 100 percent payment will be made. Payment methods include:

- Electronic Funds Transfer (EFT) by Automated Clearing House (ACH).
- Check or other cash equivalent.

The City may consider cash discounts when evaluating submittals. See 1.20.2. of the Standard Terms and Conditions.

1.12.2A - UNSATISFACTORY PERFORMANCE

In the case of unsatisfactory performance, the payment shall be made after the Supplier has made the necessary repairs and/or modifications and satisfactory performance is obtained, or the unit is replaced.

1.13 - CONTRACT EXCEPTIONS

1.13.1 - NON-RESPONSIVE

Bid proposals that claim exceptions to the terms and conditions stated within these Specifications may be declared non-responsive and the bid proposal may be rejected.



THESE TECHNICAL SPECIFICATIONS HAVE BEEN PREPARED BY A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF WASHINGTON.

SECTION II - TECHNICAL PROVISIONS

2.00 - SCOPE

The 25kV class, 900 Amp, outdoor, unitized, pole-mounted, upright, side-break, singlethrow, group-operated, three-pole, load-break, disconnect switches described in this specification shall be suitable for installation on the City's:

7,200/12,470Y volt, three-phase, four-wire, 60-hertz, multi-grounded neutral system. 7,980/13,800Y volt, three-phase, three wire, 60-hertz, single point grounded system.

2.01 - SERVICE CONDITIONS

The usual service conditions as described in Section 4.1 of ANSI C37.30.1, shall apply.

2.01.1 – MOUNTING HEIGHT

These switches are typically installed on round wood poles that are of 45 thru 65 foot in length or equivalent prior to installation. The typical mounting heights upon installation vary from 34 ft to 52 ft.



2.02 - GENERAL DESCRIPTION OF EQUIPMENT FURNISHED

The following ratings shall be required for the switches listed in this specification.

2.02.1 – OPERATING RATINGS @ 60hz – OUTDOOR DISTRIBUTION SWITCH

| Req | Value | | |
|--|--|------------------------|--|
| Voltage Class | 25 kV | | |
| (BIL)-Lightning Impu | Ilse Rating | 150 kV | |
| Continuous Current | Rating & Load Break Current Rating | 900 amperes | |
| IEEE Std C37.30.1 2011, Table 3 | Limit of observable temperature rise @ rated current | 30°C | |
| IEEE Std C1247Total temperature / Temperature Rise2005, Table 2over 40 °C ambient – Silver coated contacts in air | | 105°C / 65°C | |
| IEEE Std C37.30.1 | Short time Withstand Current Rating, 3s | 25,000 amperes, rms | |
| 2011, Table 9 | Peak Withstand Current @ 60 Hz, 10 Cycles | 65,000 amperes, rms | |
| Three-Time Fault Closing Rating | | 15,000 amperes | |
| One-Time Fault Clos | sing Rating | 20,000 amperes | |
| Ice Breaking Rating | | 3/4 inch of radial ice | |
| Maximum Switch Weight (Not including operating rod or handle) | | 400 pounds | |
| Rated withstand Voltage Dry, 1 minute | | 150 kV, rms | |
| Rated withstand Vol | 135 kV, rms | | |

2.02.2 – STANDARDS

All the material/equipment, supplied under this contract, shall meet the most recent editions of the standards in the following table and all other standards that are applicable to material/equipment of this nature:

| Standard Number | Standard Title | | | | |
|--------------------|--|--|--|--|--|
| ANSI C2 | National Electric Safety Code | | | | |
| ANSI C29.1 | Test Methods for Insulators | | | | |
| ANSI C37.30.1 | IEEE Standard Requirements for High-Voltage Air Switches | | | | |
| ANSI C37.34 | IEEE Standard Test Code for High-Voltage Air Switches | | | | |
| ASTM A 123 | Standard Specification for Zinc (Hot-Dipped Galvanized) Coatings on Iron and Steel Products | | | | |
| ASTM A 153 | Standard Specification for Zinc Coating (Hot-Dipped) on Iron and Steel Hardware | | | | |
| IEEE STD 1247 | IEEE Standard for Interrupter Switches for Alternating Current, Rated Above 1000 Volts | | | | |



2.02.3 – SIZE AND SPACING

The following shall be the required spacing of switch and the overall height and length requirements.

| 2.02.3A - DIMENSIONS | | | | | | |
|----------------------|-------|------------------------------|---|--|--|--|
| | | | Dimensions | | | |
| Item | MID | Configuration | Minimum Pole Centerline to Nearest Switch Position | Interphase - Sw Position to SW Position | Maximum Overall Length - including supporting structure, switches, and interrupters | Maximum Height - including supporting, structure insulators, switches, and interrupters |
| 1 | 20966 | Horizontal | 24" | 32" +/- 2" | 110" | 28" |
| 2 | 81004 | Alley | 18" | 32" +/- 2" | 96" | 28" |
| 3 | 20965 | Vertical / UG Termination | 8" | 32" +/- 2" | 96" | 28" |

2.02.3A – DIMENSIONS

2.02.3B - FIELD ADJUSTMENT

Switch pole locations / dimensions shall be set at the factory and shall not require field adjustment.

2.02.4 – CURRENTLY APPROVED SUPPLIER

Inertia Engineering, L26SLSHG2164H75 Alternate bids will be accepted with an approved Substitution Request Form. See Section 1.04.2B and Appendix B.

2.03 - INSULATORS - STATION POST - SWITCH POLES

The following shall be required for the switch insulators listed in this specification.

2.03.1 – ELECTRICAL & MECHANICAL CHARACTERISTICS

The switch insulators shall have the electrical & mechanical characteristics required to meet the requirements of section 2.02.1 Mechanical loading – 6,000 ft-lbs and 1200 lbs cantilever

2.03.2 – TYPE

They shall be Non-Ceramic Silicon Rubber rated for 25kV installation. The silicon rubber shall contain 30% silicon oil.

2.04 - MAIN SWITCH CONTACTS

The following shall be required for the main switch contacts listed in this specification.



2.04.1 – CONTACT TYPE

Contacts for each switch pole shall be of the modern high-pressure line, or reverse loop type.

2.04.2 - CONTACT MATERIAL

All contacts shall be manufactured in such a manner that they utilize silver-tosilver or silver-to-bronze construction.

2.04.3 - WIPING ACTION

No retarding friction on the contacts shall be allowed during the opening or closing motion of the blade about its hinge except a very light wiping motion.

2.05 - SHUNTS

The following shall be required for the shunts listed in this specification.

<u>2.05.1 – CAPACITY</u>

Shunts of adequate capacity shall be provided to transmit the current around the hinges used in the current carrying parts.

2.05.2 – UNACCEPTABLE TYPES

The use of flexible copper or aluminum braid as a shunt will not be allowed.

2.06 - BLADE

The following shall be required for the switch blades listed in this specification.

2.06.1 - BLADE COMPOSITION

The switch blade shall be C110 Cu or equivalent.

2.07 - TERMINALS AND CONNECTORS

The following shall be required for the switch terminals listed in this specification.

2.07.1 – DESCRIPTION

All switches shall be equipped with flat, silver or tin-plated, terminal pads on both ends of the switch.

2.07.2 – HOLES

All switch terminal pads shall be drilled for standard, NEMA, 2 hole, connectors in accordance with Figure 2a of ANSI C37.30.1.

2.07.3 – DUAL RATING

All terminal pads shall be suitable for both copper and aluminum conductors.

2.07.4 – CONTINUOUS CURRENT RATING

All terminal pads shall be suitable for the continuous current rating specified in Section 2.02.1 of this document.



2.07.5 - CONNECTORS

No clamping lugs or connectors shall be provided for terminal pad connections.

2.07.6 - LOADING

Loading of the terminal pads, in accordance with Table 7 of ANSI C37.30.1, and tested in accordance with Section 8.6 of ANSI C37.30.1.

2.08 - LOAD BREAK MECHANISM

The following shall be required for the load break mechanisms in this specification.

2.08.1 - RATINGS

The interrupter shall be capable of interrupting 100% of rated current (as defined by Section 9 of ANSI C37.34) at a lagging power factor no greater than 80% and a minimum recovery voltage of 100% of rated voltage.

2.08.2 – LIFE EXPECTANCY

The interrupter's life expectancy, as described in Section 6.4.4 of ANSI C37.30.1, shall be provided on the technical data sheet portion of this document. This shall be provided at both 100% and 50% of rated current. 100% shall be greater than or equal to (10) ten operations 50% shall be greater than or equal to (50) fifty operations

2.08.3 - INSPECTION

It is desired that the status of the interrupter be easily observable from the ground by the switch operator prior to operation. It is preferred the interrupter trip and pick-up arms have a minimum of 1.5-inch clearance when the switch is in the closed position for visual confirmation.

2.09 - MATERIALS

The following shall be required for the miscellaneous materials listed in this specification.

2.09.1 - CURRENT CARRYING PARTS

All current carrying items shall be made from copper, bronze, or other approved non-ferrous material.

2.09.2 – HARDWARE

Bolts, nuts, washers, pins, and all other hardware and fasteners used in the live parts shall be Everdur, Monel, Duronze or stainless steel.

2.09.3 – STEEL COMPONENTS

All steel parts shall be hot-dipped galvanized after fabrication per ASTM A153 or ASTM A123 standards.

2.10 - SUPPORT BASE

The following shall be required for the support bases listed in this specification.



<u> 2.10.1 – LIFTING</u>

The entire switch assembly, without vertical operating rods or operating handle, shall be designed for a balanced, single point lift.

2.10.1A – FULLY ASSEMBLED

The switch lifting provision shall be fully assembled and installed on the switch, by the manufacturer, when the switch is unpacked from its shipping crate.

2.10.1B - IDENTIFICATION

The switch lifting provision shall be clearly identified and color-coded.

2.10.1C - MARKINGS

If the switch lifting provision is to be removed prior to energization, it shall be clearly labeled as such, or painted in red.

2.10.2 - END CAPS

2.10.2A - INSECTS

The end caps of the support base shall not allow ingress or egress of insects.

2.10.2B - DRAINAGE

The end caps of the support base shall not allow water to collect within the interior of the support base and any excess water shall be drained away from energized parts and equipment.

2.10.2C - TYPE

End caps shall be designed to minimize gaps between the cap and the base tube. Caps that utilize a type of wire screen will not be accepted.

2.10.3 – MATERIAL

The support base shall be constructed of galvanized steel in accordance with Section 2.09.3 of this document.

2.10.3A – GROUND CONNECTION

The support base shall be equipped with a grounding provision.

2.11 - MANUAL OPERATING MECHANISM

The following shall be required for the manual operating mechanisms listed in this specification.

2.11.1 – DESCRIPTION

Each mechanism shall be supplied complete with operating handle, enclosed gears, bearings and all shafts required for connection between phases, and for connection between switch and operation mechanism.



2.11.1A – EFFORT REQUIRED

The manual mechanical operating mechanism shall provide for the quick, simple, and effective operation of each switch, without undue effort by one person.

2.11.1B - SMOOTH OPERATION

Each switch shall open and close without appreciable jar or impact and shall be free from any jerky or non-uniform movement.

2.11.1C - DISTORTION FREE FORCE TRANSMITTAL

Each mechanism shall be designed to transmit torque between phases without appreciable distortion, thus, assuring simultaneous opening or closing of all poles of the switch.

2.11.1D - LATCHING

The blades shall be equipped with a positive latching mechanism or detent to mechanically hold the switch in the closed position.

2.11.1E - INADVERTENT SWITCH OPERATION

The switch shall be constructed with over toggle blades or a similar latching arrangement to assure stability in both the open and closed positions.

2.11.2 - TORSIONAL OPERATING HANDLE - ITEM #1

The operating mechanism must be of the torsional type, reciprocating will not be accepted.

2.11.2A OPERATING HANDLE

2.11.2A.1 - LOCATION

The operating handle will be mounted on the structure approximately three (3) feet above the ground level.

2.11.2A.2 - LOCKING PROVISIONS

The operating handle shall be constructed so that it may be padlocked in both the open and closed positions.

2.11.2B - GROUNDING PROVISIONS

A flexible ground strap and associated connection materials shall be provided for grounding of the operating handle.

2.11.2C - OPERATING RODS

Included with the switch shall be a minimum of 40 feet of 1.5-inch I.P.S. Pipe (1.9" O.D.) operating rod with an insulator or insulating section.



2.11.2C.1 - INSULATING ROD

When an insulating rod section is supplied, it shall be a minimum of 6 feet in length and be located in the top section of the operating rod. It shall meet or exceed the strength requirements of the torsional operating mechanism.

2.11.2C.2 - ROD INSULATOR

The rod insulator is supplied shall be 25kV 150kV BIL with a torque rating of 6000 ft-lbs. it shall be located within 1.5 feet of the upper universal joint section and shall have a minimum dry arc distance of 6 inches. It shall meet or exceed the strength requirements of the operating mechanism. Typical section would include upper universal joint - 1-foot operating rod – insulator - 5-to-7-foot rod – lower universal joint

2.11.2C.3 - ROD UNIVERSAL JOINTS

Two universal joint sections shall be supplied to allow the operating rod to run parallel to the pole.

2.11.2C.4 - ROD GUIDE

Rod Guides shall be supplied to allow for spacing not to exceed 10 feet between guides and shall be adjustable to transition between switch and handle.

2.11.2D - INTER-PHASE RODS

2.11.2D.1 - FACTORY ASSEMBLY

All switches shall be shipped with the inter-phase operating rods installed and completely assembled.

2.11.2D.2 - FACTORY ADJUSTMENT

All inter-phase rods shall be factory-adjusted for proper operation of the switch.

2.11.2E - ADJUSTMENTS

The operating rods, couplings, joints, and guides shall allow for height and position adjustments of the switch and the operating handle.

2.11.2F – GEARS AND BEARINGS ASSEMBLY

2.11.2F.1 - GEARS

All gears shall be enclosed in weatherproof cases and packed with grease.



2.11.2F.2 - SWITCH ASSEMBLY BEARINGS

All bearings shall be double sealed maintenance free Stainless Steel with Steel shaft bushings or Oilite bronze bearings.

2.11.2G – RODS AND SUPPORT MEMBERS

All steel members furnished by the manufacturer for mounting of the operating mechanism including steel operating rods shall be fabricated from steel shapes and shall be hot-dipped galvanized after fabrication.

2.11.2H - INTERCHANGEABILITY WITH MOTOR OPERATOR

The operating mechanism shall easily be adoptable with a motor operator mechanism.

2.12 - NAMEPLATE

The following shall be required for the nameplates listed in this specification.

2.12.1 – BASIC SWITCH INFORMATION

Each switch shall be furnished with a nameplate that provides all of the information that is required in Section 7.1 of IEEE 1247.

2.12.2 - INTERRUPTER INFORMATION

The nameplate for each switch shall also include the rated interrupting current as described in Section 7.1.2 of IEEE 1247.

2.13 - ICE AND SLEET

The following shall meet the requirements of IEEE C37.34 Section 10. Ice Tests.

2.13.1 – DESCRIPTION

Each switch shall be so designed that it will operate satisfactorily from either the open or closed position under severe ice and sleet conditions to include up to 3/4-inch ice formation.

2.13.2 - REQUIRED FORCE

The force required to break the blades free of ice formation, will not require undue effort on the part of the operator which includes repeated movement (chopping) of the switch handle to break the ice.

2.14 - DATA REQUIRED FOR EACH SWITCH SHIPPED

The following data shall be included in weatherproof packaging with each switch that is shipped:

- Assembly instructions
- Assembly drawings
- Installation Instructions
- Installation Drawings

2.15 - MANUFACTURER'S QC TESTS



Before delivery of each shipment of equipment, the manufacturer, in accordance with the manufacturer's QC policies, shall test each complete switch assembly.

2.15.1 - NUMBER OF COPIES

One (1) certified copy of the test results shall be furnished to the City upon completion of the tests for each shipment.

APPENDIX B

Signature Page

Price Proposal Forms

Substitution Request Form (If applicable)

SIGNATURE PAGE

CITY OF TACOMA Tacoma Power/Transmission & Distribution

All submittals must be in ink or typewritten, executed by a duly authorized officer or representative of the bidding/proposing entity, and received and time stamped as directed in the **Request for Bids page near the beginning of the specification**. If the bidder/proposer is a subsidiary or doing business on behalf of another entity, so state, and provide the firm name under which business is hereby transacted.

REQUEST FOR BIDS SPECIFICATION NO. PT24-0200F 25kV Pole Mount Gang-Operated Distribution Switches

The undersigned bidder/proposer hereby agrees to execute the proposed contract and furnish all materials, labor, tools, equipment and all other facilities and services in accordance with these specifications.

The bidder/proposer agrees, by submitting a bid/proposal under these specifications, that in the event any litigation should arise concerning the submission of bids/proposals or the award of contract under this specification, Request for Bids, Request for Proposals or Request for Qualifications, the venue of such action or litigation shall be in the Superior Court of the State of Washington, in and for the County of Pierce.

Non-Collusion Declaration

The undersigned bidder/proposer hereby certifies under penalty of perjury that this bid/proposal is genuine and not a sham or collusive bid/proposal, or made in the interests or on behalf of any person or entity not herein named; and that said bidder/proposer has not directly or indirectly induced or solicited any contractor or supplier on the above work to put in a sham bid/proposal or any person or entity to refrain from submitting a bid/proposal; and that said bidder/proposer has not, in any manner, sought by collusion to secure to itself an advantage over any other contractor(s) or person(s).

| Bidder/Proposer's Registered Name | Signature of Person Authorized to Enter Date into Contracts for Bidder/Proposer |
|--|--|
| Address | |
| | Printed Name and Title |
| City, State, Zip | |
| | (Area Code) Telephone Number / Fax Number |
| Authorized Signatory E-Mail Address | |
| | State Business License Number in WA, also known as UBI (Unified Business Identifier) Number |
| E.I.No. / Federal Social Security Number Used on Quarterly Federal Tax Return, U.S. Treasury Dept. Form 941 | |
| | State Contractor's License Number (See Ch. 18.27, R.C.W.) |
| E-Mail Address for Communications | |
| | |
| ddendum acknowledgement #1 | #2 #3 #4 #5 |
| | |

THIS PAGE MUST BE SIGNED AND RETURNED WITH SUBMITTAL.



Material Specification PT24-0200F 25kV 900 Amp Pole-Mounted Gang-Operated Distribution Switches

Bidder

PROPOSAL - PRICING SHEET

| ltem # | Short Description (Refer to Section 2 for technical details) | Tacoma Power MID# | Estimated 3 Year Usage | Delivery Time | Unit Price (Firm for 1 year. Section 1.03) | Total Price FOB Destination (3 yr. Qty X Unit Price) |
|--|--|-------------------------|---------------------------|---------------|---|--|
| 1 | 25kV 900 amp Pole-Mounted Gang-Operated Distribution Switch – Torsional Operating Mechanism | 20966 | 40 | wks | \$ | \$ |
| 2 | 25kV 900 amp Pole-Mounted Gang-Operated Distribution Switch – Alley Arm Configuration | 81004 | 10 | wks | \$ | \$ |
| 3 | 25kV 900 amp Pole-Mounted Gang-Operated Distribution Switch – Vertical / Terminal Pole Configuration | 20965 | 10 | wks | \$ | \$ |
| Subtotal (excluding tax) | | | | | | |
| Sales Tax @ 10.3%, Location Tax Collected: Tacoma, WA (Note Paragraph 1.41 of Standard Terms and Conditions) | | | | | \$ | |
| Total for All Items with Tax: | | | | \$ | | |



PROPOSAL - PRICING SHEET CONT.

FREIGHT CHARGES LESS THAN FULL RELEASE:

A full release for item #1 is assumed to be a quantity of *Four (4)*. Additional freight charges will be allowed on purchase orders of switches considered less than a full release. For the purpose of calculating allowed freight charges the following quote is being requested. The quote below will be used in the bid evaluation. For evaluation purposes only, a quantity of four (4) additional freight charges will be included in the evaluated bid amount.

| Less than full release quantity | Additional Freight Charge |
|---|---------------------------|
| Purchase order for quantity of 2 switches | \$ |

VOLUME DISCOUNT

If a volume discount is offered, provide the quantities at which the price break will be given and the corresponding percentage:

| Quantity | Discount | % |
|----------|----------|---|
| Quantity | Discount | % |
| Quantity | Discount | % |

NOTES:

- 1. Quantities listed on the Proposal Pricing Sheets are an estimate only. Actual quantities will be according to purchase order on an as-needed basis.
- 2. Price adjustments will be made per Section 1.03.3 Annual Pricing Adjustment.
- 3. All prices shall be submitted as F.O.B. Destination, freight prepaid and allowed (included in the unit price).



Material Specification PT24-0200F 25kV 900 Amp Pole-Mounted Gang-Operated Distribution Switches

Bidder

TECHNICAL DATA SHEET

Manufacturer of switch

Manufacturing Location of switch

Catalog No. of switch _____

| Performance Characteristic | Units | Quoted Performance |
|--|------------|-----------------------|
| Total weight of each switch without operating mechanism | Lbs. | |
| Continuous current rating | Amperes | |
| Momentary current rating | Amperes | |
| Three-Time Fault close rating at | Amperes | |
| One-Time Fault close rating at | Amperes | |
| The interrupter is rated to interrupt the full load current of 900 Amperes | Operations | |
| The interrupter is rated to interrupt 50% of full load current (450 Amperes) | Operations | |
| Minimum wet withstand test voltage of switch | KV | |
| Minimum dry withstand test voltage of switch | KV | |
| Rated minimum number of mechanical operations | Operations | |
| | | |

Manufacturer of insulators

Catalog No. of insulators

Quantity of insulators per stack _____

| Performance Characteristic | Units | Quoted Performance |
|--|--------|-----------------------|
| Minimum wet flashover value of complete stack of insulators isolated from switch | KV | |
| Minimum dry flashover value of complete stack of insulators isolated from switch | KV | |
| Impulse withstand kV (BIL) of insulator stack | KV | |
| Minimum creepage distance of complete stack of insulators | inches | |

- 1. State the number of years the manufacturer has been producing products of a similar scope to those outlined in this Specification. See Section 1.01.3 for minimum gualifications allowed.
- 2. Does the manufacturer have in place a quality assurance program that conforms to ISO 9001, ISO 9002, ANSI/ASQC Q91, ANSI/ASQC Q92 or equivalent?

List the standard used :

- 3. If the manufacturer has a quality assurance program that conforms to one of the above standards, is it third party certified?
- 4. Can your firm provide "Manufacturer Representation" as described in section 1.01.3C of this Specification?

Name of Representative :

5. Do all items submitted per this Specification meet and/or exceed the requirements of the Technical Provisions (Section 2)?

Identify below any factors that do not meet the requirements of the Technical Provisions Section 2 of this Specification. Any submittal found to contain a deviation from the Technical Provisions that is not noted may be rejected. Alternate offers shall be submitted as a separate bid and identified per section 1.04.2.

YES

NO

NO

| YES | |
|-----|--|
| NO | |

| YES | |
|-----|--|
| NO | |

| YES | |
|-----|--|

Years

Bidder



PROPOSAL - VENDOR INQUIRY

 Does your firm accept payment by EFT/ACH? (Electronic Funds Transfer (EFT) by Automated Clearing House (ACH))

| Yes | |
|-----|--|
| No | |

2. **Prompt Payment discount offered** Only discounts offered of 20 days or more will be considered for bid evaluation purposes.

| % | |
|------|--|
| Days | |



PROPOSAL - REFERENCES DATA SHEET

(AS DESCRIBED IN SECTION 1.01.3A)

Five (5) Utility references are the absolute minimum allowed

| UTILITY NAME AND ADDRESS | YEAR PRODUCT SOLD | CONTACT NAME | TELEPHONE NUMBER |
|-----------------------------|-------------------------|--------------|---------------------|
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

SUB-VENDOR DATA SHEET (AS DESCRIBED IN SECTION 1.01.4)

| SUB-VENDOR NAME AND ADDRESS | CONTACT NAME | TELEPHONE NUMBER | DESCRIPTION OF WORK PROVIDED |
|-----------------------------------|-----------------|---------------------|---------------------------------|
| | | | |
| | | | |
| | | | |
| | | | |





SUBSTITUTION REQUEST FORM

Specification No. PT24-0200F

Prospective bidders may request the use of substitute equipment below.

All requests must be submitted electronically, via e-mail to HErichsen@cityoftacoma.org no later than five (5) business days prior to the submittal deadline.

| Manufacturer/Model: |
|---|
| Manufacturer Contact Information |
| Name/Title: |
| Phone Number: |
| E-Mail: |
| Describe the differences between the proposed substitution and specified equipment: |
| |
| |
| |
| Please attach documentation from manufacturer that certifies the equipment meets all the criteria outlined in Technical Specifications of this bid specification. |
| Contractor Name: |
| Preparer Name/Title: |
| Mailing Address: |
| Phone Number: |
| E-Mail: |
| Signature: |



INTERNAL USE ONLY

- Approved as Substitute*
- Rejected Equipment Not Acceptable
- Rejected Inadequate Information
- Rejected Request Received After Deadline

*Subject to review and approval of submittal documents

Remarks

| Reviewer Name/Title: | | |
|----------------------|-------|--|
| Signature: | Date: | |

APPENDIX C

PPI Information

Specification No. PT24-0200F



PRODUCER PRICE INDEX- SERIES #335313335313 OTHER ELECTRICAL EQUIPMENT AND COMPONENT MFG.

Below is the trending of the Producer Price Index – Item #335313335313 for reference purposes only.

Data extracted on: October 1, 2024 (4:04:15 PM)

PPI Industry Data

| Series Id: | PCU335313335313 | | | | | |
|--------------------|--|--|--|--|--|--|
| Series Title: | PPI industry data for Switchgear and switchboard apparatus mfg, not seasonally adjusted | | | | | |
| Industry: | Switchgear and switchboard apparatus mfg | | | | | |
| Product: | Switchgear and switchboard apparatus mfg | | | | | |
| Base Date: | 198506 | | | | | |
| Index: Base=198506 | 300- 250- 200- 01/14 01/15 01/16 01/17 01/18 01/19 01/20 01/21 01/22 01/23 01/24 Month | | | | | |

| Year | Jan | Feb | Mar | Apr | Мау | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|------|---------|---------|---------|---------|------------|------------|------------|------------|---------|---------|---------|---------|
| 2014 | 203.5 | 203.7 | 200.1 | 200.7 | 200.0 | 199.1 | 199.9 | 199.4 | 199.4 | 199.5 | 199.5 | 199.5 |
| 2015 | 199.5 | 199.9 | 199.9 | 199.9 | 199.9 | 200.1 | 198.0 | 198.4 | 199.2 | 198.7 | 198.9 | 199.5 |
| 2016 | 199.9 | 198.7 | 198.9 | 198.5 | 199.2 | 199.1 | 199.8 | 201.0 | 200.3 | 200.6 | 199.4 | 199.6 |
| 2017 | 198.9 | 199.0 | 200.7 | 200.5 | 200.3 | 200.4 | 200.3 | 200.3 | 201.2 | 200.4 | 201.4 | 201.7 |
| 2018 | 202.5 | 203.0 | 204.5 | 204.7 | 204.4 | 204.8 | 205.1 | 205.1 | 205.9 | 205.3 | 205.6 | 206.2 |
| 2019 | 208.2 | 208.2 | 210.1 | 210.1 | 210.2 | 210.3 | 211.1 | 212.1 | 214.7 | 214.8 | 214.8 | 214.8 |
| 2020 | 217.2 | 219.6 | 218.4 | 218.4 | 218.4 | 218.9 | 220.6 | 218.4 | 218.8 | 219.3 | 220.4 | 221.1 |
| 2021 | 221.5 | 222.9 | 223.0 | 225.4 | 226.2 | 227.1 | 231.543 | 233.567 | 239.981 | 240.407 | 241.329 | 243.468 |
| 2022 | 245.192 | 259.861 | 261.389 | 263.099 | 265.093 | 274.339 | 278.180 | 286.466 | 287.291 | 288.057 | 289.627 | 291.176 |
| 2023 | 291.764 | 292.058 | 292.638 | 294.956 | 295.637 | 297.963 | 301.004 | 302.695 | 303.187 | 305.577 | 309.728 | 310.443 |
| 2024 | 311.946 | 313.998 | 316.965 | 317.606 | 320.530(P) | 326.514(P) | 328.301(P) | 328.301(P) | | | | |

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P : Preliminary. All indexes are subject to monthly revisions up to four months after original publication.