



Item Number: 12

City Council / Board of Directors

Written Communications

Meeting of: May 2, 2023

Submitted By:

Brenda Hampton, Director of Electric Utility Services

Subject:

Purchase of Five (5) Liquid Filled Padmounted Transformers

Recommendation:

The Honorable City Council approve:

- (1) the purchase of five (5) Liquid Filled Padmounted Transformers from Hitachi Energy USA, Inc. in the amount not to exceed \$542,461.31; and
- (2) a Sole Source arrangement with Hitachi Energy USA, Inc. for the purchase of electric utility distribution equipment.

Fiscal Impact:

This purchase will have a fiscal impact of \$542,461.31. This purchase is budgeted under the VMUS Redundancy Equipment, 4202076-55040-30029, which was appropriated during the FY23 mid-year budget. If approved by Council, the funds to be expended for this purchase may be reimbursed to the City by future customers requiring a transformer for the installation of any new services. The lead time for the transformers are approximately three (3) years, however a purchase order is currently required to place the order. The funds will be encumbered and not expensed until the transformers are received.

Strategic Plan Goal:

Invest in Infrastructure

Background:

Electrical utilities, such as VMUS, are expected to operate a reliable power system with limited outages at a reasonable cost to its customers. Power system reliability is maintained and enhanced when that system has components that are dependable, substitutable, and easily replaceable if they fail. Interoperability is the ability of the system equipment and devices to work together easily and effectively by design. This reliability,

efficiency, and interoperability is achieved through standardization of equipment used on the system.

Standard equipment used on the VMUS system includes transformers manufactured by Hitachi. Pacific Utilities is the direct sales/marketing arm of Hitachi and their quotes come directly from the factory, which eliminates potential mark up in cost of such transformers.

Since 2020, supply chain issues have been exasperated in the United States. Transformer supply from any manufacturer has been impacted significantly. Lead times have grown from 3 months in 2020 to almost 3 years in 2023. The cost of the transformers will not be expensed until the equipment arrives on-site and any transformers used for customer sites will ultimately be paid for by the customer.

Discussion:

VMUS maintains an inventory of spare transformers and other select parts to prevent extended down time in the event of equipment failures in the system. We have one replacement transformer for each size of transformer used in the VMUS system.

Transformer Size (kVA)	In-Service	Current Inventory
500	6	1
750	7	1
1500	14	1
2500	15	1
3000/3750	7	1

When new projects are under development, the engineering design for those projects will specify the appropriate size of transformer for each required service connection. The timeline for these projects to be developed and construction completed is approximately 44-60 weeks. Previously, VMUS has been able to acquire these transformers within that window; however, because of the supply chain issues resulting in an extended lead time of 149 weeks, we would potentially have to delay providing service to new or existing customers by 2 years, or risk not having a transformer in stock if an equipment failure would occur.

With the current level of expected growth at Southern California Logistics Airport ("SCLA") and Foxborough Industrial Park, VMUS believes that we can adequately address emergency repairs, prevent extended down time for customers, and avoid extensive delays in providing new connections for customers with the procurement of one additional transformer of each size.

- One (1) 1500 KVA Liquid Filled Pad Mounted Transformer
- One (1) 3000/3750 KVA Liquid Filled Pad Mounted Transformer
- One (1) 2500 KVA Liquid Filled Pad Mounted Transformer
- One (1) 750 KVA Liquid Filled Pad Mounted Transformer
- One (1) 500 KVA Liquid Filled Pad Mounted Transformer

As noted in the quote (Attachment A) provided by Hitachi, the total price for the five (5) transformers listed above is \$542,461.31. Due to the long lead times, Hitachi has a Price Adjustment Policy ("PAC") included on the quote, which states that prices may be adjusted three (3) months prior to shipment. Should the price increase over the City Manager's purchasing authority, as stated in VMC 2.28.060, VMUS staff will come forth and request additional approval to purchase the transformers from the Victorville City Council.

Pursuant to VMC 2.28.100 this purchase is being done through the sole-source process (Attachment B) with Hitachi. A sole source purchase is defined under VMC 2.28.050(17) as, unique services, and/or supplies and equipment that can be obtained from only one vendor, or one distributor authorized to sell in this area, with singular characteristics or performance capabilities or which have specific compatibility components with existing city products, rendering bidding or quotation requirements futile or meaningless. The standardization for transformers reduces maintenance and training costs, creates efficiencies regarding a part's interchangeability and reduces outage downtime for customers in the event of a transformer failing. Additionally, Pacific Utilities is a subsidiary of the manufacturer, which minimizes the markup costs for the units.

Staff is available for questions.

Attachments: A. Hitachi Energy USA, Inc. Quote
 B. Sole Source Form