CITY OF VINELAND, NJ

A RESOLUTION TO AMEND AND SUPPLEMENT RESOLUTION NO. 2019-375, AUTHORIZING EXECUTION OF AN EXTRAORDINARY, UNSPECIFIABLE SERVICES AGREEMENT WITH ACME INDUSTRIAL INC., STATEN ISLAND, NY FOR THE DIAGNOSIS AND REPAIR OF THE WESTINGHOUSE W251B COMBUSTION TURBINE.

WHEREAS, the City Council of the City of Vineland, on August 27, 2019, adopted Resolution No. 2019-375, entitled "RESOLUTION AUTHORIZING THE EXECUTION OF AN AGREEMENT FOR THE DIAGNOSIS AND REPAIR OF THE WESTINGHOUSE W251B COMBUSTION TURBINE IN ACCORDANCE WITH N.J.S.A. 40A:11-5(1)(i) AS AN EXTRAORDINARY AND UNSPECIFIABLE SERVICE WITH ACME INDUSTRIAL, INC. STATEN ISLAND, NEW YORK"; and

WHEREAS, there exists a need to amend and supplement said Extraordinary, Unspecifiable Service Agreement with Acme Industrial Inc., Staten Island, NY for the Diagnosis and Repair of the Westinghouse W251B Combustion Turbine as authorized by Resolution No. 2019-375; by change order to Purchase Order No. 19-06363 to provide for additional repairs needed on certain other components. These findings could not be determined until the Unit was disassembled and visually inspected; and

WHEREAS, the City Comptroller has certified that funds for the amendment requested herein are available;

NOW, THEREFORE, BE IT RESOLVED by this City Council as follows:

- 1. THAT Resolution No. 2019-375, entitled "RESOLUTION AUTHORIZING THE EXECUTION OF AN AGREEMENT FOR THE DIAGNOSIS AND REPAIR OF THE WESTINGHOUSE W251B COMBUSTION TURBINE IN ACCORDANCE WITH N.J.S.A. 40A:11-5(1)(i) AS AN EXTRAORDINARY AND UNSPECIFIABLE SERVICE WITH ACME INDUSTRIAL, INC. STATEN ISLAND, NEW YORK"; be and the same is hereby amended and supplemented to increase the amount of the contract by \$142,250.00.
- 2. THAT the Purchasing Agent be and the same is hereby authorized to issue an amendatory supplemental change order #1 to Purchase Order No. 19-06363, issued to Acme Industrial, Inc., in the amount of \$142,250.00.

Adopted:

President of Council ATTEST:		
ATTEST:		President of Council
	ATTEST:	



November 4, 2019

REPORT

TO: THE MAYOR AND COUNCIL

RE: Amendatory Supplemental Change Order No. 1

Purchase Order No. 19-06363

Diagnosis and Repair of the Westinghouse W251B Combustion Turbine

Acme Industrial Inc., Staten Island, NY

Dear Mayor and Members of Council:

We are requesting an amendatory supplemental change order to Purchase Order No. 19-06363, issued to Acme Industrial Inc., Staten Island, NY, for the Diagnosis and Repair of the Westinghouse W251B Combustion Turbine. This contract was authorized by Resolution No. 2019-375, adopted by City Council on August 27, 2019.

The change order requested, in the amount of \$142,250.00, will provide for additional repairs needed on certain other components. These findings could not be determined until the Unit was disassembled and visually inspected.

This change order will increase the original contract amount from \$703,995.00 to \$846,245.00.

The amendatory supplemental change for which authorization is herein requested may be authorized in accordance with N.J.A.C. 5:34-4.1 et seq.

Respectfully submitted,

Robert Dickenson

Business Administrator

RD/wr Encl.

REQUEST FOR CHANGE ORDER



FOR:
West Unit 1 Combustion Turbine Repair
PROJECT NAME
TO: BUSINESS ADMINISTRATION
DEPARTMENT: Electric Utility FROM: Joseph L. Colla
This is a request for change order # to Contract # for:
Project Name West Unit 1 Combustion Turbine Repair
Name/Address of Contractor: Acme Industrial Inc., 326-328 Front Street, Staten Island, NY 10304
The change order is necessary because: (use additional pages if necessary to explain your reason and you must attach *documentation to support the necessity of this change order. *(Documentation from contractor, engineer, etc.) Please see documentation from contractor and engineer.
Original Contract Amount: \$\square\$703,995 Amount of this change order: \$\square\$142,250
Previous Change Orders: \$
Total Revised Amount: \$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
APPROVED BY: The Lille Signature

NOTE:

CHANGE ORDERS CANNOT EXCEED 20% OF THE ORIGINAL CONTRACT AMOUNT

Please provide the account number that the change order will be charged to:

Account # ____9-05-55-502-9006-53068

CC: Purchasing Division

Acme Industrial Proposed Contract Change Order

A borescope inspection of the compressor, combustor, and turbine sections of the West Unit 1 combustion turbine was completed in May. The inspection was conducted in order to assess the condition of internal components and identify the need for repair work. The inspection consists of a video of internal components that is produced without disassembly of the combustion turbine. There are limitations on accessibility making a field of view consisting of 100% coverage impossible. Based on the findings of the borescope inspection a decision on disassembly of the combustion turbine to implement repairs is made.

The borescope inspection indicated the Row 1 blades were damaged and would need to be replaced, and the Row 2 and Row 3 blades would need to be repaired. Based on the findings of the borescope inspection VMEU entered into a contract with Turbine Resources for the disassembly and repair. The contract included the replacement of the Row 1 blades, repair of the Row 2 and Row 3 blades and lock plate. It was understood that following disassembly various components that were not accessible during the borescope inspection would be visually inspected to determine their condition to assess the possible need for repair. The inspection indicated limited repair is needed on components such as combustion baskets, transition pieces, fuel nozzles, and lock plate hardware. The repair work is not major surgery and very reasonable given that the last time the combustion turbine was disassembled for repair following a borescope inspection was 21 years ago.

Meetings were held with Acme Industrial to establish the work scope and pricing for the repair work. The attached definitive list of repair work and price for each item was negotiated with Acme Industrial. The aggregate price for the proposed change order is \$142,250 which is a 20.2% increase in the original contract.

Please be advised that ignoring the repair work that is included in the work scope of the proposed change order could place VMEU in the situation that a forced outage occurs soon after the combustion turbine returns to service and is caused by the failure to repair a component that was on the change order list.

ACME INDUSTRIAL, INC.

MARINE AND INDUSTRIAL REPAIRS MACHINE SHOP, CENTRIFUGAL BEARINGS, STEEL FABRICATORS ON-SITE MACHINING, GAS AND OIL SEALS, BREAKER INSULATION

October 11, 2019

City of Vineland ATTN: Joseph Colla

RE: W251B Turbine Overhaul Additional Findings Quote

ACME Industrial is providing the following pricing quotes to address the recommended repairs after the turbine was opened and inspected.

Item 1: The 1st row of blades has been determined to require replacement with refurbished blades. (Option 3)

The old damaged blades will be scrapped and used as welder practice pieces. Turn over to TRI. Credit (\$1,000)

Item 2: The 2nd and 3rd rows of blades are damaged and required weld repair. (Option 3)

Option 3 cost above original PO: \$52,900

Item 3: The turbine disc inner stage seals (stage 2 and 3) are damaged at the horizontal joint bolts due to the removal of frozen bolts. Weld build up the damaged holes using pre and post heat, proper weld procedure for specialized chrome steel. Bore out new bolt holes true and aligned. Thread the lower half holes as necessary. \$10,840

Item 4: Visual cracks at the exit mouth were discovered upon disassembly on the eight (8) transition pieces. The eight (8) transition pieces will be grit blasted and inspected to find all cracks. Cracks will be removed by drilling or grinding. The area will be weld repaired and fared in. A dimensional analysis will be performed to determine the pieces that need to be reshaped. Any transition pieces out of round acceptable dimensions will be reshaped. \$16,880

Item 5: The transition side seals are damaged or missing. Fabricate eight (8) new spring seals as per original. \$12,240

Item 6: Numerous spot welds were found to be cracked on the combustion baskets. The eight (8) combustion baskets will be grit blasted and inspected to find all cracks. Cracks will be removed, and the damaged area will be plug welded. \$14,700

Item 7: The eight (8) fuel nozzles will be disassembled, cleaned, inspected, dimensions adjusted as necessary, assembled and flow test conducted. \$9,820

326-328 Front Street Staten Island, NY 10304 (718) 720-5522 / (718) 273-6942 fax Item 8: Various 2nd and 3rd stage seal pins have come loose and passed through the turbine. Fabricate and supply new seal pins to replace the missing pins. \$2,000

Item 9: The lock plate hardware has signs of weal and damage. Supply all new lock plate hardware to include thirty-two (32) specialized screws for rows 2 and 3 blades and eighty (80) specialized screws for twenty (20) 1st stage locking bars. \$3,870

Item 10: Various turbine casing bolts were seized and sheared or were damaged during disassembly. The recessed bolts were not able to be removed without cutting. Source, supply and or fabricate and replace the damaged bolts. Fabricate heavy duty washers and supply harden all thread bolts and nuts to modify and replace the recessed bolts. \$20,000

TOTAL Additional Items: \$142,250

- *All additional work, if necessary, will be addressed with a Condition Found Report with pricing at the included ACME Industrial Cumberland County T&M Rates.
- *Any delays out of ACME Industrial's control may be additional at the T&M rates.
- *Progress invoicing and payments to be allowed during this project.

Thank you for the opportunity.

ACME Industrial