

RESOLUTION NO. 2021- 605

A RESOLUTION AWARDDING A CONTRACT TO APPLIED CONTROL ENGINEERING, INC., NEWARK, DE FOR THE CONSTRUCTION AND COMMISSIONING SERVICES FOR THE CONTROLS UPGRADE FOR HOWARD M. DOWN UNIT #11 AND CLAYVILLE UNIT #1, IN THE AMOUNT OF \$1,145,530.00.

WHEREAS, the City of Vineland has heretofore advertised for bids for the Construction and Commissioning Services for the Controls Upgrade for Howard M. Down Unit #11 and Clayville Unit #1, in accordance with specifications on file in the office of the Purchasing Agent; and

WHEREAS, on November 9, 2021, bids were received, duly opened and read aloud, being referred to the Business Administrator for tabulation, evaluation, report and recommendation; and

WHEREAS, the Business Administrator has, under date of December 7, 2021 submitted a written report and tabulation of the bids received and has recommended that a contract for the Construction and Commissioning Services for the Controls Upgrade for Howard M. Down Unit #11 and Clayville Unit #1, be awarded to Applied Control Engineering, Inc., Newark, DE, in the amount of \$1,145,530.00, said bid being the lowest qualified bid received and considered in the best interest of the City of Vineland; and

WHEREAS, the following bidder has been disqualified

VENDOR

ABB Incorporated, Cary, NC

REASON

This vendor did not bid on all services required; now, therefore,

BE IT RESOLVED by the Council of the City of Vineland that said contract for the Construction and Commissioning Services for the Controls Upgrade for Howard M. Down Unit #11 and Clayville Unit #1, be and the same is awarded to Applied Control Engineering, Inc., Newark, DE, on their bid in the amount of \$1,145,530.00 said bid being the lowest qualified bid received and considered in the best interest of the City of Vineland, and the Purchasing Agent be and the same is hereby authorized and directed to issue purchase order contract for the same in behalf of the City; and

BE IT FURTHER RESOLVED that the Chief Financial Officer has certified that the funds for the contract to be awarded herein are available.

Adopted:

President of Council

ATTEST:

City Clerk



December 7, 2021

REPORT TO: THE MAYOR AND COUNCIL

RE: Proposals Submitted to the Purchasing Board 11/9/21

Dear Mayor and Members of Council:

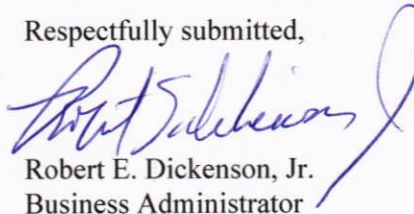
Submitted to you herewith for your consideration is our evaluation of the proposals submitted to the Purchasing Board on November 9, 2021.

CONSTRUCTION AND COMMISSIONING SERVICES FOR THE CONTROLS UPGRADE FOR HOWARD M. DOWN UNIT #11 AND CLAYVILLE UNIT #1

It is the recommendation of the Director of Municipal Utilities, which has the concurrence of the Purchasing Agent and Business Administrator that a contract be awarded to the lowest qualified bidder, Applied Control Engineering, Inc., Newark, DE, in the amount of \$1,145,530.00. The low bidder, ABB Incorporated, Cary, NC did not bid on all services required.

We trust that the above recommendation will receive your favorable consideration and that the recommended resolution will be adopted as presented.

Respectfully submitted,



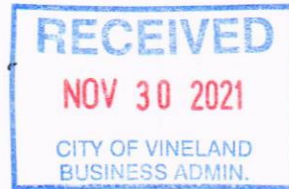
Robert E. Dickenson, Jr.
Business Administrator

RD/wr



EXHIBIT D

BID EVALUATION FORM



DEPARTMENT: EU Engineering Date: 11/19/2021

The undersigned recommends that a contract be awarded for the following:

1. Bid Title: Control System Upgrade for U11 and Clayville

2. Amount to be Awarded: 1,145,530

Encumber Total Award

Encumber by Supplemental Release

3. Engineer's Estimate: 2,000,000

4. Amount Budget: \$ 2,000,000

5. Account Number to be Charged 1-05-55-512-9001-52000 E391X-2 / E342C

6. Date Bids Received: 11/9/2021

7. Date to be Awarded: 12/14/2021

8. Recommended Vendor: Applied Controls Engineering

9. Is Recommended Vendor the Apparent Lowest Bidder? Yes No

10. Comments/Special Instructions:

11. Evaluation Performed by: Emily Smith

12. Approved By: *John Lelle*

13. Attached: (Check-Off List)

- Tabulation of Bids
- Justification for Vendor Recommendation (if applicable)
- Evaluation Data (if applicable)

Send copies to:

Purchasing Department
Business Administration


PURCHASING AGENT RECOMMENDATION AWARD
COV BID # 2021-39

BIDs were received and opened Tuesday, November 9, 2021 at 2:00 PM for Construction & Commissioning Services for the Controls Upgrade for Howard M. Down Unit 11 and Clayville Unit 1 from the following:

ABB Incorporated:	\$ 397,000.00
Applied Control Engineering:	\$1,145,530.00
Thermo Systems LLC:	\$1,507,692.00

Comments: All the mandatory documents were submitted by all bidders.

Recommendation: I will defer award recommendation to the using department as the lowest bid from ABB Inc. is 3 time lower than the next 2 bidders. ABB's submission needs to be carefully reviewed as they may not be providing all the requirements of the specifications. If needed a call to ABB may be needed to verify their low bid. Need to make sure your evaluation has concise justification as to why the low bid will not receive the award if the recommendation is to go with one of the other 2 bidders.


Miguel A. Mercado, QPA
Purchasing Agent

TABULATION OF BIDS
COV BID 2021-39 UNIT 11 & CLAYVILLE DCS UPGRADE
NOVEMBER 9, 2021

Estimated cost \$2,310,00.00

	ABB Incorporated 305 Gregson Dr. Cary, NC 27511	Applied Control Eng. Inc. 700 Creek View Road Neward, DE 19711	Thermo Systems 84 twin Rivers Dr. East Windsor, NJ 08520
Ownership Discl.	YES	YES	YES
Affirm. Action	YES	YES	YES
Check List	YES	YES	YES
Proposal	YES	YES	YES
Addenda	YES	YES	YES
Iran Discl.	YES	YES	YES
Debarment	YES	YES	YES
Sub Cotractors		YES	
TOTAL	\$397,000.00	\$1,145,530.00	\$1,507,692.00

Specifications also received by:

Riggs Distler
ICS
Prime Vendor
New Road Construction
Colliers

Scalfo Electric, Inc.
Concord Engineering
Prime Controls
Construction Journal

WALDRON ENGINEERING & CONSTRUCTION, INC.

November 24, 2021
Emily Smith
Project Manager
55 West St, Vineland NJ
Vineland Municipal Electric Utility

Via: Email
RE: Controls Upgrade Bid Award Recommendation
Attach: Attachment 1- Bid Summary
Attachment 2- Technical Summary
Attachment 3- Technical Clarifications
Attachment 4- Clarifications Responses

Dear Emily:

Thank you for the opportunity to work with your team on the controls upgrade bid process for VMEU. As discussed at our most recent project review meeting, Waldron has reviewed the bids provided from the bid process from those which were approved thru your Purchasing Department. The following bids were reviewed:

- ABB Option 1
- ABB Option 2
- Applied Controls Option 1
- Applied Controls Option 2
- Thermo Systems

Waldron has produced a review of the salient technical features of these packages. We have produced a raw cost summary and an evaluated cost summary. There were several issues which required close examination with the bids from the vendor ABB, and we have ultimately reviewed those as non-responsive technically. This vendor did not include installation by licensed electricians and has not included required hours for commissioning planning/procedures per the specification requirements.

For the bid review, Waldron has prepared two separate comparisons of the vendor prices: a raw cost and an evaluated cost. As was discussed during our project meeting, the evaluated cost summary table (including lifecycle costs) was used to make our final recommendations.

Raw Costs:

Summary (Raw Price Summary)					
Bidder	Project Totals	Off Mean	Cost breakdown		
Thermo Systems	\$1,500,000.00	83.29%	Mean price	\$818,358	
ABB Option 1	\$198,500.00	-75.74%	Median price	\$850,760	
ABB Option 2	\$397,000.00	-51.49%	LQB	\$198,500	
Applied Controls Option 1	\$1,145,530.00	30.98%	High Bid	\$1,500,000	
Applied Controls Option 2	\$850,760.00	3.96%	Tech. Select	\$1,500,000	
Options for Award	Bidder	Total	Delta From LQB	Premium over LQB	
Lowest Raw Bidder	ABB Option 1	\$198,500	\$0	N/A	This system includes a firmware update to existing components, and does not have installation of any new or replaced components. There is no commissioning planning in this proposal as vendor indicated 0 hours
Alternate Selection	ABB Option 2	\$397,000	\$198,500	100%	This system includes an update to the existing 800XA controller, but is still 800 XA and is not upgraded to Symphony, installation of any new or replaced comments does not appear included. There is no commissioning planning as vendor indicated 0 hours
Alternate Selection	Applied Controls Option 1	\$1,145,530	\$947,030	477%	Provide equipment and installation per the bid specs, installation by scalfo electrical
Alternate Selection	Applied Controls Option 2	\$850,760	\$652,260	329%	This system includes new Allen-Bradley processors mounted in the local server rack, AB/profibus modules in existing panels, reuse existing IO modules. Factory Talk SCADA, Scalfo Electrical
Alternate Selection Technical Selection	Thermo Systems	\$1,500,000	\$1,301,500	656%	This system includes Allen Bradley ControlLogix components, and installation by Scalfo Electric

Evaluated Costs:

Summary (Evaluated Price Summary)					
Bidder	Project Totals	Off Mean	Cost breakdown		
Thermo Systems	\$1,500,000.00	13.40%	Mean price	\$1,322,765	
Applied Controls Option 1	\$1,145,530.00	-13.40%	Median price	N/A	
			LQB	\$1,145,530	
			High Bid	\$1,500,000	
			Tech. Select	\$1,500,000	
Options for Award	Bidder	Total	Delta From LQB	Premium over LQB	
Lowest Qualified Bidder	Applied Controls Option 1	\$1,145,530	\$0	0%	Provide equipment and installation per the bid specs, installation by scalfo electrical
Alternate Selection Technical Selection	Thermo Systems	\$1,500,000	\$354,470	131%	This system includes Allen Bradley ControlLogix components, and installation by Scalfo Electric

From this format of evaluated summary there are two recommendations that are made in the Waldron bid review systems, which are as follows:

Technical Selection: The bidder whose package was evaluated as best meeting the Project requirements based on adherence to the technical specification, components offered, past-project history, and value offered (if not LQB).

Lowest Qualified Bidder: The bidder whose package was evaluated as lowest overall Evaluated (20-year) cost while still meeting the technical requirements of the specification.

Emily Smith
VMEU
11/24/21
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Based on the result of our bid review, Waldron makes the following recommendations.

Recommendation type	Recommendation
Technical Selection	<i>Thermo Systems</i>
Lowest Qualified Bidder	<i>Applied Controls Option 1</i>

Thermo Systems represents a very close adherence to the project specifications and over-all intent. We would anticipate a smooth project implementation and execution so long as Thermo Systems implements as per the proposed plan.

I trust this memorandum meets your needs. If you have any questions please do not hesitate to call me at (603) 540-5280

Regards,

Cynthia R Chappell

Cindy Chappell
Project Manager
Waldron Engineering & Construction, Inc.

DRAFT

COV BID #2021-39 JUSTIFICATION FOR VENDOR RECOMMENDATION

Vineland Municipal
Electric Utility

Purpose of Project

Clayville and Unit 11 have existing ABB 800xA control systems. The Operations team has expressed their interest in upgrading the existing control system due to poor customer support, and the inability to receive parts in a timely manner. It would be ideal for the upgraded system to be robust, have reliable product support, and for the procurement of parts to be easy to obtain.

Summary of Bids Received

A. ABB

Option 1

- i. Perform an update to the firmware of the existing ABB 800xA 5.1 to the 800x 6.0.3.
- ii. Does not include installation of new or replaced components.
- iii. There is no commissioning planning in the proposal. Vendor indicated 0 hours.

Option 2

- i. Update the existing 800xA controller, but this update remains an 800xA. This is not upgraded to Symphony. There does not appear to be any comments of installation of any new or replaced components.
- ii. No commissioning planning is stated. The vendor indicated 0 hours.

B. Applied Controls Engineering (ACE)

Option 1

- i. The existing ABB control system will be migrated to a Rockwell Automation FactoryTalk SE SCADA and Historian.
- ii. The existing ABB processor units will be replaced with Rockwell ControlLogix Processors.
- iii. Installation by Scalfo Electrical.

Option 2

- i. Leave the eight (8) existing ABB S800 I/O and associated signal conditioners, power supplies, and terminations will remain in place. The control platform will be Rockwell Automation FactoryTalk View SE and Historian SE over ControlLogix PLC racks at each location.

C. Thermo Systems

- i. The eight (8) control sub-panels will be replaced with eight (8) new Allen Bradley ControlLogix PLC-based platforms.
- ii. The ABB 800xA SCADA and Historian will be replaced with a new Inductive Automation Ignition SCADA and Historian at each site.

COV BID #2021-39 JUSTIFICATION FOR
VENDOR RECOMMENDATION

Vineland Municipal
Electric Utility

- iii. An additional \$21,865 cost will be added to the overall price for them to install fiber from Unit 11 Control Room to Clayville.

VMEU Recommendation

Although the price of the bid submitted by ABB was significantly less than the other two bid packages submitted, we have determined that this bid did not properly respond technically to the bid specification. ABB did not include installation by licensed electricians, required hours for commissioning planning/procedures, and does not describe a plan to install new or replaced hardware as required in the bid specification.

After receiving engineering support from Waldron Engineering, it was determined that the lowest qualified bidder is Applied Control Engineering (Option 1).

Emily H. Smith