

## STATE OF NEW JERSEY

Board of Public Utilities
44 South Clinton Avenue, 9<sup>th</sup> Floor
Post Office Box 350
Trenton, New Jersey 08625-0350
www.nj.gov/bpu/

|   |                  | <u>CLEAN ENERGY</u>          |  |  |
|---|------------------|------------------------------|--|--|
| IN THE MATTER OF THE CLEAN ENERGY PROGRAM<br>AUTHORIZATION OF COMMERCIAL AND INDUSTRIAL<br>PROGRAM ENERGY EFFICIENCY INCENTIVES<br>EXCEEDING \$500,000 – NORTH BRUNSWICK<br>TOWNSHIP BOARD OF EDUCATION | )<br>)<br>)<br>) | ORDER  DOCKET NO. QO20060449 |  |  |
|   |                  |                              |  |  |

#### Parties of Record:

**Dr. Brian Falkowski**, Business Administrator, North Brunswick Township Board of Education **Stefanie A. Brand, Esq., Director**, New Jersey Division of Rate Counsel

## BY THE BOARD:

The New Jersey Board of Public Utilities ("Board" or "BPU") through its New Jersey Clean Energy Program ("NJCEP") includes several individual Commercial & Industrial ("C&I") Energy Efficiency ("EE") Programs targeting the C&I market segments. Eligible applicants may receive rebates for a portion of the cost for installing energy efficient technologies such as lighting, HVAC, and other energy conservation measures ("ECMs"). Incentives are also available for projects involving distributed energy resources. All proposed C&I EE financial incentives and rebates exceeding \$500,000 require explicit Board approval. In the Matter of the Comprehensive Energy Efficiency and Renewable Energy Resource Analysis for the 2009 through 2012 Clean Energy Program --Revised 2012-2013 Programs & Budgets - Revised Rebate Approval Process, BPU Docket No. E007030203, Order dated May 3, 2013.

The Pay for Performance – Existing Buildings ("P4P – EB") Program uses a comprehensive, whole building approach to EE in existing C&I buildings or eligible multifamily facilities. Similar to performance contracting programs offered in other states, this program links incentives directly to energy savings and includes a measurement and verification component to ensure that the estimated savings levels are achieved. Incentives are released upon satisfactory completion of three milestones.

By this Order, the Board considers the application of the North Brunswick Township Board of Education in North Brunswick, New Jersey submitted on September 1, 2019 under the Fiscal Year 2020 ("FY20") P4P – EB Program pursuant to the Energy Efficiency and Renewable Energy Program Plan Filing for FY20 dated June 20, 2019. The project is located at North Brunswick Township High School, 98 Raider Road, North Brunswick, New Jersey. The applicant requests a total financial incentive of \$663,769.26 for a project that will cost \$8,395,720.00.

This application covers a comprehensive suite of ECMs that will greatly reduce North Brunswick High School's energy consumption. Variable refrigerant flow heat pumps ("VRF HPs") will be installed to provide the school with electric heating and cooling, decreasing the school's reliance on fossil fuels. The VRF HP system will include a dedicated outdoor air system with energy recovery ventilation to efficiently supply air for the heat pumps. It will also include system controls and a Building Automation System ("BAS") to give facility managers greater measures of control over temperature setpoints and elements of the VRF HPs. Additionally, the school's outdated rooftop units will be replaced with new, efficient models that include CO<sub>2</sub> demand control ventilation and will be integrated into the BAS to further optimize efficiencies. The BAS will also be expanded to control the temperature setpoints for all existing HVAC equipment not being replaced as part of this project, and the supplemental baseboard heating will have its temperature controls reset to be in line with the rest of the HVAC system. Finally, high efficiency transformers, interior and exterior LEDs, and occupancy lighting controls on interior LEDs will be installed to reduce the school's electric consumption.

The estimated first incentive, for purchase of the equipment, is \$50,000.00. The estimated second incentive, for completed installation of the system, is \$306,884.63. The estimated third incentive, granted after acceptance and confirmation of required performance threshold data, is \$306,884.63. These incentive amounts are within entity cap guidelines. Annually, the proposed project is anticipated to conserve 1,358,436 kWh of electricity and 17,598 therms of natural gas. The project will also reduce peak electricity demand by an anticipated 649 kW per year. Additionally, the project is estimated to result in annual energy cost savings of \$157,976. The payback period without incentives is 53.1 years; when factoring in the incentives, the payback period is reduced to 48.9 years.

While the payback period here is significantly longer than is typical for applications that Staff recommends for approval, Staff believes that the project is worthwhile and should be approved, most notably because the project's ECMs are part of a larger Energy Savings Improvement Program ("ESIP") application. Government facilities, such as K-12 public schools, may pursue large-scale capital improvement projects through ESIP that are paid for by the value of the project's future energy savings. The scope of the ESIP project must result in a positive cash flow and meet ESIP payback requirements of no more than 15 years for projects without a combined heat and power component. While this particular EE application shows an unusually lengthy payback period due to the high cost of some of the proposed measures, the larger ESIP project itself will result in a positive overall cash flow to the North Brunswick Township Board of Education while also resulting in significant energy savings. Staff views this project as representative of the type of comprehensive project that the Board typically incentivizes through the P4P – EB Program and recommends approval of the related application despite the longer than usual payback period.

TRC Environmental Corporation, the Program Manager engaged by the Board to manage the NJCEP P4P – EB program, attested to the accuracy of certain information regarding the project and that the project application adheres to the current terms and conditions of the program. Further, TRC, in its role as the NJCEP Program Administrator, submitted its certification that the incentives were calculated in accordance with the program's policies and procedures, the listed amounts are the true and accurate estimated incentives for which the applicant is eligible, and the documentation supporting estimated energy savings inputs was located, reviewed, and made available to calculate the rebate amounts as required by the program's policies and procedures. Based on these certifications and the information provided by the Program Manager and Program Administrator, Board Staff recommends approval of the above-referenced application.

The Board <u>HEREBY ORDERS</u> the approval of the aforementioned application for the total estimated incentive amount of \$663,769.26 for the North Brunswick Township Board of Education and <u>AUTHORIZES</u> issuance of a standard commitment letter to the applicant identified above, setting forth the terms and conditions of this commitment.

The effective date of this Order is July 25, 2020.

DATED: July 15, 2020

BOARD OF PUBLIC UTILITIES

BY:

JOSEPH L. FIORDALISO

PRESIDENT

MARY-ANNA HOLDEN

lay-Anna Holden

COMMISSIONER

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COMMISSIONER

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COMMISSIONER

ATTEST:

AIDA CAMACHO-WELCH

La Camacho Welch

**SECRETARY** 

IN THE MATTER OF THE CLEAN ENERGY PROGRAM AUTHORIZATION OF COMMERCIAL AND INDUSTRIAL PROGRAM ENERGY EFFICIENCY INCENTIVES EXCEEDING \$500,000 - NORTH BRUNSWICK TOWNSHIP BOARD OF EDUCATION

## **DOCKET NO. QO20060449**

## SERVICE LIST

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The undersigned preparer attests that, to the best of their knowledge and belief, the below information is accurate and the subject project application adheres to the current terms and conditions of the Pay for Performance program.

Signature of Preparer

Valentina Rozanova, TRC- P4P Program Manager

<u>04/29/2020</u>

Date

1. Application Number: 58257

2. Program Name: Pay for Performance – Existing Buildings

3. Application Received: **09/01/2019** (FY20 Filing, dated June **20, 2019**)

4. Customer Contact (name, company, address, phone #):

Dr. Brian Falkowski, Interim Business Administrator 732-289-3000 (ext.53024)

North Brunswick Township Board of Education

Old Georges Road

North Brunswick, NJ 08902

5. Project Name and Address:

North Brunswick Township High School 98 Raider Road North Brunswick, NJ 08902

6. Rebate amount:

 Incentive #1:
 \$ 50,000.00

 Incentive #2 Base + Enhanced:
 \$306,884.63

 Incentive #3 Base + Enhanced:
 \$306,884.63

 Total:
 \$663,769.26

7. Brief description of facility/site:

North Brunswick High School was constructed in 1973 and underwent renovations in 1990 and 2006. The building is a two stories and consists of administrative offices, classrooms, two separate gymnasiums, an indoor swimming pool, cafeteria, media center, an auditorium, and music rooms.

- 8. Brief description of measures:
  - 1) Installation of new Variable Refrigerant Flow heat pumps (HP), which also includes:
    - a. New Dedicated Outdoor Air System equipped with Energy Recovery Ventilation to supply air for VRF HPs
    - b. Outside Air system controls for VRF HPs

- c. Building Automation System to control temperature setpoints for new VRF HPs
- 2) Replacement of Roof Top Units (RTU) for the gyms, library, cafeteria, and common areas, which includes:
  - a. CO2 Demand Control Ventilation for new RTUs
  - b. Building Automation System to control temperature setpoints for new RTUs
- 3) Baseboard supplemental heating temperature control reset
- 4) Building Automation System to control temperature setpoints for all other existing HVAC equipment not being replaced
- 5) Installation of high efficiency transformers
- 6) Installation of interior LEDs
- 7) Installation of exterior LEDs
- 8) Occupancy lighting controls for interior LEDs
- 9. Annual Estimated Energy Savings:
  - 1) 1,358,436 kWh
  - 2) 649 kW demand
  - 3) 17,598 therms natural gas
- 10. Annual Estimate Energy Cost Savings (including simple payback with and without incentive, and IRR):
  - 1) \$157,976
  - 2) Payback: 53.1 years without incentive, 48.9 years with
- 11. Estimated Project Cost:
  - 1) Total Project Cost: \$8,395,720

# **Program Administrator Certification** (New Incentive Commitments > \$500,000)

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| Quality Contr  | ol – TRC Solutions  |  |  |  |             |
| Application No.:   | 58257   |  |  |  |             |
| Applicant:   | North Brunswick   | Township Boar  | d of Ed  |  |             |
| Payee: [   | North Brunswick Township Board of Ed  |  |  |  |             |

Committed Amount: \$663,769.26