



April 29, 2021

Mr. Richard Franzese  
Director of Development  
Renovo Energy Center, LLC  
12011 Sunset Hills Road  
Suite 110  
Reston, VA 20190

Re: Issuance of Plan Approval 18-00033B  
Renovo Energy Center, LLC  
Renovo Generation Station  
Renovo Borough, Clinton County

Dear Mr. Franzese:

Please find enclosed the plan approval for the construction of the Renovo Energy Center, LLC electric generating station located in Renovo Borough, Clinton County. A Title V operating permit will be subsequently issued IF: (1) all conditions incorporated within the plan approval have all been fulfilled, (2) it has been demonstrated to the Department's satisfaction that the project was carried out as proposed in the application and that the operation of the source(s) and any associated air pollution control equipment conforms with the operational information stated in the application and any supplemental information, and (3) it has been demonstrated to the Department's satisfaction that the air contaminant emissions from the source(s) are in compliance with the requirements specified in, or established pursuant to, all applicable Department Rules and Regulations.

Plan Approval 18-00033B was issued and became effective on **April 29, 2021**. The plan approval will expire on **October 28, 2022**. Please include the following identification number with any correspondence to the Department concerning this Plan Approval: 18-00033B.

It is suggested that you carefully review the terms and conditions of this plan approval so that you do not inadvertently violate them. Failure to comply with the terms and conditions of this plan approval constitutes a violation of Section 127.25 of the Department's Rules and Regulation, upon which legal action could be taken, and such failure is also grounds for denial of an operating permit.

This letter also contains the Department's responses to comments contained in the letter from Power Engineers, Inc. dated October 28, 2020, regarding the proposed plan approval. The following is an item-by-item response to the comments as they were received in the

correspondence. The Department's responses to the comments mainly focused on the concerns related to the terms and conditions of the proposed plan approval.

**Response to Comment 1**

Per your request, the typographical errors have been revised in the plan approval.

**Response to Comment 2**

Per your request, the Department has revised Condition #009 of Section C – Site Level Requirements to read as follows: “The permittee shall take corrective action as soon as practicable and fix...”

**Response to Comment 3**

The condition pertaining to the Emission Reduction Credits (ERC) as specified in Condition #018 of Section C has been revised to reflect the facility wide nitrogen oxide (NO<sub>x</sub>) emissions from the proposed facility. The facility-wide NO<sub>x</sub> emissions equate to 356.92 tons in any 12 consecutive month period. Pursuant to 25 Pa. Code Section 127.210, the offset ratio for both NO<sub>x</sub> and VOC emissions is 1.15:1 because the region is designated as a Transport Region. Based on the 1.15 offset ratio REC will be required to obtain 410.46 tons of NO<sub>x</sub> ERCs prior to commencement of operation of any source at the facility.

**Response to Comment 4**

Since these boilers only combust natural gas as proposed by REC, the condition has been revised to record and maintain records of the amount of fuel combusted in each calendar month.

**Response to Comment 5**

Since the proposed source is part of the project, the air contaminant source must comply with the requirements of Lowest Achievable Emission Rate (LAER) and Best available Control Technology (BACT). The NO<sub>x</sub> emission rate 0.033 lb/MMBtu satisfies these requirements and the rate is achieved with low-NO<sub>x</sub> burners. Therefore, the NO<sub>x</sub> emission rate of 0.033 lb/MMBtu will remain the same in the plan approval for the dew point heater (Source 033).

**Response to Comment 6**

The potential SO<sub>2</sub> emission rate as proposed by REC will be 0.001336 lb/MMBtu for each combustion turbine (CT) with duct burner (DB) (Sources P101 and P102). This equates to 5.94 lb/hr based on the 4,448 MMBtu/hr rated heat input for the both the CT and DB. Therefore, the SO<sub>x</sub> emission rate of 5.94 lb/hr while firing on natural gas will be included in the plan approval.

Vendor data from GE stated that the formaldehyde emission rate equates to 0.58 lb/hr for Sources P101 and P102. Therefore, the formaldehyde rate of 0.58 lb/hr will remain the same in the plan approval.

**Response to Comment 7**

Vendor data from GE stated that the emission rate for each CT and DB of Sources P101 and P102 equates to 894 lb/MW-hr. Therefore, the CO<sub>2</sub> emission rate of 894 lb/MW-hr from Sources P101 and P102 will remain the same in the plan approval.

**Response to Comment 8**

Per your request, the Department is adding the language to Condition #006 of Source P101 as "...shall only be fired on ULSD fuel no more than 720 hours of steady state, not including startup and shutdown hours, in any 12 consecutive month period." The condition has been revised in the plan approval.

**Response to Comment 9**

The limits as proposed in the plan approval were determined from the manufacturer vendor emission rates per each SUSD event for both natural gas and ULSD. In addition, REC utilized the emissions from the manufacturer vendor emission rates for the modeling analysis. There would be an increase of each air pollutant thus requiring REC to perform another modeling analysis for the project. Therefore, the condition will remain the same in the plan approval.

**Response to Comment 10**

Please see the Department's response to Comment 6.

**Response to Comment 11**

Please see the Department's response to Comment 7.

**Response to Comment 12**

Please see the Department's response to Comment 9.

**Response to Comment 13**

Please see the Department's response to Comment 8.

**Response to Comment 14**

The condition has been revised to only include Source P104.

**Response to Comment 15**

The condition has been revised to only include Source P104.

**Response to Comment 16**

Per your request, the fire pump engine (Source P104) rated brake-horsepower (bhp) has been revised to 250 bhp in the plan approval.

**Response to Comment 17**

Per your request, Condition #003 of Source P105 has been revised to the correct description of the tanks, "...two (2) 26,000-gallon aqueous ammonia storage tanks and two (2) 20,000-gallon lube oil storage tanks..." in the plan approval.

**Response to Comment 18**

The opacity limitation as specified in Sources P103 and P104 have been determined to satisfy the Prevention of Significant Deterioration (PSD) requirements of 40 CFR Part 52.21 and 25 Pa. Code Section 127.83 and Best Available Technology requirements of 25 Pa. Code Sections 127.1 and 127.12. Therefore, the conditions will remain the same in the plan approval.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S. Chapter 5A, to the Environmental Hearing Board, Second Floor, Rachel Carson State Office Building, 400 Market Street, PO Box 8457, Harrisburg, PA 17105-8457, 717.787.3483. TDD users may contact the Board through the Pennsylvania Relay Service, 800.654.5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at 717.787.3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

**IF YOU WANT TO CHALLENGE THIS ACTION, YOUR APPEAL MUST REACH THE BOARD WITHIN 30 DAYS. YOU DO NOT NEED A LAWYER TO FILE AN APPEAL WITH THE BOARD.**

**IMPORTANT LEGAL RIGHTS ARE AT STAKE, HOWEVER, SO YOU SHOULD SHOW THIS DOCUMENT TO A LAWYER AT ONCE. IF YOU CANNOT AFFORD A LAWYER, YOU MAY QUALIFY FOR FREE PRO BONO REPRESENTATION. CALL THE SECRETARY TO THE BOARD (717.787.3483) FOR MORE INFORMATION.**

We would like to extend our appreciation to Power Engineers, Inc. staff for their continued cooperation throughout the plan approval application review process. Especially, we would like to thank Mr. Tim Donnelly of Power Engineers, Inc. for the considerable effort he put forth in providing the requested information in a timely manner.

If you have any questions concerning the terms and conditions of the operating permit, please contact David M. Shimmel, P.E., Chief, New Source Review Section, Air Quality Program, at 570-327-3568.

Sincerely,

*Muhammad Q. Zaman*

Muhammad Q. Zaman  
Environmental Program Manager  
Air Quality Program

Enclosure

File: Renovo Energy Center, FAC, FAC OP, 18-00033  
Cc: Central Office, Air Quality Permits  
US EPA Region III