

CAITHNESS LONG ISLAND, LLC

*c/o Caithness Corporation
29th Floor
565 Fifth Avenue
New York, New York 10017-2478*

December 30, 2019

Ms. Suilin Chan
Chief, Air Permitting Section
US EPA Region 2
Clean Air Act Permitting
290 Broadway
New York, NY 10007-1866
(212) 637-4019

RE: Re-submittal of Petition Request to Remove PSD requirements for SO₂ and H₂SO₄ for Combustion Turbine Unit 1 (Unit 0001), Auxiliary Boiler and Emergency Diesel Fire Pump units at Caithness Long Island Energy Center, (Facility ID (ORISPL) 56234), PSD Permit, dated April 07, 2006, and Title V Permit 1-4722-04426, due to change in New York State regulations regarding sulfur content in distillate fuel oil.

Dear Ms. Chan:

As Designated Representative for the Caithness Long Island Energy Center (CLIEC) and for Caithness Long Island LLC (CLI), I request the revision of the 2006 PSD permit to make it consent with the New York State Department of Environmental Conservation's (NYSDEC) desire to remove current PSD permit requirements relating to SO₂ and H₂SO₄ emissions from the referenced facility's Title V permit. This request to modify the referenced PSD permit, is being raised at this time due to several reasons. First, the maximum sulfur content in distillate fuel oil (no. 2) in New York was reduced from 0.04 % to 0.0015% sulfur (ultra-low sulfur) because NYSDEC is currently working with CLI to renew its Title V permit. Second, the NYSDEC is in the process of renewing the facility's Title V permit and this requested modification would allow the permit to be renewed incorporating current and more restrictive, requirements for use of distillate fuel on-site.

The basis for this request is a change in a state regulation that requires the facility to use distillate fuel oil (no. 2 distillate) with a lower sulfur content than was required when the facility was initially permitted. Calculation of potential to emit (PTE) emissions for the facility under conditions reflecting the new NYSDEC sulfur content mandate demonstrates that that SO₂ and H₂SO₄ emissions are now significantly below the PSD thresholds.

The Caithness Long Island Energy Center (CLIEC) permitted emission units consist of a Siemens – Westinghouse 501 F combustion turbine (CT) with a supplementary natural gas firing duct burner in its HRSG, an auxiliary boiler (AB) unit and an emergency diesel fire pump (EDFP). The CT and the AB each have dual fuel firing capability. However, distillate fuel is only used as a back-up fuel for the CT and AB units and is limited by the Title V permit (no more than 720 hours annually on a

rolling basis). The EDFP fires only distillate fuel oil and it also has a limited operating hour and annual fuel consumption quantity. The facility is also subject to both the Acid Rain Program (ARP) and the Cross-State Air Pollution Rule (CSAPR). CLIEC is required to continuously monitor and report sulfur dioxide (SO₂) and heat input measure for natural gas and distillate fuel for Unit 0001, in accordance with 40 CFR Part 75. As noted, the CLIEC facility is currently undergoing renewal of its Title V permit. Since the facility was originally permitted, New York State regulations regarding sulfur content in fuel used as stationary sources have become more stringent.

The facility is also now subject to 6 NYCRR 225-1.2(h), which specifies that stationary combustion installations that “fire distillate oil including number two heating oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016.” This requirement is being incorporated into the renewed Title V permit for the facility. When CLIEC was originally permitted, it had the ability to fire distillate fuel oil containing sulfur up to 400 ppm (0.040%). Recalculation of sulfur emissions PTE for the facility using the 15 ppm (0.0015%) sulfur distillate fuel oil lowers the annual PTE for SO₂ and H₂SO₄ emissions to 11.0 tons and 4.1 tons, respectively. These values are well below their respective PSD thresholds of 40 and 7 tons. This information is provided in our original Petition request dated May 29, 2019 as Attachment 1.

Operational data for distillate oil consumption at the facility was provided in Attachment 2 of the May 29, 2019 request. Further, the site’s distillate fuel oil supply, which is stored on-site in a 750,000 fuel oil storage tank is fully compliant with NYSDEC’s new sulfur content mandate (analysis attached as Attachment 3 of the May 29, 2019 petition).

Based on the foregoing, the new more stringent NYSDEC sulfur content requirement dramatically lowers the PTE for SO₂ and H₂SO₄ at the CLIEC facility such that PSD thresholds for these emissions cannot be triggered. Further, the more stringent NYSDEC requirement ensures that removal of the PSD conditions for SO₂ and H₂SO₄ could not result in any backsliding in violation of principles governing implementation of the Clean Air Act. Rather, it will allow NYSDEC to streamline the Title V permit conditions in reliance on its more stringent distillate oil sulfur content requirement.

Attached with this letter, are the following:

1. A summary table of the 2006 PSD Permit identifying by page and section number those sections and existing language Caithness would like to see either removed or modified to reflect the fact that CLIEC must comply with a lower sulfur content in its distillate fuel.
2. A “red-line” copy of the 2006 PSD Permit, indicating sections of the PSD Permit that Caithness believes should be either removed or modified.
3. EPA’s letter of November 5, 2019 requesting that CLI specifically identify the conditions within the CLIEC 2006 PSD permit that Caithness seeks to have removed.
4. A copy of the original May 29, 2019 Petition request to EPA, with all attachments, for the modification of the 2006 PSD Permit that would remove or

modify SO2 and H2SO4 requirements. This request is being made based upon the fact that New York will only allow the sale of No. 2 Distillate Fuel that is now considered as ultra-low sulfur fuel containing 0.0015% sulfur, or less.

If there are any questions or concerns regarding this matter, please feel free to contact me at any time. My direct telephone number is 484 553-0932 and my e-mail address is tgrace@caithnessenergy.com

For Caithness Long Island LLC

Sincerely



Thomas A. Grace

Director – Environmental, Health and Safety
Caithness Services
Designated Representative

w/attach

cc: Mike Jennings (michael.jennings@dec.ny.gov)
Environmental Engineer, Source Control Technology Section
Division of Air Resources, NYSDEC
625 Broadway
Albany, NY 12233-3258

Michael Cronin (michael.cronin@dec.ny.gov)
Director, Bureau of Stationary Source
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Denise Prunier (denise.prunier@dec.ny.gov)
Chief, Permitting and Compliance Section
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625 Broadway
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Viorica Petriman (petriman.viorica@epa.gov)
Environmental Engineer
USEPA Region 2
Permitting Section
290 Broadway
New York, NY 10007-1866

CLIEC PSD Permit Modification proposal			
page	section	existing language	proposed language/ change
6	VII .A. 1	low sulfur distillate	ultra-low sulfur distillate
6	VII .A. 4	sulfur content of distillate oil	sulfur content of ultra-low sulfur distillate oil
6	VII.A.4	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
6	VII.A.5	distillate oil burned in the CT	ultra-low distillate oil burned in the CT
6	VII.B.4	sulfur content of the distillate oil	sulfur content of the ultra-low sulfur distillate oil
6	VII.B.4	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
6	VII.B.5	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
7	VII.D. 1	low sulfur fuel oil with a maximum sulfur content of 0.04% by weight	ultra-low sulfur fuel oil with a maximum sulfur content of 0.0015% by weight
7	VII.D.2	fuel oil	ultra-low sulfur fuel oil
9	VIII.A.4.c	oil fired emission rate for SO2 with no supplemental firing of HRSG shall not exceed 88.9 lb/hr and 0.042 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.4.d	oil fired emission rate for SO2 with supplemental firing of HRSG shall not exceed 89.3 lb/hr and 0.036 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.5.c	oil fired emission rate for H2SO4 mist with no supplemental firing of HRSG shall not exceed 31.8 lb/hr and 0.015 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.5.d	oil fired emission rate for H2SO4 mist with supplemental firing of HRSG shall not exceed 31.9 lb/hr and 0.0128 lb/MMBtu	Can this be removed, since facility now under PSD limit.
11	VIII.B.4.b	SO2 emissions during fuel oil firing of the AB shall be controlled through the use of low sulfur fuels and shall not exceed 0.041 lb/ MMBtu	Can this be changed to just read SO2 emissions shall be control by use of ultra-low sulfur distillate fuel. Or discarded entirely?

12	VIII.D.4	SO2 emissions shall be controlled by the use of low sulfur fuels and shall not exceed 0.040 lb/MMBtu.	Can this be changed to just read that SO2 emissions from the use of the Emergency Diesel fire pump shall be controlled by use of ultra-low sulfur distillate fuel oil. Or discarded entirely
17	XII. 2	CLIEC shall not accept any distilled fuel oil with a sulfur content greater than 0.04% by weight ...	Either delete or reword as , CLIEC shall not accept any distilled fuel oil with a sulfur content greater than 0.0015 % by weight.
17	XIII. 1.a	gallons of fuel must be kept for the CT, AB and EDFP	Is this still necessary here since the SO2 level is now beneath PSD threshold?
18	XIII.1.i	All fuel sampling results, the distillate fuel oil supplier's or CLIEC's analyses verifying that the sulfur content is no greater than 0.04%.	Can this be removed since the site now uses ultra-low sulfur distillate fuel oil and is below the PSD threshold?



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

APR 07 2006

Ross D. Ain
Senior Vice President
Caithness Long Island, LLC.
565 Fifth Avenue, 29th Floor
New York, NY 10017

Re: Prevention of Significant Deterioration of Air Quality (PSD)
Caithness Long Island Energy Center

Dear Mr. Ain:

On October 5, 2005, the U.S. Environmental Protection Agency (EPA), Region 2 Office, received a complete PSD application from Caithness Long Island, LLC to construct a new 346 MW combined cycle electric generating facility in Brookhaven, New York known as the Caithness Long Island Energy Center (CLIEC).

On December 16, 2005, EPA issued a preliminary determination, subject to public review, to approve the PSD permit. The 30-day public comment period for this draft permit commenced upon publication of EPA's preliminary determination in *Newsday* on Monday, December 19, 2005 and extended until Wednesday, January 18, 2006. The EPA received comments submitted by TRC Environmental Corporation on your behalf dated January 19, 2006. Since these comments were submitted after the close of the public comment period, they are not considered timely. EPA has, however, reviewed your comments, responded, and where appropriate made changes to the permit conditions as reflected in this final permit. However, while we have exercised our discretion to consider your comments, they are not timely and cannot serve as a basis for appeal.

The EPA concludes that this final permit meets all applicable requirements of the PSD regulations codified at 40 CFR §52.21, and the Clean Air Act (the Act). Accordingly, I hereby approve CLIEC's PSD permit for a 346 MW electric generating facility. This letter and its attachment represent EPA's final permit decision. The permit conditions are delineated in Enclosure I. Enclosure II contains EPA's response to comments on the draft permit.

This final permit decision may be challenged under the Consolidated Permit Regulations, codified at 40 C.F.R. Part 124 which apply to EPA's processing of this permit decision. However, since no comments were submitted during the public comment period administrative review is

available only to the extent of the changes from the draft to the final permit. Any petition for review under this part must be made within thirty (30) days of the service of notice of the final permit decision. The petition for review shall include a statement for the reasons supporting that review and shall adhere to the standards outlined in 40 C.F.R. § 124.19(a)(1) and (2).

All persons petitioning for administrative review must file the original and one (1) copy of the petition for review with the Environmental Appeals Board at the following address:

For Regular Mail:

U.S. Environmental Protection Agency
Clerk of the Board, Environmental Appeals Board (MC 1103B)
Ariel Rios Building
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460-0001

For Hand-Carried and Federal Express Mail:

Colorado Building
1341 G. Street, NW
Suite 600
Washington, D.C. 20005

Phone number: (202) 233-0122

A copy of the administrative review request must also be sent to:

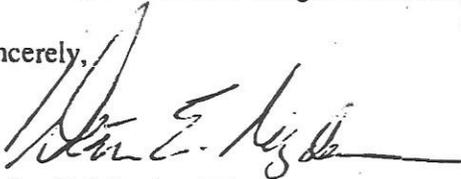
Steven C. Riva, Chief
Permitting Section
Air Programs Branch
U.S. Environmental Protection Agency
Region 2
290 Broadway – 25th Floor
New York, NY 10007-1866
(212) 637-4074

For purposes of judicial review under the Act, final agency action occurs when a final PSD permit is issued or denied and the administrative review procedures are exhausted. Notice of the Agency's final action with respect to this permit will be published in the Federal Register. Judicial review of this final action is available by the filing of a petition for review in the United States Court of Appeals for the appropriate circuit within 60 days of the date of the Federal Register notice. Only those persons who petitioned EPA under the administrative procedures may petition for review in the Court of Appeals. Under section 307(b) of the Act, this final agency action shall not be subject to judicial review in civil or criminal proceedings for enforcement.

Since changes were made to the draft permit, this final permit will become effective 30 days after the service of notice unless review is requested under §124.19. If a petition for review of the final agency action is filed, the permit will not become effective until a decision on the petition is rendered by the Environmental Appeals Board.

If you have any questions regarding this letter, please call Mr. Steven C. Riva, Chief, Permitting Section, Air Programs Branch, at (212) 637-4074.

Sincerely,

A handwritten signature in black ink, appearing to read "Walter E. Mugdan". The signature is written in a cursive style with a long horizontal stroke at the end.

Walter E. Mugdan, Director
Division of Environmental Planning and Protection

Enclosures

cc: Kevin Kispert, NYSDEC
Kevin Maher, TRC

**bcc: S. Riva, DEPP-APB
C. Adduci, DEPP-APB
A. Coulter, DEPP-APB
F. Mills, ORC-AB
J. Siegel, ORC-AB
File**

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The Caithness Long Island Energy Center (CLIEC) Project is subject to the following conditions.

I. Permit Expiration

This PSD Permit shall become invalid if construction:

- A. has not commenced (as defined in 40 CFR Part 52.21(b)(9)) within 18 months of the effective date of this permit;
- B. is discontinued for a period of 18 months or more; or
- C. is not completed within a reasonable time.

II. Notification of Commencement of Construction and Startup

The Regional Administrator (RA) shall be notified in writing of the anticipated date of initial startup (as defined in 40 CFR Part 60.2) of the facility not more than sixty (60) days nor less than thirty (30) days prior to such date. The RA shall be notified in writing of the actual date of both commencement of construction and startup within fifteen (15) days after such date.

III. Plant Operations

All equipment, facilities, and systems installed or used to achieve compliance with the terms and conditions of this PSD Permit, shall at all times be maintained in good working order and be operated as efficiently as possible so as to minimize air pollutant emissions. The continuous emission monitoring systems required by this permit shall be on-line and in operation 95% of the time when the emissions sources are operating. CLIEC shall demonstrate initial and continuous compliance with the operating, emission and other limits according to the performance testing and compliance assurance and all other requirements of this permit.

IV. Right to Entry

Pursuant to Section 114 of the Clean Air Act (Act), 42 U.S.C. §7414, the Administrator and/or his/her authorized representatives have the right to enter and inspect for all purposes authorized under Section 114 of the Act. The permittee acknowledges that the Regional Administrator and/or his/her authorized representatives, upon the presentation of credentials shall be permitted:

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- A. to enter at any time upon the premises where the source is located or in which any records are required to be kept under the terms and conditions of this PSD Permit;
- B. at reasonable times to access and to copy any records required to be kept under the terms and conditions of this PSD Permit;
- C. to inspect any equipment, operation, or method required in this PSD Permit; and
- D. to sample emissions from the source relevant to this permit.

V. Transfer of Ownership

In the event of any changes in control or ownership of facilities to be constructed, this PSD Permit shall be binding on all subsequent owners and operators. The applicant shall notify the succeeding owner and operator of the existence of this PSD Permit and its conditions by letter, a copy of which shall be forwarded to the Regional Administrator.

VI. Operating Requirements and Stack Parameters

A. **Combustion Turbine and Duct Burner**

- 1. The Siemens Westinghouse 501F combustion turbine shall be limited to a maximum design heat input rate of 2,221 million British Thermal Units per hour (mmBtu/hr) when firing natural gas and 2,125 mmBtu/hr when firing distillate oil, based on the higher heating value (HHV) of the fuel.
- 2. Except for startup and shutdown, the combustion turbine shall only be allowed to operate at or above 75% load.
- 3. While the combustion turbine (CT) is firing natural gas, the Heat Recovery Steam Generator (HRSG) may combust natural gas in the duct burner up to a maximum heat capacity of 494 mmBtu/hr, HHV.
- 4. While the combustion turbine is firing fuel oil and during fuel switching, the HRSG may combust natural gas in the duct burner up to a maximum heat input capacity of 369 mmBtu/hr, HHV.
- 5. The duct burner may operate a maximum of 4,380 hours during any 12-month consecutive period.

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6. For the purposes of this PSD permit, startup and shutdown shall be defined as:
- a. Startup for the combustion turbine is defined as the period beginning with the initial firing of fuel in the combustion turbine combustor and ending at the time when the load has increased to 75% of base load. Startups with the auxiliary boiler are defined as those starts in which the auxiliary boiler is operating and the air cooled condenser pressure is less than 15 inches of mercury absolute, the HP drum pressure is greater than or equal to 75 pounds per square inch (psig) and the IP drum pressure is at least 35 psig.
 - b. For any startup without the auxiliary boiler, the duration shall not exceed 199 minutes for any given cold startup (>48 hours since shutdown), 199 minutes for any given warm startup (between 12 to 48 hours since shutdown) and 102 minutes for any given hot startup (12 hours or less since shutdown). For any startup with the auxiliary boiler, the duration shall not exceed 115 minutes for any given cold startup or warm startup and 102 minutes for any given hot startup.
 - c. Shutdown for the combustion turbine is defined as the period of time beginning with the load decreasing from 75% of peak rated load and ending with the cessation of operation of fuel flow to the combustion turbine. The duration of any shutdown shall not exceed 90 minutes.
 - d. During startup and shutdown of the combustion turbine, CLIEC shall comply with all mass emission limits in Section VIII of this permit except for NO_x, CO and PM/PM-10. CLIEC shall also comply with the opacity limit during each startup and shutdown. For NO_x, CO and PM/PM-10, CLIEC must comply with the emission limits specified in items e through l below during startup and shutdown. The total number of startup-shutdown cycles for the combustion turbine shall be limited to 260 during any consecutive 12-month period, out of which a maximum of 20 can be on oil.
 - e. For natural gas startups without the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 488 lbs, 2,813 lbs and 75 lbs, respectively for cold and warm startups. Compliance shall be determined by taking the total pounds per event as measured by the CEMS for NO_x and CO.

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- f. For natural gas startups with the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 191 lbs, 1,083 lbs and 51 lbs, respectively for cold and warm startups. Compliance shall be determined by taking the total pounds per event as measured by the CEMS for NO_x and CO.
 - g. For natural gas startups with or without the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 127 lbs, 891 lbs and 26 lbs, respectively for a hot startup.
 - h. For fuel oil startups without the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 1,136 lbs, 3,757 lbs and 745 lbs, respectively for cold and warm startups. Compliance shall be determined by taking the total pounds per event as measured by the CEMS for NO_x and CO.
 - i. For fuel oil startups with the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 413 lbs, 1,781 lbs and 557 lbs, respectively for cold and warm startups. Compliance shall be determined by taking the total pounds per event as measured by the CEMS for NO_x and CO.
 - j. For fuel oil startups with or without the auxiliary boiler, NO_x, CO and PM/PM-10 total emissions shall be limited to 277 lbs, 1,520 lbs and 266 lbs, respectively for a hot startup.
 - k. For each shutdown while the combustion turbine is firing fuel oil, NO_x, CO and PM/PM-10 total emissions shall not exceed 156 lbs, 850 lbs and 113 lbs, respectively.
 - l. For each shutdown while the combustion turbine is firing natural gas, NO_x, CO and PM/PM-10 total emissions shall not exceed 77 lbs, 511 lbs and 12 lbs, respectively.
7. At all times, including periods of startup, shutdown, and malfunction, CLIEC shall use best practices to maintain and operate the combustion turbine, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to EPA and/or NYSDEC which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the plant.

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8. Exhaust gases from the combustion turbine/duct burner shall be directed to a single stack that rises to 170 feet above grade with a flue diameter of 20 feet.

B. Auxiliary Boiler

1. The auxiliary boiler shall be limited to a maximum design heat input rate of 29.4 million British Thermal Units per hour (mmBtu/hr) when firing natural gas and 28.0 mmBtu/hr when firing fuel oil.
2. The auxiliary boiler may operate up to a maximum of 4,800 hours during any 12-month consecutive period.
3. As part of the total 4,800 hours of operation, the auxiliary boiler may fire fuel oil for a maximum of 400 hours during any 12-month consecutive period.
4. Exhaust gases from the auxiliary boiler shall be directed to a stack that rises to 170 feet above grade with a flue diameter of 2.0 feet.

C. Fuel Gas Heater

1. The fuel gas heater shall be limited to a maximum design heat capacity of 4.32 million British Thermal Units per hour (mmBtu/hr).
2. Exhaust gases from the fuel gas heater shall be directed to a stack that rises to 26 feet above grade with a flue diameter of 1.33 feet.

D. Emergency Diesel Fire Pump

1. The emergency diesel fire pump shall be limited to a maximum design heat capacity of 2.24 million British Thermal Units per hour (mmBtu/hr).
2. The emergency diesel fire pump may operate up to a maximum of 4 hours per day and 375 hours during any 12-month consecutive period.
3. Exhaust gases from the emergency diesel fire pump shall be directed to a stack that rises to 7.25 feet above grade with a flue diameter of 0.5 feet.

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VII. Fuel Requirements

A. Combustion Turbine and Duct Burner

1. The combustion turbine shall only burn natural gas and/or low sulfur distillate oil.
2. The duct burner shall only burn natural gas.
3. The natural gas burned in the combustion turbine and duct burner shall have a maximum sulfur content of 0.35 grains per 100 standard cubic feet (gr/dscf).
4. The sulfur content of the distillate oil burned in the combustion turbine shall not exceed 0.04 percent by weight.
5. The maximum amount of distillate oil burned in the combustion turbine shall not exceed 10,928,571 gallons during any consecutive 12-month period.

B. Auxiliary Boiler

1. The auxiliary boiler shall only burn natural gas and/or low sulfur distillate oil.
2. With the exception of turbine startups, the auxiliary boiler shall not operate simultaneously with the combustion turbine.
3. The natural gas burned in the auxiliary boiler shall have a maximum sulfur content of 0.35 grains per 100 standard cubic feet.
4. The sulfur content of the distillate oil burned in the auxiliary boiler shall not exceed 0.04 percent by weight.
5. The maximum amount of distillate oil burned in the auxiliary boiler shall not exceed 95,714 gallons during any 12-month consecutive period.

C. Fuel Gas Heater

1. The fuel gas heater shall only burn natural gas with a maximum sulfur content of 0.35 grains per 100 standard cubic feet.

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D. Emergency Diesel Fire Pump

1. The emergency diesel fire pump shall burn low sulfur fuel oil with a maximum sulfur content of 0.04 percent by weight.
2. The maximum amount of fuel oil burned in the fire pump shall not exceed 6,000 gallons during any 12-month consecutive period.

VIII. Emission Limitations

A. Combustion Turbine and Duct Burner

1. Oxides of Nitrogen (NO_x)

- a. The concentration of NO_x in the exhaust gas during natural gas firing of the CT both with and without supplemental firing of the HRSG shall not exceed 2.0 parts-per-million by volume on a dry basis (ppmvd), corrected to 15% oxygen and 0.0076 lbs/mmBtu.
- b. The NO_x concentration in the exhaust gas during fuel oil firing of the CT with no supplemental firing of the HRSG shall not exceed 6.0 ppmvd, corrected to 15% oxygen and 0.025 lbs/mmBtu.
- c. The NO_x concentration in the exhaust gas during fuel oil firing of the CT and supplemental firing of the HRSG shall not exceed 6.8 ppmvd, corrected to 15% oxygen and 0.027 lb/mmBtu.

2. Carbon Monoxide (CO)

- a. The concentration of CO in the exhaust gas during natural gas firing of the CT and no supplemental firing of the HRSG shall not exceed 2.0 ppmvd, corrected to 15% oxygen and 0.0047 lb/mmBtu.
- b. The concentration of CO in the exhaust gas during natural gas firing of the CT with supplemental firing of the HRSG shall not exceed 2.0 ppmvd, corrected to 15% oxygen and 0.0046 lb/mmBtu.

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- c. The concentration of CO in the exhaust gas during fuel oil firing of the CT at loads between 90% and 100% load and no supplemental firing of the HRSG shall not exceed 2.0 ppmvd, corrected to 15% oxygen and 0.0050 lb/mmBtu.
 - d. The concentration of CO in the exhaust gas during fuel oil firing of the CT at loads greater than or equal to 75% and less than 90% load with no supplemental firing of the HRSG shall not exceed 4.0 ppmvd, corrected to 15% oxygen and 0.010 lb/mmBtu.
 - e. The concentration of CO in the exhaust gas during fuel oil firing of the CT and supplemental firing of the HRSG shall not exceed 4.0 ppmvd, corrected to 15% oxygen and 0.010 lb/mmBtu.
3. Particulate Matter/Particulate Matter with an aerodynamic diameter of less than or equal to 10 micrometers (PM/PM-10)
- a. The mass emission rate of PM/PM-10 in the exhaust gas during natural gas firing of the CT and no supplemental firing of the HRSG shall not exceed 11.7 lb/hr and 0.0055 lb/mmBtu.
 - b. The mass emission rate of PM/PM-10 in the exhaust gas during natural gas firing of the CT and supplemental firing of the HRSG shall not exceed 17.0 lb/hr and 0.0066 lb/mmBtu.
 - c. The mass emission rate of PM/PM-10 in the exhaust gas during fuel oil firing of the CT at loads between 90% and 100% load and no supplemental firing of the HRSG shall not exceed 98.3 lb/hr and 0.051 lb/mmBtu.
 - d. The mass emission rate of PM/PM-10 in the exhaust gas during fuel oil firing of the CT at loads greater than or equal to 75% and less than 90% load with no supplemental firing of the HRSG shall not exceed 98.3 lb/hr and 0.061 lb/mmBtu.
 - e. The mass emission rate of PM/PM-10 in the exhaust gas during fuel oil firing of the CT and with supplemental firing of the HRSG shall not exceed 100.3 lb/hr and 0.041 lb/mmBtu.

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4. Sulfur Dioxide (SO₂)
 - a. The gas fired mass emission rate of SO₂ in the exhaust gas with no supplemental firing of the HRSG shall not exceed 2.4 lb/hr and 0.0011 lb/mmBtu.
 - b. The gas fired mass emission rate of SO₂ in the exhaust gas during supplemental firing of the HRSG shall not exceed 2.9 lb/hr and 0.0011 lb/mmBtu.
 - c. The oil fired mass emission rate of SO₂ in the exhaust gas with no supplemental firing of the HRSG shall not exceed 88.9 lb/hr and 0.042 lb/mmBtu.
 - d. The oil fired mass emission rate of SO₂ in the exhaust gas during supplemental firing of the HRSG shall not exceed 89.3 lb/hr and 0.036 lb/mmBtu.
5. Sulfuric Acid Mist (H₂SO₄)
 - a. The gas fired mass emission rate of H₂SO₄ in the exhaust gas with no supplemental firing of the HRSG shall not exceed 0.9 lb/hr and 0.0004 lb/mmBtu.
 - b. The gas fired mass emission rate of H₂SO₄ in the exhaust gas during supplemental firing of the HRSG shall not exceed 1.1 lb/hr and 0.0004 lb/mmBtu.
 - c. The oil fired mass emission rate of H₂SO₄ in the exhaust gas with no supplemental firing of the HRSG shall not exceed 31.8 lb/hr and 0.015 lb/mmBtu.
 - d. The oil fired mass emission rate of H₂SO₄ in the exhaust gas during supplemental firing of the HRSG shall not exceed 31.9 lb/hr and 0.0128 lb/mmBtu.
6. Opacity

Opacity of emissions shall not exceed 20% except for one period of not more than 6 minutes in any 60-minute interval when the opacity shall not exceed 27%.

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B. Auxiliary Boiler

1. Oxides of Nitrogen (NO_x)
 - a. NO_x emissions during natural gas firing of the auxiliary boiler shall be controlled through the use of low NO_x burners and flue gas recirculation to a rate no greater than 0.011 lbs/mmBtu.
 - b. NO_x emissions during fuel oil firing of the auxiliary boiler shall be controlled through the use of low NO_x burners and flue gas recirculation to a rate no greater than 0.10 lbs/mmBtu.
2. Carbon Monoxide (CO)
 - a. CO emissions during natural gas firing of the auxiliary boiler shall be controlled through good boiler design and good combustion practices to a rate no greater than 0.036 lb/mmBtu.
 - b. CO emissions during fuel oil firing of the auxiliary boiler shall be controlled through good boiler design and good combustion practices to a rate no greater than 0.039 lb/mmBtu.
3. Particulate Matter/Particulate Matter with an aerodynamic diameter of less than or equal to 10 micrometers (PM/PM-10)
 - a. PM/PM-10 emissions during natural gas firing of the auxiliary boiler shall be controlled through the use of low sulfur fuels and shall not exceed 0.0033 lb/mmBtu.
 - b. PM/PM-10 emissions during fuel oil firing of the auxiliary boiler shall be controlled through the use of low sulfur fuels and shall not exceed 0.015 lb/mmBtu.
4. Sulfur Dioxide (SO₂)
 - a. SO₂ emissions during natural gas firing of the auxiliary boiler shall be controlled through the use of low sulfur fuels and shall not exceed 0.0005 lb/mmBtu.

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- b. SO₂ emissions during fuel oil firing of the auxiliary boiler shall be controlled through the use of low sulfur fuels and shall not exceed 0.041 lb/mmBtu.

5. Opacity

Opacity of emissions shall not exceed 20% except for one period of not more than 6 minutes in any 60-minute interval when the opacity shall not exceed 27%.

C. Fuel Gas Heater

1. Oxides of Nitrogen (NO_x)

NO_x emissions from the heater shall be controlled with forced draft low NO_x burners to a rate not to exceed 0.050 lb/mmBtu.

2. Carbon Monoxide (CO)

CO emissions shall be controlled by the use of good combustion controls and shall not exceed 0.098 lb/mmBtu.

3. Particulate Matter/Particulate Matter with an aerodynamic diameter of less than or equal to 10 micrometers (PM/PM-10)

PM/PM-10 emissions shall be controlled through the use of low sulfur fuel to a rate no greater than 0.0088 lb/mmBtu.

4. Sulfur Dioxide (SO₂)

SO₂ emissions shall be controlled by the use of low sulfur fuels to a rate no greater than 0.0011 lb/mmBtu.

5. Opacity

Opacity of emissions shall not exceed 20% except for one period of not more than 6 minutes in any 60-minute interval when the opacity shall not exceed 27%.

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D. Emergency Diesel Fire Pump

1. Oxides of Nitrogen (NO_x)

NO_x emissions shall be controlled by the use of good combustion practices and shall not exceed 1.97 lb/mmBtu.

2. Carbon Monoxide (CO)

CO emissions shall be controlled by the use of good combustion practices and shall not exceed 0.09 lb/mmBtu.

3. Particulate Matter/Particulate Matter with an aerodynamic diameter of less than or equal to 10 micrometers (PM/PM-10)

PM/PM-10 emissions shall be controlled by the use of low sulfur fuels and shall not exceed 0.03 lb/mmBtu.

4. Sulfur Dioxide (SO₂)

SO₂ emissions shall be controlled by the use of low sulfur fuels and shall not exceed 0.040 lb/mmBtu.

5. Opacity

Opacity of emissions shall not exceed 20% except for one period of not more than 6 minutes in any 60-minute interval when the opacity shall not exceed 27%.

IX. Pollution Control Equipment and Opacity Measurement

1. Each unit shall operate in accordance with its design specified parameters. This includes continuously operating all proposed control devices in a manner consistent with good air pollution control practice for minimizing emissions.
2. For the combustion turbine and duct burner, CLIEC shall install and utilize low NO_x burners for natural gas firing and a water injection system for fuel oil firing. CLIEC shall monitor the water to fuel ratio to ensure proper control of NO_x emissions. In addition to

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- the low NO_x burners and water injection system, CLIEC shall install and continuously operate a Selective Catalytic Reduction (SCR) system for NO_x control.
3. CLIEC shall install an oxidation catalyst in the HRSG to control CO and VOC emissions from the combustion turbine and duct burner. The oxidation catalyst shall be utilized whenever the combustion is operating.
 4. CLIEC shall install low NO_x burners and flue gas recirculation to control NO_x emissions from the auxiliary boiler. These controls shall be used at all times when the auxiliary boiler is operating.
 5. CLIEC shall install forced draft low NO_x burners to control NO_x emissions from the fuel gas heater. The forced draft low NO_x burners shall operate whenever the fuel gas heater is operating.
 6. While firing gaseous fuels, CLIEC shall conduct monthly opacity observations at the turbine, auxiliary boiler, and fuel gas heater emission points in accordance with 40 CFR Part 60, Method 9. The opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Alternatively, CLIEC may install and operate a Continuous Opacity Monitoring System that meets the requirements of 40 CFR Part 60.
 7. While firing distillate fuel oil, CLIEC shall conduct daily opacity observations at the turbine and auxiliary boiler emission points in accordance with 40 CFR Part 60, Method 9. The opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. Alternatively, CLIEC may install and operate a Continuous Opacity Monitoring System that meets the requirements of 40 CFR Part 60.
 8. Each time the fire pump is tested for operational readiness, CLIEC shall use 40 CFR Part 60, Method 22 to determine if visible emissions are present. In addition, CLIEC shall conduct annual opacity observations at the fire pump emission point in accordance with 40 CFR Part 60, Method 9.
- X. Continuous Emission Monitoring (CEM) Requirements
1. Prior to conducting the initial performance tests required by Section XI of this permit and thereafter, CLIEC shall install, calibrate, maintain, and operate:

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- a. a CEM to measure and record stack gas carbon monoxide concentrations from the combustion turbine and duct burner stack. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 4, and Appendix F).
 - b. a CEM to measure and record stack gas NO_x (as measured as NO₂) concentrations from the combustion turbine and duct burner stack. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 2, and Appendix F).
 - c. a CEM to measure and record stack gas oxygen concentrations from the combustion turbine and duct burner stack. The system shall meet all applicable EPA monitoring performance specifications (including but not limited to 40 CFR Part 60.13 and 40 CFR Part 60, Appendix B, Performance Specification 3, and Appendix F).
 - d. a continuous monitoring system to measure and record stack gas temperatures, fuel flow rate and water to fuel ratios from the combustion turbine. These systems shall meet all applicable EPA monitoring performance specifications.
 - e. a continuous monitoring system to measure and record fuel flow to the duct burner, fuel gas heater and auxiliary boiler. Upon EPA or NYSDEC request, CLIEC shall conduct a performance evaluation of the monitors.
2. Not less than 90 days prior to the date of startup of the combustion turbine/duct burner, CLIEC shall submit a written report to EPA of a Quality Assurance Project Plan for the certification of the combustion turbine and duct burner's monitoring systems. Any comments provided to CLIEC by EPA on the written plan shall be responded to in an expeditious manner. Performance evaluation of the monitoring systems may not begin until the Quality Assurance Project Plan has been approved by EPA.
 3. CLIEC shall conduct performance evaluations of the continuous monitoring systems during the initial performance testings required under this Permit or within 30 days thereafter in accordance with the applicable performance specifications in 40 CFR Part 60, Appendix B, and 40 CFR Part 52, Appendix E. CLIEC shall notify EPA at least 15 days in advance of the date upon which demonstration of the monitoring system(s) performance will commence.

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4. CLIEC shall submit a written report to EPA of the results of all monitor performance specification evaluations conducted on the monitoring system(s) within 60 days of the completion of the tests. The monitoring systems must meet all the requirements of the applicable performance specification test in order for the monitors to be certified.

XI. Performance Testing Requirements

1. CLIEC shall conduct initial performance tests for the combustion turbine and duct burner, the auxiliary boiler and the fuel gas heater. Within 60 days after achieving the maximum production rate of each unit, but no later than 180 days after initial startup as defined in 40 CFR Part 60.2, CLIEC shall submit the results of the performance tests for NO_x, CO, PM/PM-10, SO₂ and H₂SO₄. Once the initial performance tests are complete, CLIEC shall conduct additional stack testing once every five years from the date of the initial performance test for the combustion turbine/duct burner and auxiliary boiler (for those pollutants for which a CEM is not required). All performance tests shall be conducted at base load conditions, with and without supplemental firing of the HRSG (for the combustion turbine), 75% load conditions and/or other loads specified by EPA.
2. Three test runs shall be conducted for each load condition and compliance for each operating mode shall be based on the average emission rate of these runs.
3. At least 60 days prior to actual testing, CLIEC shall submit to the EPA a Quality Assurance Project Plan detailing methods and procedures to be used during the performance stack testing. A Quality Assurance Project Plan that does not have EPA approval may be grounds to invalidate any test and require a re-test.
4. CLIEC shall use the following test methods, or a test method which would be applicable at the time of the test and detailed in a test protocol approved by EPA:
 - a. Performance tests to determine the stack gas velocity, sample area, volumetric flow rate, molecular composition, excess air of flue gases, and moisture content of flue gas shall be conducted using 40 CFR Part 60, Appendix A, Methods 1, 2, 3, and 4.
 - b. Performance tests for the emissions of PM-10 shall be conducted using 40 CFR Part 51, Appendix M, Method 201 (exhaust gas recycle), Method 201A (constant

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- flow rate) or Method 5, and Method 202. PM-10 emissions shall be the sum of noncondensable emissions determined using Method 201, 201A or Method 5 and condensable emissions determined using Method 202.
- c. Performance tests for the emissions of CO shall be conducted using 40 CFR Part 60, Appendix A, Method 10.
 - d. Performance tests for the emissions of NO_x shall be conducted using 40 CFR Part 60, Appendix A, Method 7E.
 - e. Performance tests for the emissions of SO₂ shall be conducted using 40 CFR Part 60, Appendix A, Method 6 or 6C.
 - f. Performance tests for the emissions of H₂SO₄ shall be conducted using 40 CFR Part 60, Appendix A, Method 8.
 - g. Performance tests for the visual determination of the opacity of emissions from the stack shall be conducted using 40 CFR Part 60, Appendix A, Method 9 and the procedures stated in 40 CFR Part 60.11, or using a Continuous Opacity Monitoring system meeting the requirements of 40 CFR Part 60.
5. Test results indicating that emissions are below the limits of detection shall be deemed to be in compliance.
 6. Additional performance tests may be required at the discretion of the EPA or NYSDEC for any or all of the above pollutants.
 7. For performance test purposes, sampling ports, platforms and safe access shall be provided by CLIEC on each unit in accordance with 40 CFR Part 60.8(e).
 8. CLIEC shall submit a written report to EPA of the results of all emission testing within 60 days of the completion of the performance test, but in any event, no later than 180 days after initial startup of each unit.
 9. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test.

XII. Fuel Sampling Requirements

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1. CLIEC shall verify that the sulfur content of the fuels being burned meets the specifications outlined in Section VII of this permit.
2. CLIEC shall not accept any distillate fuel oil with a sulfur content greater than 0.04% by weight. Prior to unloading the oil from the supplier, CLIEC shall verify that the sulfur content of the oil being delivered is no greater than 0.04% by weight by evaluating the fuel oil analyses conducted by the supplier and/or by independently analyzing and confirming the sulfur content of the fuel oil.
3. Compliance with the sulfur content standards for liquid and gaseous fuels shall be determined using the testing methods established in 40 CFR 60.335(b)(10). Compliance with the natural gas sulfur content requirement shall be determined monthly.

XIII. Record keeping Requirements

1. Logs shall be kept and updated daily to record the following:
 - a. the gallons of fuel oil fired in the combustion turbine, auxiliary boiler and diesel fire pump;
 - b. the hours of operation of the duct burner, auxiliary boiler and diesel fire pump;
 - c. the fuel flow to the duct burner and the maximum heat input capacity using a natural gas heating value of 22,685 Btu/lb (HHV);
 - d. the beginning, duration and completion of each startup and shutdown for the combustion turbine;
 - e. the total pounds of NO_x and CO, as measured by the CEM, for each startup and shutdown of the combustion turbine;
 - f. the gallons of fuel burned in the diesel fire pump as determined by measuring the tank level before and after each run;
 - g. any adjustments and maintenance performed on the combustion turbine/duct burner, auxiliary boiler, fuel gas heater and diesel fire pump;
 - h. any adjustments and maintenance performed on monitoring systems;

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1. all fuel sampling results; the distillate fuel oil supplier's or CLIEC's analyses verifying that the sulfur content is no greater than 0.04%; and
- j. all calculations, opacity readings, CEM summaries and information related to emission determinations
2. All monitoring records, fuel sampling test results, calibration test results and logs must be maintained for a period of five years after the date of record, and made available upon request. All rolling averages shall be computed as required in this permit.

XIV. Reporting Requirements

1. CLIEC shall submit a written report of all excess emissions to EPA for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each quarter and shall include the information specified below:
 - a. The magnitude of excess emissions computed in accordance with 40 CFR Part 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions and whether the excess emissions occurred during startup, shutdown or malfunction.
 - b. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted shall also be reported.
 - c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
 - d. When no excess emissions have occurred or the monitoring systems have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - e. Results of quarterly monitor performance audits, as required in 40 CFR Part 60, Appendix F (including the Data Assessment Report) and all information required by the reporting requirements in 40 CFR 60.7 including excess emissions and CEMS downtime summary sheets.
 - f. Any failure of air pollution control equipment, process equipment, or of a process to operate in a normal manner which results in an increase in emissions above any

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allowable emission limit stated in this permit and any corrective actions and/or preventative measures taken on any unit must be reported by telephone within 2 business days to:

Air Compliance Branch
Division of Enforcement and Compliance Assistance
U.S. Environmental Protection Agency
Region 2
290 Broadway - 21st Floor
New York, New York 10007-1866
(212)637-3000

- g. In addition, the U.S. EPA's Air Compliance Branch shall be notified in writing within fifteen (15) days of any such failure referenced in item g above. This notification shall include a description of the malfunctioning equipment or abnormal operation; the date of the initial failure; the period of time over which emissions were increased due to the failure; the cause of the failure; the estimated resultant emissions in excess of those allowed under this permit; and the methods utilized to restore normal operations. Compliance with this malfunction notification provision shall not excuse or otherwise constitute a defense to any violations of this permit or of any law or regulations which such malfunction may cause.
2. All reports and Quality Assurance Project Plans required by this permit shall be submitted to:

Chief, Air Compliance Branch
U.S. Environmental Protection Agency
Region 2
290 Broadway - 21st Floor
New York, New York 10007

3. Copies of all reports and Quality Assurance Project Plans shall also be submitted to:

Chief, Air Programs Branch - Permitting Section
U.S. Environmental Protection Agency
Region 2
290 Broadway - 25th Floor
New York, NY 10007

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Region 2 CEM Coordinator
U. S. Environmental Protection Agency
Air and Water Q/A Team
Monitoring & Assessment Branch
2890 Woodbridge Avenue - MS - 220
Edison, New Jersey 08837-3679

Regional Air Pollution Control Engineer
New York State Department of Environmental
Conservation

Region 1
SUNY at Stony Brook
Campus Loop Road
Building 40, Room 121
Stony Brook NY 11790-2356

XV. Other Requirements

1. CLIEC shall meet all other applicable federal, state and local requirements, including but not limited to those contained in the New York State Implementation Plan (SIP) and the Provisions of the New Source Performance Standards (NSPS) (40 CFR Part 60, Subparts A, GG, Da, Dc and Kb) and Part 61.

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Responsiveness Summary

The Region 2 Office of the U.S. Environmental Protection Agency (EPA) held a public comment period from December 19, 2005 until January 18, 2006 with respect to the Prevention of Significant Deterioration of Air Quality (PSD) permit application submitted by Caithness Long Island Energy Center (CLIEC) for the construction and operation of a new electric generating facility in Brookhaven, Suffolk County, New York. The purpose of the public comment period was to solicit comments from the public on EPA's preliminary determination to approve CLIEC's PSD permit and offer the public the opportunity to request a public hearing.

EPA received comments submitted by TRC Environmental Corporation dated January 19, 2006 on the applicant's behalf. Since these comments were submitted after the close of the public comment period, they are not considered timely. EPA does not have an obligation to respond to comments submitted after the close of the public comment period. However, EPA has discretion to consider late comments in reaching its final permit decision. We are, therefore, including responses to these comments in this responsiveness summary to avoid unnecessary permit modification requests.

Comment 1 – Fact Sheet

In the most recent submittal to USEPA (revised air modeling on October 4, 2005), the potential to emit (PTE) for NO_x and CO were 90.3 and 270.9 tons/year, respectively, which is slightly lower than the PTE stated for those parameters in the fact sheet. The values in the draft permit are from a previous submittal to USEPA (response to additional comments on August 12, 2005). Thus, the PTE values in the PSD permit for NO_x and CO should be lowered to 90.3 and 270.9 tons/year, respectively to match the worst-case annual emissions scenario presented in the October 4, 2005 submittal.

Response 1

The PTE values included in the fact sheet are considered estimates and are provided for informational purposes only. The fact sheet does not contain PSD permit conditions. These annual PTE estimates are not carried over into the PSD permit. Rather the PSD permit contains short-term emission limits. These limits match the most recent values provided in the October 4, 2005 submittal. Therefore, EPA does not consider this comment relevant to the permitting decision. However, we have included the updated estimates in the Fact Sheet for the final permit.

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Comment 2 – Condition III

Based on the proposed allowable operation of the combined cycle unit, a maximum of 260 start-ups could occur per year, which corresponds to one start per day for five days per week, 52 weeks per year. The number of permitted start-ups for the facility creates an inherent problem with respect to Caithness's ability to comply with Condition II, as drafted. Mandatory CEM system daily calibrations typically have a duration of approximately 20 minutes; because the resulting data gap is longer than 15 minutes, this causes exclusion of an entire operating hour from the valid data reported by the CEM.

The way the PSD permit condition is written, the operating hours lost due to calibration checks are not excluded from calculations to show compliance with the 95% data capture requirement. As stated above, the permit provides for as many as 260 start-ups of this unit per year. The actual number of starts, up to the permitted limit, will be due to, among other things, the dispatch of the unit as may be dictated by LIPA under a power supply agreement. As an example, it is reasonably anticipated that there may be extended periods of time during which the unit is dispatched for an average of eight hours of operation per weekday. In this scenario, loss of one hour of data due to a calibration check corresponds to downtime of 12.5% of the source operating time, or a maximum CEM on-line time of 87.5%, well below the 95% criteria. This example does not account for additional CEM downtime that may occur due to quarterly linearity checks, semiannual RATAs, maintenance, routine repairs and replacements, and other unforeseen circumstances.

Caithness is proposing either of the two following modifications to the PSD permit condition to accommodate the permitted number of start-ups and daily calibrations:

- 1) Replace the text "shall be on-line and in operation 95% of the time when the emission sources are operating" with "shall be on-line and in operation except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d) and shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period". This language is consistent with the language specified in 40 CFR 60.13.
- 2) Add the following underlined text at the end of the sentence "The continuous emission monitoring systems required by this permit shall be on-line and in operation 95% of the time when the emission sources are

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operating excluding periods removed due to calibration checks, zero and span adjustments, linearity checks and relative accuracy testing.”

Response 2

After consideration of Caithness's comment, EPA is retaining the original language. From EPA's experience with other similar facilities, calibration can be done in less than 15 minutes. If at least one CEMS reading is recorded in a 15-minute period before or after the daily calibration, that 15-minute period will be considered valid data. Caithness must work with the CEMS vendor to minimize the duration of the daily calibration. Even if the calibration time cannot be reduced, calibration can be scheduled for times when the unit is not likely to be in operation. Quarterly linearity checks are very similar to the daily calibration checks, with additional calibration gases. One calibration gas can be checked in each 15 minute period. In this way the quarterly check can be completed without loss of any data. The relative accuracy audit is a check of the CEMS against a reference method monitor. There is no need for the CEMS to be off-line for this determination. Routine maintenance, repairs, and replacements must be scheduled for periods when the generating unit is not in use. PSD permits do not contain exclusions for unforeseen circumstances. In any event, these unforeseen events should not be greater than 5% of the time that the emission source is operating.

Comment 3 – Condition IX.7

Based on the proposed operating schedule of the fire pump, the unit will only be used during periods of emergency or for weekly/monthly testing. If the fire pump were operated during an emergency (a fire), fulfilling the requirement of a certified EPA Method 9 reader taking opacity readings is an unreasonable and impractical requirement because it is likely that the Method 9 observer, as part of the facility staff, would be required to evacuate, would be involved in fire-fighting or rescue, or would otherwise be unable to conduct readings due to hazardous conditions attendant to the emergency at hand.

Section 2.4 of EPA Method 9 requires that opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on an observational record sheet. A minimum of 24 observations shall be recorded. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period. 24 x 15-second measurements equates to 6 minutes. Caithness expects to conduct the fire pump weekly/monthly testing for less than 30 minutes. Thus, requiring an EPA Method 9

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certified opacity reader to be present for each weekly/monthly test totaling 30 minutes per test should also be considered overly burdensome.

Caithness performs an annual tune-up test on the fire pump in accordance with its insurance policy requirements and is proposing to perform an EPA Method 9 test during the annual tune-up testing. This approach would reflect the fact that the fire pump is a piece of emergency equipment that would not be expected to operate other than for emergency or testing purposes. Caithness therefore proposes the following alternative compliance language to replace the first sentence:

“While firing distillate fuel oil, CLIEC shall conduct daily opacity observations at the turbine, and auxiliary boiler emission points in accordance with 40 CFR Part 60, Method 9. When firing distillate fuel oil, CLIEC shall conduct an opacity observation, in accordance with 40 CFR Part 60, Method 9, at the emergency fire pump emission point once per calendar year.”

Response 3

Since the fire-pump is a piece of emergency equipment and will not operate other than for emergency and testing purposes and each test is conducted for less than 30 minutes, EPA has revised the monitoring for opacity at the unit. The new monitoring will require a Method 22 reading during each weekly/monthly test and an annual Method 9 observation during the fire pump's annual tune-up. Method 22 is less stringent than Method 9 since it requires only the determination of whether a visible emission occurs and does not require that opacity levels be determined or that a certified opacity reader be present.

Comment 4 – Condition XII.3

The following referenced requirement does not exist in the 2005 version of the Code of Federal Regulations. For reference, the regulation used to read:

Sec. 60.335: Test methods and procedures.

- (d) The owner or operator shall determine compliance with the sulfur content standard in Sec. 60.333(b) as follows: ASTM D 2880-71, 78, or 96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80 or 90 (Reapproved 1994), D 3031-81, D 4084-82 or 94, or D 3246-81, 92, or 96 shall be

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used for the sulfur content of gaseous fuels (incorporated by reference-see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

Caithness is proposing to change the reference to match the current standard requirements at 40 CFR 60.335(b)(10) which reads:

- (10) If the owner or operator is required under Sec. 60.334(i)(1) or (3) to periodically determine the sulfur content of the fuel combusted in the turbine, a minimum of three fuel samples shall be collected during the performance test. Analyze the samples for the total sulfur content of the fuel using:
- (i) For liquid fuels, ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, see Sec. 60.17); or
 - (ii) For gaseous fuels, ASTM D1072-80, 90 (Reapproved 1994); D3246-81, 92, 96; D4468-85 (Reapproved 2000); or D6667-01 (all of which are incorporated by reference, see Sec. 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the prior approval of the Administrator.

Response 4

The permit has been updated to reflect the most current test methods.

Comment 5 – Condition XIV.1.f.

Under 40 CFR Part 60, the use of CEM systems for continuous compliance is not certified until after completion of initial emissions compliance performance testing. As such, we propose addition of the following text to this condition:

"Demonstration of continuous compliance with the PSD permit limits is not required until completion of the PSD compliance testing, or within 180 days of start-up,

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whichever date comes first. However, the permittee shall take all reasonable steps to minimize emissions during startup and equipment testing prior to completion of compliance testing. For purposes of this PSD permit, excess emissions indicated by monitoring systems shall be considered credible evidence of violations of the applicable emission limits."

The above suggested language, which mirrors language from PSD permits previously issued by NYSDEC, will provide for the same shakedown period allowed under NSPS prior to CEM certification and compliance stack testing while still requiring CLIEC to operate the units and controls in such a way as to minimize emissions.

Also, Caithness believes that even after the shakedown period, excess emissions indicated by monitoring systems should not be considered definitive regarding whether a violation has occurred, as there may be other credible evidence or factors that would show a violation has not occurred. All credible evidence should be considered by the agency before a determination of whether a violation has occurred is made. Therefore, Caithness proposes that "shall be considered violations of the applicable emission limits" be changed to read "shall be considered credible evidence of a violation of an applicable emission limit." Under appropriate circumstances, this would allow Caithness to submit relevant information to demonstrate that a violation has not occurred.

Response 5

After reviewing the permit condition on which this comment was based, EPA has decided to remove condition XIV.1.f. from the permit. In this way EPA reserves our authority to rely on any credible evidence, including CEMS, to determine if a violation has occurred and we can exercise discretion regarding possible violations.

tlgrace@ptd.net

From: "Tom Grace" <tgrace@caithnessenergy.com>
Date: Monday, December 30, 2019 11:41 AM
To: <tlgrace@ptd.net>
Attach: EPA Letter Caithness 2006 PSD Permit .pdf
Subject: FW: Caithness Long Island Energy Center - 2006 PSD Permit

From: Petriman, Viorica [mailto:Petriman.Viorica@epa.gov]
Sent: Wednesday, November 6, 2019 8:14 AM
To: Tom Grace <tgrace@caithnessenergy.com>
Cc: Chan, Suilin <Chan.Suilin@epa.gov>; 'Cronin, Michael P (DEC)' <michael.cronin@dec.ny.gov>; Jennings, Mike (DEC) <mike.jennings@dec.ny.gov>; 'Prunier, Denise (DEC)' <denise.prunier@dec.ny.gov>
Subject: RE: Caithness Long Island Energy Center - 2006 PSD Permit

Hi Mr. Grace,

Please find attached the EPA letter relating to the 2006 PSD permit issued by EPA to Caithness.

Could you please reply to this email just to confirm that you received it.

Thank you,

Viorica Petriman
Environmental Engineer
US EPA–Region 2
Air & Radiation Division
Permitting Section
212-637-4021



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REGION 2
290 BROADWAY
NEW YORK, NY 10007-1866

NOV - 5 2019

Thomas Grace
Director, Environmental, Health and Safety
Caithness Corporation 29th Floor
565 Fifth Avenue
New York, NY 10017-2478
tgrace@caithnessenergy.com

RE: Caithness Long Island Center Prevention of Significant Deterioration (PSD) Permit

Dear Mr. Grace,

This is in response to your letter dated May 29, 2019, received via e-mail on June 28, 2019, in which you request that the Environmental Protection Agency Region 2 office (EPA) consent to the New York State Department of Environmental Conservation's (NYSDEC's) removal of the current PSD requirements related to the SO₂ and H₂SO₄ emissions from the Caithness title V permit. The permit requirements you seek to remove include the SO₂ and H₂SO₄ BACT limits and the associated monitoring, recordkeeping and reporting requirements. Your letter explains that your request to remove these requirements is based on a change to a New York State regulation that requires your facility to use a distillate fuel oil with a lower sulfur content than is required in the PSD permit.

All PSD requirements of the Caithness title V permit issued by the NYSDEC, including the SO₂ and H₂SO₄ PSD requirements, are based on and derived from the 2006 PSD permit that was issued by the EPA to Caithness pursuant to 40 CFR§ 52.21¹. Thus, in order for the SO₂ and H₂SO₄ PSD requirements to be removed from the title V permit, first they must be removed from the 2006 PSD permit by EPA.

Please provide a letter to EPA signed by the responsible official for Caithness requesting the revision of the 2006 PSD permit by specifically identifying the conditions that Caithness seeks to remove from the 2006 PSD permit.

If you have any further questions or wish to discuss any of these issues, please feel free to contact me at 212-637-4019 or chan.suilin@epa.gov, or contact Viorica Petriman at 212-637-4021 or petriman.viorica@epa.gov.

Sincerely,

A handwritten signature in cursive script that reads "Suilin W. Chan".

Suilin W. Chan, Chief
Permitting Section
Air Programs Branch
Air and Radiation Division

¹ The 2006 PSD permit issued by EPA to Caithness is available on the EPA R2 web site at <https://www.epa.gov/caa-permitting/caithness-long-island-llc-brookhaven-ny>

cc: Michael Cronin (michael.cronin@dec.ny.gov)
Director, Bureau of Stationary Source
Division of Air Resources, NYSDEC
625 Broadway
Albany, NY 12233-3258

Denise Prunier (denise.prunier@dec.ny.gov)
Chief, Permitting and Compliance Section
Bureau of Stationary Source
Division of Air Resources, NYSDEC
625 Broadway
Albany, NY 12233-3258

Michael Jennings (michael.jennings@dec.ny.gov)
Environmental Engineer, Source Control Technology Section
Division of Air Resources, NYSDEC
625 Broadway
Albany, NY 12233-3258

CAITHNESS LONG ISLAND, LLC

*c/o Caithness Corporation
29th Floor
565 Fifth Avenue
New York, New York 10017-2478*

May 29, 2019

Ms. Suilin Chan
Chief, Air Permitting Section
US EPA Region 2
Clean Air Act Permitting
290 Broadway
New York, NY 10007-1866
(212) 637-4019

RE: Petition to Remove PSD requirements for SO₂ and H₂SO₄ for
Combustion Turbine Unit 1 (Unit 0001), Auxiliary Boiler and Emergency
Diesel Fire Pump units at Caithness Long Island Energy Center, (Facility
ID (ORISPL) 56234), Title V Permit 1-4722-04426, due to change in New
York State regulations regarding sulfur content in distillate fuel oil.

Dear Ms. Chan:

By this letter, Caithness Long Island LLC (CLI) is petitioning the Environmental Protection Agency to consent to the New York State Department of Environmental Conservation's (NYSDEC) removal of current PSD permit requirements relating to SO₂ and H₂SO₄ emissions from the referenced facility's Title V permit. This request is being raised at this time because NYSDEC is currently working with CLI to renew its Title V permit. The basis for this request is a change in a state regulation that requires the facility to use distillate fuel oil (no. 2 distillate) with a lower sulfur content than was required when the facility was initially permitted. Calculation of potential to emit (PTE) emissions for the facility under conditions reflecting the new NYSDEC sulfur content mandate demonstrates that that SO₂ and H₂SO₄ emissions are significantly below the PSD thresholds.

The Caithness Long Island Energy Center (CLIEC) permitted emission units consist of a Siemens – Westinghouse 501 F combustion turbine (CT) with a supplementary natural gas firing duct burner in its HRSG, an auxiliary boiler (AB) unit and an emergency diesel fire pump (EDFP). The CT and the AB each have dual fuel firing capability. However, distillate fuel is only used as a back-up fuel for the CT and AB units and is limited by the Title V permit (no more than 720 hours annually on a rolling basis). The EDFP fires only distillate fuel oil and it also has a limited operating hour and annual fuel consumption quantity. The facility is also subject to both the Acid Rain Program (ARP) and the Cross-State Air Pollution Rule (CSAPR). CLIEC is required to continuously monitor and report sulfur dioxide (SO₂) and heat input measure for natural gas and distillate fuel for Unit 0001, in accordance with 40 CFR Part 75. As noted, the CLIEC facility is currently undergoing renewal of its Title V permit. Since the facility was originally permitted, New York State regulations regarding sulfur content in fuel used as stationary sources have become more stringent.

The facility is also now subject to 6 NYCCR 225-1.2(h), which specifies that stationary combustion installations that “fire distillate oil including number two heating oil are limited to the firing of distillate oil with 0.0015 percent sulfur by weight or less on or after July 1, 2016.” This requirement is being incorporated into the renewed Title V permit for the facility. When CLIEC was originally permitted, it had the ability to fire distillate fuel oil containing sulfur up to 400 ppm (0.040%). Recalculation of sulfur emissions PTE for the facility using the 15 ppm (0.0015%) sulfur distillate fuel oil lowers the annual PTE for SO₂ and H₂SO₄ emissions to 11.0 tons and 4.1 tons, respectively. These values are well below their respective PSD thresholds of 40 and 7 tons. (See attached emissions modelling calculation for PTE using 15 ppm fuel oil (Attachment 1)).

Operational data for distillate oil consumption at the facility is provided in Attachment 2. Further, the distillate fuel oil currently stored on-site in the 750,000 fuel oil storage tank is fully compliant with NYSDEC’s new sulfur content mandate (analysis attached as Attachment 3).

Based on the foregoing, the new more stringent NYSDEC sulfur content requirement dramatically lowers the PTE for SO₂ and H₂SO₄ at the CLIEC facility such that PSD thresholds for these emissions cannot be triggered. Further, the more stringent NYSDEC requirement ensures that removal of the PSD conditions for SO₂ and H₂SO₄ could not result in any backsliding in violation of principles governing implementation of the Clean Air Act. Rather, it will allow NYSDEC to streamline the Title V permit conditions in reliance on its more stringent distillate oil sulfur content requirement.

Caithness Long Island LLC thanks the EPA for the opportunity to submit this petition requesting removal of PSD program requirements for SO₂ and H₂SO₄ emissions and allowing the NYSDEC to modify the facility Title V permit accordingly.

If there are any questions or concerns regarding this matter, please feel free to contact me at any time. My direct telephone number is 484 553-0932 and my e-mail address is tgrace@caithnessenergy.com

For Caithness Long Island LLC
Sincerely



Thomas A. Grace
Director – Environmental, Health and Safety
Caithness Services
Designated Representative

w/attach

cc: Mike Jennings, NYSDEC
Shaun Snee, NYSDEC Region 1

Cathiness Long Island Energy Center
Potential Emissions Summary
Title V Permit Renewal (2019)

Pollutants	Annual Potential to Emit (Tons per Year)						Title V Renewal Facility Total Emissions in lbs/yr
	Combined Cycle CT Natural Gas	Auxiliary Boiler Natural Gas	Auxiliary Boiler Natural Gas with ULSD or 4,800 hr/yr without ULSD	Auxiliary Boiler ULSD	Dew Point Heater Natural Gas	Fire Pump Fuel Oil	
Sulfur Dioxide	8,040	4,380	11.0	0.0086	8,760	0.0095	24,060
Sulfuric Acid Mist	41	41	0.0095	0.0015	0.0004	0.000095	8,180
PM ₁₀ /PM _{2.5}	49.2	49.2	0.21	0.084	0.17	0.01	18,420
Lead	0.011	0.011	0.00032	0.00020	0.000033	0.0	2.4
Total HAPs	58	58	0.13	0.00	0.035	0.0027	19,860
CO	256.4	2.33		0.21	1.85	0.033	270.9

Hourly Emissions (Pounds per Hour)

Pollutants	Hourly Emissions (Pounds per Hour)					Fire Pump Fuel Oil
	Combined Cycle CT Natural Gas with DB	Combined Cycle CT ULSD with DB	Combined Cycle CT Natural Gas without DB	Combined Cycle CT ULSD without DB	Auxiliary Boiler Natural Gas	
Sulfur Dioxide	2.7	3.7	2.1	3.3	0.01	0.0090
Sulfuric Acid Mist	1.0	1.3	0.8	1.2	0.0003	0.000095
PM ₁₀ /PM _{2.5}	15.1	100.3	10.7	98.3	0.10	0.060
Lead	0.00224	0.080	0.0	0.030	0.000044	0.0
CO	11.4	23.9	9.2	16.2	1.05	0.18

Notes:

- Hours of annual operation based upon maximum Title V permit limits.
- Hourly emissions based on the Title V permit hourly emission limit for each operating scenario.
- Carbon Monoxide potential to emit includes the emissions contribution from the combustion turbine operation during periods of startup and shutdown as provided in the initial Title V application.
- Auxiliary Boiler potential to emit based on the worst case of either 4,800 hours of operation on natural gas or 4,400 hours of operation on natural gas with 400 hours of operation on ULSD per Title V operating permit limit.
- Emissions for SO₂ and H₂SO₄ based on adjusted ULSD sulfur content of 15 ppm (0.0045%).

Distillate Fuel Use 2012 - 2018

Unit	Permit Allowed Hrs./ 12 months	Permit Allowed Gallons	2012		2013		2014		2015		2016		2017		2018	
			Hrs.	Gal.	Hrs.	Gal.	Hrs.	Gal.	Hrs.	Gal.	Hrs.	Gal.	Hrs.	Gal.	Hrs.	Gal.
CT	744	10,928,571	1,48	1,1,600	3,33	35,300	0,80	12,200	30,42	387,800	2,25	37,700	1,13	18,096	2,23	25,320
AB	400	95,714	0	0	56	7,400	0	0	3	1,600	10	4,230	0	C	0	0
EDFP	375	6,000	27	269	26	362	27	375	31	440	39	500	23	308	25	330
Total		11,030,285		1,1,869		43,062		12,575		389,840		42,430		18,404		25,650



Certificate of Analysis

Vessel / Object: Shore Tank 1
 Location: Yapbank, NY / Caithness Terminal (United States)
 Job Type: Inventory
 Product Grade: Distillate

Job No: 110-18-09428
 Date Sampled: 24 Sep 2018
 Date Tested: 28 Sep 2018
 Version: 1 / 28 Sep 2018 07:42

Sample
 110-18-09428-004

Sample ID, Type & Description
 Tank 1 Running

<u>Method</u>	<u>Test</u>	<u>Min</u>	<u>Max</u>	<u>Result</u>	<u>Units</u>
ASTM D4052	API Gravity @60°F			35.0	"
ASTM D664A	Acid Number by Potentiometric Titration Method A				
	Acid Number		0.10	< 0.10	mg KOH/g
	Strong Acid Number		0	< 0.10	mg KOH/g
ASTM D482	Ash Content		0.01	0.001	mass%
ASTM D240	Heat of Combustion, Gross (BTU Value)				
	Gross (BTU Value)			19,568	Btu/lb
	Gross (BTU Value)			139,140	Btu/gal
ASTM D976	Calculated Cetane Index	45		46.7	
ASTM D524	Ramsbottom Carbon Residue on 10% Distillation Residue		0.15	0.08	%wt
ASTM D130	Copper Strip Corrosion Rating @50°C/122°F for 3 Hours			1A	
ASTM D93A	Flash Point	100		132	°F
ASTM D2500	Cloud Point		-10	-11	°C
ASTM D97	Pour Point		-21	< -21	°C
ASTM D2274	Oxidation Stability Total Insolubles		2.5	0.3	mg/100ml
ASTM D5762	Nitrogen		0.015	< 0.004	%wt
ASTM D5453	Total Sulfur Content		400	8.6	ppmw
ASTM D2709	Water and Sediment		0.05	< 0.01	%vol
ASTM D7536	Total Chlorine Concentration			< 0.66	ppmw
ASTM D7688	Wear Scar Diameter			400	µm
ASTM D1094	Change in Volume of Aqueous Layer		2	0	ml
ASTM D445	Kinematic Viscosity @104°F/40°C	1.8	5.8	2.448	cSt
ASTM D86	Distillation				
	IBP			327.3	°F
	10%			391.4	°F
	50%			507.5	°F
	90%		640	615.7	°F
	FBP		690	663.9	°F
	Recovery			98.2	%vol
	Residue			0.9	%VOL
	Loss			0.9	%vol
ASTM D3605*	Calcium Content			< 0.1	mg/l
ASTM D3605*	Sodium Content			< 0.1	mg/l
ASTM D3605*	Vanadium Content			< 0.1	mg/l
ASTM D3605*	Lead Content			< 0.1	mg/l
ASTM D3605**	Potassium Content			< 0.1	mg/l
ASTM D3605**	Barium Content			< 0.1	mg/l
ASTM D3605**	Manganese Content			< 0.1	mg/l
ASTM D3605**	Phosphorus Content			< 0.1	mg/l
ASTM D381	Existent Gum Content		7	137.0	mg/100ml
ASTM D4539	Minimum LTFT Pass Temperature			-4	°C



Certificate of Analysis

Vessel / Object: Shore Tank 1
Location: Yapbank, NY / Caithness Terminal (United States)
Job Type: Inventory
Product Grade: Distillate

Job No: 110-18-09428
Date Sampled: 24 Sep 2018
Date Tested: 28 Sep 2018
Version: 1 / 28 Sep 2018 07:42

Sample
110-18-09428-004

Sample ID, Type & Description
Tank 1 Running

Table with 5 columns: Method, Test, Min, Max, Result, Units. Contains data for ASTM D323 Reid Vapor Pressure and Liquicult Bacteria in CFU/mL.

Pete Nguyen
Pete Nguyen
Laboratory Supervisor

CLIEC PSD Permit Modification proposal			
page	section	existing language	proposed language/ change
6	VII .A. 1	low sulfur distillate	ultra-low sulfur distillate
6	VII .A. 4	sulfur content of distillate oil	sulfur content of ultra-low sulfur distillate oil
6	VII.A.4	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
6	VII.A.5	distillate oil burned in the CT	ultra-low distillate oil burned in the CT
6	VII.B.4	sulfur content of the distillate oil	sulfur content of the ultra-low sulfur distillate oil
6	VII.B.4	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
6	VII.B.5	shall not exceed 0.04% by weight	shall not exceed 0.0015% by weight
7	VII.D. 1	low sulfur fuel oil with a maximum sulfur content of 0.04% by weight	ultra-low sulfur fuel oil with a maximum sulfur content of 0.0015% by weight
7	VII.D.2	fuel oil	ultra-low sulfur fuel oil
9	VIII.A.4.c	oil fired emission rate for SO2 with no supplemental firing of HRSG shall not exceed 88.9 lb/hr and 0.042 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.4.d	oil fired emission rate for SO2 with supplemental firing of HRSG shall not exceed 89.3 lb/hr and 0.036 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.5.c	oil fired emission rate for H2SO4 mist with no supplemental firing of HRSG shall not exceed 31.8 lb/hr and 0.015 lb/MMBtu	Can this be removed, since facility now under PSD limit.
9	VIII.A.5.d	oil fired emission rate for H2SO4 mist with supplemental firing of HRSG shall not exceed 31.9 lb/hr and 0.0128 lb/MMBtu	Can this be removed, since facility now under PSD limit.
11	VIII.B.4.b	SO2 emissions during fuel oil firing of the AB shall be controlled through the use of low sulfur fuels and shall not exceed 0.041 lb/ MMBtu	Can this be changed to just read SO2 emissions shall be control by use of ultra-low sulfur distillate fuel. Or discarded entirely?

12	VIII.D.4	SO2 emissions shall be controlled by the use of low sulfur fuels and shall not exceed 0.040 lb/MMBtu.	Can this be changed to just read that SO2 emissions from the use of the Emergency Diesel fire pump shall be controlled by use of ultra-low sulfur distillate fuel oil. Or discarded entirely
17	XII. 2	CLIEC shall not accept any distilled fuel oil with a sulfur content greater than 0.04% by weight ...	Either delete or reword as , CLIEC shall not accept any distilled fuel oil with a sulfur content greater than 0.0015 % by weight.
17	XIII. 1.a	gallons of fuel must be kept for the CT, AB and EDFP	Is this still necessary here since the SO2 level is now beneath PSD threshold?
18	XIII.1.i	All fuel sampling results, the distillate fuel oil supplier's or CLIEC's analyses verifying that the sulfur content is no greater than 0.04%.	Can this be removed since the site now uses ultra-low sulfur distillate fuel oil and is below the PSD threshold?