



**Verified Carbon
Standard**

**MONITORING REPORT #2020 FOR THE
GREATER NEW BEDFORD LFG UTILIZATION
PROJECT, DARTMOUTH, MASSACHUSETTS**

**FOR VERIFICATION PERIOD
OCTOBER 1, 2019 THROUGH JUNE 30, 2020**

AUGUST 7, 2020

CommonWealth
Resource Management Corporation

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Project Title	Greater New Bedford LFG Utilization Project
Version	3
Report ID	138
Date of Issue	August 7, 2020
Project ID	138
Monitoring Period	01-October-2019 to 30-June-2020
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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

The Project is a landfill methane (a.k.a., “landfill gas” or “LFG”) capture and utilization project located at a solid waste landfill (the “Landfill”) in Dartmouth, Massachusetts. The Landfill is owned by the Greater New Bedford Regional Refuse Management District (the “District”). The owner of the Project is Commonwealth New Bedford Energy, LLC (“CNBE”), a wholly-owned subsidiary of Commonwealth Resource Management Corporation (“CRMC”), a Massachusetts corporation based in Boston, Massachusetts, U.S.A. CNBE also owns the exclusive rights to all of the LFG at the Landfill, and all of the environmental attributes associated with the collection, destruction and use of all of the LFG at the Landfill.

The Project voluntarily captures and destroys LFG methane from the Crapo Hill Landfill located in Dartmouth, Massachusetts (latitude and longitude are 41° 43' 28.12" N and 70° 59' 04.82" W, respectively). The Project captures LFG from the expanded active collection system and destroys it either via four Caterpillar 3516 engine-generator sets or a back-up open flare. The Project achieves emissions reductions through the destruction of LFG that would otherwise have been released to the atmosphere. The back-up flare did not operate for any significant period of time during the current verification period; therefore, emission reductions are not claimed from flaring.

The Project was implemented according to the description provided in the revalidated PD. The Project became operational in January 2002 with the expansion of an existing active LFG collection and destruction system. Emission reductions from the current verification period were claimed for LFG collected from the expanded active LFG collection system and destroyed in the Caterpillar 3516 engine-generator sets. The back-up flare had limited operation during the current verification period and no emission reductions are claimed from flaring. CRMC claims GHG emission reductions eligible under VCS program of 66,546 metric tons of CO₂e for the verification period October 1, 2019 through June 30, 2020 including 22,070 metric tons of CO₂e from October 1, through December 31, 2019 and 44,475 metric tons of CO₂e from January 1, 2020 through June 30, 2020.

1.2 Sectoral Scope and Project Type

The sectoral scope is renewable energy industry. The Project is not a grouped project.

1.3 Project Proponent

Organization name	CommonWealth Resource Management Corporation For its wholly-owned subsidiary CommonWealth New Bedford Energy, LLC
Contact person	Thomas Yeransian
Title	Principal of CRMC
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1.4 Other Entities Involved in the Project

None

1.5 Project Start Date

January 1, 2002

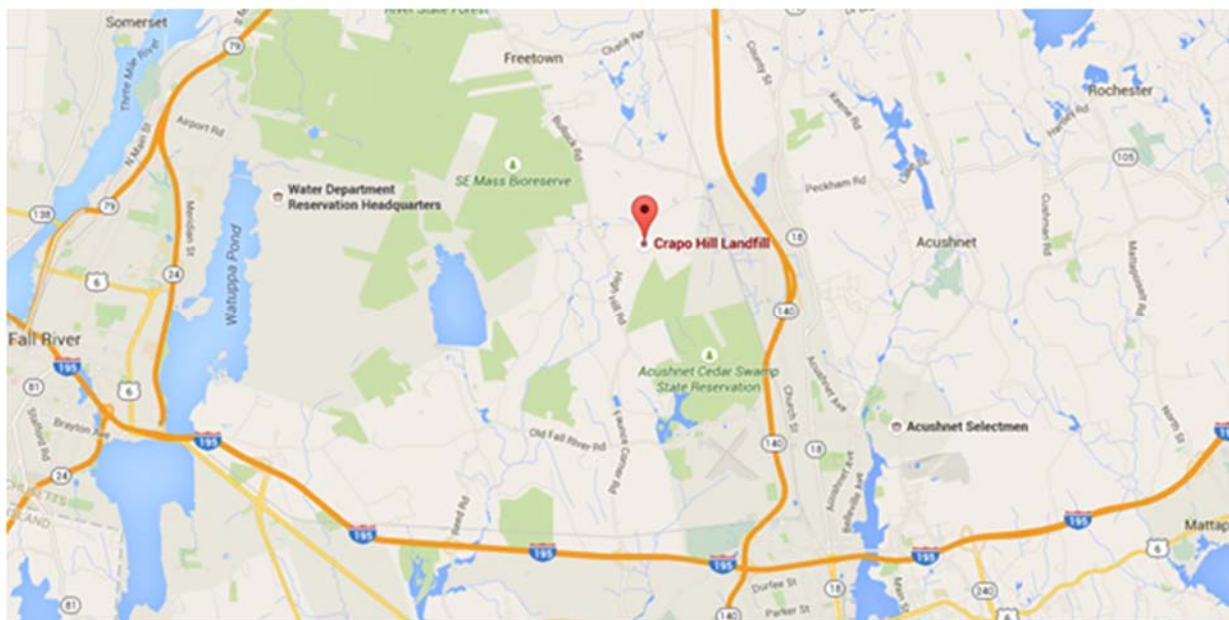
1.6 Project Crediting Period

The first Project Credit Period was a 10-year period starting March 28, 2006 and ending March 28, 2016.

The second Project Credit Period is a 10-year period starting March 29, 2016 and ending March 28, 2026.

1.7 Project Location

The Project is at the Crapo Hill Landfill located west of Samuel Barnet Boulevard in the northeast portion of the Town of Dartmouth, Massachusetts (latitude and longitude are 41° 43' 28.12" N and 70° 59' 04.82").



1.8 Title and Reference of Methodology

As outlined in the Project Description document, the VCS methodology applied to the Project was the approved consolidated baseline methodology UNFCCC's ACM0001, Version 16, "Large-scale Consolidated Methodology – Flaring or use of landfill gas".

1.9 Participation under other GHG Programs

- Emission Trading Programs and Other Binding Limits: The Project does not participate in emission trading programs and does not have other binding limits.
- Participation under Other GHG Programs: The Project is registered at the American Carbon Registry – Project ID of ACR 113. The emission reductions verified for this monitoring period will not be claimed under or registered on the ACR or any other registry. The last year that credits from this Project were registered under the ACR were for the full year of 2008 vintage.

1.10 Other Forms of Credit

- Other Forms of Environmental Credit: None. The Project has not sought or received another form of GHG-related environmental credit for the direct methane emissions reductions that result from the destruction of methane by the Project.

- Renewable Energy Portfolio Programs: The Project is qualified under the Massachusetts, Connecticut, Maine and New Hampshire Renewable Energy Portfolio Programs to produce Class 1 Renewable Energy Credits in Massachusetts, Connecticut, and Maine; and Class III Renewable Energy Credits in New Hampshire. These programs and the resulting Renewable Energy Credits do not include the GHG emission reduction attributes associated with the destruction of methane.

1.11 Sustainable Development

The project is a renewable energy project that supports sustainable development in the United States. The project specifically supports the United States Environmental Protection Agency Landfill Methane Outreach Program (LMOP), which is a voluntary program that works cooperatively with industry stakeholders and waste officials to reduce or avoid methane emissions from landfills. LMOP encourages the recovery and beneficial use of biogas generated from organic municipal solid waste. CRMC has been a member of LMOP since 1995. The project is listed on LMOP and CRMC reports performance of the project annually. The project helps LMOP to achieve its stated goals to reduce greenhouse gas emissions, reduction of air pollution by offsetting the use of non-renewable resources, create health and safety benefits, and benefit the community and economy.

CRMC also reports annual performance data to the US Energy Information Administration to support their requirements to track the performance of facilities that produce electricity nationally.

2 SAFEGUARDS

2.4 No Net Harm

None. The project is an environmental control project that is designed and operated to (1) control landfill gas emissions from a landfill that may otherwise be uncontrolled and (2) utilize an energy resource may be otherwise wasted.

2.5 Local Stakeholder Consultation

Provide tours of the facility to interested parties including school groups, college students, environmental advocacy groups, political leaders, etc. The project has been typically used as an example by the State of Massachusetts Clean Energy Council and Department of

Environmental Protection as an important environmental project that helps to achieve the environmental, renewable energy, GHG reduction and sustainability goals of Massachusetts. The Project was awarded the Silver Metal for Excellence in 2010 for landfill gas and biogas projects by the Solid Waste Association of North America (SWANA). Criteria used for this national award for excellence included Site Design & Construction, Environmental Controls, Regulatory Compliance, Planning, Operations & Financial Management, Utilization of Equipment/Systems and Technologies, Public Acceptance, Appearance and Aesthetics, and Innovation and Creativity.

2.6 AFOLU-Specific Safeguards

The Project is not an Agriculture, Forestry and Other Land Use (AFOLU) project.

3 IMPLEMENTATION STATUS

3.1 Implementation Status of the Project Activity

The project activity is in service.

The project activity operated normally during the monitoring period subject to this verification. The four engines destroyed landfill gas during the period. The back-up flare had very limited operation during the current verification period and no emission reductions are claimed from flaring.

3.2 Deviations

Methodology Deviations

The following methodology deviations were previously validated and approved for the Project:

- The SCADA system was programmed to calculate the methane gas flow in units of million British thermal units (MMBtu) using standardized gas flow (at 68°F and one atmosphere of pressure), methane concentration, the gross heat content (higher heating value) of methane, and the actual temperature and pressure. CNBE determined the volume of methane destroyed by converting the MMBtu values to total methane gas flow in standard cubic feet. This deviation from the monitoring methodology was previously approved by independent verifiers and had a conservative impact on the quantification of GHG emissions reductions during the verification period.

- The Project reference conditions are 20 degrees Centigrade and 1 atmosphere rather than ACM0001 reference conditions of 0 degrees Centigrade and 1 atmosphere.

Additional deviations from the latest methodology are:

1. A separate LFG meter is not present on each of the four combustion engines. A single meter is used immediately before the piping splits to each engine. This meter is continuously recording data. Operating data is tracked for each engine so it is possible to calculate the flow destroyed by each engine and to ensure that LFG is destroyed. Flow controls are in place to ensure no LFG is sent to an engine that is not operating. This does not affect the conservativeness of the emissions reductions claimed.
2. Ex-ante emissions reductions calculations use historic Project specific data as the basis for projecting future emissions rather than the required CDM estimation tools. Using real data allows the estimations to be more accurate and reflect actual Project operating conditions. This does not affect the conservativeness of the emissions reductions claimed but increases the accuracy of the ex-ante projections ensuring the project is forecasting obtainable, appropriate emissions reductions.
3. There is no flow meter installed on the collection pipe from the District Initial System to separately monitor the contribution of the original baseline system. Given the collection system design and meter requirements, installing a meter at this location would not produce reliable, meaningful results. Instead, well-head flow measurements are collected manually two times each month. These results are used to calculate the relative contribution of the District Initial System to the overall flow of LFG destroyed by the engines. This portion of the total flow represents FCH₄,BL,y and will be calculated on a monthly basis and subtracted from the total flow to account for the amount of methane destroyed in the baseline scenario. This approach represents an accurate measurement of the flow because (a) the portion of the landfill that includes the District Initial System (Phase 1) is capped so no landfill gas can be passively emitted to the atmosphere, and (b) the remaining active wells from the District Initial System are located in such a way as to enable capture of all LFG generated within the sphere of influence of the District Initial System. This deviation decreases the conservativeness of the emissions reductions claimed but significantly increases the accuracy of the calculations as is allowable under VCS Standard v3.7, Section 3.5.1.
4. The Project uses the eGrid electricity emissions factor rather than the default emissions factor provided in the CDM tool as explained in the project emissions section. This deviation decreases the conservativeness of the emissions reductions claimed but significantly increases the accuracy of the calculations as is allowable under VCS Standard v3.7, Section 3.5.1.

These deviations only apply to the monitoring and measurement portions of the Project.

Project Description Deviations

No project description deviations applied during this monitoring period.

3.3 Grouped Projects

The project is not a grouped project.

4 DATA AND PARAMETERS

4.1 Data and Parameters Available at Validation

Data / Parameter	OXtop_layer
Data unit	Dimensionless
Description	Fraction of methane that would be oxidized in the top layer of the SWDS in the baseline
Source of data	Consistent with how oxidation is accounted for in the methodological tool "Emissions from solid waste disposal"
Value applied:	0.1
Justification of choice of data or description of measurement methods and procedures applied	In accordance with requirements of ACM0001
Purpose of Data	Calculation of baseline emissions
Comments	No comments

Data / Parameter	GWpch4
Data unit	T CO ₂ e / t CH ₄
Description	Global warming potential of methane
Source of data	IPCC – Fourth Assessment Report
Value applied:	25
Justification of choice of data or description of measurement methods and procedures applied	Updated from 21 to 25 pursuant to (1) the re-validation report dated May 16, 2016, and (2) the VCS approval of updated global warming potentials provided in the IPCC's Fourth Assessment Report (Sections 3.15.3 and 4.8.3).
Purpose of Data	Calculation of baseline emissions
Comments	No comments

Data / Parameter	Regulatory requirements
Data unit	Not applicable
Description	Regulatory requirements applicable to the Landfill and Project
Source of data	Publicly available information on local, regional and national regulations
Value applied:	Not applicable
Justification of choice of data or description of measurement methods and procedures applied	Not applicable
Purpose of Data	To ensure continued compliance and regulatory additionality
Comments	This information is summarized in the PDD and will be monitored during the crediting period for any applicable changes.

Data / Parameter	Methane oxidation efficiency for electricity generation
Data unit	Percent
Description	Quantity of methane oxidized during combustion for electricity generation
Source of data	CDM Methodologies and Tools
Value applied:	100

Purpose of the data	Calculation of baseline and emissions reductions
Comments	None

Data Unit / Parameter:	Methane oxidation efficiency for flare
Data unit:	Percent
Description:	Quantity of methane oxidized during combustion using flare
Source of data:	VCS
Value applied:	50
Purpose of the data:	Baseline and emissions reductions
Any comment:	None

Data / Parameter	Fuel Use by the Emergency Generator
Data unit	Gallons/hour
Description	Average consumption of a 150kW generator operating at ¾ load to be used to calculate fuel consumed annually
Source of data	Diesel Service and Supply Company
Value applied:	8.4 gallons/hour
Justification of choice of data or description of measurement methods and procedures applied	Conservative for this piece of equipment given output needed vs total capacity
Purpose of the data	Calculation of project emissions
Comments	None

4.2 Data and Parameters Monitored

Data Unit / Parameter:	Methane content of gas (LFG and biogas)
Data unit:	Percent methane content of gas (LFG and biogas)
Description:	Methane content of gas (LFG and biogas)
Source of data:	SCADA System at Facility

Data Unit / Parameter:	Methane content of gas (LFG and biogas)
Description of measurement methods and procedures to be applied:	Non-dispersive infrared
Frequency of monitoring/recording:	Continuous, hourly, daily
Value monitored:	Methane concentration, %
Monitoring equipment:	California Analytical 602P, Serial # S07002
QA/QC procedures to be applied:	Field calibrated once per week. A zero check and value check is performed by comparison with standard certified gas.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Used in calculation to obtain heat value of gas (LFG and biogas) in Btu per scf of gas (LFG and biogas)
Any comment:	CO2 and O2 are also continuously monitored using the same instrument.

Data Unit / Parameter:	Volume of gas (LFG and biogas) to engines
Data unit:	Actual cubic feet per minute
Description:	Quantity of gas (LFG and biogas) used to fuel engines
Source of data:	SCADA System at Facility
Description of measurement methods and procedures to be applied:	Differential pressure measured across orifice plate
Frequency of monitoring/recording:	Continuous, hourly, daily
Value monitored:	Differential pressure
Monitoring equipment:	Oripac Model 4150, Serial #30154
QA/QC procedures to be applied:	Field calibrated once per month.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Fluid flow equation (Bernoulli) calculates actual cubic feet per minute of gas (LFG and biogas).
Any comment:	None

Data Unit / Parameter:	Temperature of gas (LFG and biogas) to engines
Data unit:	Degrees Fahrenheit
Description:	Temperature of gas (LFG and biogas)
Source of data:	SCADA System at Facility
Description of measurement methods and procedures to be applied:	Thermocouple
Frequency of monitoring/recording:	Continuous
Value monitored:	Temperature
Monitoring equipment:	Thermocouple, Omega or equivalent
QA/QC procedures to be applied:	Field calibrated using thermometer.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Used in fluid flow equation (Bernoulli) to calculate standard cubic feet per minute from actual cubic feet per minute of gas (LFG and biogas).
Any comment:	None

Data Unit / Parameter:	Pressure of gas (LFG and biogas) to engines
Data unit:	PSIG
Description:	Pressure of gas (LFG and biogas)
Source of data:	SCADA System at Facility
Description of measurement methods and procedures to be applied:	Pressure transducer
Frequency of monitoring/recording:	Continuous
Value monitored:	Static pressure
Monitoring equipment:	Pressure transducer, Omega or equivalent
QA/QC procedures to be applied:	Field calibrated using pressure gauge.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Used in fluid flow equation (Bernoulli) to calculate standard cubic feet per minute from actual cubic feet per minute of gas (LFG and biogas).
Any comment:	None

Data Unit / Parameter:	Pressure of gas (LFG and biogas) to engines
Data unit:	PSIG
Description:	Pressure of gas (LFG and biogas)
Source of data:	SCADA System at Facility
Description of measurement methods and procedures to be applied:	Pressure transducer
Frequency of monitoring/recording:	Continuous
Value monitored:	Static pressure
Monitoring equipment:	Pressure transducer, Omega or equivalent
QA/QC procedures to be applied:	Field calibrated using pressure gauge.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Used in fluid flow equation (Bernoulli) to calculate standard cubic feet per minute from actual cubic feet per minute of gas (LFG and biogas).
Any comment:	None

Data Unit / Parameter:	Methane content of biogas
Data unit:	Percent methane content of biogas
Description:	Methane content of biogas
Source of data:	CRMC Bioenergy Facility (anaerobic digester system) tied to SCADA System at Facility
Description of measurement methods and procedures to be applied:	Non-dispersive infrared
Frequency of monitoring/recording:	Continuous and at totalization of biogas volume
Value monitored:	Methane concentration, %
Monitoring equipment:	Hitech Model: IR600 Infra-Red Gas Analyzer, Serial #1-09916
QA/QC procedures to be applied:	Field calibrated periodically. A value check is performed by comparison with standard certified gas.

Data Unit / Parameter:	Methane content of biogas
Purpose of the data	Calculate emissions reductions.
Calculation method:	Used in calculation to obtain heat value of biogas in Btu per scf of biogas
Any comment:	None

Data Unit / Parameter:	Volume of biogas
Data unit:	Standard cubic feet per minute
Description:	Quantity of biogas added to LFG, both used to fuel engines
Source of data:	CRMC Bioenergy Facility (anaerobic digester system) tied to SCADA System at Facility
Description of measurement methods and procedures to be applied:	Differential pressure measured across a pitot tube
Frequency of monitoring/recording:	Continuous and at totalization of biogas volume
Value monitored:	Differential pressure
Monitoring equipment:	Dwyer Series DS-300 Flow Sensor, which is an averaging pitot tube
QA/QC procedures to be applied:	Field calibrated once per month.
Purpose of the data	Calculate emissions reductions.
Calculation method:	Fluid flow equation (Bernoulli) calculates actual cubic feet per minute of gas.
Any comment:	None

Data Unit / Parameter:	Temperature of biogas
Data unit:	Degrees Fahrenheit
Description:	Temperature of gas
Source of data:	CRMC Bioenergy Facility (anaerobic digester system) tied to SCADA System at Facility
Description of measurement methods and procedures to be applied:	Thermocouple

Data Unit / Parameter:	Temperature of biogas
Frequency of monitoring/recording:	Continuous monitoring
Value monitored:	Temperature
Monitoring equipment:	Thermocouple, Omega or equivalent
QA/QC procedures to be applied:	Field calibrated using thermometer.
Purpose of the data	Calculate emissions reductions.
Calculation method:	Used in fluid flow equation (Bernoulli) to calculate standard cubic feet per minute from actual cubic feet per minute of gas.
Any comment:	None

Data Unit / Parameter:	Pressure of biogas
Data unit:	PSIG
Description:	Pressure of gas
Source of data:	SCADA System at Facility
Description of measurement methods and procedures to be applied:	Pressure transducer
Frequency of monitoring/recording:	Continuous
Value monitored:	Static pressure
Monitoring equipment:	Pressure transducer, Omega or equivalent
QA/QC procedures to be applied:	Field calibrated using pressure gauge.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Used in fluid flow equation (Bernoulli) to calculate standard cubic feet per minute from actual cubic feet per minute of gas.
Any comment:	None

Data Unit / Parameter:	Volume of LFG to the flare
Data unit:	Standard cubic feet per minute

Data Unit / Parameter:	Volume of LFG to the flare
Description:	Quantity of landfill gas combusted in flare
Source of data:	Flare station
Description of measurement methods and procedures to be applied:	Differential pressure measured across orifice plate
Frequency of monitoring/recording:	Continuous, hourly, daily
Value monitored:	Standard cubic feet per minute
Monitoring equipment:	Omega PDF65 sqrt, Serial #57493
QA/QC procedures to be applied:	Field calibrated as required when operating.
Purpose of the data	Calculate baseline and emissions reductions.
Calculation method:	Fluid flow equation (Bernoulli) calculates standard cubic feet per minute of LFG.
Any comment:	None

Data / Parameter	Fraction of total LFG collected attributable to District Initial System
Data unit	Percentage
Description	Amount of LFG collected from the District Initial System that would have been destroyed in the baseline scenario
Source of data	Well-head measurements
Description of measurement methods and procedures to be applied	Measurements at each well-head using a hand-held instrument
Frequency of monitoring/recording	Twice a month (approximately every two weeks)
Value applied:	5% was used in the ex-ante calculation based on data June 2013 through September 2019
Monitoring equipment	Elkin Earthworks Model 1104M64-06

QA/QC procedures to be applied	Calibrations are conducted prior to each set of measurements and documented.
Purpose of data	Calculation of the baseline emissions
Calculation method	LFG flows from District Initial System/Total LFG flow from all wells
Comments	None

Data Unit / Parameter	EF EL,Grid,y
Data unit	tonnes CO2/MWh
Description	Emission factor for electricity generation in year y
Source of data	US EPA eGRID data
Description of measurement methods and procedures to be applied	This value converted from the pounds CO2/MWh provided by the US EPA.
Frequency of monitoring/recording	The eGRID data will be reviewed each year to ensure that the most current value is used.
Value applied	0.260 tonnes CO2/MWh
Monitoring equipment	None
QA/QC procedures to be applied	None
Purpose of data	Calculation of project emissions
Calculation method	570.90 lbs CO2/MWh*0.454545455 kg/lbs*0.001 tonnes/kg = 0.260 tonnes CO2/MWh
Any comment:	None

Data Unit / Parameter	TDL Grid,y
Data unit	--
Description	Average technical transmission and distribution losses for grid in year y

Source of data	Energy Information Administration (EIA) Department of Energy (DOE) Annual Energy Review 2011: Chapter 2 Energy Consumption by Sector. P. 66
Description of measurement methods and procedures to be applied	None
Frequency of monitoring/recording	This data will be reviewed each year to ensure that the most current value is used.
Value applied	0.07
Monitoring equipment	None
QA/QC procedures to be applied	None
Purpose of data	Calculation of project emissions
Calculation method	None
Any comment	None

Data Unit / Parameter	EC Grid,y
Data unit	MWh
Description	Amount of grid electricity consumed by the project
Source of data	Bills
Description of measurement methods and procedures to be applied	CNBE staff will compile the data.
Frequency of monitoring/recording	Data will be compiled annually.
Value applied	Ex Ante Calculation: 0 MWh/year based on 2019 usage
Monitoring equipment	None
QA/QC procedures to be applied	None
Purpose of data	Calculation of project emissions
Calculation method	None
Any comment	None.

Data Unit / Parameter:	FCDiesel,y
Data unit:	Gallons/year
Description:	Amount of diesel consumed by the emergency generator
Source of data:	Run time log
Description of measurement methods and procedures to be applied:	Plant operator will log the run time of the engine each time it is used
Frequency of monitoring/recording:	Data will be compiled annually.
Value applied:	Ex Ante Calculation: Based on 2019 usage, the engine ran for 55.7 hours. Using a conservative assumption that the engine operated at $\frac{3}{4}$ load, it was assumed that the engine uses 8.4 gallons of diesel per hour run. (Technical specifications provided to validator. See Parameter in Section 5.1 of PD)
Monitoring equipment:	None
QA/QC procedures to be applied:	None
Purpose of data:	Calculation of project emissions
Calculation method:	The total run time will be multiplied by 8.4 gallons/hour to determine the total amount of diesel consumed in the year.
Any comment:	None.

Data Unit / Parameter:	NCVdiesel
Data unit:	MMBtu/ gallon
Description:	Energy content of the diesel
Source of data:	Draft 2011 US Greenhouse Gas Inventory Report
Description of measurement methods and procedures to be applied:	This was converted from the MMBtu/barrel data provided by the USEPA. 5.809 MMBtu/barrel
Frequency of monitoring/recording:	Annual

Value applied:	0.13831 MMBtu/ gallon See ExAnteEstimate or Annual Calculation Workbooks for conversion
Monitoring equipment:	None
QA/QC procedures to be applied:	None
Calculation method:	None
Any comment:	Values provided by the EPA will be reviewed annually to ensure this value is the most up to date value available. This value is higher than the range provided by the IPCC in its 2006 Guidelines for National Greenhouse Gas Inventories and is therefore conservative.

Data Unit / Parameter:	EF CO ₂ ,Diesel,y
Data unit:	t CO ₂ /MMBtu
Description:	CO ₂ emissions factor for diesel
Source of data:	Draft 2011 US Greenhouse Gas Inventory Report
Description of measurement methods and procedures to be applied:	This was converted from the Tg C/Qbtu data provided by the US EPA. See ExAnteEstimate or Annual Calculation Workbooks for conversion
Frequency of monitoring/recording:	Annual
Value applied:	0.073957 t CO ₂ /MMBtu
Monitoring equipment:	N/A
QA/QC procedures to be applied:	N/A
Calculation method:	N/A
Any comment:	Values provided by the EPA will be reviewed annually to ensure this value is the most up to date value available.

4.3 Monitoring Plan

Critical for the accuracy and transparency of the calculation is that:

1. Measurements of gas flows are undertaken with reliable equipment that is regularly calibrated;
2. Sampling of Methane concentration in gas is undertaken with reliable equipment that is regularly calibrated;
3. Sampling of Methane concentration in gas takes place with a frequency that is sufficient to calculate average concentration factors that are statistically unbiased (i.e. they reflect the actual methane concentration of the gas);
4. Measurements of gas flows are undertaken at least on a monthly basis and are as frequent as necessary to apply statistically valid methane concentration factors (as described in (3), above);
5. Measurement and calibration equipment and processes and changes thereof are clearly described as part of the GHG emissions reporting process.

Unless otherwise specified through the GHG emissions reporting process, the following system is assumed to be in place.

4.3.1 Data Collection

At the Facility, the Supervisory Control and Data Acquisition (SCADA) system measures and records methane content and gas (LFG and biogas) volume to the engines and flare once per minute, and then calculates methane quantities each minute. The results are then accumulated to provide hourly and daily totals in units of million British thermal units on a higher heating value basis [MMBtu (HHV)] and thousand standard cubic feet (KSCF) of LFG. This data point provides information regarding the mixed landfill gas and biogas from the CRMC Bioenergy Facility (anaerobic digester system).

The same calculation is made using data from the biogas feed pipe. The difference between the total Btus entering the engines and the total Btus received from the biogas facility is the quantity attributed to the LFG collected and is used in the calculations described previously in the PDD. Because the calculations for this project are based on the use of Btus rather than metric tonnes of methane as discussed in the deviation section, the value obtained by this approach is not skewed by the mixing of the gases prior to the measurement of the gas entering the engines.

Flow Measurements

The flow meters are located directly upstream of the destruction devices. One flow meter serves as the unit for flow meter measurements to the four engines, one unit for flow measurement of the biogas, and one unit for flow meter measurements to the flare. Each flow meter is equipped with a totalizer that indicates the cumulative actual cubic feet of gas that have passed through that flow meter.

The Project uses an orifice plate flow meter purchased directly from its manufacturer, Lambda Square Inc for the engine measurements. The orifice plate flow meter is an Oripac® Model 5300 that determines flow based on pressure differentials measured across a 5-inch diameter bore pressure differential plate installed in the Project's 8-inch diameter LFG pipe. The design data for the instrument specifies an accuracy of ± 0.6 percent of full scale and the capability of measuring flows from 0 to 1,600 actual cubic feet per minute. The performance of the instrument in the field is assured by the manufacturer on the basis of bench scale testing in accordance with applicable design and methodologies prescribed by the International Standards Organization (ISO) and the American Society of Mechanical Engineers (ASME).

The Project uses an Omega PDF65 flow meter for measuring flow to the flare and a Dwyer Series DS-300 Flow Sensor, which is an averaging pitot tube, for measuring flow of the biogas.

Methane Measurements

The methane content of the gas (LFG and biogas), on a percent volume basis, is measured at a sampling port in the main header pipe near the flow meter with the use of a California Analytical Instrument Non-dispersive infrared (NDIR) analyzer. The readings are also logged by the SCADA system once per minute.

The methane content of the biogas is measured using a Hitech Model: IR600 Infra-Red Gas Analyzer.

Wellfield Measurements

Typically, a trained operator balances the landfill gas collection wellfield. During balancing the system, the operator measures and records the methane content, carbon dioxide content, oxygen content, landfill gas flow rate, landfill gas temperature, static pressure, and balance gas content. These results are logged in an electronic file to document system performance as well as to determine the percent contribution of LFG from the District Initial System.

Meter Calibrations

On installation, CNBE performed initial calibrations of the instruments, under actual field conditions using the USEPA Protocols described below. As a back-up to the flowmeter measurements, actual quantities of LFG destroyed in the Project engine-generators can be accurately calculated based on (a) the known engine heat rate (the number of British Thermal Units (Btus) required to produce

a kilowatt hour electric power, (b) the measured heat content of the LFG fuel, and the metered electric power output of the Project.

CNBE performs calibration of the orifice plate flow meter at least quarterly and often monthly. CNBE follows the USEPA-promulgated test methods (USEPA Protocols) for determining flow rates of gas through pipes at 40 CFR 60 Appendix A, including (a) Method 1a - sample and velocity traverses for stationary sources with small stacks or ducts, and (b) Method 2c - determination of gas velocity and volumetric flow rate in small stacks or ducts (standard pitot tube). The USEPA Protocols were established by the USEPA to accurately determine the volumetric flow rates of gases through pipes at industrial facilities to determine compliance with permit limitations on process and exhaust gases.

The calibration is performed by measuring the flow at a point near the orifice flow meters. A pitot tube attached to a manometer measures the flow. The pitot tube is inserted into the pipe and several points are measured across the full diameter of the pipe. The measurements taken by the pitot tube and manometer include velocity pressure and static pressure. Other measurements taken during calibration include gas temperature and barometric pressure.

Each week or more frequently as necessary, CNBE calibrates methane concentration measured on an automated basis by a California Instruments NDIR Analyzer installed at the Project, and any hand-held instrument that may be used in addition to the NDIR Analyzer is calibrated prior to its use. CNBE has found that weekly calibrations are sufficient to provide accurate measurements because of the reliable performance of the instrument, and the stringent dependence of engine operations on the accuracy of the methane measurements. CNBE typically experiences a weekly variance in the accuracy of methane content readings of one percent or less, which readings are measured by the California Instruments NDIR Analyzer and compared to readings from a certified standard gas containing a known methane concentration.

Another performance measure that is a further check and balance of methane content is the calculation of efficiency of the operating engine-generator sets, which is calculated daily and does not vary by more than approximately five percent during normal operations.

Biogas meters are calibrated as outlined in the relevant parameters.

4.3.2 Organizational structure, responsibilities and competencies

CNBE owns and manages the operations of the Facility and is responsible for oversight of operations and data collection, calculating emissions reductions and ensuring proper Project documentation. CNBE personnel have extensive experience in these areas. They have successfully implemented the Project over many years and have had no employee turnover.

CNBE contracts an operating company to conduct the operations and maintenance of the Facility. The operating company employs a full-time operator to conduct operations, maintenance,

inspections, calibrations, monitoring and record-keeping at the facility. The operator receives training on the necessary tasks and has a task reminder calendar to ensure duties are performed at the appropriate time.

4.3.3 Recordkeeping

The SCADA system creates a Microsoft Excel file that contains the hourly and daily totals of landfill gas flow, landfill gas heat value, landfill gas methane content, operating hours of each engine, gross power output of each engine, gross and net power output of the facility. This file is created each day at mid-night for the prior 24-hour period. The file is automatically stored on the SCADA system computer. This file can be accessed remotely or at the facility. The file is manually copied from in its entirety and pasted into the monthly quantification excel spreadsheet. No individual pieces of data are manually entered. The files are backed up at the Facility and off-site.

The SCADA systems also records all biogas data which is also transferred in its entirety and used in calculating the landfill gas values for determining Project emissions reductions.

Operator records including the Facility operation logs, maintenance logs and manually recorded data logs are maintained at the Facility. Operator records also include the log noting the run time of the emergency generator.

4.3.4 Internal Review

The Project uses several layers of review to ensure proper operations, data collection and quantification of emissions reductions.

The monthly quantification spreadsheet calculates several key performance parameters each day that are compared a few times per week to the expected performance range of each parameter. If the calculations show a significant deviation, corrective actions are taken. Corrective actions involve repairing equipment that is performing outside its normal range or correcting data that may have been reported in error. Equipment problems and corrective actions are noted in the “Service Section” of the monthly reports. CNBE includes notes to fully explain the problem and corrective action to the extent necessary. This information also identifies any deviations from this monitoring plan which can then be recorded in the verified Monitoring Report.

CNBE has established monthly operations meetings at the Facility between CNBE’s contract operator and the owners of CNBE. During each monthly meeting CNBE and the operator review the prior month operations performance including the production reports, work order list, unscheduled repairs and maintenance, and routine maintenance; the current month’s additions to the work orders that would prevent and correct deficiencies discovered and make overall improvements in performance of the Facility; review reports including monthly outage report,

methane calibration logs, exhaust gas oxygen logs, lubricating oil logs, spare parts inventory report and others that may be relevant. In addition, CNBE meets with the District to review the status of the LFG collection system performance and work required to prevent and correct deficiencies discovered and make overall improvements in performance of the system.

CNBE annually calculates the project emissions from electricity use and emergency generator use as outlined in the PD.

5 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

5.1 Baseline Emissions

See attached Exhibits 1 through 4.

5.2 Project Emissions Leakage

See attached Exhibits 1 through 4.

5.3 Leakage

See attached Exhibits 1 through 4.

5.4 Net GHG Emission Reductions and Removals

See attached Exhibits 1 through 4.

Year	Baseline emissions or removals (tCO ₂ e)	Project emissions or removals (tCO ₂ e)	Leakage emissions (tCO ₂ e)	Net GHG emission reductions or removals (tCO ₂ e)
Year 2019 (October 1, 2019 – December 31, 2019)	22,070	0	0	22,070
Year 2020 (January 1, 2020 – June 30, 2020)	44,475	0	0	44,475
Total	66,546	0	0	66,546

APPENDIX A: EXHIBITS 1 - 7

Exhibit 1

The emission reductions credits in CO2 equivalent tons in accordance with Project Methodology from
October 1, 2019 through June 30, 2020.

EXHIBIT 1
CommonWealth New Bedford Energy LLC
Greater New Bedford LFG Utilization Project
Dartmouth, Massachusetts
Calculation of Verified Emission Reduction Credits in CO2 equivalent tons
in accordance with the Project Methodology

Key parameters used in calculations

Parameter	VCS	VCS
Methane oxidation efficiency electricity generation	100.0%	100.0%
Methane oxidation efficiency LFG flaring	50.0%	50.0%
Methane, molecular weight	16.04	16.04
Pounds per metric ton	2,204.62	2,204.62
Gas constant (scf per lb-mole)	385.32	385.32
Global Warming Potential (GWP) methane	25	25

Summary results

		Unit		
Electricity generation				
Start date			1-Oct-19	1-Jan-20
End date			31-Dec-19	30-Jun-20
Methane delivered	scf		53,203,611	160,402,691
Emission Reductions	metric tons CO2e		25,119	50,611
Flaring				
Start date			1-Oct-19	1-Jan-20
End date			31-Dec-19	30-Jun-20
Methane delivered	scf		-	-
Emission Reductions	metric tons CO2e		-	-
Subtotal				
Methane delivered	scf		53,203,611	160,402,691
Emission Reductions	metric tons CO2e		25,119	50,611
Deductions				
Oxidation potential	metric tons CO2e		2,512	5,061
District Initial System	metric tons CO2e		536	1,073
Electricity use utility and diesel backup	metric tons CO2e		-	2
Total				
Emission Reductions eligible under VCS program	metric tons CO2e		22,070	44,475

Exhibit 2

Gas totalizer readings, and methane content readings for the period October 1, 2019 through June 30, 2020, and calculations using the verification protocols under the VCS to obtain emission reductions from methane oxidation during energy generation.

EXHIBIT 2
CommonWealth New Bedford Energy LLC
Emission Reductions from methane oxidation during energy generation

Physical constants:	
Methane, molecular weight (lb per lb-mole)	16.04
Pounds to metric ton	2,204.62
Gas constant, scf per lb-mole	385.32

Calculation of Verified Emission Reduction in CO2 equivalent tons per the following:
Verification Process: UNFCCC's CDM methodology ACM0001 (Version 16)
Standard of Verification: Verified Carbon Standard Version 3, October 19, 2016, v3.6

Begin period - date	End period - date	Totalizer reading end period	Totalizer reading start period	Total in period	Methane delivered to engines	Methane delivered cumulative	Methane delivered in the period	Methane delivered in the period cumulative	Methane oxidation efficiency	MD electricity, Mass methane destroyed in the period	MD electricity, Mass methane destroyed cumulative	Global warming potential methane tons CO2 equivalent per ton methane	Emission reduction CO2 equivalent metric tons	Emission reduction cumulative CO2 equivalent metric tons
mm/dd/yy	mm/dd/yy	MMBtu HHV	MMBtu HHV	MMBtu HHV	scf	scf	metric tons	metric tons	%	metric tons	metric tons			
	1-Oct-19													
1-Oct-19	31-Oct-19	18,195	-	18,195	17,979,712	17,979,712	340	340	100.0%	340	340	25	8,489	8,489
1-Nov-19	30-Nov-19	36,042	18,195	17,846	17,634,727	35,614,440	333	673	100.0%	333	673	25	8,326	16,814
1-Dec-19	31-Dec-19	53,842	36,042	17,800	17,589,171	53,203,611	332	1,005	100.0%	332	1,005	25	8,304	25,119
	1-Jan-20													
1-Jan-20	31-Jan-20	19,201	-	19,201	18,973,170	72,176,780	358	1,363	100.0%	358	1,363	25	8,958	8,958
1-Feb-20	28-Feb-20	37,368	19,201	18,168	17,952,082	90,128,862	339	1,702	100.0%	339	1,702	25	8,476	17,433
1-Mar-20	31-Mar-20	56,380	37,368	19,012	18,786,470	108,915,332	355	2,057	100.0%	355	2,057	25	8,870	26,303
1-Apr-20	30-Apr-20	73,942	56,380	17,562	17,353,378	126,268,711	328	2,385	100.0%	328	2,385	25	8,193	34,496
1-May-20	31-May-20	91,600	73,942	17,659	17,449,198	143,717,909	330	2,714	100.0%	330	2,714	25	8,238	42,734
1-Jun-20	30-Jun-20	108,485	91,600	16,885	16,684,783	160,402,691	315	3,029	100.0%	315	3,029	25	7,877	50,611

Exhibit 3

LFG totalizer readings, and methane content readings for the periods from October 1, 2019 through June 30, 2020, and calculations using the verification protocols under the VCS to obtain emission reductions from methane oxidation during flaring.

EXHIBIT 3
CommonWealth New Bedford Energy LLC
Calculation of Verified Emission Reduction in CO2 equivalent tons per the Project Methodology
Emission Reductions from methane oxidation from LFG flaring

Physical constants:	
Methane, molecular weight (lb per lb-mole)	16.04
Pounds to metric ton	2,204.62
Gas constant, scf per lb-mole	385.32

Calculation of Verified Emission Reduction in CO2 equivalent tons per the following: Verification Process: UNFCCC's CDM methodology ACM0001 (Version 16) Standard of Verification: Verified Carbon Standard Version 3, October 19, 2016, v3.6																
Methane oxidation efficiency	MD flare, Mass methane destroyed in the period	MD flare, Mass methane destroyed cumulative	Global warming potential methane	Emission reduction	Emission reduction cumulative	PE flare, Project emissions (uncontrolled emissions to atmosphere from flare)	PE flare, Project emissions cumulative (uncontrolled emissions to atmosphere from flare)									
%	metric tons	metric tons	tons CO2 equivalent per ton methane	CO2 equivalent metric tons	CO2 equivalent metric tons	CO2 equivalent metric tons	CO2 equivalent metric tons									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									
50%	-	-	25	-	-	-	-									

Exhibit 4

The key factors, equations, and calculation of VCUs in accordance with the approved consolidated baseline methodology ACM0001, Version 16.0 "Large-scale Consolidated Methodology – Flaring or use of landfill gas" dated 16 October 2015 as promulgated by the United Nations Framework Convention of Climate Change (UNFCCC) under the Clean Development Mechanism (CDM).

EXHIBIT 4**EX Ante Estimates of Annual Emissions Reductions**

	Formula variables	Value used	Units	Source if appropriate
$ER_y = BE_y - PE_y$				
66,546	BE_y	see below	tCO ₂ e/period	
	PE_y	2.17	tCO ₂ e/period	See Electricity Tab + Emergency Generator Tab
$BE_y = BE_{CH_4,y}$				
66,548	$BE_{CH_4,y}$	see below	tCO ₂ e/period	
$BE_{CH_4,y} = ((1 - OX_{top_layer}) \times F_{CH_4,PJ,y} - F_{CH,BL,y}) \times GWP_{CH_4}$				
66,548	OX_{top_layer}	0.1		ACM001 Methodology value
	GWP_{CH_4}	25	tCO ₂ e / tCH ₄	IPCC Value - 4th assessment report
	$F_{CH_4,PJ,y}$	see below	t CH ₄ /period	
	$F_{CH,BL,y}$	see below	t CH ₄ /period	
$F_{CH_4,PJ,y} = F_{CH_4,flared,y} + F_{CH_4,EL,y}$				
3,029	$F_{CH_4,flared,y}$	0	t CH ₄ /period	See Exhibit 3 tab
	$F_{CH_4,EL,y}$	3029	t CH ₄ /period	See Exhibit 2 tab
$F_{CH_4,BL,y} = F_{CH_4,BL,sys,y}$				
$F_{CH_4,BL,sys,y} = \%DistrictInitialSystem \times F_{CH_4,PJ,y}$				
64.4	%DistrictInitialSystem	4.25		See DistrictInitialSystemTab
	$F_{CH_4,PJ,y}$	see above	t CH ₄ /period	
		50%	Methane oxidation efficiency for flare	

Supporting Information for Exhibit 4

Electricity Consumption Project Emissions

$PE_{EC,y} = EC_{PJ,Grid,y} * FE_{EL,Grid,y} * (1 + TDL_{Grid,y})$

0.00 tCO2

Variable	Value	Units	Data Source
ECPJ,Grid, y	0	MW hr	See Eversource bill
FEEL,Grid,y	0.26	tonnes CO2/MW hr	USEPA Conversions tab/eGrid data
TDLGrid,y	0.07	None	EIA Annual Energy Report 2011

USAGE HISTORY

Select an Account :

27461920012(CNBE)

300 SAMUEL-BARNET BLV CGN, NEW BEDFRD MA 02745

Meter Number: 5120378



Download my secure data with Green Button



Email My Data

View Data From :

13 months



Usage Graph



Usage Data

Read Date ▼	Usage (kWh) ▲	Number of Days ▲	Usage Per Day ▲	Cost Per Day ▲	Total Charge ▲	Average Temp(°F) ▲
06/17/2020	0	30	0	\$0.20	\$5.88	63.0
05/18/2020	0	32	0	\$0.18	\$5.70	48.0
04/16/2020	0	29	0	\$0.20	\$5.70	44.0
03/18/2020	0	29	0	\$0.20	\$5.71	40.0
02/18/2020	0	32	0	\$0.18	\$5.71	34.0
01/17/2020	0	31	0	\$0.18	\$5.71	37.0
12/17/2019	0	29	0	\$0.20	\$5.88	39.0
11/18/2019	0	32	0	\$0.18	\$5.88	48.0
10/17/2019	0	30	0	\$0.19	\$5.70	61.0
09/17/2019	0	32	0	\$0.18	\$5.70	69.0

Supporting Information for Exhibit 4

Fossil Fuel Project Emissions

Emergency Generator - Diesel Use

Gallons of Diesel Consumed (1 year Actual)

$$212 \quad FC_{\text{Diesel}} = \text{Number of hours run} * \text{Gallons used/hour}$$

$$COEF_{\text{Diesel},2015} = NCV_{\text{Diesel},2015} * EF_{\text{CO}_2,\text{Diesel},2015}$$

$$COEF_{\text{Diesel},2015} \quad 0.010229 \quad \text{See inputs on USEPA Data Conversions Tab}$$

$$PE_{FC,2015} = FC_{\text{Diesel},2015} * COEF_{\text{Diesel},2015}$$

$$PE_{FC, 2010} \quad \boxed{2.17} \text{ tonnes CO}_2 \quad \begin{array}{l} \text{Occurred during 2020} \\ \text{0 during Oct 1 - Dec 31, 2019.} \end{array}$$

Assumptions Used

Generator runs at 3/4 load during testing and operation

(This is conservative as the plant requires 75-90kW/hr to operate
and the generator can produce up to 150kW/hr)

During October 1, 2019 through June 30, 2020, the generator ran 25.2 hours (see log sheet)

The generator requires 8.4 gallons/hour running at 3/4 Load (see estimate fuel consumption)

$$\begin{array}{l} 25.2 \text{ hours} * 8.4 \text{ gallons/hour} \\ 211.68 \text{ gallons} \end{array}$$

Emergency Generator Log Sheet
CNBE

[illegible]
$$326.5 - 301.3 = 25.2 \quad \text{Hours}$$

Supporting Information for Exhibit 4

Gas extraction from District Initial System versus Phase 1 Area and District Total System

Month	Days	LFG flow rate from District Initial System contained in Phase 1 area scfm @50% methane		LFG flow rate from District Total System, scfm @50% methane		District Initial System/Total
Oct-19	31	45		1047		4.3%
Nov-19	30	45		1061		4.2%
Dec-19	31	45		1024		4.4%
Jan-20	31	45		1105		4.1%
Feb-20	29	45		1158		3.9%
Mar-20	31	45		1094		4.1%
Apr-20	30	45		1044		4.3%
May-20	31	45		1016		4.4%
<u>Jun-20</u>	<u>30</u>	<u>45</u>		<u>1004</u>		<u>4.5%</u>

Weighted Average 4%

Average 4%

Note: During October 1, 2019 through June 30, 2020, the Initial District System consists of 9 remaining active wells measuring less than 5 cfm lower detection limit of each well. Assume worst conservative case of 5 cfm from each remaining well.

Exhibit 5

Compilation of the field data logs recording the total gas volumes and methane content readings for the identified reporting period.

ELIGRO

DOCK OR BURN

REWORK ONLY

THIS UNIT

CA

elster

ZD3210JA0L4-50

Pkh

VTR _____ :1

TYPE **A3RAL**

Mult. by **2100**

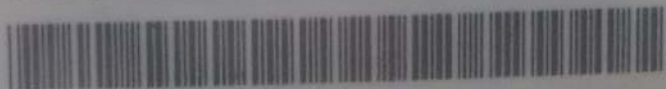
CTR _____ :5

03 04332

GPRS*3G

elster

NSTAR ELECTRIC 5120378



KZG 512037816

20742831

814

CL20, 120 TO 480V, 4WY or 4WD, 60Hz

Kh 1.8

FM 9S (8S) Watthour Meter

P/R 24

R3.04.02-1652QM-02FD5B

TA 2.5 A

ITRON MODEL: A3 3G B
CONTAINS FCC ID: N7NSL8080

OCTOBER 2019																		
		Tuesday 10/1/2019	Wednesday 10/2/2019	Thursday 10/3/2019	Friday 10/4/2019	Saturday 10/5/2019	Sunday 10/6/2019	Monday 10/7/2019	Tuesday 10/8/2019	Wednesday 10/9/2019	Thursday 10/10/2019	Friday 10/11/2019	Saturday 10/12/2019	Sunday 10/13/2019	Monday 10/14/2019	Tuesday 10/15/2019	Wednesday 10/16/2019	
LFG and Biogas Flow to the Engines (KSCF)		1,159	1,161	1,154	1,110	1,152	1,148	1,145	1,148	1,152	1,127	1,149	1,155	1,156	1,141	1,161	1,137	
LFG and Biogas Flow to the Engines (MMBTU HHV)		614	617	601	590	592	591	598	602	604	591	613	617	606	602	609	610	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,159	1,161	1,154	1,110	1,152	1,148	1,145	1,148	1,152	1,127	1,149	1,155	1,156	1,141	1,161	1,137	
LFG and Biogas Total Flow (MMBTU HHV)		614	617	601	590	592	591	598	602	604	591	613	617	606	602	609	610	
Average Methane Content (%)		52.3	52.5	51.4	52.5	50.8	50.8	51.6	51.8	51.8	51.8	52.7	52.7	51.8	52.2	51.8	53.0	
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 2 Hours		-	-	-	-	-	-	-	-	-	-	1	-	-	3	15	24	
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 4 Hours		24	24	24	22	24	24	24	24	24	24	24	24	24	24	9	-	
Generator 1 Power Output (kWhr)		16,584	16,436	16,228	15,740	16,196	16,788	16,784	16,784	16,784	16,740	16,584	16,232	15,604	16,532	16,348	16,784	
Generator 2 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	236	9,280	15,968	
Generator 3 Power Output (kWhr)		16,572	16,768	16,252	15,780	15,740	15,584	15,580	16,184	16,016	16,100	16,768	16,768	16,736	16,736	16,736	16,752	
Generator 4 Power Output (kWhr)		16,140	16,140	15,732	15,288	15,552	15,556	15,554	15,552	16,252	16,692	16,692	16,728	15,880	14,408	5,768	-	
Gross Power Output (kWhr)		49,334	49,386	48,249	46,846	47,545	47,981	47,964	47,962	48,565	49,051	49,411	49,771	48,284	47,970	48,192	49,604	
Net Power Output (kWhr)		47,300	47,276	46,208	44,880	45,604	46,008	45,852	45,936	46,512	46,972	47,316	47,724	46,244	45,876	46,024	47,412	
Power Sold as metered by NStar, (kWhr)		47,162	47,134	46,089	44,779	45,502	45,884	45,705	45,802	46,397	46,844	47,191	47,589	46,116	45,764	45,900	47,278	
Offgrid RECs (kWhr)		2,034	2,109	2,042	1,965	1,942	1,973	2,112	2,026	2,052	2,080	2,095	2,047	2,040	2,094	2,169	2,191	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		691	685	676	656	675	700	699	699	699	698	691	676	650	689	681	699	
Generator 2		-	-	-	-	-	-	-	-	-	-	-	-	-	79	619	665	
Generator 3		691	699	677	658	656	649	649	649	674	667	671	699	699	697	697	698	
Generator 4		673	673	656	695	648	648	648	648	648	677	696	697	662	600	641	-	
Power output (kW average over 24-hrs)																		
Facility Gross		2,056	2,058	2,010	1,952	1,981	1,999	1,999	1,998	2,024	2,044	2,059	2,074	2,012	1,999	2,008	2,067	
Facility Net		1,971	1,970	1,925	1,870	1,900	1,917	1,911	1,914	1,938	1,957	1,972	1,989	1,927	1,912	1,918	1,976	
In-plant load		85	88	85	82	81	82	88	84	86	87	87	85	85	87	90	91	
Daily availability factor																		
Facility		75%	75%	75%	73%	75%	75%	75%	75%	75%	75%	76%	75%	75%	78%	75%	75%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	0%	0%	13%	63%	100%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	38%	0%	
Daily capacity factor																		
Facility		62%	62%	61%	59%	60%	61%	61%	61%	61%	62%	62%	63%	61%	61%	61%	63%	
Engine 1		84%	83%	82%	79%	82%	85%	85%	85%	85%	85%	84%	82%	79%	83%	83%	85%	
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	75%	81%	
Engine 3		84%	85%	82%	80%	79%	79%	79%	79%	82%	81%	81%	85%	85%	85%	85%	85%	
Engine 4		82%	82%	79%	84%	79%	79%	79%	79%	82%	84%	84%	80%	73%	78%	78%	0%	
Cumulative by engine																		
Engine operating run hours in the month																		
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 1		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 2		0	0	0	0	0	0	0	0	0	0	1	1	1	4	19	43	
Engine 3		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 4		24	48	72	94	118	142	166	190	214	238	262	286	310	334	343	343	
Engine operating run hours total from 0 hours																		
Engine 1		109,714	109,738	109,762	109,786	109,810	109,834	109,858	109,882	109,906	109,930	109,954	109,978	110,002	110,026	110,050	110,074	110,098
Engine 2		95,533	95,533	95,533	95,533	95,533	95,533	95,533	95,533	95,533	95,533	95,534	95,534	95,534	95,537	95,552	95,576	
Engine 3		105,155	105,179	105,203	105,227	105,251	105,275	105,299	105,323	105,347	105,371	105,395	105,419	105,443	105,467	105,491	105,515	105,539
Engine 4		104,558	104,582	104,606	104,630	104,652	104,676	104,700	104,724	104,748	104,772	104,796	104,820	104,844	104,868	104,892	104,901	104,901
Cumulative availability, %		October 1, 2019 @ 00:00 hours																
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	5%	11%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	98%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%	95%	89%	
Engine cumulative gross output, kWhr																		
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200	
Engine 1		691	1,376	2,052	2,708	3,383	4,082	4,782	5,481	6,180	6,878	7,569	8,245	8,895	9,584	10,265	10,965	
Engine 2		-	-	-	-	-	-	-	-	-	-	-	-	-	79	697	1,363	
Engine 3		691	1,389	2,066	2,724	3,380	4,029	4,678	5,328	6,002	6,669	7,340	8,039	8,737	9,435	10,132	10,830	
Engine 4		673	1,345	2,001	2,695	3,343	3,992	4,639	5,287	5,935	6,612	7,308	8,005	8,667	9,267	9,908	9,908	
Cumulative capacity factor, %																		
Engine 1		84%	83%	83%	82%	82%	82%	83%	83%	83%	83%	83%	83%	83%	83%	83%	83%	
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	6%	10%	
Engine 3		84%	84%	83%	83%	82%	81%	81%	81%	81%	81%	81%	81%	81%	82%	82%	82%	
Engine 4		82%	82%	81%	82%	81%	81%	80%	80%	80%	80%	81%	81%	81%	80%	80%	75%	

		Tuesday 10/1/2019	Wednesday 10/2/2019	Thursday 10/3/2019	Friday 10/4/2019	Saturday 10/5/2019	Sunday 10/6/2019	Monday 10/7/2019	Tuesday 10/8/2019	Wednesday 10/9/2019	Thursday 10/10/2019	Friday 10/11/2019	Saturday 10/12/2019	Sunday 10/13/2019	Monday 10/14/2019	Tuesday 10/15/2019	Wednesday 10/16/2019
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	288	358	430	502	574	646	718	791	863	935	1,010	1,082	1,154
Cumulative Availability, %		75.0%	75.0%	75.0%	74.5%	74.6%	74.7%	74.7%	74.7%	74.8%	74.8%	74.9%	74.9%	74.9%	75.1%	75.1%	75.1%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		49,334	98,720	146,969	193,815	241,360	289,341	337,305	385,267	433,832	482,883	532,294	582,065	630,349	678,319	726,511	776,115
Cumulative Capacity Factor		62.3%	62.3%	61.9%	61.2%	60.9%	60.9%	60.8%	60.8%	60.9%	61.0%	61.1%	61.2%	61.2%	61.2%	61.2%	61.2%
Cumulative fuel input, MMBtu HHV		614	1,231	1,831	2,421	3,013	3,604	4,201	4,803	5,407	5,999	6,611	7,228	7,833	8,436	9,045	9,655
Cumulative gross output, kWhr		49,334	98,720	146,969	193,815	241,360	289,341	337,305	385,267	433,832	482,883	532,294	582,065	630,349	678,319	726,511	776,115
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,196	11,248	11,207	11,330	11,212	11,079	11,216	11,295	11,198	10,854	11,159	11,154	11,289	11,305	11,378	11,076
Daily heat rate, Btu/kWe gross HHV		12,438	12,495	12,450	12,586	12,458	12,307	12,459	12,547	12,439	12,057	12,396	12,391	12,540	12,558	12,639	12,303
Cumulative heat rate, Btu/kWe gross LHV		11,196	11,222	11,217	11,245	11,238	11,212	11,212	11,223	11,220	11,183	11,180	11,178	11,187	11,195	11,207	11,199
Cumulative heat rate, Btu/kWe gross HHV		12,438	12,467	12,461	12,491	12,484	12,455	12,455	12,467	12,464	12,422	12,420	12,418	12,427	12,436	12,450	12,440
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	25,824	25,920	26,016	26,112	26,208	26,304	26,400	26,496	26,592	26,688	26,784	26,880	26,976	27,072	27,168	27,264	
Actual cumulative engine run hours	19,006	19,078	19,150	19,220	19,292	19,364	19,436	19,508	19,580	19,652	19,725	19,797	19,869	19,944	20,016	20,088	
Cumulative Availability, %	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.6%	73.7%	73.7%	73.7%	73.7%
Max cumulative gross output, kWhr	21,304,800	21,384,000	21,463,200	21,542,400	21,621,600	21,700,800	21,780,000	21,859,200	21,938,400	22,017,600	22,096,800	22,176,000	22,255,200	22,334,400	22,413,600	22,492,800	
Actual cumulative gross output, kWhr	11,845,138	11,894,524	11,942,773	11,989,619	12,037,164	12,085,145	12,133,109	12,181,071	12,229,636	12,278,687	12,328,098	12,377,869	12,426,153	12,474,123	12,522,315	12,571,919	
Cumulative Capacity Factor	55.6%	55.6%	55.6%	55.7%	55.7%	55.7%	55.7%	55.7%	55.7%	55.7%	55.8%	55.8%	55.8%	55.8%	55.9%	55.9%	55.9%
Cumulative fuel input, MMBtu HHV	143,590	144,207	144,808	145,398	145,990	146,580	147,178	147,780	148,384	148,975	149,588	150,205	150,810	151,412	152,022	152,632	
Cumulative gross output, kWhr	11,845,138	11,894,524	11,942,773	11,989,619	12,037,164	12,085,145	12,133,109	12,181,071	12,229,636	12,278,687	12,328,098	12,377,869	12,426,153	12,474,123	12,522,315	12,571,919	
Cumulative heat rate, Btu/kWe gross LHV	10,912	10,914	10,915	10,917	10,918	10,918	10,920	10,921	10,922	10,922	10,923	10,924	10,925	10,927	10,928	10,929	
Cumulative heat rate, Btu/kWe gross HHV	12,122	12,124	12,125	12,127	12,128	12,129	12,130	12,132	12,133	12,133	12,134	12,135	12,137	12,138	12,140	12,141	
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Tuesday 10/1/2019	Wednesday 10/2/2019	Thursday 10/3/2019	Friday 10/4/2019	Saturday 10/5/2019	Sunday 10/6/2019	Monday 10/7/2019	Tuesday 10/8/2019	Wednesday 10/9/2019	Thursday 10/10/2019	Friday 10/11/2019	Saturday 10/12/2019	Sunday 10/13/2019	Monday 10/14/2019	Tuesday 10/15/2019	Wednesday 10/16/2019
Hour																	
1		1,938	1,982	1,926	1,984	1,913	1,915	1,909	1,911	1,912	1,961	1,957	1,958	1,957	1,909	1,919	1,955
2		1,938	1,982	1,911	1,985	1,914	1,914	1,908	1,911	1,911	1,961	1,957	1,959	1,956	1,908	1,910	1,956
3		1,939	1,983	1,910	1,985	1,914	1,913	1,909	1,911	1,912	1,961	1,958	2,005	1,956	1,909	1,911	1,956
4		1,939	1,982	1,910	1,985	1,877	1,914	1,909	1,911	1,912	1,961	1,957	2,006	1,956	1,945	1,910	1,956
5		1,939	1,980	1,910	1,985	1,866	1,914	1,909	1,911	1,912	1,961	1,957	2,006	1,956	1,957	1,910	1,955
6		1,939	1,980	1,910	1,985	1,866	1,914	1,909	1,912	1,912	1,960	1,957	2,005	1,956	1,956	1,910	1,955
7		1,939	1,980	1,911	1,985	1,867	1,914	1,909	1,911	1,912	1,960	1,959	2,005	1,943	1,957	1,910	1,956
8		1,939	1,979	1,910	1,985	1,867	1,914	1,909	1,911	1,910	1,958	1,958	2,005	1,909	1,957	1,908	1,954
9		1,963	1,968	1,880	1,967	1,867	1,913	1,898	1,904	1,904	1,920	1,951	2,006	1,909	1,918	1,811	1,945
10		1,979	1,923	1,855	1,928	1,867	1,913	1,900	1,903	1,900	1,882	1,951	2,006	1,908	1,918	1,718	1,949
11		1,977	1,922	1,855	1,449	1,863	1,912	1,899	1,902	1,906	1,953	1,936	2,005	1,907	1,624	1,797	1,952
12		1,974	1,958	1,888	141	1,861	1,912	1,896	1,901	1,922	1,950	1,901	2,005	1,907	1,793	1,887	1,949
13		1,970	1,972	1,905	1,740	1,907	1,911	1,896	1,903	1,952	1,948	1,953	2,005	1,905	1,650	1,930	1,945
14		1,978	1,972	1,904	2,013	1,911	1,911	1,895	1,903	1,952	1,947	1,978	2,004	1,906	1,839	1,945	1,948
15		1,976	1,972	1,906	2,010	1,914	1,912	1,894	1,904	1,953	1,953	1,982	1,990	1,906	1,919	1,939	1,951
16		1,976	1,972	1,906	2,007	1,915	1,911	1,896	1,905	1,954	1,953	2,000	1,958	1,907	1,935	1,941	1,951
17		1,982	1,979	1,912	2,011	1,914	1,912	1,904	1,906	1,954	1,955	2,006	1,958	1,908	1,957	1,947	1,993
18		1,983	1,982	1,928	2,011	1,914	1,911	1,907	1,910	1,954	1,957	1,959	1,908	1,959	1,958	2,006	
19		1,982	1,981	1,937	1,975	1,915	1,911	1,907	1,913	1,951	1,957	2,005	1,958	1,910	1,960	1,958	2,008
20		1,983	1,948	1,981	1,962	1,914	1,910	1,908	1,912	1,960	1,958	2,005	1,958	1,910	1,959	1,957	2,005
21		1,982	1,934	1,984	1,947	1,914	1,908	1,908	1,912	1,960	1,957	1,983	1,957	1,909	1,959	1,956	2,007
22		1,982	1,934	1,983	1,913	1,914	1,909	1,909	1,912	1,960	1,957	1,958	1,957	1,909	1,959	1,956	2,008
23		1,983	1,934	1,983	1,913	1,914	1,908	1,908	1,911	1,961	1,957	1,958	1,957	1,909	1,958	1,956	2,009
24		1,982	1,935	1,984	1,913	1,914	1,908	1,909	1,912	1,961	1,957	1,958	1,957	1,909	1,959	1,956	2,009
TOTAL		47,162	47,134	46,089	44,779	45,502	45,884	45,705	45,802	46,397	46,844	47,191	47,589	46,116	45,764	45,900	47,278
Cumulative Output Sold, kWhr		47,162	94,296	140,385	185,164	230,666	276,550	322,255	368,057	414,454	461,298	508,489	556,078	602,194	647,958	693,858	741,136
Transformer and line efficiency		99.7%	99.7%	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%	99.8%	99.7%	99.7%
Hourly average		1,965	1,964	1,920	1,866	1,896	1,912	1,904	1,908	1,933	1,952	1,966	1,983	1,922	1,907	1,913	1,970

OCTOBER 2019		Thursday 10/17/2019	Friday 10/18/2019	Saturday 10/19/2019	Sunday 10/20/2019	Monday 10/21/2019	Tuesday 10/22/2019	Wednesday 10/23/2019	Thursday 10/24/2019	Friday 10/25/2019	Saturday 10/26/2019	Sunday 10/27/2019	Monday 10/28/2019	Tuesday 10/29/2019	Wednesday 10/30/2019	Thursday 10/31/2019	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine		1,024	1,117	1,157	1,142	1,142	1,131	1,035	1,115	1,147	1,115	1,100	1,106	1,084	1,110	1,101	34,981	571	34,410
LFG and Biogas Flow to the Engine		580	602	616	607	609	604	563	597	607	590	594	592	579	597	606	18,600	404	18,195
LFG and Biogas Flow to the Flare (t		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2%	98%
LFG and Biogas Total Flow (KSCF		1,024	1,117	1,157	1,142	1,142	1,131	1,035	1,115	1,147	1,115	1,100	1,106	1,084	1,110	1,101	34,981		
LFG and Biogas Total Flow (MMBT		580	602	616	607	609	604	563	597	607	590	594	592	579	597	606	18,600		
Average Methane Content (%)		56.0	53.3	52.6	52.6	52.7	52.8	53.8	52.9	52.3	52.2	53.4	52.9	52.8	53.1	54.4	52.5		
Engine 1 Hours		24	23	24	24	13	-	-	-	-	-	-	-	-	-	-	492		
Engine 2 Hours		11	2	-	-	13	24	24	24	24	24	24	24	24	24	24	309		
Engine 3 Hours		24	24	24	24	24	24	23	24	24	24	24	24	24	24	24	743		
Engine 4 Hours		11	24	24	24	24	24	21	23	24	24	24	24	24	24	24	686		
Generator 1 Power Output (kWhr)		16,788	13,740	13,232	13,232	6,596	-	-	-	-	-	-	-	-	-	-	326,736		
Generator 2 Power Output (kWhr)		6,408	152	-	-	7,632	15,812	16,592	16,796	16,800	16,796	16,800	16,796	16,796	16,800	16,804	206,468		
Generator 3 Power Output (kWhr)		16,752	16,892	17,956	17,952	17,056	16,752	15,924	16,760	16,880	17,128	17,124	17,124	17,120	17,116	17,116	515,572		
Generator 4 Power Output (kWhr)		6,564	17,056	17,920	17,468	16,880	16,724	14,292	16,128	16,872	15,892	16,320	16,244	16,152	16,364	17,088	464,748		
Gross Power Output (kWhr)		46,593	47,926	49,191	48,757	48,210	49,313	46,757	49,690	50,585	49,848	50,273	50,170	50,067	50,278	51,001	1,514,774		
Net Power Output (kWhr)		44,456	45,804	47,124	46,688	46,112	47,204	44,764	47,464	48,392	47,676	48,084	48,068	48,104	48,332	49,040	1,450,456		
Power Sold as metered by NStar, (		44,367	45,702	47,002	46,571	46,000	47,081	44,664	47,351	48,262	47,542	47,968	47,935	47,966	48,197	48,887	1,446,631	CRMCB inplant	
Offgrid RECs (kWhr)		2,138	2,122	2,067	2,069	2,096	2,110	1,993	2,227	2,193	2,172	2,189	2,102	1,963	1,946	1,961	64,319	14,088	22%
Calculated Performance Results																			
Daily																			of total in-plant power
Power output (kW average whe																			
Generator 1		700	597	551	551	507	-	-	-	-	-	-	-	-	-	-			
Generator 2		583	76	-	-	587	659	691	700	700	700	700	700	700	700	700			
Generator 3		698	704	748	748	711	698	692	698	703	714	714	714	713	713	713			
Generator 4		597	711	747	728	703	697	681	701	703	662	680	677	673	682	712			
Power output (kW average ove																			
Facility Gross		1,941	1,997	2,050	2,032	2,009	2,055	1,948	2,070	2,108	2,077	2,095	2,090	2,086	2,095	2,125			
Facility Net		1,852	1,909	1,964	1,945	1,921	1,967	1,865	1,978	2,016	1,987	2,004	2,003	2,004	2,014	2,043			
In-plant load		89	88	86	86	87	88	83	93	91	91	91	88	82	81	82			
Daily availability factor																			
Facility		73%	76%	75%	75%	77%	75%	71%	74%	75%	75%	75%	75%	75%	75%	75%			
Engine 1		100%	96%	100%	100%	54%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2		46%	8%	0%	0%	54%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3		100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4		46%	100%	100%	100%	100%	100%	88%	96%	100%	100%	100%	100%	100%	100%	100%			
Daily capacity factor																			
Facility		59%	61%	62%	62%	61%	62%	59%	63%	64%	63%	63%	63%	63%	63%	64%			
Engine 1		85%	72%	67%	67%	62%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2		71%	9%	0%	0%	71%	80%	84%	85%	85%	85%	85%	85%	85%	85%	85%			
Engine 3		85%	85%	91%	91%	86%	85%	84%	85%	85%	87%	86%	86%	86%	86%	86%			
Engine 4		72%	86%	91%	88%	85%	84%	82%	85%	85%	80%	82%	82%	82%	83%	86%			
Cumulative by engine																			
Engine operating run hours in ti																			
Max Cumulative Available,		408	432	456	480	504	528	552	576	600	624	648	672	696	720	720			
Engine 1		408	431	455	479	492	492	492	492	492	492	492	492	492	492	492			
Engine 2		54	56	56	56	69	93	117	141	165	189	213	237	261	285	285			
Engine 3		408	432	456	480	504	528	551	575	599	623	647	671	695	719	719			
Engine 4		354	378	402	426	450	474	495	518	542	566	590	614	638	662	662			
Engine operating run hours tota																			
Engine 1		110,122	110,145	110,169	110,193	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206			
Engine 2		95,587	95,589	95,589	95,589	95,626	95,626	95,650	95,674	95,698	95,722	95,746	95,770	95,794	95,818	95,818			
Engine 3		105,563	105,587	105,611	105,635	105,659	105,683	105,706	105,730	105,754	105,778	105,802	105,826	105,850	105,874	105,874			
Engine 4		104,912	104,936	104,960	104,984	105,008	105,032	105,053	105,076	105,100	105,124	105,148	105,172	105,196	105,220	105,220			
Cumulative availability, %																			
Engine 1		100%	100%	100%	100%	98%	93%	89%	85%	82%	79%	76%	73%	71%	68%	68%			
Engine 2		13%	13%	12%	12%	14%	18%	21%	24%	28%	30%	33%	35%	38%	40%	40%			
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4		87%	88%	88%	89%	89%	90%	90%	90%	90%	91%	91%	91%	92%	92%	92%			
Engine cumulative gross output																			
Max cumulative capacity or		14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750	24,750			
Engine 1		11,664	12,261	12,813	13,364	13,871	13,871	13,871	13,871	13,871	13,871	13,871	13,871	13,871	13,871	13,871			
Engine 2		1,945	2,021	2,021	2,021	2,608	3,267	3,958	4,658	5,358	6,058	6,758	7,458	8,158	8,858	8,858			
Engine 3		11,528	12,232	12,980	13,728	14,439	15,137	15,829	16,527	17,231	17,944	18,658	19,371	20,085	20,798	20,798			
Engine 4		10,505	11,215	11,962	12,690	13,393	14,090	14,770	15,472	16,175	16,837	17,517	18,194	18,867	19,548	19,579			
Cumulative capacity factor, %																			
Engine 1		83%	83%	82%	81%	80%	76%	73%	70%	67%	65%	62%	60%	58%	56%	56%			
Engine 2		14%	14%	13%	12%	15%	18%	21%	24%	26%	28%	30%	32%	34%	36%	36%			
Engine 3		82%	82%	83%	83%	83%	83%	83%	83%	84%	84%	84%	84%	84%	84%	84%			
Engine 4		75%	76%	76%	77%	77%	78%	78%	78%	78%	79%	79%	79%	79%	79%	79%			

	Thursday 10/17/2019	Friday 10/18/2019	Saturday 10/19/2019	Sunday 10/20/2019	Monday 10/21/2019	Tuesday 10/22/2019	Wednesday 10/23/2019	Thursday 10/24/2019	Friday 10/25/2019	Saturday 10/26/2019	Sunday 10/27/2019	Monday 10/28/2019	Tuesday 10/29/2019	Wednesday 10/30/2019	Thursday 10/31/2019	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine run hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run hours	1,224	1,297	1,369	1,441	1,515	1,587	1,655	1,726	1,798	1,870	1,942	2,014	2,086	2,158	2,158			
Cumulative Availability, %	75.0%	75.1%	75.1%	75.1%	75.1%	75.1%	75.0%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	822,708	870,634	919,825	968,582	1,016,792	1,066,105	1,112,862	1,162,552	1,213,137	1,262,985	1,313,258	1,363,428	1,413,495	1,463,773	1,464,496			
Cumulative Capacity Factor	61.1%	61.1%	61.1%	61.1%	61.1%	61.2%	61.1%	61.2%	61.3%	61.3%	61.4%	61.5%	61.5%	61.6%	61.6%			
Cumulative fuel input, MMBtu	10,235	10,838	11,453	12,061	12,670	13,274	13,837	14,434	15,042	15,631	16,225	16,818	17,397	17,994	18,003			
Cumulative gross output, kWh	822,708	870,634	919,825	968,582	1,016,792	1,066,105	1,112,862	1,162,552	1,213,137	1,262,985	1,313,258	1,363,428	1,413,495	1,463,773	1,464,496			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,206	11,315	11,271	11,211	11,373	11,028	10,841	10,819	10,809	10,649	10,634	10,629	10,414	10,693	10,696			
Daily heat rate, Btu/kWe net	12,448	12,569	12,521	12,454	12,634	12,250	12,043	12,019	12,008	11,830	11,813	11,808	11,568	11,878	11,882			
Cumulative heat rate, Btu/kWe gross	11,199	11,206	11,209	11,209	11,217	11,208	11,193	11,177	11,161	11,141	11,122	11,104	11,079	11,066	11,066			
Cumulative heat rate, Btu/kWe net	12,441	12,448	12,452	12,452	12,460	12,451	12,434	12,416	12,399	12,376	12,355	12,335	12,308	12,293	12,293			
Cumulative by Facility starting C																		
Max cumulative available engine run hours	27,360	27,456	27,552	27,648	27,744	27,840	27,936	28,032	28,128	28,224	28,320	28,416	28,512	28,608	28,608			
Actual cumulative engine run hours	20,158	20,231	20,303	20,375	20,449	20,521	20,589	20,660	20,732	20,804	20,876	20,948	21,020	21,092	21,092			
Cumulative Availability, %	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%	73.7%			
Max cumulative gross output, kWh	22,572,000	22,651,200	22,730,400	22,809,600	22,888,800	22,968,000	23,047,200	23,126,400	23,205,600	23,284,800	23,364,000	23,443,200	23,522,400	23,601,600	23,601,600			
Actual cumulative gross output, kWh	12,618,512	12,666,438	12,715,629	12,764,386	12,812,596	12,861,909	12,908,666	12,958,356	13,008,941	13,058,789	13,109,062	13,159,232	13,209,299	13,259,577	13,260,300			
Cumulative Capacity Factor	55.9%	55.9%	55.9%	56.0%	56.0%	56.0%	56.0%	56.0%	56.1%	56.1%	56.1%	56.1%	56.2%	56.2%	56.2%			
Cumulative fuel input, MMBtu	153,212	153,814	154,430	155,037	155,646	156,251	156,814	157,411	158,018	158,608	159,202	159,794	160,373	160,971	160,979			
Cumulative gross output, kWh	12,618,512	12,666,438	12,715,629	12,764,386	12,812,596	12,861,909	12,908,666	12,958,356	13,008,941	13,058,789	13,109,062	13,159,232	13,209,299	13,259,577	13,260,300			
Cumulative heat rate, Btu/kWe gross	10,930	10,932	10,933	10,934	10,936	10,936	10,936	10,935	10,935	10,934	10,932	10,931	10,929	10,928	10,928			
Cumulative heat rate, Btu/kWe net	12,142	12,143	12,145	12,146	12,148	12,148	12,148	12,147	12,147	12,146	12,144	12,143	12,141	12,140	12,140			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Thursday 10/17/2019	Friday 10/18/2019	Saturday 10/19/2019	Sunday 10/20/2019	Monday 10/21/2019	Tuesday 10/22/2019	Wednesday 10/23/2019	Thursday 10/24/2019	Friday 10/25/2019	Saturday 10/26/2019	Sunday 10/27/2019	Monday 10/28/2019	Tuesday 10/29/2019	Wednesday 10/30/2019	Thursday 10/31/2019			
Date																		
Hour																		
1	2,010	2,004	1,958	1,956	1,957	1,957	1,977	1,420	2,000	2,031	1,962	2,029	1,975	1,977	2,040			
2	2,004	2,007	1,958	1,956	1,958	1,957	1,977	1,985	2,001	2,031	1,963	2,030	1,976	1,977	2,038			
3	2,002	2,003	1,958	1,956	1,959	1,956	1,975	1,998	2,000	2,030	1,962	1,991	1,974	1,978	2,040			
4	2,002	2,002	1,958	1,956	1,959	1,957	1,978	1,995	1,999	2,027	1,964	1,967	2,007	1,977	2,039			
5	2,003	1,981	1,957	1,956	1,961	1,957	1,981	1,994	2,000	2,030	1,964	1,966	1,974	1,978	2,039			
6	2,001	1,958	1,959	1,956	1,960	1,957	1,980	1,992	1,998	1,981	1,964	1,966	2,005	1,978	2,041			
7	2,000	1,959	1,959	1,956	1,960	1,956	1,980	1,995	1,998	1,966	1,965	1,966	1,987	1,977	2,039			
8	1,999	1,957	1,957	1,957	1,922	1,955	1,980	1,994	1,999	1,967	1,965	1,965	1,974	1,978	2,038			
9	1,461	1,953	1,958	1,946	1,908	1,950	1,999	1,989	1,997	1,967	1,968	1,959	1,971	1,972	2,033			
10	1,313	1,949	1,959	1,911	1,902	1,947	1,997	1,986	1,998	1,971	1,968	1,960	1,971	1,972	2,034			
11	1,331	1,895	1,961	1,912	1,873	1,948	1,998	1,996	1,999	1,970	1,968	1,964	1,972	1,970	2,033			
12	1,514	1,816	1,960	1,913	1,613	1,948	1,998	1,996	1,998	1,972	1,967	1,981	1,973	2,013	2,033			
13	1,674	1,917	1,961	1,913	1,731	1,950	1,998	1,997	2,000	1,970	2,027	2,033	2,035	2,032	2,032			
14	1,389	1,952	1,961	1,913	1,790	1,952	1,998	1,998	2,000	1,971	2,031	2,032	2,033	2,033	2,033			
15	1,696	1,684	1,960	1,912	1,950	1,951	1,998	1,998	2,003	1,972	2,031	2,032	2,033	2,034	2,032			
16	1,910	1,962	1,959	1,913	1,949	1,964	1,998	1,998	2,014	1,971	2,031	2,033	2,036	2,034	2,033			
17	2,009	1,386	1,960	1,913	1,957	1,979	1,657	2,003	2,034	1,970	2,031	2,039	2,039	2,039	2,039			
18	2,008	1,548	1,960	1,919	1,957	1,977	2,006	2,005	2,033	1,970	2,033	2,038	2,039	2,038	2,038			
19	2,010	1,962	1,958	1,960	1,955	1,978	2,004	2,003	2,033	1,966	2,034	2,037	2,036	2,038	2,038			
20	2,010	1,963	1,957	1,960	1,956	1,976	2,003	2,003	2,031	1,963	2,035	2,037	2,035	2,041	2,039			
21	2,006	1,962	1,956	1,958	1,954	1,977	1,687	2,003	2,032	1,963	2,035	1,987	1,989	2,040	2,039			
22	2,005	1,962	1,956	1,960	1,955	1,977	1,327	2,002	2,031	1,961	2,035	1,973	1,977	2,041	2,039			
23	2,006	1,961	1,956	1,959	1,956	1,976	1,321	2,002	2,032	1,961	2,032	1,976	1,978	2,041	2,039			
24	2,004	1,959	1,956	1,960	1,958	1,979	1,318	1,999	2,032	1,961	2,033	1,974	1,977	2,039	2,037			
TOTAL	44,367	45,702	47,002	46,571	46,000	47,081	44,664	47,351	48,262	47,542	47,968	47,935	47,966	48,197	48,887			
Cumulative Output Sold, kWh	785,503	831,205	878,207	924,778	970,778	1,017,859	1,062,523	1,109,874	1,158,136	1,205,678	1,253,646	1,301,581	1,349,547	1,397,744	1,446,631			
Transformer and line efficiency	99.8%	99.8%	99.7%	99.7%	99.8%	99.7%	99.8%	99.8%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%			
Hourly average	1,849	1,904	1,958	1,940	1,917	1,962	1,861	1,973	2,011	1,981	1,999	1,997	1,999	2,008	2,037			

NOVEMBER 2019																	
				DLST													
		Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		11/1/2019	11/2/2019	11/3/2019	11/4/2019	11/5/2019	11/6/2019	11/7/2019	11/8/2019	11/9/2019	11/10/2019	11/11/2019	11/12/2019	11/13/2019	11/14/2019	11/15/2019	11/16/2019
LFG and Biogas Flow to the Engines (KSCF)		1,089	1,145	1,168	1,138	1,109	1,115	1,112	1,133	1,148	1,154	1,127	1,108	1,130	1,124	1,109	1,157
LFG and Biogas Flow to the Engines (MMBTU HHV)		596	618	634	609	610	609	614	624	620	626	610	613	602	603	606	614
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,089	1,145	1,168	1,138	1,109	1,115	1,112	1,133	1,148	1,154	1,127	1,108	1,130	1,124	1,109	1,157
LFG and Biogas Total Flow (MMBTU HHV)		596	618	634	609	610	609	614	624	620	626	610	613	602	603	606	614
Average Methane Content (%)		54.1	53.3	53.6	52.8	54.3	54.0	54.6	54.4	53.4	53.7	53.4	54.7	52.7	53.0	54.0	52.4
Engine 1 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine 2 Hours		24	24	25	24	24	24	24	24	24	24	24	24	24	24	24	24
Engine 3 Hours		24	24	25	24	24	24	24	24	24	24	24	24	24	24	24	24
Engine 4 Hours		24	24	25	24	24	24	24	24	24	24	24	24	24	24	24	23
Generator 1 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Generator 2 Power Output (kWhr)		16,800	16,804	17,496	16,800	16,800	16,400	17,636	17,980	17,984	17,984	16,788	16,980	16,808	16,592	17,140	16,688
Generator 3 Power Output (kWhr)		17,120	17,128	17,832	15,592	16,404	16,476	16,196	16,028	15,580	15,580	15,580	15,144	15,452	15,220	15,308	15,428
Generator 4 Power Output (kWhr)		16,624	16,652	16,728	16,612	17,096	16,824	17,584	16,692	16,188	16,420	17,184	16,592	16,332	16,568	16,880	16,144
Gross Power Output (kWhr)		50,544	50,571	52,059	49,018	50,350	49,749	51,424	50,729	49,802	50,015	49,588	48,735	48,622	48,384	49,369	48,269
Net Power Output (kWhr)		48,512	48,456	49,860	46,856	48,288	47,804	49,480	48,748	47,848	48,056	47,640	46,804	46,560	46,348	47,340	46,232
Power Sold as metered by NStar, (kWhr)		48,364	48,335	49,739	46,730	48,170	47,687	49,347	48,627	47,735	47,937	47,514	46,890	46,459	46,246	47,221	46,131
Offgrid RECs (kWhr)		2,034	2,114	2,199	2,162	2,062	1,944	1,945	1,980	1,955	1,959	1,947	1,932	2,062	2,037	2,029	2,037
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Generator 2		700	700	700	700	700	683	735	749	749	749	700	708	700	691	714	695
Generator 3		713	714	713	650	684	687	675	668	649	649	649	631	644	634	638	643
Generator 4		693	694	669	692	712	701	733	696	675	684	619	691	681	690	703	702
Power output (kW average over 24-hrs)																	
Facility Gross		2,106	2,107	2,082	2,042	2,098	2,073	2,143	2,114	2,075	2,084	2,066	2,031	2,026	2,016	2,057	2,011
Facility Net		2,021	2,019	1,994	1,952	2,012	1,992	2,062	2,031	1,994	2,002	1,985	1,950	1,940	1,931	1,973	1,926
In-plant load		85	88	88	90	86	81	81	83	81	82	81	80	86	85	85	85
Daily availability factor																	
Facility		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	74%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%
Daily capacity factor																	
Facility		64%	64%	63%	62%	64%	63%	65%	64%	63%	63%	63%	62%	61%	61%	62%	61%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Engine 2		85%	85%	85%	85%	85%	83%	89%	91%	91%	85%	86%	85%	84%	87%	84%	84%
Engine 3		86%	87%	86%	79%	83%	83%	82%	81%	79%	79%	79%	76%	78%	77%	77%	78%
Engine 4		84%	84%	81%	84%	86%	85%	89%	84%	82%	83%	87%	84%	82%	84%	85%	85%
Cumulative by engine																	
Engine operating run hours in the month																	
Max Cumulative Available, hours		24	48	73	97	121	145	169	193	217	241	265	289	313	337	361	385
Engine 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Engine 2		24	48	73	97	121	145	169	193	217	241	265	289	313	337	361	385
Engine 3		24	48	73	97	121	145	169	193	217	241	265	289	313	337	361	385
Engine 4		24	48	73	97	121	145	169	193	217	241	265	289	313	337	361	384
Engine operating run hours total from 0 hours																	
Engine 1		110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206
Engine 2		95,842	95,866	95,890	95,915	95,939	95,963	95,987	96,011	96,035	96,059	96,083	96,107	96,131	96,155	96,179	96,227
Engine 3		105,898	105,922	105,946	105,971	105,995	106,019	106,043	106,067	106,091	106,115	106,139	106,163	106,187	106,211	106,235	106,283
Engine 4		105,244	105,268	105,292	105,317	105,341	105,365	105,389	105,413	105,437	105,461	105,485	105,509	105,533	105,557	105,581	105,628
Cumulative availability, %		November 1, 2019 @ 00:00 hours															
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine cumulative gross output, kWhr																	
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200
Engine 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine 2		700	1,400	2,100	2,800	3,500	4,183	4,918	5,667	6,417	7,166	7,866	8,573	9,273	9,965	10,679	11,374
Engine 3		713	1,427	2,140	2,790	3,473	4,160	4,835	5,503	6,152	6,801	7,450	8,081	8,725	9,359	9,997	10,640
Engine 4		693	1,387	2,056	2,748	3,460	4,161	4,894	5,589	6,264	6,948	7,664	8,355	9,036	9,726	10,429	11,131
Cumulative capacity factor, %																	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Engine 2		85%	85%	85%	85%	85%	85%	85%	86%	86%	87%	87%	87%	86%	86%	86%	86%
Engine 3		86%	86%	86%	85%	84%	84%	84%	83%	83%	82%	82%	82%	81%	81%	81%	81%
Engine 4		84%	84%	83%	83%	84%	84%	85%	85%	84%	84%	84%	84%	84%	84%	84%	84%

	Friday 11/1/2019	Saturday 11/2/2019	Sunday 11/3/2019	Monday 11/4/2019	Tuesday 11/5/2019	Wednesday 11/6/2019	Thursday 11/7/2019	Friday 11/8/2019	Saturday 11/9/2019	Sunday 11/10/2019	Monday 11/11/2019	Tuesday 11/12/2019	Wednesday 11/13/2019	Thursday 11/14/2019	Friday 11/15/2019	Saturday 11/16/2019
Cumulative by Facility in month																
Max cumulative available engine run hours	96	192	292	388	484	580	676	772	868	964	1,060	1,156	1,252	1,348	1,444	1,540
Actual cumulative engine run hours	72	144	219	291	363	435	507	579	651	723	795	867	939	1,011	1,083	1,154
Cumulative Availability, %	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.9%
Max cumulative gross output, kWhr	79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr	50,544	101,115	153,174	202,192	252,542	302,291	353,715	404,444	454,246	504,261	553,849	602,584	651,206	699,590	748,959	797,228
Cumulative Capacity Factor	63.8%	63.8%	64.5%	63.8%	63.8%	63.6%	63.8%	63.8%	63.7%	63.7%	63.6%	63.4%	63.2%	63.1%	63.0%	62.9%
Cumulative fuel input, MMBtu HHV	596	1,214	1,848	2,456	3,066	3,675	4,289	4,912	5,533	6,159	6,769	7,382	7,984	8,587	9,193	9,807
Cumulative gross output, kWhr	50,544	101,115	153,174	202,192	252,542	302,291	353,715	404,444	454,246	504,261	553,849	602,584	651,206	699,590	748,959	797,228
Heat Rate																
Daily heat rate, Btu/kWe gross LHV	10,611	10,999	10,960	11,180	10,902	11,018	10,745	11,066	11,210	11,274	11,065	11,325	11,153	11,210	11,052	11,451
Daily heat rate, Btu/kWe gross HHV	11,788	12,218	12,175	12,420	12,111	12,239	11,936	12,293	12,453	12,524	12,291	12,580	12,389	12,452	12,277	12,720
Cumulative heat rate, Btu/kWe gross LHV	10,611	10,805	10,858	10,936	10,929	10,944	10,915	10,934	10,964	10,995	11,001	11,027	11,037	11,049	11,049	11,073
Cumulative heat rate, Btu/kWe gross HHV	11,788	12,003	12,061	12,148	12,141	12,157	12,125	12,146	12,180	12,214	12,221	12,250	12,260	12,274	12,274	12,301
Cumulative by Facility starting Calendar Year																
Max cumulative available engine run hours	28,704	28,800	28,900	28,996	29,092	29,188	29,284	29,380	29,476	29,572	29,668	29,764	29,860	29,956	30,052	30,148
Actual cumulative engine run hours	21,164	21,236	21,311	21,383	21,455	21,527	21,599	21,671	21,743	21,815	21,887	21,959	22,031	22,103	22,175	22,246
Cumulative Availability, %	73.7%	73.7%	73.7%	73.7%	73.7%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
Max cumulative gross output, kWhr	23,680,800	23,760,000	23,839,200	23,918,400	23,997,600	24,076,800	24,156,000	24,235,200	24,314,400	24,393,600	24,472,800	24,552,000	24,631,200	24,710,400	24,789,600	24,868,800
Actual cumulative gross output, kWhr	13,310,844	13,361,415	13,413,474	13,462,492	13,512,842	13,562,591	13,614,015	13,664,744	13,714,546	13,764,561	13,814,149	13,862,884	13,911,506	13,959,890	14,009,259	14,057,528
Cumulative Capacity Factor	56.2%	56.2%	56.3%	56.3%	56.3%	56.3%	56.4%	56.4%	56.4%	56.4%	56.4%	56.5%	56.5%	56.5%	56.5%	56.5%
Cumulative fuel input, MMBtu HHV	161,575	162,193	162,827	163,436	164,046	164,654	165,268	165,892	166,512	167,138	167,748	168,361	168,963	169,566	170,172	170,786
Cumulative gross output, kWhr	13,310,844	13,361,415	13,413,474	13,462,492	13,512,842	13,562,591	13,614,015	13,664,744	13,714,546	13,764,561	13,814,149	13,862,884	13,911,506	13,959,890	14,009,259	14,057,528
Cumulative heat rate, Btu/kWe gross LHV	10,927	10,927	10,928	10,928	10,928	10,929	10,928	10,929	10,930	10,931	10,931	10,933	10,933	10,934	10,935	10,937
Cumulative heat rate, Btu/kWe gross HHV	12,139	12,139	12,139	12,140	12,140	12,140	12,140	12,140	12,141	12,143	12,143	12,145	12,146	12,147	12,147	12,149
Service																
Engine 1																
Engine 2																
Engine 3																
Engine 4																
Oil - oil and filter change																
Service - plugs, air filter, valve inspection and adjustment																
Precipitation																
NSTAR Power Reports	Friday 11/1/2019	Saturday 11/2/2019	Sunday 11/3/2019	Monday 11/4/2019	Tuesday 11/5/2019	Wednesday 11/6/2019	Thursday 11/7/2019	Friday 11/8/2019	Saturday 11/9/2019	Sunday 11/10/2019	Monday 11/11/2019	Tuesday 11/12/2019	Wednesday 11/13/2019	Thursday 11/14/2019	Friday 11/15/2019	Saturday 11/16/2019
Date																
Hour																
1	2,038	2,029	2,031	1,918	1,969	2,044	2,034	2,086	1,986	2,058	1,983	1,992	2,007	1,919	2,027	2,004
2	2,038	2,027	2,029	1,964	1,968	2,043	2,036	2,085	1,982	2,057	1,983	1,993	1,997	1,907	1,989	2,005
3	2,039	2,028	2,029	1,966	1,969	2,043	2,039	2,081	1,982	2,057	1,984	1,993	1,986	1,917	1,986	2,002
4	2,039	1,978	2,031	1,910	1,972	2,008	2,037	2,073	1,984	2,027	1,985	2,040	1,959	1,908	2,027	2,003
5	2,040	2,006	2,029	1,904	1,968	1,978	2,038	2,084	1,987	1,987	1,986	1,992	1,958	1,907	2,028	2,003
6	2,040	2,029	2,028	1,925	1,970	1,977	2,037	2,083	1,985	1,986	1,984	1,991	1,957	1,913	2,018	2,003
7	2,041	2,022	2,030	1,966	1,974	1,979	2,038	2,085	1,986	1,986	1,983	1,992	1,956	1,908	2,007	1,999
8	2,039	1,967	2,031	1,945	1,971	1,979	2,037	2,042	1,986	1,986	1,966	1,991	1,917	1,908	1,970	1,992
9	2,034	1,967	1,985	1,901	1,968	1,976	2,039	2,009	1,989	1,989	1,919	1,980	1,908	1,356	1,633	1,412
10	2,035	1,970	1,970	1,899	1,967	1,978	2,032	2,011	1,989	1,989	1,910	2,030	1,910	1,992	1,873	1,022
11	2,035	1,972	1,973	1,901	1,966	1,978	2,029	2,012	1,992	1,989	1,977	2,050	1,922	2,003	2,005	1,829
12	2,034	1,971	1,971	1,926	2,021	1,976	2,030	2,011	1,992	1,990	1,984	2,052	1,509	2,004	2,008	2,015
13	2,034	1,994	1,973	1,965	2,032	1,996	2,033	2,012	1,994	1,989	1,984	1,991	1,914	2,005	2,008	2,016
14	2,034	2,035	1,973	1,965	2,030	2,003	2,034	2,012	1,993	1,989	1,990	1,914	2,006	2,007	2,010	
15	2,030	2,036	1,972	1,965	2,031	1,827	2,080	2,012	1,991	1,989	1,985	2,008	1,913	2,006	1,844	1,990
16	2,025	2,036	1,971	1,965	2,038	1,609	2,082	2,010	1,992	1,990	1,986	932	1,939	1,372	1,729	1,985
17	1,971	2,037	1,973	1,971	2,044	2,044	2,086	2,015	1,988	1,987	1,989	1,597	2,007	2,028	2,013	1,982
18	1,971	2,035	1,971	1,969	2,043	2,040	2,088	1,995	1,986	1,986	1,989	2,014	2,008	2,026	2,011	1,982
19	1,970	2,034	1,971	1,970	2,045	2,036	2,086	1,986	1,987	1,987	1,991	2,012	2,006	2,025	2,006	1,979
20	1,968	2,033	1,969	1,967	2,044	2,034	2,087	1,985	1,987	1,985	1,990	2,012	1,966	2,028	2,006	1,979
21	1,968	2,032	1,965	1,965	2,045	2,035	2,086	1,985	1,987	1,981	1,992	2,010	1,956	2,028	2,007	1,980
22	1,967	2,032	1,966	1,967	2,044	2,036	2,086	1,983	1,986	1,982	1,992	2,010	1,956	2,027	2,007	1,980
23	1,962	2,034	1,966	1,967	2,046	2,033	2,086	1,984	1,987	1,985	1,993	2,009	1,956	2,026	2,007	1,979
24	2,012	2,031	1,966	1,969	2,045	2,035	2,087	1,986	2,014	1,984	1,995	2,009	1,938	2,027	2,005	1,980
TOTAL	48,364	48,335	49,739	46,730	48,170	47,687	49,347	48,627	47,735	47,937	47,514	46,690	46,459	46,246	47,221	46,131
Cumulative Output Sold, kWhr	48,364	96,699	146,438	193,168	241,338	289,025	338,372	386,999	434,734	482,671	530,185	576,875	623,334	669,580	716,801	762,932
Transformer and line efficiency	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.8%
Hourly average	2,015	2,014	2,072	1,947	2,007	1,987	2,056	2,026	1,989	1,997	1,980	1,945	1,936	1,927	1,968	1,922

NOVEMBER 2019																	
	Sunday 11/17/2019	Monday 11/18/2019	Tuesday 11/19/2019	Wednesday 11/20/2019	Thursday 11/21/2019	Friday 11/22/2019	Saturday 11/23/2019	Sunday 11/24/2019	Monday 11/25/2019	Tuesday 11/26/2019	Wednesday 11/27/2019	Thursday 11/28/2019	Friday 11/29/2019	Saturday 11/30/2019	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,130	1,090	1,124	1,080	1,110	1,114	1,095	1,094	1,090	1,093	1,032	1,081	1,088	1,107	33,393	561	32,833
LFG and Biogas Flow to the Engine	606	606	620	596	605	616	597	618	598	597	577	602	594	606	18,244	397	17,846
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2.2%	98%
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,130	1,090	1,124	1,080	1,110	1,114	1,095	1,094	1,090	1,093	1,032	1,081	1,088	1,107	33,393		
LFG and Biogas Total Flow (MMBT)	606	606	620	596	605	616	597	618	598	597	577	602	594	606	18,244		
Average Methane Content (%)	53.0	54.9	54.5	54.5	53.8	54.6	53.8	55.8	54.2	53.9	55.3	55.0	54.0	54.1	54.0		
Engine 1 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Engine 2 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	721		
Engine 3 Hours	24	24	24	23	24	24	24	24	24	24	24	24	24	24	720		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	720		
Generator 1 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 2 Power Output (kWhr)	16,484	16,364	16,376	16,652	16,692	17,376	16,216	17,144	16,216	16,212	16,216	17,396	17,400	17,396	507,820		
Generator 3 Power Output (kWhr)	15,136	15,176	15,580	14,876	15,576	15,576	15,584	15,580	15,584	15,584	14,140	14,388	14,396	14,396	467,640		
Generator 4 Power Output (kWhr)	16,964	17,072	17,844	17,708	16,768	17,076	16,700	17,132	16,704	17,168	16,680	16,984	16,760	16,528	505,208		
Gross Power Output (kWhr)	48,607	48,638	49,835	49,259	49,025	50,014	48,463	49,831	48,474	48,942	47,004	48,765	48,540	48,308	1,480,933		
Net Power Output (kWhr)	46,588	46,656	47,816	47,272	47,072	47,976	46,500	47,860	46,444	46,908	45,076	46,812	46,568	46,348	1,420,728		
Power Sold as metered by NStar, (Offgrid RECs (kWhr)	46,489	46,537	47,715	47,163	46,961	47,852	46,393	47,744	46,337	46,785	44,962	46,693	46,467	46,246	1,417,276	CRMCB inplant	
	2,017	1,983	2,020	1,986	1,953	2,037	1,964	1,971	2,030	2,034	1,928	1,953	1,972	1,960	60,206	16,037	27%
Calculated Performance Results																	
Daily																	of total in-plant power
Power output (kW average whe																	
Generator 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 2	687	682	682	694	696	724	676	714	676	676	676	725	725	725			
Generator 3	631	632	649	647	649	649	649	649	649	649	589	600	600	600			
Generator 4	707	711	744	738	699	712	696	714	696	715	695	708	698	689			
Power output (kW average ove																	
Facility Gross	2,025	2,027	2,076	2,052	2,043	2,084	2,019	2,076	2,020	2,039	1,959	2,032	2,023	2,013			
Facility Net	1,941	1,944	1,992	1,970	1,961	1,999	1,938	1,994	1,935	1,955	1,878	1,951	1,940	1,931			
In-plant load	84	83	84	83	81	85	82	82	85	85	80	81	82	82			
Daily availability factor																	
Facility	75%	75%	75%	74%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%			
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Daily capacity factor																	
Facility	61%	61%	63%	62%	62%	63%	61%	63%	61%	62%	59%	62%	61%	61%			
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	83%	83%	83%	84%	84%	88%	82%	87%	82%	82%	82%	88%	88%	88%			
Engine 3	76%	77%	79%	78%	79%	79%	79%	79%	79%	79%	71%	73%	73%	73%			
Engine 4	86%	86%	90%	89%	85%	86%	84%	87%	84%	87%	84%	86%	85%	83%			
Cumulative by engine																	
Engine operating run hours in ti																	
Max Cumulative Available,	409	433	457	481	505	529	553	577	601	625	649	673	697	721			
Engine 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Engine 2	409	433	457	481	505	529	553	577	601	625	649	673	697	721			
Engine 3	409	433	457	480	504	528	552	576	600	624	648	672	696	720			
Engine 4	408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine operating run hours tote																	
Engine 1	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206			
Engine 2	96,251	96,275	96,299	96,323	96,347	96,371	96,395	96,419	96,443	96,467	96,491	96,515	96,539	96,563			
Engine 3	106,307	106,331	106,355	106,378	106,402	106,426	106,450	106,474	106,498	106,522	106,546	106,570	106,594	106,618			
Engine 4	105,652	105,676	105,700	105,724	105,748	105,772	105,796	105,820	105,844	105,868	105,892	105,916	105,940	105,964			
Cumulative availability, %																	
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine cumulative gross output																	
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750			
Engine 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 2	12,061	12,743	13,425	14,119	14,815	15,539	16,214	16,929	17,604	18,280	18,955	19,680	20,405	21,130			
Engine 3	11,270	11,903	12,552	13,199	13,848	14,497	15,146	15,795	16,445	17,094	17,743	18,392	19,041	19,690			
Engine 4	11,838	12,550	13,293	14,031	14,730	15,441	16,137	16,851	17,547	18,262	18,957	19,665	20,363	21,052			
Cumulative capacity factor, %																	
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	86%	86%	86%	86%	86%	86%	85%	85%	85%	85%	85%	85%	85%	85%			
Engine 3	80%	80%	80%	80%	80%	80%	80%	80%	80%	80%	79%	79%	79%	79%			
Engine 4	84%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%	85%			

	Sunday 11/17/2019	Monday 11/18/2019	Tuesday 11/19/2019	Wednesday 11/20/2019	Thursday 11/21/2019	Friday 11/22/2019	Saturday 11/23/2019	Sunday 11/24/2019	Monday 11/25/2019	Tuesday 11/26/2019	Wednesday 11/27/2019	Thursday 11/28/2019	Friday 11/29/2019	Saturday 11/30/2019	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine	1,636	1,732	1,828	1,924	2,020	2,116	2,212	2,308	2,404	2,500	2,596	2,692	2,788	2,884			
Actual cumulative engine run	1,226	1,298	1,370	1,441	1,513	1,585	1,657	1,729	1,801	1,873	1,945	2,017	2,089	2,161			
Cumulative Availability, %	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000			
Actual cumulative gross output, kWh	845,835	894,473	944,308	993,567	1,042,592	1,092,606	1,141,069	1,190,900	1,239,374	1,288,316	1,335,320	1,384,085	1,432,625	1,480,933			
Cumulative Capacity Factor	62.8%	62.7%	62.8%	62.7%	62.7%	62.7%	62.6%	62.7%	62.6%	62.6%	62.4%	62.4%	62.4%	62.3%			
Cumulative fuel input, MMBtu	10,413	11,019	11,638	12,234	12,839	13,455	14,051	14,669	15,268	15,865	16,441	17,043	17,637	18,244			
Cumulative gross output, kWh	845,835	894,473	944,308	993,567	1,042,592	1,092,606	1,141,069	1,190,900	1,239,374	1,288,316	1,335,320	1,384,085	1,432,625	1,480,933			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,225	11,216	11,194	10,892	11,104	11,080	11,082	11,166	11,109	10,979	11,049	11,113	11,014	11,298			
Daily heat rate, Btu/kWe gross	12,469	12,459	12,435	12,099	12,335	12,309	12,310	12,404	12,341	12,196	12,273	12,345	12,235	12,551			
Cumulative heat rate, Btu/kWe	11,082	11,089	11,095	11,085	11,086	11,085	11,085	11,089	11,089	11,085	11,084	11,085	11,082	11,090			
Cumulative heat rate, Btu/kWe	12,311	12,319	12,325	12,314	12,315	12,314	12,314	12,318	12,319	12,314	12,313	12,314	12,311	12,319			
Cumulative by Facility starting C																	
Max cumulative available engine	30,244	30,340	30,436	30,532	30,628	30,724	30,820	30,916	31,012	31,108	31,204	31,300	31,396	31,492			
Actual cumulative engine run	22,318	22,390	22,462	22,533	22,605	22,677	22,749	22,821	22,893	22,965	23,037	23,109	23,181	23,253			
Cumulative Availability, %	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%			
Max cumulative gross output, kWh	24,948,000	25,027,200	25,106,400	25,185,600	25,264,800	25,344,000	25,423,200	25,502,400	25,581,600	25,660,800	25,740,000	25,819,200	25,898,400	25,977,600			
Actual cumulative gross output, kWh	14,106,135	14,154,773	14,204,608	14,253,867	14,302,892	14,352,906	14,401,369	14,451,200	14,499,674	14,548,616	14,595,620	14,644,385	14,692,925	14,741,233			
Cumulative Capacity Factor	56.5%	56.6%	56.6%	56.6%	56.6%	56.6%	56.6%	56.7%	56.7%	56.7%	56.7%	56.7%	56.7%	56.7%			
Cumulative fuel input, MMBtu	171,392	171,998	172,618	173,214	173,819	174,434	175,031	175,649	176,247	176,844	177,421	178,023	178,617	179,223			
Cumulative gross output, kWh	14,106,135	14,154,773	14,204,608	14,253,867	14,302,892	14,352,906	14,401,369	14,451,200	14,499,674	14,548,616	14,595,620	14,644,385	14,692,925	14,741,233			
Cumulative heat rate, Btu/kWe	10,938	10,939	10,939	10,939	10,940	10,940	10,941	10,942	10,942	10,942	10,943	10,943	10,943	10,945			
Cumulative heat rate, Btu/kWe	12,150	12,151	12,152	12,152	12,153	12,153	12,154	12,155	12,155	12,155	12,156	12,156	12,157	12,158			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports																	
Date	11/17/2019	11/18/2019	11/19/2019	11/20/2019	11/21/2019	11/22/2019	11/23/2019	11/24/2019	11/25/2019	11/26/2019	11/27/2019	11/28/2019	11/29/2019	11/30/2019	TOTAL		
Hour																	
1	1,980	1,988	2,010	1,986	1,984	2,007	1,910	1,959	1,909	1,958	1,957	1,962	1,909	1,959			
2	1,983	1,985	2,009	1,985	1,985	2,007	1,909	1,959	1,909	1,957	1,957	1,962	1,909	1,959			
3	1,976	1,986	2,009	1,987	1,984	2,006	1,910	1,959	1,909	1,959	1,957	1,962	1,910	1,958			
4	1,999	1,986	1,998	1,987	1,983	2,008	1,909	1,959	1,909	1,959	1,957	1,960	1,910	1,960			
5	2,004	1,984	1,986	1,987	1,984	2,007	1,911	1,977	1,908	1,959	1,957	1,961	1,909	1,958			
6	2,001	1,984	1,985	1,987	1,984	2,008	1,909	2,007	1,909	1,958	1,958	1,962	1,910	1,957			
7	2,004	1,984	1,986	1,985	1,982	2,008	1,910	2,008	1,911	1,958	1,959	1,961	1,909	1,958			
8	1,996	1,984	1,987	1,984	1,955	2,008	1,910	2,007	1,910	1,958	1,959	1,961	1,911	1,935			
9	1,985	1,982	1,981	1,981	1,907	2,003	1,911	2,008	1,910	1,909	1,955	1,962	1,912	1,912			
10	1,984	1,980	1,981	1,977	1,914	2,000	1,914	2,009	1,905	1,903	1,952	1,962	1,913	1,914			
11	1,969	1,333	1,981	1,978	1,920	2,004	1,914	2,010	1,903	1,902	1,259	1,962	1,910	1,914			
12	1,566	1,985	1,981	1,980	1,935	2,000	1,916	2,010	1,903	1,926	1,127	1,962	1,929	1,917			
13	932	2,007	1,983	1,981	1,969	2,000	1,916	2,010	1,909	1,954	1,919	1,961	1,966	1,916			
14	2,017	2,008	1,983	1,983	1,970	2,000	1,960	2,011	1,952	1,951	1,953	1,961	1,964	1,917			
15	2,013	2,007	1,983	1,741	1,558	2,003	1,961	2,010	1,954	1,950	2,002	1,960	1,963	1,914			
16	2,010	1,284	1,984	1,579	1,896	2,006	1,959	2,009	1,955	1,954	1,420	1,958	1,959	1,913			
17	2,010	1,995	1,988	2,017	2,009	2,008	1,957	2,009	1,962	1,962	1,967	1,952	1,959	1,913			
18	2,009	2,012	1,987	2,013	2,008	2,008	1,957	2,009	1,962	1,962	1,967	1,909	1,959	1,911			
19	2,008	2,012	1,987	2,010	2,005	1,989	1,958	2,007	1,959	1,960	1,964	1,908	1,960	1,911			
20	2,008	2,011	1,987	2,008	2,005	1,958	1,957	1,998	1,957	1,956	1,964	1,909	1,959	1,910			
21	2,008	2,010	1,984	2,007	2,006	1,957	1,958	1,958	1,958	1,958	1,965	1,909	1,959	1,911			
22	2,008	2,010	1,984	2,011	2,007	1,957	1,958	1,958	1,957	1,958	1,964	1,909	1,960	1,910			
23	2,008	2,010	1,985	2,008	2,006	1,956	1,959	1,958	1,958	1,957	1,964	1,909	1,959	1,910			
24	2,011	2,010	1,986	2,001	2,005	1,944	1,960	1,935	1,959	1,957	1,959	1,909	1,959	1,909			
TOTAL	46,489	46,537	47,715	47,163	46,961	47,852	46,393	47,744	46,337	46,785	44,962	46,693	46,467	46,246			
Cumulative Output Sold, kWh	809,421	855,958	903,673	950,836	997,797	1,045,649	1,092,042	1,139,786	1,186,123	1,232,908	1,277,870	1,324,563	1,371,030	1,417,276			
Transformer and line efficiency	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.7%	99.7%	99.8%	99.8%			
Hourly average	1,937	1,939	1,988	1,965	1,957	1,994	1,933	1,989	1,931	1,949	1,873	1,946	1,936	1,927			

DECEMBER 2019																		
		Sunday 12/1/2019	Monday 12/2/2019	Tuesday 12/3/2019	Wednesday 12/4/2019	Thursday 12/5/2019	Friday 12/6/2019	Saturday 12/7/2019	Sunday 12/8/2019	Monday 12/9/2019	Tuesday 12/10/2019	Wednesday 12/11/2019	Thursday 12/12/2019	Friday 12/13/2019	Saturday 12/14/2019	Sunday 12/15/2019	Monday 12/16/2019	
LFG and Biogas Flow to the Engines (KSCF)		1,102	1,084	1,092	1,084	1,102	1,130	1,103	1,101	1,064	1,104	1,091	1,104	1,087	1,089	1,087	1,049	
LFG and Biogas Flow to the Engines (MMBTU HHV)		607	614	620	607	614	622	598	595	602	621	600	593	602	624	604	575	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,102	1,084	1,092	1,084	1,102	1,130	1,103	1,101	1,064	1,104	1,091	1,104	1,087	1,089	1,087	1,049	
LFG and Biogas Total Flow (MMBTU HHV)		607	614	620	607	614	622	598	595	602	621	600	593	602	624	604	575	
Average Methane Content (%)		54.4	55.9	56.1	55.3	55.1	54.4	53.6	53.4	55.9	55.6	54.3	53.1	54.7	56.6	54.9	54.2	
Engine 1 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 2 Hours		24	24	24	24	24	24	24	24	24	24	24	24	23	24	24	24	
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 4 Hours		24	24	24	24	24	24	24	24	22	24	24	24	24	24	24	24	
Generator 1 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 2 Power Output (kWhr)		16,700	17,700	17,724	16,832	17,480	18,068	16,808	16,804	17,840	17,388	16,804	16,804	15,748	17,396	16,892	15,592	
Generator 3 Power Output (kWhr)		14,400	15,020	15,592	15,588	14,772	15,112	14,832	14,396	15,180	15,576	15,516	14,396	15,012	15,576	14,728	13,680	
Generator 4 Power Output (kWhr)		16,860	17,328	16,480	16,668	17,448	16,812	16,940	16,744	15,104	17,396	16,736	16,732	17,736	17,768	16,724	15,396	
Gross Power Output (kWhr)		47,938	50,036	49,772	49,067	49,679	49,966	48,556	47,919	48,070	50,346	49,038	47,908	48,461	50,732	48,370	44,645	
Net Power Output (kWhr)		45,964	47,980	47,704	47,044	47,632	47,900	46,568	45,932	46,124	48,328	46,996	45,856	46,448	48,800	46,344	42,680	
Power Sold as metered by NStar, (kWhr)		45,866	47,862	47,598	46,937	47,513	47,795	46,465	45,839	46,032	48,195	46,883	45,772	46,347	48,666	46,229	42,590	
Offgrid RECs (kWhr)		1,973	2,056	2,069	2,021	2,048	2,066	1,988	1,987	1,946	2,018	2,042	2,050	2,013	1,931	2,026	1,964	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 2		696	738	739	701	728	753	700	700	743	725	700	700	685	725	704	650	
Generator 3		600	626	650	650	616	630	618	600	633	649	647	600	626	649	614	570	
Generator 4		703	722	687	695	727	701	706	698	687	725	697	697	739	740	697	642	
Power output (kW average over 24-hrs)																		
Facility Gross		1,997	2,085	2,074	2,044	2,070	2,082	2,023	1,997	2,003	2,098	2,043	1,996	2,019	2,114	2,015	1,860	
Facility Net		1,915	1,999	1,988	1,960	1,985	1,996	1,940	1,914	1,922	2,014	1,958	1,911	1,935	2,033	1,931	1,778	
In-plant load		82	86	86	84	85	86	83	83	81	84	85	85	84	81	84	82	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	75%	75%	75%	73%	75%	75%	75%	74%	75%	75%	75%	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	
Daily capacity factor																		
Facility		61%	63%	63%	62%	63%	63%	61%	61%	61%	64%	62%	60%	61%	64%	61%	56%	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		84%	89%	90%	85%	88%	91%	85%	85%	90%	88%	85%	85%	83%	88%	85%	79%	
Engine 3		73%	76%	79%	79%	75%	76%	75%	73%	77%	79%	78%	73%	76%	79%	74%	69%	
Engine 4		85%	88%	83%	84%	88%	85%	86%	85%	83%	88%	85%	85%	90%	90%	84%	78%	
Cumulative by engine																		
Engine operating run hours in the month																		
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engine 2		24	48	72	96	120	144	168	192	216	240	264	288	311	335	359	383	
Engine 3		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 4		24	48	72	96	120	144	168	192	214	238	262	286	310	334	358	382	
Engine operating run hours total from 0 hours																		
Engine 1		110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	110,206	
Engine 2		96,563	96,587	96,611	96,635	96,659	96,683	96,707	96,731	96,755	96,779	96,803	96,827	96,851	96,874	96,898	96,942	
Engine 3		106,618	106,642	106,666	106,690	106,714	106,738	106,762	106,786	106,810	106,834	106,858	106,882	106,906	106,930	106,954	107,002	
Engine 4		105,964	105,988	106,012	106,036	106,060	106,084	106,108	106,132	106,156	106,178	106,202	106,226	106,250	106,274	106,298	106,346	
Cumulative availability, %																		
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	
Engine cumulative gross output, kWhr																		
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200	
Engine 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 2		696	1,433	2,172	2,873	3,602	4,354	5,055	5,755	6,498	7,223	7,923	8,623	9,308	10,033	10,736	11,386	
Engine 3		600	1,226	1,876	2,525	3,141	3,770	4,388	4,988	5,621	6,270	6,916	7,516	8,141	8,790	9,404	9,974	
Engine 4		703	1,425	2,111	2,806	3,533	4,233	4,939	5,637	6,323	7,048	7,745	8,443	9,182	9,922	10,619	11,260	
Cumulative capacity factor, %																		
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		84%	87%	88%	87%	87%	88%	88%	87%	88%	88%	87%	87%	87%	87%	87%	86%	
Engine 3		73%	74%	76%	77%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	
Engine 4		85%	86%	85%	85%	86%	86%	86%	85%	85%	85%	85%	85%	86%	86%	86%	85%	

		Sunday 12/1/2019	Monday 12/2/2019	Tuesday 12/3/2019	Wednesday 12/4/2019	Thursday 12/5/2019	Friday 12/6/2019	Saturday 12/7/2019	Sunday 12/8/2019	Monday 12/9/2019	Tuesday 12/10/2019	Wednesday 12/11/2019	Thursday 12/12/2019	Friday 12/13/2019	Saturday 12/14/2019	Sunday 12/15/2019	Monday 12/16/2019
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	288	360	432	504	576	648	718	790	862	933	1,005	1,077	1,149
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		47,938	97,974	147,746	196,813	246,492	296,458	345,014	392,933	441,003	491,349	540,387	588,293	636,754	687,486	735,856	780,501
Cumulative Capacity Factor		60.5%	61.9%	62.2%	62.1%	62.2%	62.4%	62.2%	62.0%	61.9%	62.0%	62.0%	61.9%	61.8%	62.0%	61.9%	61.8%
Cumulative fuel input, MMBtu HHV		607	1,221	1,840	2,447	3,061	3,684	4,281	4,876	5,478	6,099	6,699	7,292	7,893	8,518	9,121	9,696
Cumulative gross output, kWhr		47,938	97,974	147,746	196,813	246,492	296,458	345,014	392,933	441,003	491,349	540,387	588,293	636,754	687,486	735,856	780,501
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,391	11,045	11,206	11,140	11,124	11,213	11,081	11,176	11,272	11,100	11,011	11,143	11,177	11,078	11,233	11,594
Daily heat rate, Btu/kWe gross HHV		12,654	12,269	12,449	12,375	12,357	12,456	12,309	12,415	12,521	12,331	12,231	12,378	12,416	12,306	12,479	12,879
Cumulative heat rate, Btu/kWe gross LHV		11,391	11,214	11,211	11,194	11,180	11,185	11,171	11,171	11,182	11,174	11,159	11,158	11,159	11,153	11,158	11,183
Cumulative heat rate, Btu/kWe gross HHV		12,654	12,457	12,454	12,435	12,419	12,425	12,409	12,410	12,422	12,413	12,396	12,395	12,396	12,390	12,395	12,423
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	31,588	31,588	31,684	31,780	31,876	31,972	32,068	32,164	32,260	32,356	32,452	32,548	32,644	32,740	32,836	32,932	33,028
Actual cumulative engine run hours	23,325	23,325	23,397	23,469	23,541	23,613	23,685	23,757	23,829	23,899	23,971	24,043	24,115	24,186	24,258	24,330	24,402
Cumulative Availability, %	73.8%	73.8%	73.8%	73.8%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%
Max cumulative gross output, kWhr	26,056,800	26,056,800	26,136,000	26,215,200	26,294,400	26,373,600	26,452,800	26,532,000	26,611,200	26,690,400	26,769,600	26,848,800	26,928,000	27,007,200	27,086,400	27,165,600	27,244,800
Actual cumulative gross output, kWhr	14,789,171	14,789,171	14,839,207	14,888,979	14,938,046	14,987,725	15,037,691	15,086,247	15,134,166	15,182,236	15,232,582	15,281,620	15,329,526	15,377,987	15,428,719	15,477,089	15,521,734
Cumulative Capacity Factor	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.8%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	57.0%	57.0%	57.0%
Cumulative fuel input, MMBtu HHV	179,830	179,830	180,444	181,063	181,670	182,284	182,907	183,504	184,099	184,701	185,322	185,922	186,515	187,116	187,741	188,344	188,919
Cumulative gross output, kWhr	14,789,171	14,789,171	14,839,207	14,888,979	14,938,046	14,987,725	15,037,691	15,086,247	15,134,166	15,182,236	15,232,582	15,281,620	15,329,526	15,377,987	15,428,719	15,477,089	15,521,734
Cumulative heat rate, Btu/kWe gross LHV	10,946	10,946	10,946	10,947	10,948	10,948	10,948	10,949	10,950	10,950	10,951	10,952	10,953	10,953	10,954	10,955	10,957
Cumulative heat rate, Btu/kWe gross HHV	12,160	12,160	12,160	12,161	12,162	12,162	12,163	12,164	12,164	12,166	12,166	12,166	12,167	12,168	12,168	12,169	12,171
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Sunday 12/1/2019	Monday 12/2/2019	Tuesday 12/3/2019	Wednesday 12/4/2019	Thursday 12/5/2019	Friday 12/6/2019	Saturday 12/7/2019	Sunday 12/8/2019	Monday 12/9/2019	Tuesday 12/10/2019	Wednesday 12/11/2019	Thursday 12/12/2019	Friday 12/13/2019	Saturday 12/14/2019	Sunday 12/15/2019	Monday 12/16/2019
Hour																	
1		1,909	1,959	2,014	1,939	1,959	1,958	1,975	1,907	1,910	2,082	1,957	1,909	1,910	2,032	1,986	1,907
2		1,908	1,959	1,982	1,911	1,960	1,958	1,973	1,906	1,941	2,081	1,958	1,908	1,909	2,032	1,983	1,907
3		1,908	1,957	1,982	1,911	1,960	1,959	1,973	1,907	1,981	2,080	1,958	1,908	1,910	2,032	1,983	1,906
4		1,908	1,958	1,982	1,912	1,960	1,958	1,972	1,907	1,922	2,081	1,958	1,908	1,921	2,032	1,969	1,907
5		1,879	1,959	1,982	1,912	1,959	1,958	1,972	1,905	1,911	2,076	1,958	1,908	1,959	2,032	1,956	1,907
6		1,860	1,959	1,981	1,912	1,959	1,959	1,973	1,906	1,981	2,032	1,959	1,908	1,959	2,033	1,957	1,907
7		1,860	1,959	1,979	1,911	1,959	1,958	1,953	1,906	1,981	2,032	1,959	1,908	1,959	2,032	1,948	1,907
8		1,861	1,959	1,979	1,912	1,935	1,958	1,910	1,907	1,929	2,032	1,958	1,908	1,958	2,032	1,909	1,907
9		1,863	1,954	1,924	1,909	1,905	1,954	1,911	1,909	1,921	1,959	1,957	1,904	1,953	2,034	1,911	1,343
10		1,880	1,950	1,974	1,908	1,944	1,950	1,914	1,914	1,849	1,954	1,951	1,898	1,951	2,034	1,910	558
11		1,914	1,959	2,038	1,930	1,985	1,951	1,946	1,912	1,360	1,949	1,950	1,901	1,952	2,035	1,910	1,943
12		1,913	2,002	2,051	1,953	2,001	1,955	1,985	1,914	1,461	1,997	1,948	1,904	1,563	2,035	1,913	1,957
13		1,913	2,047	2,044	1,952	1,998	2,002	1,985	1,914	1,359	1,998	1,950	1,906	1,317	2,035	1,913	1,956
14		1,914	2,047	1,979	1,951	2,001	2,047	1,929	1,914	1,746	1,995	1,950	1,906	1,858	2,035	1,910	1,955
15		1,912	2,047	1,980	2,002	2,000	2,038	1,914	1,913	2,040	2,002	1,952	1,906	2,000	2,036	1,910	1,954
16		1,912	2,052	1,977	2,051	2,004	2,041	1,913	1,912	2,076	2,004	1,956	1,904	2,017	2,034	1,909	1,280
17		1,912	2,037	1,969	2,032	2,008	2,048	1,911	1,911	2,085	2,010	1,961	1,910	2,033	2,034	1,908	1,913
18		1,912	1,984	1,970	2,009	2,007	2,047	1,909	1,911	2,084	2,009	1,960	1,908	2,032	2,033	1,907	1,894
19		1,933	2,005	1,969	2,008	2,007	2,046	1,909	1,911	2,084	2,009	1,958	1,912	2,031	2,034	1,907	1,850
20		1,958	2,054	1,968	2,007	2,006	2,045	1,907	1,911	2,084	1,957	1,910	2,031	2,034	1,905	1,652	
21		1,959	2,009	1,969	2,007	2,006	2,045	1,909	1,911	2,083	1,960	1,958	1,910	2,030	2,034	1,905	1,729
22		1,959	1,985	1,968	1,980	2,006	2,014	1,907	1,910	2,081	1,959	1,957	1,909	2,031	1,989	1,907	1,778
23		1,959	2,006	1,969	1,959	2,005	1,974	1,908	1,910	2,081	1,956	1,944	1,909	2,031	1,987	1,907	1,784
24		1,960	2,055	1,968	1,959	1,979	1,972	1,907	1,911	2,082	1,957	1,909	1,910	2,032	1,986	1,906	1,789
TOTAL		45,866	47,862	47,598	46,937	47,513	47,795	46,465	45,839	46,032	48,195	46,883	45,772	46,347	48,666	46,229	42,590
Cumulative Output Sold, kWhr		45,866	93,728	141,326	188,263	235,776	283,571	330,036	375,875	421,907	470,102	516,985	562,757	609,104	657,770	703,999	746,589
Transformer and line efficiency		99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%
Hourly average		1,911	1,994	1,983	1,956	1,980	1,991	1,936	1,910	1,918	2,008	1,953	1,907	1,931	2,028	1,926	1,775

DECEMBER 2019																					
	Tuesday 12/17/2019	Wednesday 12/18/2019	Thursday 12/19/2019	Friday 12/20/2019	Saturday 12/21/2019	Sunday 12/22/2019	Monday 12/23/2019	Tuesday 12/24/2019	Wednesday 12/25/2019	Thursday 12/26/2019	Friday 12/27/2019	Saturday 12/28/2019	Sunday 12/29/2019	Monday 12/30/2019	Tuesday 12/31/2019	TOTAL	Biogas	LFG			
LFG and Biogas Flow to the Engine	1,002	913	915	921	1,109	1,090	1,116	1,142	1,162	957	911	1,114	1,128	1,116	1,172	33,242	940	32,302			
LFG and Biogas Flow to the Engine	568	524	517	519	604	602	619	620	624	517	520	621	624	630	662	18,466	666	17,800			
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	3.6%	96%			
LFG and BiogasFlow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)	1,002	913	915	921	1,109	1,090	1,116	1,142	1,162	957	911	1,114	1,128	1,116	1,172	33,242					
LFG and Biogas Total Flow (MMBTU)	568	524	517	519	604	602	619	620	624	517	520	621	624	630	662	18,466					
Average Methane Content (%)	56.0	56.7	55.9	55.7	53.8	54.5	54.8	53.6	53.0	53.4	56.4	55.1	54.6	55.8	55.8	54.9					
Engine 1 Hours	-	-	-	8	24	24	24	24	24	23	24	24	24	24	24	271					
Engine 2 Hours	24	24	23	12	-	-	-	-	-	-	9	24	24	24	24	571					
Engine 3 Hours	24	24	24	24	24	24	24	24	24	12	-	-	-	-	-	612					
Engine 4 Hours	24	21	25	24	24	24	24	24	24	23	24	24	24	23	24	738					
Generator 1 Power Output (kWhr)	-	-	-	4,592	14,436	14,432	15,248	16,232	16,228	14,132	17,544	16,784	16,780	17,872	18,588	182,868					
Generator 2 Power Output (kWhr)	15,708	13,928	11,832	3,352	-	-	-	-	-	-	4,896	14,440	14,444	15,484	16,228	382,892					
Generator 3 Power Output (kWhr)	14,308	13,364	12,584	13,740	15,012	15,008	15,008	15,008	15,004	7,260	-	-	-	-	-	375,672					
Generator 4 Power Output (kWhr)	15,600	12,416	12,584	15,524	17,928	17,916	17,916	17,056	16,732	14,480	14,740	16,712	16,712	16,236	17,944	509,368					
Gross Power Output (kWhr)	45,579	39,637	36,918	37,115	47,465	47,450	48,263	48,386	48,056	35,949	37,095	47,937	47,932	49,666	52,903	1,450,852					
Net Power Output (kWhr)	43,712	37,888	35,152	35,364	45,620	45,624	46,440	46,584	46,236	34,200	35,512	46,240	46,232	47,864	51,064	1,392,032					
Power Sold as metered by NStar, (Offgrid RECs (kWhr)	43,632	37,853	35,156	35,386	45,551	45,570	46,346	46,490	46,142	34,201	35,558	46,165	46,166	47,784	50,864	1,389,453	CRMCB inplant				
	1,869	1,747	1,766	1,752	1,846	1,826	1,823	1,802	1,820	1,749	1,583	1,697	1,700	1,802	1,839	58,819	17,591	30%			
Calculated Performance Results																					
Daily																		of total in-plant power			
Power output (kW average whe																					
Generator 1	-	-	-	574	602	601	635	676	676	614	731	699	699	745	775						
Generator 2	655	580	514	279	-	-	-	-	-	-	544	602	602	645	676						
Generator 3	596	557	524	573	626	625	625	625	625	605	-	-	-	-	-						
Generator 4	650	591	503	647	747	747	747	711	697	630	614	696	696	706	748						
Power output (kW average ove																					
Facility Gross	1,899	1,652	1,538	1,546	1,978	1,977	2,011	2,016	2,002	1,498	1,546	1,997	1,997	2,069	2,204						
Facility Net	1,821	1,579	1,465	1,474	1,901	1,901	1,935	1,941	1,927	1,425	1,480	1,927	1,926	1,994	2,128						
In-plant load	78	73	74	73	77	76	76	75	76	73	66	71	71	75	77						
Daily availability factor																					
Facility	75%	72%	75%	71%	75%	75%	75%	75%	75%	60%	59%	75%	75%	74%	75%						
Engine 1	0%	0%	0%	33%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%						
Engine 2	100%	100%	96%	50%	0%	0%	0%	0%	0%	0%	38%	100%	100%	100%	100%						
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	0%	0%	0%	0%	0%						
Engine 4	100%	88%	104%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	96%	100%						
Daily capacity factor																					
Facility	58%	50%	47%	47%	60%	60%	61%	61%	61%	45%	47%	61%	61%	63%	67%						
Engine 1	0%	0%	0%	70%	73%	73%	77%	82%	82%	74%	89%	85%	85%	90%	94%						
Engine 2	79%	70%	62%	34%	0%	0%	0%	0%	0%	0%	66%	73%	73%	78%	82%						
Engine 3	72%	67%	64%	69%	76%	76%	76%	76%	76%	73%	0%	0%	0%	0%	0%						
Engine 4	79%	72%	61%	78%	91%	90%	90%	86%	85%	76%	74%	84%	84%	86%	91%						
Cumulative by engine																					
Engine operating run hours in ti																					
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720						
Engine 1	0	0	0	8	32	56	80	104	128	151	175	199	223	247	247						
Engine 2	407	431	454	466	466	466	466	466	466	466	475	499	523	547	547						
Engine 3	408	432	456	480	504	528	552	576	600	612	612	612	612	612	612						
Engine 4	406	427	452	476	500	524	548	572	596	619	643	667	691	714	715						
Engine operating run hours tota																					
Engine 1	110,206	110,206	110,206	110,214	110,238	110,262	110,286	110,310	110,334	110,357	110,381	110,405	110,429	110,453	110,453						
Engine 2	96,970	96,994	97,017	97,029	97,029	97,029	97,029	97,029	97,029	97,029	97,038	97,062	97,086	97,110	97,110						
Engine 3	107,026	107,050	107,074	107,098	107,122	107,146	107,170	107,194	107,218	107,230	107,230	107,230	107,230	107,230	107,230						
Engine 4	106,370	106,391	106,416	106,440	106,464	106,488	106,512	106,536	106,560	106,583	106,607	106,631	106,655	106,678	106,679						
Cumulative availability, %																					
Engine 1	0%	0%	0%	2%	6%	11%	14%	18%	21%	24%	27%	30%	32%	34%	34%						
Engine 2	100%	100%	100%	97%	92%	88%	84%	81%	78%	75%	73%	74%	75%	76%	76%						
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	94%	91%	88%	85%	85%						
Engine 4	100%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%						
Engine cumulative gross output																					
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750	24,750						
Engine 1	-	-	-	574	1,176	1,777	2,412	3,089	3,765	4,379	5,110	5,809	6,509	7,253	7,283						
Engine 2	12,041	12,621	13,135	13,415	13,415	13,415	13,415	13,415	13,415	13,415	13,959	14,560	15,162	15,807	15,838						
Engine 3	10,570	11,127	11,651	12,224	12,849	13,475	14,100	14,725	15,351	15,956	15,956	15,956	15,956	15,956	15,956						
Engine 4	11,910	12,501	13,005	13,652	14,399	15,145	15,892	16,602	17,299	17,929	18,543	19,240	19,936	20,642	20,684						
Cumulative capacity factor, %																					
Engine 1	0%	0%	0%	3%	7%	10%	13%	16%	18%	20%	23%	25%	27%	29%	29%						
Engine 2	86%	85%	84%	81%	77%	74%	71%	68%	65%	63%	63%	63%	63%	64%	64%						
Engine 3	75%	75%	74%	74%	74%	74%	74%	74%	74%	74%	72%	69%	67%	64%	64%						
Engine 4	85%	84%	83%	83%	83%	83%	84%	84%	84%	84%	83%	83%	83%	83%	84%						

	Tuesday 12/17/2019	Wednesday 12/18/2019	Thursday 12/19/2019	Friday 12/20/2019	Saturday 12/21/2019	Sunday 12/22/2019	Monday 12/23/2019	Tuesday 12/24/2019	Wednesday 12/25/2019	Thursday 12/26/2019	Friday 12/27/2019	Saturday 12/28/2019	Sunday 12/29/2019	Monday 12/30/2019	Tuesday 12/31/2019	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine run hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run hours	1,221	1,290	1,362	1,430	1,502	1,574	1,646	1,718	1,790	1,862	1,934	2,006	2,078	2,150	2,121			
Cumulative Availability, %	74.8%	74.7%	74.7%	74.5%	74.5%	74.5%	74.5%	74.6%	74.6%	74.0%	73.5%	73.5%	73.6%	73.6%	73.6%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	826,080	865,717	902,635	939,750	987,215	1,034,665	1,082,928	1,131,314	1,179,370	1,215,319	1,252,414	1,300,351	1,348,283	1,397,949	1,401,186			
Cumulative Capacity Factor	61.4%	60.7%	60.0%	59.3%	59.4%	59.4%	59.4%	59.5%	59.6%	59.0%	58.6%	58.6%	58.7%	58.8%	59.0%			
Cumulative fuel input, MMBtu	10,264	10,788	11,305	11,824	12,428	13,029	13,649	14,268	14,892	15,409	15,929	16,550	17,174	17,804	17,836			
Cumulative gross output, kWh	826,080	865,717	902,635	939,750	987,215	1,034,665	1,082,928	1,131,314	1,179,370	1,215,319	1,252,414	1,300,351	1,348,283	1,397,949	1,401,186			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,218	11,896	12,606	12,586	11,451	11,413	11,549	11,531	11,680	12,946	12,624	11,654	11,717	11,424	11,263			
Daily heat rate, Btu/kWe net	12,462	13,215	14,004	13,981	12,721	12,679	12,830	12,809	12,974	14,381	14,023	12,946	13,016	12,691	12,512			
Cumulative heat rate, Btu/kWe gross	11,185	11,218	11,275	11,326	11,332	11,336	11,346	11,354	11,367	11,414	11,449	11,457	11,466	11,465	11,458			
Cumulative heat rate, Btu/kWe net	12,425	12,461	12,525	12,582	12,589	12,593	12,603	12,612	12,627	12,679	12,719	12,727	12,737	12,736	12,729			
Cumulative by Facility starting C																		
Max cumulative available engine run hours	33,124	33,220	33,316	33,412	33,508	33,604	33,700	33,796	33,892	33,988	34,084	34,180	34,276	34,372	34,372			
Actual cumulative engine run hours	24,474	24,543	24,615	24,683	24,755	24,827	24,899	24,971	25,043	25,101	25,158	25,230	25,302	25,373	25,374			
Cumulative Availability, %	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.8%	73.8%	73.8%	73.8%	73.8%			
Max cumulative gross output, kWh	27,324,000	27,403,200	27,482,400	27,561,600	27,640,800	27,720,000	27,799,200	27,878,400	27,957,600	28,036,800	28,116,000	28,195,200	28,274,400	28,353,600	28,353,600			
Actual cumulative gross output, kWh	15,567,313	15,606,950	15,643,868	15,680,983	15,728,448	15,775,898	15,824,161	15,872,547	15,920,603	15,966,552	15,993,647	16,041,584	16,089,516	16,139,182	16,142,419			
Cumulative Capacity Factor	57.0%	57.0%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%	56.9%			
Cumulative fuel input, MMBtu	189,487	190,011	190,528	191,047	191,651	192,252	192,872	193,491	194,115	194,632	195,152	195,773	196,397	197,027	197,059			
Cumulative gross output, kWh	15,567,313	15,606,950	15,643,868	15,680,983	15,728,448	15,775,898	15,824,161	15,872,547	15,920,603	15,966,552	15,993,647	16,041,584	16,089,516	16,139,182	16,142,419			
Cumulative heat rate, Btu/kWe gross	10,957	10,960	10,964	10,967	10,969	10,970	10,972	10,974	10,976	10,980	10,984	10,986	10,988	10,990	10,989			
Cumulative heat rate, Btu/kWe net	12,172	12,175	12,179	12,183	12,185	12,186	12,188	12,190	12,193	12,198	12,202	12,204	12,206	12,208	12,207			
Service																		
Engine 1																		
Engine 2	pH control issue with H2S treatment system				Installed OED pump				E2 lost head and piston.									
Engine 3					in LFG condensate sump													
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports																		
Date	Tuesday 12/17/2019	Wednesday 12/18/2019	Thursday 12/19/2019	Friday 12/20/2019	Saturday 12/21/2019	Sunday 12/22/2019	Monday 12/23/2019	Tuesday 12/24/2019	Wednesday 12/25/2019	Thursday 12/26/2019	Friday 12/27/2019	Saturday 12/28/2019	Sunday 12/29/2019	Monday 12/30/2019	Tuesday 12/31/2019	TOTAL		
Hour																		
1	1,789	1,812	1,578	1,573	1,897	1,897	1,899	1,971	1,921	1,924	892	1,924	1,919	1,922	2,122			
2	1,789	1,812	1,577	1,123	1,896	1,898	1,898	1,970	1,920	1,923	979	1,924	1,924	1,922	2,122			
3	1,789	1,811	1,577	1,138	1,895	1,897	1,899	1,972	1,921	1,922	625	1,924	1,922	1,921	2,122			
4	1,788	1,449	1,574	1,446	1,896	1,897	1,898	1,971	1,920	1,921	1,222	1,924	1,921	1,922	2,122			
5	1,790	1,096	1,578	1,528	1,896	1,897	1,899	1,974	1,920	1,883	1,300	1,923	1,921	1,922	2,122			
6	1,788	1,005	1,577	1,548	1,894	1,897	1,897	1,973	1,923	1,873	1,308	1,922	1,921	1,923	2,121			
7	1,789	1,755	1,577	1,550	1,896	1,897	1,898	1,956	1,922	1,874	1,310	1,923	1,920	1,923	2,118			
8	1,789	1,784	1,575	1,549	1,896	1,898	1,899	1,924	1,922	1,873	1,310	1,923	1,922	1,923	2,123			
9	1,788	1,791	1,573	1,545	1,897	1,898	1,894	1,923	1,922	1,867	1,337	1,923	1,923	1,918	2,119			
10	1,789	1,806	1,576	1,547	1,900	1,900	1,917	1,925	1,924	1,867	1,383	1,927	1,924	1,817	2,116			
11	1,823	1,823	1,485	1,546	1,901	1,901	1,917	1,925	1,925	1,870	1,403	1,928	1,928	1,354	2,117			
12	1,824	1,830	560	618	1,901	1,901	1,922	1,925	1,926	665	1,400	1,929	1,929	1,886	2,117			
13	1,847	1,685	1,258	392	1,903	1,901	1,922	1,927	1,925	1,308	1,427	1,927	1,930	2,115	2,116			
14	1,887	854	1,726	713	1,902	1,901	1,923	1,929	1,925	1,315	1,426	1,927	1,928	2,111	2,116			
15	1,557	1,725	1,724	1,296	1,901	1,901	1,928	1,925	1,922	1,357	1,426	1,926	1,929	2,115	2,116			
16	1,911	1,718	1,679	1,308	1,900	1,900	1,963	1,926	1,921	1,316	1,473	1,926	1,923	2,117	2,114			
17	1,915	1,726	1,648	1,680	1,898	1,898	1,975	1,921	1,921	1,287	1,867	1,922	1,923	2,122	2,122			
18	1,914	1,725	1,647	1,899	1,898	1,897	1,970	1,924	1,924	1,246	1,923	1,922	1,923	2,122	2,122			
19	1,914	1,722	1,645	1,899	1,897	1,899	1,971	1,922	1,922	1,203	1,926	1,922	1,923	2,122	2,117			
20	1,887	998	1,641	1,899	1,897	1,900	1,972	1,921	1,923	1,194	1,926	1,921	1,922	2,122	2,120			
21	1,828	1,189	1,637	1,898	1,897	1,898	1,971	1,921	1,923	1,193	1,920	1,920	1,922	2,122	2,120			
22	1,813	1,579	1,383	1,897	1,898	1,899	1,972	1,921	1,923	1,018	1,922	1,923	1,923	2,121	2,121			
23	1,812	1,580	768	1,898	1,897	1,899	1,972	1,922	1,923	-	1,927	1,918	1,923	2,121	2,120			
24	1,812	1,578	593	1,896	1,898	1,899	1,970	1,922	1,924	302	1,925	1,918	1,923	2,121	2,119			
TOTAL	43,632	37,853	35,156	35,386	45,551	45,570	46,346	46,490	46,142	34,201	35,558	46,165	46,166	47,784	50,864			
Cumulative Output Sold, kWh	790,221	828,074	863,230	898,616	944,167	989,737	1,036,083	1,082,573	1,128,715	1,162,916	1,198,474	1,244,639	1,290,805	1,338,589	1,389,453			
Transformer and line efficiency	99.8%	99.9%	100.0%	100.1%	99.8%	99.9%	99.8%	99.8%	99.8%	100.0%	100.1%	99.8%	99.9%	99.8%	99.6%			
Hourly average	1,818	1,577	1,465	1,474	1,898	1,899	1,931	1,937	1,923	1,425	1,482	1,924	1,924	1,991	2,119			

January 2020																	
		Wednesday 1/1/2020	Thursday 1/2/2020	Friday 1/3/2020	Saturday 1/4/2020	Sunday 1/5/2020	Monday 1/6/2020	Tuesday 1/7/2020	Wednesday 1/8/2020	Thursday 1/9/2020	Friday 1/10/2020	Saturday 1/11/2020	Sunday 1/12/2020	Monday 1/13/2020	Tuesday 1/14/2020	Wednesday 1/15/2020	Thursday 1/16/2020
LFG and Biogas Flow to the Engines (KSCF)		1,190	1,200	1,151	1,173	1,193	1,213	1,220	1,224	1,170	1,194	1,170	1,161	1,094	1,195	1,173	1,232
LFG and Biogas Flow to the Engines (MMBTU HHV)		658	659	643	660	664	663	668	665	614	640	642	636	594	651	649	679
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,190	1,200	1,151	1,173	1,193	1,213	1,220	1,224	1,170	1,194	1,170	1,161	1,094	1,195	1,173	1,232
LFG and Biogas Total Flow (MMBTU HHV)		658	659	643	660	664	663	668	665	614	640	642	636	594	651	649	679
Average Methane Content (%)		54.7	54.2	55.2	55.6	55.0	54.0	54.1	53.7	51.9	53.0	54.2	54.1	53.6	53.8	54.7	54.4
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	23	24	14	-
Engine 2 Hours		24	24	23	24	24	24	24	24	13	-	-	-	-	-	10	24
Engine 3 Hours		-	-	-	-	-	-	-	-	14	24	24	24	23	24	22	22
Engine 4 Hours		24	24	23	24	24	24	24	24	22	24	24	24	24	24	24	24
Generator 1 Power Output (kWhr)		18,396	17,408	17,096	17,976	17,976	17,976	17,972	17,788	17,200	17,376	17,376	17,100	15,176	17,764	10,228	-
Generator 2 Power Output (kWhr)		16,188	16,208	14,644	15,616	15,612	15,616	15,616	15,608	7,848	-	-	-	-	-	7,460	19,636
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	7,800	16,692	17,368	17,364	15,684	17,928	16,532	16,540
Generator 4 Power Output (kWhr)		17,116	17,272	17,064	17,892	17,884	17,896	17,900	17,468	13,984	15,256	15,512	15,508	15,032	17,248	17,972	18,876
Gross Power Output (kWhr)		51,840	51,023	48,952	51,656	51,641	51,649	51,646	51,023	46,889	49,393	50,332	50,042	45,982	53,032	52,206	55,003
Net Power Output (kWhr)		50,040	49,176	47,208	49,992	49,936	49,832	49,856	49,144	45,096	47,536	48,496	48,184	44,152	51,080	50,304	53,016
Power Sold as metered by NStar, (kWhr)		49,989	49,062	47,094	49,838	49,794	49,694	49,722	49,004	45,033	47,406	48,348	48,056	44,060	50,948	50,201	52,924
Offgrid RECs (kWhr)		1,801	1,849	1,743	1,664	1,706	1,816	1,791	1,878	1,792	1,859	1,836	1,857	1,830	1,953	1,902	1,988
Calculated Performance Results																	
Daily																	
	Power output (kW average when running)																
	Generator 1	767	725	712	749	749	749	749	741	717	724	724	713	660	740	731	-
	Generator 2	675	675	637	651	651	651	651	650	604	-	-	-	-	-	746	818
	Generator 3	-	-	-	-	-	-	-	-	557	696	724	724	682	747	751	752
	Generator 4	713	720	742	746	745	746	746	728	636	636	646	646	626	719	749	787
	Power output (kW average over 24-hrs)																
	Facility Gross	2,160	2,126	2,040	2,152	2,152	2,152	2,152	2,126	1,954	2,058	2,097	2,085	1,916	2,210	2,175	2,292
	Facility Net	2,085	2,049	1,967	2,083	2,081	2,076	2,077	2,048	1,879	1,981	2,021	2,008	1,840	2,128	2,096	2,209
	In-plant load	75	77	73	69	71	76	75	78	75	77	76	77	76	81	79	83
	Daily availability factor																
	Facility	75%	75%	73%	75%	75%	75%	75%	75%	76%	75%	75%	75%	73%	75%	73%	73%
	Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	58%	0%
	Engine 2	100%	100%	96%	100%	100%	100%	100%	100%	54%	0%	0%	0%	0%	0%	42%	100%
	Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	58%	100%	100%	100%	96%	100%	92%	92%
	Engine 4	100%	100%	96%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%
	Daily capacity factor																
	Facility	65%	64%	62%	65%	65%	65%	65%	64%	59%	62%	64%	63%	58%	67%	66%	69%
	Engine 1	93%	88%	86%	91%	91%	91%	91%	90%	87%	88%	88%	86%	80%	90%	89%	0%
	Engine 2	82%	82%	77%	79%	79%	79%	79%	79%	73%	0%	0%	0%	0%	0%	90%	99%
	Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	68%	84%	88%	88%	83%	91%	91%	91%
	Engine 4	86%	87%	90%	90%	90%	90%	90%	88%	77%	77%	78%	78%	76%	87%	91%	95%
Cumulative by engine																	
	Engine operating run hours in the month																
	Max Cumulative Available, hours	24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
	Engine 1	24	48	72	96	120	144	168	192	216	240	264	288	311	335	349	349
	Engine 2	24	48	71	95	119	143	167	191	204	204	204	204	204	204	214	238
	Engine 3	0	0	0	0	0	0	0	0	14	38	62	86	109	133	155	177
	Engine 4	24	48	71	95	119	143	167	191	213	237	261	285	309	333	357	381
	Engine operating run hours total from 0 hours																
	Engine 1	110,501	110,525	110,549	110,573	110,597	110,621	110,645	110,669	110,693	110,717	110,741	110,765	110,788	110,812	110,826	110,826
	Engine 2	97,134	97,158	97,182	97,205	97,229	97,253	97,277	97,301	97,325	97,338	97,338	97,338	97,338	97,338	97,348	97,372
	Engine 3	107,230	107,230	107,230	107,230	107,230	107,230	107,230	107,230	107,244	107,268	107,292	107,316	107,339	107,363	107,385	107,407
	Engine 4	106,702	106,726	106,750	106,773	106,797	106,821	106,845	106,869	106,893	106,915	106,939	106,963	106,987	107,011	107,035	107,059
	Cumulative availability, %	January 1, 2020 @ 00:00 hours															
	Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	97%	91%
	Engine 2	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
	Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	6%	16%	23%	30%	35%	40%	43%	46%
	Engine 4	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
	Engine cumulative gross output, kWhr																
	Max cumulative capacity one engine	825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200
	Engine 1	767	1,492	2,204	2,953	3,702	4,451	5,200	5,941	6,658	7,382	8,106	8,818	9,478	10,218	10,949	10,949
	Engine 2	675	1,350	1,987	2,637	3,288	3,938	4,589	5,239	5,843	6,483	7,123	7,763	8,403	9,043	9,683	10,323
	Engine 3	-	-	-	-	-	-	-	-	557	1,253	1,976	2,700	3,382	4,129	4,880	5,632
	Engine 4	713	1,433	2,175	2,920	3,665	4,411	5,157	5,885	6,520	7,156	7,802	8,449	9,075	9,794	10,542	11,329
	Cumulative capacity factor, %																
	Engine 1	93%	90%	89%	89%	90%	90%	90%	90%	90%	89%	89%	89%	88%	88%	88%	83%
	Engine 2	82%	82%	80%	80%	80%	80%	79%	79%	79%	71%	64%	59%	54%	51%	53%	56%
	Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	8%	15%	22%	27%	32%	36%	39%	43%
	Engine 4	86%	87%	88%	88%	89%	89%	89%	89%	88%	87%	86%	85%	85%	85%	85%	86%

		Wednesday 1/1/2020	Thursday 1/2/2020	Friday 1/3/2020	Saturday 1/4/2020	Sunday 1/5/2020	Monday 1/6/2020	Tuesday 1/7/2020	Wednesday 1/8/2020	Thursday 1/9/2020	Friday 1/10/2020	Saturday 1/11/2020	Sunday 1/12/2020	Monday 1/13/2020	Tuesday 1/14/2020	Wednesday 1/15/2020	Thursday 1/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	214	286	358	430	502	574	647	719	791	863	933	1,005	1,075	1,145
Cumulative Availability, %		75.0%	75.0%	74.3%	74.5%	74.6%	74.7%	74.7%	74.7%	74.9%	74.9%	74.9%	74.9%	74.8%	74.8%	74.7%	74.5%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		51,840	102,863	151,815	203,471	255,112	306,761	358,407	409,430	456,319	505,712	556,044	606,086	652,068	705,100	757,306	812,309
Cumulative Capacity Factor		65.5%	64.9%	63.9%	64.2%	64.4%	64.6%	64.6%	64.6%	64.0%	63.9%	63.8%	63.8%	63.3%	63.6%	63.7%	64.1%
Cumulative fuel input, MMBtu HHV		658	1,317	1,960	2,620	3,284	3,947	4,615	5,280	5,894	6,534	7,177	7,813	8,406	9,057	9,706	10,385
Cumulative gross output, kWhr		51,840	102,863	151,815	203,471	255,112	306,761	358,407	409,430	456,319	505,712	556,044	606,086	652,068	705,100	757,306	812,309
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,428	11,620	11,830	11,505	11,576	11,556	11,635	11,736	11,790	11,670	11,486	11,439	11,623	11,049	11,184	11,111
Daily heat rate, Btu/kWe gross HHV		12,695	12,908	13,141	12,781	12,860	12,837	12,925	13,037	13,097	12,963	12,759	12,707	12,912	12,274	12,424	12,343
Cumulative heat rate, Btu/kWe gross LHV		11,428	11,523	11,622	11,592	11,589	11,583	11,591	11,609	11,628	11,632	11,618	11,604	11,605	11,563	11,537	11,508
Cumulative heat rate, Btu/kWe gross HHV		12,695	12,801	12,910	12,878	12,874	12,868	12,876	12,896	12,917	12,921	12,907	12,890	12,892	12,845	12,816	12,784
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	214	286	358	430	502	574	647	719	791	863	933	1,005	1,075	1,145
Cumulative Availability, %		75.0%	75.0%	74.3%	74.5%	74.6%	74.7%	74.7%	74.7%	74.9%	74.9%	74.9%	74.9%	74.8%	74.8%	74.7%	74.5%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		51,840	102,863	151,815	203,471	255,112	306,761	358,407	409,430	456,319	505,712	556,044	606,086	652,068	705,100	757,306	812,309
Cumulative Capacity Factor		65.5%	64.9%	63.9%	64.2%	64.4%	64.6%	64.6%	64.6%	64.0%	63.9%	63.8%	63.8%	63.3%	63.6%	63.7%	64.1%
Cumulative fuel input, MMBtu HHV		658	1,317	1,960	2,620	3,284	3,947	4,615	5,280	5,894	6,534	7,177	7,813	8,406	9,057	9,706	10,385
Cumulative gross output, kWhr		51,840	102,863	151,815	203,471	255,112	306,761	358,407	409,430	456,319	505,712	556,044	606,086	652,068	705,100	757,306	812,309
Cumulative heat rate, Btu/kWe gross LHV		11,428	11,523	11,622	11,592	11,589	11,583	11,591	11,609	11,628	11,632	11,618	11,604	11,605	11,563	11,537	11,508
Cumulative heat rate, Btu/kWe gross HHV		12,695	12,801	12,910	12,878	12,874	12,868	12,876	12,896	12,917	12,921	12,907	12,890	12,892	12,845	12,816	12,784
Service																	
Engine 1																	
Engine 2																	
Engine 3				Repair of E-3			Repair of E-3										
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Wednesday 1/1/2020	Thursday 1/2/2020	Friday 1/3/2020	Saturday 1/4/2020	Sunday 1/5/2020	Monday 1/6/2020	Tuesday 1/7/2020	Wednesday 1/8/2020	Thursday 1/9/2020	Friday 1/10/2020	Saturday 1/11/2020	Sunday 1/12/2020	Monday 1/13/2020	Tuesday 1/14/2020	Wednesday 1/15/2020	Thursday 1/16/2020
Date																	
Hour																	
1		2,119	2,021	2,119	2,076	2,076	2,070	2,074	2,073	1,969	1,927	2,013	2,013	1,967	2,019	2,145	2,252
2		2,120	2,022	2,120	2,076	2,076	2,069	2,073	2,073	1,970	1,922	2,013	2,013	1,968	2,019	2,147	2,253
3		2,117	2,022	2,120	2,076	2,076	2,067	2,071	2,073	1,967	1,921	2,013	2,014	1,967	2,019	2,146	2,253
4		2,121	2,021	2,120	2,076	2,076	2,068	2,071	2,073	1,917	1,923	2,014	2,014	1,967	2,018	2,146	2,253
5		2,120	2,021	2,120	2,076	2,076	2,069	2,072	2,072	1,919	1,924	2,014	2,014	1,967	2,017	2,148	2,253
6		2,116	2,022	2,119	2,076	2,076	2,073	2,070	2,071	1,919	1,925	2,014	2,013	1,966	2,017	2,147	2,253
7		2,116	2,022	2,120	2,077	2,075	2,073	2,072	2,071	1,920	1,925	2,014	2,013	1,966	2,017	2,146	2,253
8		2,119	2,022	2,120	2,076	2,075	2,073	2,071	2,072	1,919	1,925	2,014	2,013	1,968	2,019	2,146	2,253
9		2,088	2,018	2,112	2,077	2,075	2,070	2,070	2,066	1,915	1,944	2,015	2,013	627	2,090	2,142	2,292
10		2,074	2,015	2,113	2,078	2,076	2,068	2,070	2,066	1,851	1,963	2,015	2,016	641	2,191	2,144	2,319
11		2,075	2,016	532	2,077	2,077	2,070	2,069	2,068	1,697	1,973	2,015	2,016	1,347	2,189	2,145	2,316
12		2,075	2,018	1,263	2,078	2,076	2,070	2,069	2,064	1,641	2,006	2,016	2,015	1,651	2,189	2,165	2,329
13		2,077	2,018	1,502	2,077	2,076	2,068	2,071	2,065	1,545	2,005	2,017	2,015	1,892	2,191	2,195	2,335
14		2,074	2,064	1,936	2,077	2,077	2,070	2,070	2,064	1,648	2,004	2,016	2,014	2,013	2,192	2,161	2,334
15		2,076	2,066	2,017	2,077	2,076	2,069	2,070	2,057	1,923	2,002	2,015	2,015	2,013	2,192	2,145	2,335
16		2,074	2,066	2,049	2,077	2,076	2,070	2,069	2,030	1,922	2,007	2,016	2,014	2,013	2,192	2,234	2,335
17		2,072	2,072	2,077	2,077	2,075	2,069	2,074	2,017	1,925	2,015	2,016	2,013	2,014	2,192	2,331	2,330
18		2,071	2,072	2,077	2,077	2,075	2,070	2,075	2,016	1,925	2,014	2,016	2,017	2,192	2,324	2,284	2,284
19		2,071	2,072	2,076	2,076	2,074	2,072	2,074	2,016	1,925	2,014	2,016	1,979	2,017	2,191	1,803	2,283
20		2,070	2,072	2,077	2,076	2,074	2,074	2,073	2,016	1,922	2,013	2,014	1,966	2,017	2,193	1,525	1,562
21		2,069	2,071	2,076	2,076	2,073	2,073	2,073	1,975	1,921	2,013	2,013	1,966	2,017	2,171	1,854	1,547
22		2,032	2,072	2,077	2,076	2,071	2,073	2,074	1,971	1,922	2,014	2,013	1,965	2,016	2,146	2,157	1,744
23		2,021	2,072	2,076	2,076	2,070	2,073	2,074	1,969	1,925	2,014	2,014	1,964	2,013	2,146	2,253	2,229
24		2,022	2,105	2,076	2,077	2,071	2,073	2,073	1,966	1,926	2,013	2,014	1,965	2,016	2,146	2,252	2,327
TOTAL		49,989	49,062	47,094	49,838	49,794	49,694	49,722	49,004	45,033	47,406	48,348	48,056	44,060	50,948	50,201	52,924
Cumulative Output Sold, kWhr		49,989	99,051	146,145	195,983	245,777	295,471	345,193	394,197	439,230	486,636	534,984	583,040	627,100	678,048	728,249	781,173
Transformer and line efficiency		99.9%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.9%	99.7%	99.7%	99.7%	99.8%	99.7%	99.8%	99.8%
Hourly average		2,083	2,044	1,962	2,077	2,075	2,071	2,072	2,042	1,876	1,975	2,015	2,002	1,836	2,123	2,092	2,205

January 2020																				
		Friday 1/17/2020	Saturday 1/18/2020	Sunday 1/19/2020	Monday 1/20/2020	Tuesday 1/21/2020	Wednesday 1/22/2020	Thursday 1/23/2020	Friday 1/24/2020	Saturday 1/25/2020	Sunday 1/26/2020	Monday 1/27/2020	Tuesday 1/28/2020	Wednesday 1/29/2020	Thursday 1/30/2020	Friday 1/31/2020	TOTAL	Biogas	LFG	
LFG and Biogas Flow to the Engine	1,336	1,291	1,234	1,259	1,242	1,305	1,307	1,299	1,209	1,210	737	1,174	949	1,265	1,289	37,059	1,087	35,972		
LFG and Biogas Flow to the Engine	681	668	661	643	632	658	660	659	655	656	406	632	507	647	657	19,806	605	19,201		
LFG and Biogas Flow to the Flare (t	-	-	-	-	-	-	-	-	-	-	271	-	176	-	-	447	3.1%	97%		
LFG and BiogasFlow to the Flare (t	-	-	-	-	-	-	-	-	-	-	149	-	94	-	-	243				
LFG and Biogas Total Flow (KSCF	1,336	1,291	1,234	1,259	1,242	1,305	1,307	1,299	1,209	1,210	1,008	1,174	1,125	1,265	1,289	37,506				
LFG and Biogas Total Flow (MMBT	681	668	661	643	632	658	660	659	655	656	555	632	600	647	657	20,048				
Average Methane Content (%)	50.4	51.1	52.9	50.5	50.2	49.8	49.9	50.1	53.6	53.6	54.4	53.2	52.7	50.5	50.4	52.8				
Engine 1 Hours	11	24	24	24	10	-	-	-	-	-	-	-	-	-	-	442				
Engine 2 Hours	24	24	24	12	17	24	24	24	24	24	15	23	19	24	24	564				
Engine 3 Hours	16	-	-	12	24	24	24	24	24	24	15	24	19	24	24	455				
Engine 4 Hours	24	24	24	24	20	24	24	24	24	24	15	24	19	24	24	723				
Generator 1 Power Output (kWhr)	5,400	14,428	14,428	14,396	4,476	-	-	-	-	-	-	-	-	-	-	307,936				
Generator 2 Power Output (kWhr)	18,680	19,148	19,140	9,232	12,612	16,568	16,804	17,036	17,376	17,396	10,116	16,088	13,172	17,404	17,404	398,228				
Generator 3 Power Output (kWhr)	11,240	-	-	8,224	18,548	18,584	18,620	17,884	17,344	17,364	10,020	17,504	13,188	17,368	17,364	329,160				
Generator 4 Power Output (kWhr)	18,196	17,940	17,920	18,336	14,032	16,220	16,716	16,960	17,292	17,312	10,276	17,616	13,324	17,348	17,340	516,708				
Gross Power Output (kWhr)	53,532	51,614	51,612	50,284	49,658	51,338	52,127	51,882	52,096	52,075	30,418	51,152	39,681	52,093	52,091	1,553,962				
Net Power Output (kWhr)	51,464	49,688	49,792	48,360	47,752	49,344	50,112	49,896	50,174	50,232	29,280	49,256	38,168	50,056	50,088	1,496,710				
Power Sold as metered by NStar, (	51,357	49,576	49,681	48,258	47,667	49,231	49,976	49,758	50,025	50,083	29,208	49,143	38,087	49,947	49,979	1,493,149	CRMCB inplant			
Offgrid RECs (kWhr)	2,067	1,926	1,821	1,923	1,906	1,994	2,014	1,987	1,922	1,843	1,138	1,896	1,513	2,037	2,003	57,255	18,899			
Calculated Performance Results																		33%		
Daily																		of total in-plant power		
Power output (kW average whe																				
Generator 1	491	601	601	600	448	-	-	-	-	-	-	-	-	-	-	-				
Generator 2	778	798	798	769	742	690	700	710	724	725	674	699	693	725	725					
Generator 3	703	-	-	685	773	774	776	745	723	724	668	729	694	724	724					
Generator 4	758	748	747	764	702	676	697	707	721	721	685	734	701	723	723					
Power output (kW average ove																				
Facility Gross	2,231	2,151	2,151	2,095	2,069	2,139	2,172	2,162	2,171	2,170	1,267	2,131	1,653	2,171	2,170					
Facility Net	2,144	2,070	2,075	2,015	1,990	2,056	2,088	2,079	2,091	2,093	1,220	2,052	1,590	2,086	2,087					
In-plant load	86	80	76	80	79	83	84	83	80	77	47	79	63	85	83					
Daily availability factor																				
Facility	78%	75%	75%	75%	74%	75%	75%	75%	75%	75%	47%	74%	59%	75%	75%					
Engine 1	46%	100%	100%	100%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
Engine 2	100%	100%	100%	50%	71%	100%	100%	100%	100%	100%	63%	96%	79%	100%	100%					
Engine 3	67%	0%	0%	50%	100%	100%	100%	100%	100%	100%	63%	100%	79%	100%	100%					
Engine 4	100%	100%	100%	100%	83%	100%	100%	100%	100%	100%	63%	100%	79%	100%	100%					
Daily capacity factor																				
Facility	68%	65%	65%	63%	63%	65%	66%	66%	66%	66%	38%	65%	50%	66%	66%					
Engine 1	60%	73%	73%	73%	54%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%					
Engine 2	94%	97%	97%	93%	90%	84%	85%	86%	88%	88%	82%	85%	84%	88%	88%					
Engine 3	85%	0%	0%	83%	94%	94%	94%	90%	88%	88%	81%	88%	84%	88%	88%					
Engine 4	92%	91%	91%	93%	85%	82%	84%	86%	87%	87%	83%	89%	85%	88%	88%					
Cumulative by engine																				
Engine operating run hours in ti																				
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720					
Engine 1	360	384	408	432	442	442	442	442	442	442	442	442	442	442	442					
Engine 2	262	286	310	322	339	363	387	411	435	459	474	497	516	540	540					
Engine 3	193	193	193	205	229	253	277	301	325	349	364	388	407	431	431					
Engine 4	405	429	453	477	497	521	545	569	593	617	632	656	675	699	699					
Engine operating run hours tota																				
Engine 1	110,837	110,861	110,885	110,909	110,919	110,919	110,919	110,919	110,919	110,919	110,919	110,919	110,919	110,919	110,919					
Engine 2	97,396	97,420	97,444	97,456	97,473	97,497	97,521	97,545	97,569	97,593	97,608	97,631	97,650	97,674	97,674					
Engine 3	107,423	107,423	107,423	107,435	107,459	107,483	107,507	107,531	107,555	107,579	107,594	107,618	107,637	107,661	107,661					
Engine 4	107,107	107,131	107,155	107,179	107,199	107,223	107,247	107,271	107,295	107,319	107,334	107,358	107,377	107,401	107,401					
Cumulative availability, %																				
Engine 1	88%	89%	89%	90%	88%	84%	80%	77%	74%	71%	68%	66%	64%	61%	61%					
Engine 2	64%	66%	68%	67%	67%	69%	70%	71%	73%	74%	73%	74%	74%	75%	75%					
Engine 3	47%	45%	42%	43%	45%	48%	50%	52%	54%	56%	56%	58%	58%	60%	60%					
Engine 4	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	98%	98%	97%	97%	97%					
Engine cumulative gross output																				
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750	24,750					
Engine 1	11,440	12,041	12,642	13,242	13,690	13,690	13,690	13,690	13,690	13,690	13,690	13,690	13,690	13,690	13,690					
Engine 2	8,186	8,983	9,781	10,550	11,292	11,982	12,683	13,392	14,116	14,841	15,516	16,215	16,908	17,634	17,634					
Engine 3	6,334	6,334	6,334	7,020	7,793	8,567	9,343	10,088	10,811	11,534	12,202	12,931	13,626	14,349	14,349					
Engine 4	12,087	12,835	13,581	14,345	15,047	15,723	16,419	17,126	17,846	18,568	19,253	19,987	20,688	21,411	21,410					
Cumulative capacity factor, %																				
Engine 1	82%	81%	81%	80%	79%	75%	72%	69%	66%	64%	61%	59%	57%	55%	55%					
Engine 2	58%	60%	62%	64%	65%	66%	67%	68%	68%	69%	70%	70%	71%	71%	71%					
Engine 3	45%	43%	40%	43%	45%	47%	49%	51%	52%	54%	55%	56%	57%	58%	58%					
Engine 4	86%	86%	87%	87%	87%	87%	87%	86%	87%	87%	86%	87%	86%	87%	87%					

	Friday 1/17/2020	Saturday 1/18/2020	Sunday 1/19/2020	Monday 1/20/2020	Tuesday 1/21/2020	Wednesday 1/22/2020	Thursday 1/23/2020	Friday 1/24/2020	Saturday 1/25/2020	Sunday 1/26/2020	Monday 1/27/2020	Tuesday 1/28/2020	Wednesday 1/29/2020	Thursday 1/30/2020	Friday 1/31/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run	1,220	1,292	1,364	1,436	1,507	1,579	1,651	1,723	1,795	1,867	1,912	1,983	2,040	2,112	2,112			
Cumulative Availability, %	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	73.8%	73.8%	73.3%	73.3%	73.3%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	865,841	917,455	969,067	1,019,351	1,069,009	1,120,347	1,172,474	1,224,356	1,276,452	1,328,527	1,358,945	1,410,097	1,449,778	1,501,871	1,501,869			
Cumulative Capacity Factor	64.3%	64.4%	64.4%	64.4%	64.3%	64.3%	64.4%	64.4%	64.5%	64.5%	63.5%	63.6%	63.1%	63.2%	63.2%			
Cumulative fuel input, MMBtu	11,066	11,734	12,395	13,038	13,670	14,328	14,987	15,646	16,301	16,957	17,364	17,995	18,502	19,149	19,159			
Cumulative gross output, kWh	865,841	917,455	969,067	1,019,351	1,069,009	1,120,347	1,172,474	1,224,356	1,276,452	1,328,527	1,358,945	1,410,097	1,449,778	1,501,871	1,501,869			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,452	11,654	11,527	11,517	11,451	11,541	11,389	11,432	11,320	11,338	12,021	11,119	11,495	11,172	11,356			
Daily heat rate, Btu/kWe	12,721	12,946	12,805	12,793	12,721	12,821	12,652	12,700	12,575	12,595	13,354	12,351	12,769	12,410	12,614			
Cumulative heat rate, Btu/kWe	11,505	11,513	11,514	11,514	11,511	11,512	11,507	11,504	11,496	11,490	11,502	11,488	11,488	11,477	11,484			
Cumulative heat rate, Btu/kWe	12,780	12,790	12,790	12,790	12,787	12,789	12,783	12,779	12,771	12,764	12,777	12,762	12,762	12,750	12,757			
Cumulative by Facility starting C																		
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run	1,220	1,292	1,364	1,436	1,507	1,579	1,651	1,723	1,795	1,867	1,912	1,983	2,040	2,112	2,112			
Cumulative Availability, %	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	73.8%	73.8%	73.3%	73.3%	73.3%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	865,841	917,455	969,067	1,019,351	1,069,009	1,120,347	1,172,474	1,224,356	1,276,452	1,328,527	1,358,945	1,410,097	1,449,778	1,501,871	1,501,869			
Cumulative Capacity Factor	64.3%	64.4%	64.4%	64.4%	64.3%	64.3%	64.4%	64.4%	64.5%	64.5%	63.5%	63.6%	63.1%	63.2%	63.2%			
Cumulative fuel input, MMBtu	11,066	11,734	12,395	13,038	13,670	14,328	14,987	15,646	16,301	16,957	17,364	17,995	18,502	19,149	19,159			
Cumulative gross output, kWh	865,841	917,455	969,067	1,019,351	1,069,009	1,120,347	1,172,474	1,224,356	1,276,452	1,328,527	1,358,945	1,410,097	1,449,778	1,501,871	1,501,869			
Cumulative heat rate, Btu/kWe	11,505	11,513	11,514	11,514	11,511	11,512	11,507	11,504	11,496	11,490	11,502	11,488	11,488	11,477	11,484			
Cumulative heat rate, Btu/kWe	12,780	12,790	12,790	12,790	12,787	12,789	12,783	12,779	12,771	12,764	12,777	12,762	12,762	12,750	12,757			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday			
Date	1/17/2020	1/18/2020	1/19/2020	1/20/2020	1/21/2020	1/22/2020	1/23/2020	1/24/2020	1/25/2020	1/26/2020	1/27/2020	1/28/2020	1/29/2020	1/30/2020	1/31/2020			
Hour																		
1	2,324	2,062	2,070	2,065	2,039	2,107	2,069	2,081	2,081	2,086	2,085	2,062	2,117	2,082	2,082			
2	2,284	2,063	2,070	2,064	2,036	2,108	2,077	2,083	2,082	2,085	2,085	2,062	2,117	2,081	2,081			
3	2,262	2,060	2,070	2,061	2,042	2,107	2,083	2,082	2,082	2,086	2,085	2,062	2,116	2,080	2,080			
4	2,250	2,061	2,070	2,062	2,042	2,086	2,086	2,082	2,082	2,085	2,085	2,063	2,116	2,080	2,081			
5	2,248	2,062	2,070	2,063	2,041	2,054	2,084	2,082	2,084	2,086	2,085	2,063	2,116	2,080	2,081			
6	2,249	2,058	2,070	2,061	2,041	2,057	2,086	2,082	2,084	2,086	2,085	2,062	2,115	2,080	2,079			
7	2,246	2,061	2,070	2,060	1,991	2,055	2,096	2,081	2,084	2,085	2,086	2,063	2,116	2,078	2,081			
8	2,247	2,062	2,070	2,058	1,243	2,058	2,070	2,080	2,083	2,086	338	2,065	1,052	2,080	2,082			
9	2,152	2,063	2,070	2,054	1,440	2,054	2,092	2,079	2,085	2,086	-	2,049	-	2,079	2,079			
10	2,136	2,066	2,073	2,060	1,522	2,056	2,094	2,077	2,085	2,089	-	2,106	-	2,076	2,080			
11	2,138	2,068	2,075	2,063	1,527	1,676	2,084	2,076	2,083	2,090	-	2,106	-	2,080	2,081			
12	2,141	2,069	2,075	1,732	1,914	1,935	2,088	2,061	2,084	2,090	-	2,103	-	2,083	2,082			
13	2,137	2,069	2,075	1,610	2,112	2,012	2,076	2,009	2,086	2,091	-	2,104	31	2,084	2,081			
14	2,050	2,069	2,075	1,949	2,125	2,044	2,077	2,006	2,087	2,091	-	2,118	1,381	2,082	2,082			
15	2,107	2,068	2,075	2,054	2,207	2,106	2,077	2,059	2,086	2,089	-	2,133	2,056	2,078	2,082			
16	1,874	2,068	2,070	1,909	2,206	2,103	2,078	2,078	2,086	2,089	-	2,136	2,085	2,082	2,081			
17	2,069	2,068	2,070	2,047	2,209	2,105	2,082	2,084	2,085	2,088	469	2,139	2,088	2,088	2,085			
18	2,068	2,067	2,068	2,043	2,164	2,078	2,083	2,083	2,085	2,085	1,463	2,140	2,084	2,083	2,085			
19	2,065	2,068	2,067	2,042	2,155	2,050	2,083	2,084	2,086	2,085	2,022	2,140	2,086	2,083	2,086			
20	2,064	2,068	2,066	2,042	2,154	2,064	2,084	2,083	2,085	2,085	2,066	1,946	2,083	2,082	2,086			
21	2,062	2,068	2,066	2,041	2,139	2,079	2,082	2,081	2,085	2,085	2,064	1,409	2,083	2,081	2,085			
22	2,061	2,069	2,065	2,041	2,106	2,083	2,082	2,082	2,085	2,085	1,779	2,083	2,083	2,082	2,085			
23	2,062	2,069	2,065	2,040	2,105	2,079	2,081	2,082	2,084	2,085	2,063	2,117	2,080	2,082	2,086			
24	2,061	2,070	2,066	2,037	2,107	2,075	2,082	2,081	2,086	2,085	2,064	2,116	2,082	2,081	2,086			
TOTAL	51,357	49,576	49,681	48,258	47,667	49,231	49,976	49,758	50,025	50,083	29,208	49,143	38,087	49,947	49,979			
Cumulative Output Sold, kWh	832,530	882,106	931,787	980,045	1,027,712	1,076,943	1,126,919	1,176,677	1,226,702	1,276,785	1,305,993	1,355,136	1,393,223	1,443,170	1,493,149			
Transformer and line efficiency	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%			
Hourly average	2,140	2,066	2,070	2,011	1,986	2,051	2,082	2,073	2,084	2,087	1,217	2,048	1,587	2,081	2,082			

February 2020																		
		Saturday 2/1/2020	Sunday 2/2/2020	Monday 2/3/2020	Tuesday 2/4/2020	Wednesday 2/5/2020	Thursday 2/6/2020	Friday 2/7/2020	Saturday 2/8/2020	Sunday 2/9/2020	Monday 2/10/2020	Tuesday 2/11/2020	Wednesday 2/12/2020	Thursday 2/13/2020	Friday 2/14/2020	Saturday 2/15/2020	Sunday 2/16/2020	
LFG and Biogas Flow to the Engines (KSCF)		1,197	1,179	1,245	1,260	1,272	1,263	1,088	1,290	1,306	1,284	1,257	1,268	1,272	1,273	1,243	1,262	
LFG and Biogas Flow to the Engines (MMBTU HHV)		634	638	651	663	658	680	598	653	647	662	664	655	678	651	640	661	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,197	1,179	1,245	1,260	1,272	1,263	1,088	1,290	1,306	1,284	1,257	1,268	1,272	1,273	1,243	1,262	
LFG and Biogas Total Flow (MMBTU HHV)		634	638	651	663	658	680	598	653	647	662	664	655	678	651	640	661	
Average Methane Content (%)		52.3	53.5	51.7	52.0	51.1	53.2	54.3	50.0	48.9	50.9	52.2	51.1	52.6	50.5	50.9	51.7	
Engine 1 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 2 Hours		24	24	24	24	24	24	20	24	24	24	24	24	24	24	21	24	
Engine 3 Hours		24	24	24	24	24	24	20	24	24	24	24	24	24	24	24	24	
Engine 4 Hours		24	24	24	24	24	24	20	24	24	24	24	24	24	25	24	23	
Generator 1 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 2 Power Output (kWhr)		17,404	17,364	17,688	17,988	17,984	18,664	15,436	17,752	17,388	17,404	18,172	18,244	18,804	17,988	14,828	17,984	
Generator 3 Power Output (kWhr)		17,368	17,332	17,652	17,960	17,172	18,296	15,376	17,360	17,348	18,504	18,456	17,956	18,760	17,636	17,428	17,356	
Generator 4 Power Output (kWhr)		17,340	17,304	17,624	17,924	17,924	18,588	15,420	17,388	17,304	18,148	19,064	17,972	17,904	17,600	17,680	18,476	
Gross Power Output (kWhr)		52,110	52,015	52,944	53,861	53,061	55,516	46,193	52,469	52,001	54,038	55,657	54,129	55,420	53,182	49,864	53,791	
Net Power Output (kWhr)		50,248	50,168	50,944	51,856	51,040	53,480	44,512	50,416	49,936	51,968	53,576	52,000	53,344	51,048	47,880	51,808	
Power Sold as metered by NStar, (kWhr)		50,117	50,135	50,823	51,724	50,934	53,364	44,421	50,281	49,856	51,804	53,441	51,870	53,204	50,922	47,804	51,681	
Offgrid RECs (kWhr)		1,862	1,847	2,001	2,006	2,019	2,037	1,681	2,053	2,066	2,069	2,081	2,129	2,075	2,136	1,983	1,984	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 2		725	724	737	750	749	778	772	740	725	725	757	760	784	750	706	749	
Generator 3		724	722	736	748	716	762	769	723	723	771	769	748	782	735	726	723	
Generator 4		723	721	734	747	747	775	771	725	721	756	794	749	746	704	737	803	
Power output (kW average over 24-hrs)																		
Facility Gross		2,171	2,167	2,206	2,244	2,211	2,313	1,925	2,186	2,167	2,252	2,319	2,255	2,309	2,216	2,078	2,241	
Facility Net		2,094	2,090	2,123	2,161	2,127	2,228	1,855	2,101	2,081	2,165	2,232	2,167	2,223	2,127	1,995	2,159	
In-plant load		78	77	83	84	84	85	70	86	86	86	87	89	87	89	83	83	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	75%	63%	75%	75%	75%	75%	75%	75%	76%	72%	74%	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	83%	100%	100%	100%	100%	100%	100%	100%	88%	100%	
Engine 3		100%	100%	100%	100%	100%	100%	83%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	100%	100%	100%	83%	100%	100%	100%	100%	100%	100%	104%	100%	96%	
Daily capacity factor																		
Facility		66%	66%	67%	68%	67%	70%	58%	66%	66%	68%	70%	68%	70%	67%	63%	68%	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		88%	88%	89%	91%	91%	94%	90%	88%	88%	92%	92%	92%	95%	91%	86%	91%	
Engine 3		88%	88%	89%	91%	87%	92%	93%	88%	88%	93%	93%	91%	95%	89%	88%	88%	
Engine 4		88%	87%	89%	91%	91%	94%	93%	88%	87%	92%	96%	91%	90%	85%	89%	97%	
Cumulative by engine																		
Engine operating run hours in the month																		
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 1		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engine 2		24	48	72	96	120	144	164	188	212	236	260	284	308	332	353	377	
Engine 3		24	48	72	96	120	144	164	188	212	236	260	284	308	332	356	380	
Engine 4		24	48	72	96	120	144	164	188	212	236	260	284	308	333	357	380	
Engine operating run hours total from 0 hours																		
Engine 1		110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	110,918	
Engine 2		97,673	97,697	97,721	97,745	97,769	97,793	97,817	97,837	97,861	97,885	97,909	97,933	97,957	97,981	98,005	98,026	
Engine 3		107,662	107,686	107,710	107,734	107,758	107,782	107,806	107,826	107,850	107,874	107,898	107,922	107,946	107,970	107,994	108,018	
Engine 4		107,402	107,426	107,450	107,474	107,498	107,522	107,546	107,566	107,590	107,614	107,638	107,662	107,686	107,710	107,735	107,759	
Cumulative availability, % February 1, 2020 @ 00:00 hours																		
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	98%	98%	98%	98%	98%	98%	99%	99%	98%	98%	
Engine 3		100%	100%	100%	100%	100%	100%	98%	98%	98%	98%	98%	99%	99%	99%	99%	99%	
Engine 4		100%	100%	100%	100%	100%	100%	98%	98%	98%	98%	98%	99%	99%	99%	99%	99%	
Engine cumulative gross output, kWhr																		
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200	
Engine 1		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 2		725	1,449	2,186	2,935	3,685	4,462	5,234	5,974	6,698	7,423	8,180	8,941	9,724	10,474	11,180	11,929	
Engine 3		724	1,446	2,181	2,930	3,645	4,408	5,176	5,900	6,622	7,393	8,162	8,911	9,692	10,427	11,153	11,876	
Engine 4		723	1,444	2,178	2,925	3,672	4,446	5,217	5,942	6,663	7,419	8,213	8,962	9,708	10,412	11,149	11,952	
Cumulative capacity factor, %																		
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		88%	88%	88%	89%	89%	90%	91%	91%	90%	90%	90%	90%	91%	91%	90%	90%	
Engine 3		88%	88%	88%	89%	88%	89%	90%	89%	89%	90%	90%	90%	90%	90%	90%	90%	
Engine 4		88%	87%	88%	89%	89%	90%	90%	90%	90%	90%	91%	91%	91%	90%	90%	91%	

		Saturday 2/1/2020	Sunday 2/2/2020	Monday 2/3/2020	Tuesday 2/4/2020	Wednesday 2/5/2020	Thursday 2/6/2020	Friday 2/7/2020	Saturday 2/8/2020	Sunday 2/9/2020	Monday 2/10/2020	Tuesday 2/11/2020	Wednesday 2/12/2020	Thursday 2/13/2020	Friday 2/14/2020	Saturday 2/15/2020	Sunday 2/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	288	360	432	492	564	636	708	780	852	924	997	1,066	1,137
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	73.2%	73.4%	73.6%	73.8%	73.9%	74.0%	74.0%	74.2%	74.0%	74.0%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		52,110	104,125	157,069	210,930	263,991	319,507	365,700	418,169	470,170	524,208	579,865	633,994	689,414	742,596	792,460	846,251
Cumulative Capacity Factor		65.8%	65.7%	66.1%	66.6%	66.7%	67.2%	66.0%	66.0%	66.0%	66.2%	66.6%	66.7%	67.0%	67.0%	66.7%	66.8%
Cumulative fuel input, MMBtu HHV		634	1,272	1,923	2,585	3,243	3,923	4,522	5,174	5,821	6,483	7,147	7,803	8,480	9,131	9,771	10,431
Cumulative gross output, kWhr		52,110	104,125	157,069	210,930	263,991	319,507	365,700	418,169	470,170	524,208	579,865	633,994	689,414	742,596	792,460	846,251
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,944	11,045	11,065	11,076	11,161	11,028	11,660	11,195	11,199	11,031	10,744	10,896	11,005	11,014	11,554	11,055
Daily heat rate, Btu/kWe gross HHV		12,157	12,270	12,292	12,304	12,399	12,251	12,952	12,436	12,440	12,254	11,936	12,104	12,225	12,235	12,835	12,281
Cumulative heat rate, Btu/kWe gross LHV		10,944	10,994	11,018	11,033	11,059	11,053	11,130	11,138	11,145	11,133	11,096	11,079	11,073	11,069	11,099	11,096
Cumulative heat rate, Btu/kWe gross HHV		12,157	12,213	12,240	12,256	12,285	12,279	12,364	12,373	12,380	12,367	12,326	12,307	12,300	12,296	12,330	12,327
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		2,976	3,072	3,168	3,264	3,360	3,456	3,552	3,648	3,744	3,840	3,936	4,032	4,128	4,224	4,320	4,416
Actual cumulative engine run hours		2,184	2,256	2,328	2,400	2,472	2,544	2,604	2,676	2,748	2,820	2,892	2,964	3,036	3,109	3,178	3,249
Cumulative Availability, %		73.4%	73.4%	73.5%	73.5%	73.6%	73.6%	73.3%	73.4%	73.4%	73.4%	73.5%	73.5%	73.5%	73.6%	73.6%	73.6%
Max cumulative gross output, kWhr		2,455,200	2,534,400	2,613,600	2,692,800	2,772,000	2,851,200	2,930,400	3,009,600	3,088,800	3,168,000	3,247,200	3,326,400	3,405,600	3,484,800	3,564,000	3,643,200
Actual cumulative gross output, kWhr		1,553,979	1,605,994	1,658,938	1,712,799	1,765,860	1,821,376	1,867,569	1,920,038	1,972,039	2,026,077	2,081,734	2,135,863	2,191,283	2,244,465	2,294,329	2,348,120
Cumulative Capacity Factor		63.3%	63.4%	63.5%	63.6%	63.7%	63.9%	63.7%	63.8%	63.8%	64.0%	64.1%	64.2%	64.3%	64.4%	64.4%	64.5%
Cumulative fuel input, MMBtu HHV		19,793	20,431	21,082	21,744	22,402	23,082	23,681	24,333	24,980	25,642	26,307	26,962	27,639	28,290	28,930	29,591
Cumulative gross output, kWhr		1,553,979	1,605,994	1,658,938	1,712,799	1,765,860	1,821,376	1,867,569	1,920,038	1,972,039	2,026,077	2,081,734	2,135,863	2,191,283	2,244,465	2,294,329	2,348,120
Cumulative heat rate, Btu/kWe gross LHV		11,466	11,452	11,440	11,428	11,420	11,408	11,414	11,408	11,403	11,393	11,376	11,363	11,354	11,346	11,351	11,344
Cumulative heat rate, Btu/kWe gross HHV		12,737	12,722	12,708	12,695	12,686	12,673	12,680	12,673	12,667	12,656	12,637	12,623	12,613	12,604	12,609	12,602
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Saturday 2/1/2020	Sunday 2/2/2020	Monday 2/3/2020	Tuesday 2/4/2020	Wednesday 2/5/2020	Thursday 2/6/2020	Friday 2/7/2020	Saturday 2/8/2020	Sunday 2/9/2020	Monday 2/10/2020	Tuesday 2/11/2020	Wednesday 2/12/2020	Thursday 2/13/2020	Friday 2/14/2020	Saturday 2/15/2020	Sunday 2/16/2020
Hour																	
1		2,086	2,088	2,086	2,153	2,155	2,108	2,289	2,215	2,075	2,081	2,173	2,246	2,152	2,149	2,093	2,154
2		2,086	2,088	2,085	2,154	2,155	2,124	2,299	2,149	2,074	2,081	2,175	2,214	2,153	2,149	2,097	2,154
3		2,086	2,090	2,085	2,156	2,155	2,156	2,298	2,150	2,075	2,082	2,175	2,198	2,190	2,150	2,096	2,153
4		2,086	2,090	2,084	2,155	2,155	2,157	2,298	2,148	2,076	2,081	2,175	2,194	2,213	2,151	2,089	2,152
5		2,088	2,089	2,084	2,157	2,155	2,158	2,299	2,136	2,075	2,125	2,175	2,193	2,249	2,148	1,867	2,152
6		2,087	2,089	2,084	2,155	2,155	2,157	2,299	2,077	2,073	2,153	2,175	2,167	2,248	2,150	1,485	2,153
7		2,086	2,089	2,085	2,156	2,154	2,157	2,299	2,077	2,074	2,153	2,175	2,152	2,249	2,151	1,468	2,152
8		2,088	2,089	2,085	2,157	2,155	2,157	2,300	2,076	2,073	2,154	2,176	2,151	2,249	2,151	1,467	2,153
9		2,088	2,090	2,081	2,154	2,116	2,156	2,299	2,078	2,076	2,150	2,175	2,148	2,247	2,147	1,957	2,152
10		2,090	2,091	2,079	2,154	2,103	2,155	2,296	2,081	2,077	2,146	2,169	2,139	2,244	2,144	992	2,155
11		2,089	2,090	2,080	2,155	2,104	2,281	2,295	2,081	2,080	2,146	2,215	2,138	2,245	2,144	1,847	2,158
12		2,089	2,089	2,082	2,156	2,103	2,293	2,298	2,081	2,080	2,148	2,220	2,142	2,246	2,111	2,208	2,157
13		2,089	2,089	2,125	2,153	2,105	2,296	2,298	2,082	2,079	2,169	2,222	2,145	2,245	2,099	2,207	2,156
14		2,090	2,089	2,153	2,155	2,103	2,295	2,332	2,082	2,079	2,223	2,266	2,143	2,244	2,099	2,206	2,156
15		2,090	2,089	2,154	2,155	2,105	2,295	-	2,080	2,081	2,221	2,293	2,144	2,242	2,100	2,206	2,155
16		2,090	2,090	2,154	2,156	2,106	2,296	-	2,081	2,080	2,223	2,292	2,147	2,244	2,096	2,206	2,154
17		2,089	2,089	2,159	2,160	2,106	2,299	-	2,079	2,080	2,223	2,297	2,153	2,248	2,102	2,202	2,154
18		2,089	2,089	2,152	2,155	2,107	2,298	381	2,077	2,078	2,202	2,297	2,147	2,247	2,097	2,199	2,153
19		2,088	2,089	2,154	2,153	2,107	2,298	1,598	2,076	2,078	2,174	2,297	2,151	2,224	2,102	2,152	2,153
20		2,088	2,088	2,154	2,154	2,105	2,297	2,129	2,075	2,079	2,295	2,151	2,198	2,098	2,153	2,152	2,152
21		2,088	2,088	2,155	2,154	2,106	2,251	2,297	2,075	2,077	2,173	2,262	2,151	2,177	2,098	2,150	2,151
22		2,089	2,088	2,155	2,155	2,105	2,226	2,296	2,075	2,078	2,174	2,248	2,152	2,150	2,097	2,153	2,150
23		2,090	2,088	2,154	2,156	2,106	2,227	2,294	2,075	2,079	2,174	2,248	2,151	2,150	2,096	2,151	2,151
24		2,088	2,087	2,154	2,156	2,108	2,227	2,227	2,075	2,080	2,174	2,246	2,153	2,150	2,093	2,153	2,151
TOTAL		50,117	50,135	50,823	51,724	50,934	53,364	44,421	50,281	49,856	51,804	53,441	51,870	53,204	50,922	47,804	51,681
Cumulative Output Sold, kWhr		50,117	100,252	151,075	202,799	253,733	307,097	351,518	401,799	451,655	503,459	556,900	608,770	661,974	712,896	760,700	812,381
Transformer and line efficiency		99.7%	99.9%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.8%	99.7%	99.7%	99.8%	99.7%	99.8%	99.8%	99.8%
Hourly average		2,088	2,089	2,118	2,155	2,122	2,224	1,851	2,095	2,077	2,159	2,227	2,161	2,217	2,122	1,992	2,153

February 2020																	
	Monday 2/17/2020	Tuesday 2/18/2020	Wednesday 2/19/2020	Thursday 2/20/2020	Friday 2/21/2020	Saturday 2/22/2020	Sunday 2/23/2020	Monday 2/24/2020	Tuesday 2/25/2020	Wednesday 2/26/2020	Thursday 2/27/2020	Friday 2/28/2020	Saturday 2/29/2020	TOTAL	Biogas	LFC	
LFG and Biogas Flow to the Engine	1,274	1,286	1,262	1,271	1,272	1,234	1,240	1,047	1,288	1,285	1,283	1,286	1,309	36,296	1,120	35,176	
LFG and Biogas Flow to the Engine	652	668	657	651	656	651	653	561	680	666	690	668	672	18,954	786	18,168	
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.1%	96%	
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)	1,274	1,286	1,262	1,271	1,272	1,234	1,240	1,047	1,288	1,285	1,283	1,286	1,309	36,296			
LFG and Biogas Total Flow (MMBTU)	652	668	657	651	656	651	653	561	680	666	690	668	672	18,954			
Average Methane Content (%)	50.6	51.3	51.4	50.6	50.9	52.1	52.0	52.9	52.2	51.2	53.1	51.3	50.7	51.6			
Engine 1 Hours	-	-	-	9	24	24	24	18	24	24	24	24	24	219			
Engine 2 Hours	24	24	24	16	-	-	-	-	-	-	1	-	-	466			
Engine 3 Hours	24	24	24	24	24	24	24	19	24	24	24	24	24	687			
Engine 4 Hours	25	24	24	24	24	24	24	18	24	24	24	24	24	687			
Generator 1 Power Output (kWhr)	-	-	-	5,192	15,036	15,036	15,028	11,256	17,580	17,984	17,964	17,984	17,984	151,044			
Generator 2 Power Output (kWhr)	17,224	17,292	17,816	11,068	-	-	-	-	-	-	-	-	-	344,492			
Generator 3 Power Output (kWhr)	17,364	17,936	16,692	17,160	17,968	17,960	17,964	13,872	17,964	17,160	17,932	17,308	17,036	506,276			
Generator 4 Power Output (kWhr)	17,628	17,776	17,928	17,972	18,484	18,480	18,472	13,564	17,928	17,932	17,916	17,936	17,840	513,516			
Gross Power Output (kWhr)	52,181	52,963	52,396	51,384	51,498	51,517	51,498	38,771	53,550	53,170	53,890	53,313	52,945	1,515,327			
Net Power Output (kWhr)	50,216	50,912	50,336	49,360	49,544	49,712	49,712	37,312	51,592	51,240	51,976	51,296	50,936	1,458,368			
Power Sold as metered by NStar, (Offgrid RECs (kWhr)	50,100	50,798	50,225	49,252	49,438	49,582	49,588	37,233	51,462	51,119	51,859	51,190	50,825	1,455,052	CRMCB inplant		
	1,963	2,052	2,061	2,023	1,954	1,805	1,785	1,459	1,958	1,930	1,914	2,017	2,009	56,959	16,403		
Calculated Performance Results																	
Daily																	
Power output (kW average whe																	
Generator 1	-	-	-	577	627	627	626	625	733	749	749	749	749				
Generator 2	718	721	742	692	-	-	-	-	-	-	-	-	-				
Generator 3	724	747	696	715	749	748	749	730	749	715	747	721	710				
Generator 4	705	741	747	749	770	770	770	754	747	747	747	747	743				
Power output (kW average ove																	
Facility Gross	2,174	2,207	2,183	2,141	2,146	2,147	2,146	1,615	2,231	2,215	2,245	2,221	2,206				
Facility Net	2,092	2,121	2,097	2,057	2,064	2,071	2,071	1,555	2,150	2,135	2,166	2,137	2,122				
In-plant load	82	85	86	84	81	75	74	61	82	80	80	84	84				
Daily availability factor																	
Facility	76%	75%	75%	76%	75%	75%	75%	57%	75%	75%	76%	75%	75%				
Engine 1	0%	0%	0%	38%	100%	100%	100%	75%	100%	100%	100%	100%	100%				
Engine 2	100%	100%	100%	67%	0%	0%	0%	0%	0%	0%	4%	0%	0%				
Engine 3	100%	100%	100%	100%	100%	100%	100%	79%	100%	100%	100%	100%	100%				
Engine 4	104%	100%	100%	100%	100%	100%	100%	75%	100%	100%	100%	100%	100%				
Daily capacity factor																	
Facility	66%	67%	66%	65%	65%	65%	65%	49%	68%	67%	68%	67%	67%				
Engine 1	0%	0%	0%	70%	76%	76%	76%	76%	89%	91%	91%	91%	91%				
Engine 2	87%	87%	90%	84%	0%	0%	0%	0%	0%	0%	0%	0%	0%				
Engine 3	88%	91%	84%	87%	91%	91%	91%	88%	91%	87%	91%	87%	86%				
Engine 4	85%	90%	91%	91%	93%	93%	93%	91%	91%	91%	90%	91%	90%				
Cumulative by engine																	
Engine operating run hours in ti																	
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696				
Engine 1	0	0	0	9	33	57	81	99	123	147	171	195	219				
Engine 2	401	425	449	465	465	465	465	465	465	465	466	466	466				
Engine 3	404	428	452	476	500	524	548	567	591	615	639	663	687				
Engine 4	405	429	453	477	501	525	549	567	591	615	639	663	687				
Engine operating run hours tota																	
Engine 1	110,918	110,918	110,918	110,927	110,951	110,975	110,999	111,017	111,041	111,065	111,089	111,113	111,137				
Engine 2	98,074	98,098	98,122	98,138	98,138	98,138	98,138	98,138	98,138	98,138	98,139	98,139	98,139				
Engine 3	108,066	108,090	108,114	108,138	108,162	108,186	108,210	108,229	108,253	108,277	108,301	108,325	108,349				
Engine 4	107,807	107,831	107,855	107,879	107,903	107,927	107,951	107,969	107,993	108,017	108,041	108,065	108,089				
Cumulative availability, %																	
Engine 1	0%	0%	0%	2%	7%	11%	15%	17%	21%	24%	26%	29%	31%				
Engine 2	98%	98%	98%	97%	92%	88%	84%	81%	78%	75%	72%	69%	67%				
Engine 3	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%				
Engine 4	99%	99%	99%	99%	99%	99%	99%	98%	99%	99%	99%	99%	99%				
Engine cumulative gross output																	
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925				
Engine 1	-	-	-	577	1,203	1,830	2,456	3,081	3,814	4,563	5,312	6,061	6,810				
Engine 2	12,647	13,367	14,110	14,801	14,801	14,801	14,801	14,801	14,801	14,801	14,801	14,801	14,801				
Engine 3	12,600	13,347	14,043	14,758	15,506	16,255	17,003	17,733	18,482	19,197	19,944	20,665	21,375				
Engine 4	12,657	13,398	14,145	14,893	15,664	16,434	17,203	17,957	18,704	19,451	20,197	20,945	21,688				
Cumulative capacity factor, %																	
Engine 1	0%	0%	0%	3%	7%	10%	13%	16%	18%	21%	24%	26%	28%				
Engine 2	90%	90%	90%	90%	85%	82%	78%	75%	72%	69%	66%	64%	62%				
Engine 3	90%	90%	90%	89%	90%	90%	90%	90%	90%	89%	90%	89%	89%				
Engine 4	90%	90%	90%	90%	90%	91%	91%	91%	91%	91%	91%	91%	91%				

	Monday 2/17/2020	Tuesday 2/18/2020	Wednesday 2/19/2020	Thursday 2/20/2020	Friday 2/21/2020	Saturday 2/22/2020	Sunday 2/23/2020	Monday 2/24/2020	Tuesday 2/25/2020	Wednesday 2/26/2020	Thursday 2/27/2020	Friday 2/28/2020	Saturday 2/29/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784			
Actual cumulative engine run	1,210	1,282	1,354	1,427	1,499	1,571	1,643	1,698	1,770	1,842	1,915	1,987	2,059			
Cumulative Availability, %	74.1%	74.2%	74.2%	74.3%	74.4%	74.4%	74.4%	73.7%	73.8%	73.8%	73.9%	73.9%	74.0%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800			
Actual cumulative gross output, kWh	898,432	951,395	1,003,791	1,055,175	1,106,673	1,158,190	1,209,688	1,248,459	1,302,009	1,355,179	1,409,069	1,462,382	1,515,327			
Cumulative Capacity Factor	66.7%	66.7%	66.7%	66.6%	66.5%	66.5%	66.4%	65.7%	65.8%	65.8%	65.9%	65.9%	66.0%			
Cumulative fuel input, MMBtu	11,084	11,751	12,408	13,059	13,714	14,365	15,018	15,579	16,259	16,925	17,614	18,282	18,954			
Cumulative gross output, kWh	898,432	951,395	1,003,791	1,055,175	1,106,673	1,158,190	1,209,688	1,248,459	1,302,009	1,355,179	1,409,069	1,462,382	1,515,327			
Heat Rate																
Daily heat rate, Btu/kWe gross	11,253	11,347	11,279	11,407	11,458	11,368	11,415	13,025	11,431	11,271	11,519	11,274	11,426			
Daily heat rate, Btu/kWe gross	12,501	12,605	12,530	12,671	12,729	12,629	12,680	14,470	12,698	12,520	12,796	12,524	12,692			
Cumulative heat rate, Btu/kWe	11,105	11,119	11,127	11,141	11,156	11,165	11,176	11,233	11,241	11,242	11,253	11,254	11,260			
Cumulative heat rate, Btu/kWe	12,337	12,352	12,361	12,376	12,392	12,403	12,415	12,479	12,488	12,489	12,501	12,502	12,508			
Cumulative by Facility starting C																
Max cumulative available engine	4,512	4,608	4,704	4,800	4,896	4,992	5,088	5,184	5,280	5,376	5,472	5,568	5,664			
Actual cumulative engine run	3,322	3,394	3,466	3,539	3,611	3,683	3,755	3,810	3,882	3,954	4,027	4,099	4,171			
Cumulative Availability, %	73.6%	73.7%	73.7%	73.7%	73.8%	73.8%	73.8%	73.5%	73.5%	73.5%	73.6%	73.6%	73.6%			
Max cumulative gross output, kWh	3,722,400	3,801,600	3,880,800	3,960,000	4,039,200	4,118,400	4,197,600	4,276,800	4,356,000	4,435,200	4,514,400	4,593,600	4,672,800			
Actual cumulative gross output, kWh	2,400,301	2,453,264	2,505,660	2,557,044	2,608,542	2,660,059	2,711,557	2,750,328	2,803,878	2,857,048	2,910,938	2,964,251	3,017,196			
Cumulative Capacity Factor	64.5%	64.5%	64.6%	64.6%	64.6%	64.6%	64.6%	64.3%	64.4%	64.4%	64.5%	64.5%	64.6%			
Cumulative fuel input, MMBtu	30,243	30,910	31,567	32,218	32,874	33,524	34,177	34,738	35,418	36,084	36,773	37,441	38,113			
Cumulative gross output, kWh	2,400,301	2,453,264	2,505,660	2,557,044	2,608,542	2,660,059	2,711,557	2,750,328	2,803,878	2,857,048	2,910,938	2,964,251	3,017,196			
Cumulative heat rate, Btu/kWe	11,342	11,342	11,341	11,342	11,345	11,345	11,346	11,370	11,371	11,369	11,372	11,370	11,371			
Cumulative heat rate, Btu/kWe	12,600	12,600	12,598	12,600	12,602	12,603	12,604	12,631	12,632	12,630	12,633	12,631	12,632			
Service																
Engine 1								Breaker work								
Engine 2								All but E-1 repaired								
Engine 3																
Engine 4																
Oil - oil and filter change																
Service - plugs, air filter, valve insp																
Precipitation																
NSTAR Power Reports	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday			
Date	2/17/2020	2/18/2020	2/19/2020	2/20/2020	2/21/2020	2/22/2020	2/23/2020	2/24/2020	2/25/2020	2/26/2020	2/27/2020	2/28/2020	2/29/2020			
Hour																
1	2,151	2,053	2,201	2,030	2,059	2,061	2,062	2,064	2,119	2,160	2,166	2,142	2,158			
2	2,151	2,056	2,201	2,028	2,059	2,061	2,062	2,064	2,119	2,160	2,166	2,108	2,156			
3	2,149	2,055	2,200	2,028	2,058	2,062	2,063	2,064	2,118	2,160	2,166	2,109	2,155			
4	2,150	2,055	2,173	2,028	2,058	2,062	2,061	2,063	2,119	2,160	2,168	2,112	2,156			
5	2,150	2,056	2,152	2,027	2,059	2,062	2,061	2,064	2,119	2,160	2,168	2,111	2,156			
6	2,149	2,055	2,150	2,027	2,057	2,058	2,062	2,065	2,119	2,160	2,168	2,111	2,119			
7	2,125	2,056	2,149	2,026	2,057	2,063	2,062	2,064	2,119	2,160	2,169	2,109	2,107			
8	2,105	2,056	2,104	2,029	2,059	2,064	2,063	2,066	2,119	2,127	2,169	2,113	2,112			
9	2,084	2,055	2,104	2,031	2,054	2,069	2,068	394	2,152	2,104	2,164	2,110	2,114			
10	2,061	2,047	2,102	2,027	2,055	2,070	2,071	-	2,158	2,116	2,163	2,111	2,116			
11	2,062	2,052	2,103	2,077	2,060	2,070	2,071	-	2,156	2,116	2,161	2,113	2,118			
12	2,063	2,052	2,103	2,129	2,061	2,073	2,072	-	2,151	2,110	2,162	2,114	2,120			
13	2,063	2,081	2,103	2,128	2,062	2,074	2,072	-	2,151	2,114	2,161	2,114	2,119			
14	2,064	2,100	1,947	2,128	2,062	2,073	2,071	286	2,149	2,113	2,160	2,115	2,119			
15	2,065	2,166	1,702	2,127	2,064	2,073	2,071	1,141	2,151	2,116	2,106	2,160	2,116			
16	2,064	2,194	2,124	1,942	2,062	2,070	2,071	1,945	2,155	2,114	2,157	2,163	2,113			
17	2,058	2,199	2,128	2,026	2,064	2,068	2,070	2,125	2,162	2,120	2,168	2,165	2,113			
18	2,056	2,201	2,123	2,063	2,063	2,067	2,065	2,119	2,163	2,118	2,156	2,159	2,112			
19	2,055	2,202	2,124	2,061	2,062	2,066	2,067	2,111	2,163	2,116	2,163	2,161	2,110			
20	2,055	2,202	2,099	2,062	2,061	2,064	2,066	2,120	2,162	2,118	2,161	2,160	2,107			
21	2,056	2,202	2,056	2,058	2,061	2,065	2,065	2,119	2,161	2,116	2,160	2,159	2,106			
22	2,056	2,201	2,027	2,058	2,060	2,063	2,064	2,120	2,159	2,119	2,160	2,157	2,108			
23	2,055	2,201	2,027	2,054	2,060	2,061	2,064	2,119	2,158	2,119	2,156	2,158	2,059			
24	2,053	2,201	2,023	2,058	2,061	2,063	2,064	2,120	2,160	2,143	2,161	2,156	2,056			
TOTAL	50,100	50,798	50,225	49,252	49,438	49,582	49,588	37,233	51,462	51,119	51,859	51,190	50,825			
Cumulative Output Sold, kWh	862,481	913,279	963,504	1,012,756	1,062,194	1,111,776	1,161,364	1,198,597	1,250,059	1,301,178	1,353,037	1,404,227	1,455,052			
Transformer and line efficiency	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%	99.8%			
Hourly average	2,088	2,117	2,093	2,052	2,060	2,066	2,066	1,551	2,144	2,130	2,161	2,133	2,118			

March 2020										DLST								
			Sunday 3/1/2020	Monday 3/2/2020	Tuesday 3/3/2020	Wednesday 3/4/2020	Thursday 3/5/2020	Friday 3/6/2020	Saturday 3/7/2020	Sunday 3/8/2020	Monday 3/9/2020	Tuesday 3/10/2020	Wednesday 3/11/2020	Thursday 3/12/2020	Friday 3/13/2020	Saturday 3/14/2020	Sunday 3/15/2020	Monday 3/16/2020
LFG and Biogas Flow to the Engines (KSCF)			1,345	1,326	1,243	1,293	1,315	1,284	1,292	1,253	1,317	1,297	1,298	1,243	1,265	1,229	1,262	1,247
LFG and Biogas Flow to the Engines (MMBTU HHV)			675	675	660	677	661	662	651	623	665	670	665	634	662	632	634	626
LFG and Biogas Flow to the Flare (KSCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)			1,345	1,326	1,243	1,293	1,315	1,284	1,292	1,253	1,317	1,297	1,298	1,243	1,265	1,229	1,262	1,247
LFG and Biogas Total Flow (MMBTU HHV)			675	675	660	677	661	662	651	623	665	670	665	634	662	632	634	626
Average Methane Content (%)			49.6	50.3	52.5	51.7	49.7	51.0	49.8	49.1	49.9	51.1	50.6	50.4	51.7	50.8	49.7	49.6
Engine 1 Hours			24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine 2 Hours			-	15	24	24	24	24	24	23	24	24	24	23	24	24	24	24
Engine 3 Hours			24	24	24	24	24	24	24	23	24	24	24	23	24	22	23	24
Engine 4 Hours			24	24	22	24	24	24	24	23	24	24	24	24	24	24	24	24
Generator 1 Power Output (kWhr)			17,984	6,784	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Generator 2 Power Output (kWhr)			-	9,568	16,216	16,208	16,204	15,812	16,216	15,536	16,208	16,200	16,204	15,344	16,532	16,800	16,792	16,792
Generator 3 Power Output (kWhr)			16,772	17,512	17,944	17,936	17,256	17,956	17,080	16,468	17,700	17,952	17,180	16,340	17,952	15,084	13,252	12,992
Generator 4 Power Output (kWhr)			16,748	17,472	16,460	17,924	17,124	17,388	17,276	16,036	17,184	17,912	17,920	17,160	17,932	17,780	16,904	17,484
Gross Power Output (kWhr)			51,605	51,373	50,622	52,066	50,606	51,149	50,572	48,034	51,088	52,056	51,315	48,881	52,384	49,644	46,953	47,295
Net Power Output (kWhr)			49,576	49,344	48,792	50,224	48,696	49,280	48,696	46,264	49,240	50,272	49,512	47,080	50,552	47,888	45,144	45,408
Power Sold as metered by NStar, (kWhr)			49,464	49,256	48,642	50,095	48,570	49,178	48,610	46,196	49,121	50,146	49,378	46,958	50,430	47,805	45,083	45,317
Offgrid RECs (kWhr)			2,028	2,029	1,829	1,842	1,911	1,870	1,874	1,771	1,847	1,784	1,804	1,800	1,832	1,757	1,810	1,885
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
			Generator 1	749	678	-	-	-	-	-	-	-	-	-	-	-	-	-
			Generator 2	-	638	676	675	675	659	676	675	675	675	667	689	700	700	700
			Generator 3	699	730	748	747	719	748	712	716	738	748	710	748	686	576	541
			Generator 4	698	728	748	747	714	725	720	697	716	746	747	715	747	741	704
Power output (kW average over 24-hrs)																		
			Facility Gross	2,150	2,141	2,109	2,169	2,109	2,131	2,107	2,088	2,129	2,169	2,138	2,037	2,183	2,069	1,956
			Facility Net	2,066	2,056	2,033	2,093	2,029	2,053	2,029	2,011	2,052	2,095	2,063	1,962	2,106	1,995	1,881
			In-plant load	85	85	76	77	80	78	78	77	77	74	75	75	76	73	75
Daily availability factor																		
			Facility	75%	76%	73%	75%	75%	75%	75%	75%	75%	75%	73%	75%	73%	74%	75%
			Engine 1	100%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
			Engine 2	0%	63%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%
			Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	92%	96%	100%
			Engine 4	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Daily capacity factor																		
			Facility	65%	65%	64%	66%	64%	65%	64%	63%	65%	66%	65%	62%	66%	63%	59%
			Engine 1	91%	82%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
			Engine 2	0%	77%	82%	82%	82%	80%	82%	82%	82%	82%	81%	83%	85%	85%	85%
			Engine 3	85%	88%	91%	91%	87%	91%	86%	87%	89%	91%	87%	86%	91%	83%	70%
			Engine 4	85%	88%	91%	91%	86%	88%	87%	85%	87%	90%	91%	87%	91%	90%	85%
Cumulative by engine																		
Engine operating run hours in the month																		
			Max Cumulative Available, hours	24	48	72	96	120	144	168	191	215	239	263	287	311	335	359
			Engine 1	24	34	34	34	34	34	34	34	34	34	34	34	34	34	34
			Engine 2	0	15	39	63	87	111	135	158	182	206	230	253	277	301	
			Engine 3	24	48	72	96	120	144	168	191	215	239	263	286	310	332	
			Engine 4	24	48	70	94	118	142	166	189	213	237	261	285	309	333	
Engine operating run hours total from 0 hours																		
			Engine 1	111,138	111,162	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172
			Engine 2	98,138	98,138	98,153	98,177	98,201	98,225	98,249	98,273	98,296	98,320	98,344	98,391	98,415	98,439	
			Engine 3	108,349	108,373	108,397	108,421	108,445	108,469	108,493	108,517	108,540	108,564	108,588	108,612	108,635	108,659	
			Engine 4	108,089	108,113	108,137	108,159	108,183	108,207	108,231	108,255	108,278	108,302	108,326	108,350	108,374	108,398	
Cumulative availability, %			March 1, 2020 @ 00:00 hours															
			Engine 1	100%	71%	47%	35%	28%	24%	20%	18%	16%	14%	13%	12%	11%	10%	9%
			Engine 2	0%	31%	54%	66%	73%	77%	80%	83%	85%	86%	87%	88%	89%	90%	91%
			Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%
			Engine 4	100%	100%	97%	98%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%
Engine cumulative gross output, kWhr																		
			Max cumulative capacity one engine	825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	
			Engine 1	749	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428
			Engine 2	-	638	1,314	1,989	2,664	3,323	3,999	4,674	5,349	6,024	6,700	7,367	8,055	8,755	
			Engine 3	699	1,429	2,176	2,924	3,643	4,391	5,102	5,818	6,556	7,304	8,020	8,730	9,478	10,164	
			Engine 4	698	1,426	2,174	2,921	3,634	4,359	5,079	5,776	6,492	7,238	7,985	8,700	9,447	10,188	
Cumulative capacity factor, %																		
			Engine 1	91%	87%	58%	43%	35%	29%	25%	22%	19%	17%	16%	14%	13%	12%	11%
			Engine 2	0%	39%	53%	60%	65%	67%	69%	71%	72%	73%	74%	75%	76%	76%	77%
			Engine 3	85%	87%	88%	89%	88%	89%	88%	88%	88%	89%	88%	88%	88%	88%	87%
			Engine 4	85%	86%	88%	89%	88%	88%	88%	88%	87%	88%	88%	88%	88%	88%	88%

		Sunday 3/1/2020	Monday 3/2/2020	Tuesday 3/3/2020	Wednesday 3/4/2020	Thursday 3/5/2020	Friday 3/6/2020	Saturday 3/7/2020	Sunday 3/8/2020	Monday 3/9/2020	Tuesday 3/10/2020	Wednesday 3/11/2020	Thursday 3/12/2020	Friday 3/13/2020	Saturday 3/14/2020	Sunday 3/15/2020	Monday 3/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	145	215	287	359	431	503	572	644	716	788	858	930	1,000	1,071	1,143
Cumulative Availability, %		75.0%	75.5%	74.7%	74.7%	74.8%	74.8%	74.9%	74.5%	74.5%	74.6%	74.6%	74.5%	74.5%	74.4%	74.4%	74.4%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	630,300	709,500	788,700	867,900	947,100	1,026,300	1,105,500	1,184,700	1,263,900
Actual cumulative gross output, kWhr		51,605	102,978	153,600	205,666	256,272	307,421	357,993	406,027	457,115	509,171	560,486	609,367	661,751	711,395	758,348	805,643
Cumulative Capacity Factor		65.2%	65.0%	64.6%	64.9%	64.7%	64.7%	64.6%	64.4%	64.4%	64.6%	64.6%	64.3%	64.5%	64.4%	64.0%	63.7%
Cumulative fuel input, MMBtu HHV		675	1,350	2,010	2,687	3,348	4,010	4,661	5,284	5,950	6,620	7,284	7,919	8,580	9,213	9,847	10,473
Cumulative gross output, kWhr		51,605	102,978	153,600	205,666	256,272	307,421	357,993	406,027	457,115	509,171	560,486	609,367	661,751	711,395	758,348	805,643
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,780	11,819	11,744	11,698	11,760	11,656	11,588	11,674	11,725	11,591	11,659	11,683	11,368	11,467	12,159	11,907
Daily heat rate, Btu/kWe gross HHV		13,086	13,129	13,046	12,995	13,064	12,948	12,873	12,968	13,025	12,877	12,951	12,978	12,628	12,739	13,507	13,228
Cumulative heat rate, Btu/kWe gross LHV		11,780	11,799	11,781	11,760	11,760	11,743	11,721	11,715	11,716	11,704	11,699	11,698	11,672	11,658	11,689	11,702
Cumulative heat rate, Btu/kWe gross HHV		13,086	13,108	13,087	13,064	13,064	13,045	13,020	13,014	13,015	13,001	12,997	12,995	12,966	12,950	12,985	12,999
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		5,760	5,856	5,952	6,048	6,144	6,240	6,336	6,432	6,528	6,624	6,720	6,816	6,912	7,008	7,104	7,200
Actual cumulative engine run hours		4,243	4,316	4,386	4,458	4,530	4,602	4,674	4,743	4,815	4,887	4,959	5,029	5,101	5,171	5,242	5,314
Cumulative Availability, %		73.7%	73.7%	73.7%	73.7%	73.7%	73.8%	73.8%	73.7%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%
Max cumulative gross output, kWhr		4,752,000	4,831,200	4,910,400	4,989,600	5,068,800	5,148,000	5,227,200	5,303,100	5,382,300	5,461,500	5,540,700	5,619,900	5,699,100	5,778,300	5,857,500	5,936,700
Actual cumulative gross output, kWhr		3,068,801	3,120,174	3,170,796	3,222,862	3,273,468	3,324,617	3,375,189	3,423,223	3,474,311	3,526,367	3,577,682	3,626,563	3,678,947	3,728,591	3,775,544	3,822,839
Cumulative Capacity Factor		64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.6%	64.5%	64.6%	64.5%	64.5%	64.4%
Cumulative fuel input, MMBtu HHV		38,788	39,463	40,123	40,800	41,461	42,123	42,774	43,397	44,063	44,733	45,398	46,032	46,693	47,326	47,960	48,586
Cumulative gross output, kWhr		3,068,801	3,120,174	3,170,796	3,222,862	3,273,468	3,324,617	3,375,189	3,423,223	3,474,311	3,526,367	3,577,682	3,626,563	3,678,947	3,728,591	3,775,544	3,822,839
Cumulative heat rate, Btu/kWe gross LHV		11,378	11,385	11,391	11,396	11,402	11,406	11,408	11,412	11,417	11,419	11,423	11,426	11,425	11,426	11,435	11,441
Cumulative heat rate, Btu/kWe gross HHV		12,640	12,648	12,654	12,660	12,666	12,670	12,673	12,677	12,682	12,685	12,689	12,693	12,692	12,693	12,703	12,709
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Sunday 3/1/2020	Monday 3/2/2020	Tuesday 3/3/2020	Wednesday 3/4/2020	Thursday 3/5/2020	Friday 3/6/2020	Saturday 3/7/2020	Sunday 3/8/2020	Monday 3/9/2020	Tuesday 3/10/2020	Wednesday 3/11/2020	Thursday 3/12/2020	Friday 3/13/2020	Saturday 3/14/2020	Sunday 3/15/2020	Monday 3/16/2020
Hour																	
1		2,054	2,056	2,085	2,094	2,075	2,037	2,090	1,986	1,992	2,090	2,093	2,041	2,087	2,109	2,019	2,059
2		2,055	2,056	2,086	2,093	2,037	2,037	2,089	1,987	1,991	2,090	2,094	2,040	2,086	2,110	2,018	1,898
3		2,058	2,056	2,086	2,091	2,037	2,038	2,089	1,987	1,992	2,090	2,092	2,040	2,083	2,107	1,959	1,837
4		2,059	2,056	2,085	2,091	2,039	2,038	2,087	1,987	1,990	2,088	2,093	2,039	2,085	2,108	1,945	1,813
5		2,059	2,056	2,085	2,090	2,038	2,037	2,086	1,986	1,993	2,090	2,089	2,038	2,090	2,108	1,949	1,790
6		2,057	2,058	2,086	2,089	2,038	2,038	2,085	1,987	2,036	2,090	2,088	2,039	2,090	2,106	1,920	1,775
7		2,057	2,057	2,085	2,089	2,036	2,039	2,052	1,990	2,040	2,090	2,090	2,041	2,091	2,107	1,869	1,763
8		2,059	2,059	2,085	2,090	2,030	2,040	2,038	1,991	2,040	2,090	2,090	2,039	2,090	2,107	1,854	1,760
9		2,060	1,929	2,084	2,087	1,989	2,035	2,039	1,994	2,036	2,086	2,053	2,038	2,088	1,706	1,869	1,772
10		2,068	1,893	2,080	2,087	1,979	2,038	2,040	1,996	2,033	2,082	2,034	2,040	2,087	1,390	1,874	1,808
11		2,067	1,956	1,920	2,086	1,978	2,042	2,022	1,997	2,034	2,085	2,039	2,038	2,094	1,389	1,875	1,865
12		2,067	2,043	1,347	2,089	1,980	2,082	1,995	1,992	2,036	2,086	2,039	2,036	2,111	1,629	1,890	1,902
13		2,071	2,055	1,667	2,087	1,980	2,085	1,996	1,989	2,036	2,088	2,040	1,501	2,111	2,069	1,885	1,920
14		2,066	2,076	1,950	2,086	1,987	2,081	1,998	2,036	2,029	2,084	2,040	239	2,111	2,099	1,885	1,919
15		2,069	2,082	2,086	2,081	2,003	1,971	1,998	2,044	2,034	2,082	2,032	1,942	2,110	2,098	1,899	1,938
16		2,067	2,084	2,071	2,070	2,042	2,091	1,997	2,046	2,081	2,086	2,029	2,089	2,111	2,097	1,913	1,942
17		2,064	2,088	2,096	2,093	2,044	2,091	1,996	2,045	2,087	2,094	2,040	2,093	2,116	2,098	1,890	1,949
18		2,062	2,088	2,096	2,089	2,042	2,092	1,990	2,043	2,093	2,094	2,045	2,094	2,118	2,096	1,873	1,943
19		2,060	2,084	2,096	2,085	2,037	2,091	1,989	2,041	2,092	2,095	2,045	2,092	2,115	2,088	1,846	1,941
20		2,058	2,084	2,090	2,087	2,035	2,089	1,988	2,038	2,092	2,093	2,093	2,091	2,114	2,070	1,782	1,945
21		2,057	2,084	2,094	2,081	2,034	2,088	1,987	2,039	2,091	2,094	2,042	2,085	2,114	2,057	1,577	1,944
22		2,057	2,085	2,094	2,084	2,034	2,089	1,987	2,005	2,092	2,094	2,043	2,088	2,111	2,019	1,404	1,944
23		2,057	2,085	2,094	2,088	2,038	2,087	1,986	1,990	2,091	2,093	2,042	2,087	2,108	2,019	2,029	1,945
24		2,056	2,086	2,094	2,088	2,038	2,087	1,986	-	2,090	2,092	2,043	2,088	2,109	2,019	2,059	1,945
TOTAL		49,464	49,256	48,642	50,095	48,570	49,178	48,610	46,196	49,121	50,146	49,378	46,958	50,430	47,805	45,083	45,317
Cumulative Output Sold, kWhr		49,464	98,720	147,362	197,457	246,027	295,205	343,815	390,011	439,132	489,278	538,656	585,614	636,044	683,849	728,932	774,249
Transformer and line efficiency		99.8%	99.8%	99.7%	99.7%	99.7%	99.8%	99.8%	99.9%	99.8%	99.7%	99.7%	99.7%	99.8%	99.8%	99.9%	99.8%
Hourly average		2,061	2,052	2,027	2,087	2,024	2,049	2,025	1,925	2,047	2,089	2,057	1,957	2,101	1,992	1,878	1,888

[illegible]

	Tuesday 3/17/2020	Wednesday 3/18/2020	Thursday 3/19/2020	Friday 3/20/2020	Saturday 3/21/2020	Sunday 3/22/2020	Monday 3/23/2020	Tuesday 3/24/2020	Wednesday 3/25/2020	Thursday 3/26/2020	Friday 3/27/2020	Saturday 3/28/2020	Sunday 3/29/2020	Monday 3/30/2020	Tuesday 3/31/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,976			
Actual cumulative engine run	1,215	1,287	1,359	1,431	1,502	1,573	1,645	1,717	1,789	1,861	1,932	2,004	2,076	2,148	2,220			
Cumulative Availability, %	74.4%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%	74.5%	74.6%	74.5%	74.6%	74.6%	74.6%	74.6%			
Max cumulative gross output, kWh	1,343,100	1,422,300	1,501,500	1,580,700	1,659,900	1,739,100	1,818,300	1,897,500	1,976,700	2,055,900	2,135,100	2,214,300	2,293,500	2,372,700	2,451,900			
Actual cumulative gross output, kWh	856,320	904,418	954,524	1,006,039	1,056,310	1,103,825	1,153,639	1,204,528	1,254,810	1,305,628	1,355,790	1,404,975	1,452,819	1,503,740	1,554,857			
Cumulative Capacity Factor	63.8%	63.6%	63.6%	63.6%	63.6%	63.5%	63.4%	63.5%	63.5%	63.5%	63.5%	63.5%	63.3%	63.4%	63.4%			
Cumulative fuel input, MMBtu	11,114	11,732	12,371	13,013	13,664	14,278	14,904	15,540	16,175	16,812	17,452	18,083	18,697	19,333	19,972			
Cumulative gross output, kWh	856,320	904,418	954,524	1,006,039	1,056,310	1,103,825	1,153,639	1,204,528	1,254,810	1,305,628	1,355,790	1,404,975	1,452,819	1,503,740	1,554,857			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,393	11,570	11,477	11,222	11,663	11,627	11,309	11,250	11,361	11,296	11,478	11,545	11,564	11,240	11,248			
Daily heat rate, Btu/kWe gross	12,657	12,853	12,749	12,466	12,956	12,916	12,563	12,498	12,621	12,549	12,751	12,825	12,846	12,486	12,495			
Cumulative heat rate, Btu/kWe	11,683	11,677	11,667	11,644	11,645	11,644	11,630	11,614	11,604	11,592	11,587	11,586	11,585	11,573	11,563			
Cumulative heat rate, Btu/kWe	12,979	12,972	12,960	12,935	12,936	12,935	12,919	12,901	12,890	12,877	12,872	12,870	12,870	12,857	12,845			
Cumulative by Facility starting C																		
Max cumulative available engine	7,296	7,392	7,488	7,584	7,680	7,776	7,872	7,968	8,064	8,160	8,256	8,352	8,448	8,544	8,640			
Actual cumulative engine run	5,386	5,458	5,530	5,602	5,673	5,744	5,816	5,888	5,960	6,032	6,103	6,175	6,247	6,319	6,391			
Cumulative Availability, %	73.8%	73.8%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	74.0%	74.0%			
Max cumulative gross output, kWh	6,015,900	6,095,100	6,174,300	6,253,500	6,332,700	6,411,900	6,491,100	6,570,300	6,649,500	6,728,700	6,807,900	6,887,100	6,966,300	7,045,500	7,124,700			
Actual cumulative gross output, kWh	3,873,516	3,921,614	3,971,720	4,023,235	4,073,506	4,121,021	4,170,835	4,221,724	4,272,006	4,322,824	4,372,986	4,422,171	4,470,015	4,520,936	4,572,053			
Cumulative Capacity Factor	64.4%	64.3%	64.3%	64.3%	64.3%	64.3%	64.3%	64.3%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%	64.2%			
Cumulative fuel input, MMBtu	49,227	49,845	50,484	51,126	51,778	52,391	53,017	53,653	54,288	54,925	55,565	56,196	56,810	57,446	58,085			
Cumulative gross output, kWh	3,873,516	3,921,614	3,971,720	4,023,235	4,073,506	4,121,021	4,170,835	4,221,724	4,272,006	4,322,824	4,372,986	4,422,171	4,470,015	4,520,936	4,572,053			
Cumulative heat rate, Btu/kWe	11,440	11,442	11,442	11,439	11,442	11,444	11,443	11,440	11,439	11,438	11,438	11,439	11,441	11,439	11,436			
Cumulative heat rate, Btu/kWe	12,709	12,710	12,711	12,708	12,711	12,713	12,711	12,709	12,708	12,706	12,706	12,708	12,709	12,707	12,704			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Tuesday 3/17/2020	Wednesday 3/18/2020	Thursday 3/19/2020	Friday 3/20/2020	Saturday 3/21/2020	Sunday 3/22/2020	Monday 3/23/2020	Tuesday 3/24/2020	Wednesday 3/25/2020	Thursday 3/26/2020	Friday 3/27/2020	Saturday 3/28/2020	Sunday 3/29/2020	Monday 3/30/2020	Tuesday 3/31/2020			
Date																		
Hour																		
1	1,945	2,040	1,919	2,065	2,067	1,376	1,959	2,046	1,992	2,039	2,038	2,035	1,920	1,921	2,113			
2	1,946	2,039	1,920	2,066	2,065	1,508	1,963	2,045	1,993	2,042	2,038	2,033	1,921	1,921	2,113			
3	1,945	1,990	1,920	2,065	2,064	1,561	1,962	2,043	1,993	2,042	2,040	2,035	1,922	1,922	2,113			
4	1,945	1,990	1,920	2,066	2,062	1,948	1,962	2,044	1,993	2,039	2,044	2,037	1,921	1,921	2,113			
5	1,945	1,990	1,921	2,065	2,063	1,987	1,962	2,042	1,994	2,040	2,043	2,036	1,922	1,922	2,113			
6	1,946	1,991	1,919	2,066	2,062	1,985	1,962	2,043	1,993	2,038	2,044	2,036	1,921	1,922	2,113			
7	1,946	1,989	1,921	2,066	2,062	1,963	1,963	2,042	1,992	2,041	2,042	2,036	1,921	1,921	2,114			
8	1,946	1,989	1,921	2,065	2,062	1,962	1,964	2,045	1,994	2,042	2,043	2,039	1,921	1,922	2,115			
9	1,992	1,989	1,960	2,065	2,063	1,959	1,963	2,038	1,987	2,039	1,696	2,040	1,923	2,038	2,061			
10	2,053	1,959	1,964	2,064	2,062	1,921	1,962	2,039	1,988	2,038	1,687	2,040	1,923	2,062	2,014			
11	2,064	1,944	2,047	2,064	2,064	1,922	1,964	2,039	1,985	2,017	2,036	1,951	1,924	2,112	2,015			
12	2,065	1,788	2,062	2,065	2,064	1,923	1,965	2,041	1,991	1,992	2,035	1,916	1,922	2,112	2,016			
13	2,068	1,773	2,064	2,064	2,063	1,941	1,962	2,041	1,988	2,001	2,035	1,919	1,923	2,112	2,017			
14	2,090	1,638	2,065	2,064	2,066	1,970	1,959	2,040	1,999	2,039	2,033	1,920	1,923	2,112	2,015			
15	2,086	1,552	2,039	2,065	2,066	1,972	1,958	2,037	2,034	2,036	2,035	1,921	1,923	2,113	2,016			
16	2,090	1,986	2,064	2,064	2,065	1,973	2,013	2,039	2,038	2,037	2,035	1,922	1,925	2,114	2,017			
17	2,094	1,978	2,069	2,070	2,064	1,971	2,038	2,046	2,046	2,044	2,039	1,922	1,924	2,116	2,017			
18	2,099	1,972	2,068	2,071	2,063	1,963	2,040	2,048	2,045	2,047	2,040	1,923	1,924	2,113	2,023			
19	2,095	1,972	2,065	2,069	2,059	1,964	2,041	2,046	2,046	2,046	2,041	1,921	1,924	2,111	2,019			
20	2,092	1,930	2,066	2,068	1,916	1,962	2,045	2,040	2,044	2,041	2,041	1,919	1,924	2,113	2,016			
21	2,093	1,920	2,066	2,068	1,846	1,960	2,045	2,043	2,040	2,040	2,036	1,921	1,922	2,114	2,016			
22	2,090	1,919	2,066	2,067	1,802	1,959	2,045	2,042	2,038	2,042	2,038	1,920	1,922	2,113	2,018			
23	2,076	1,919	2,066	2,066	1,784	1,959	2,047	2,036	2,041	2,042	2,038	1,920	1,924	2,114	2,013			
24	2,041	1,919	2,066	2,067	1,703	1,960	2,045	1,993	2,040	2,041	2,037	1,920	1,922	2,114	2,014			
TOTAL	48,752	46,176	48,158	49,585	48,257	45,569	47,789	48,958	48,294	48,865	48,234	47,282	46,141	49,055	49,214			
Cumulative Output Sold, kWh	823,001	869,177	917,335	966,920	1,015,177	1,060,746	1,108,535	1,157,493	1,205,787	1,254,652	1,302,886	1,350,168	1,396,309	1,445,364	1,494,578			
Transformer and line efficiency	99.8%	99.8%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%			
Hourly average	2,031	1,924	2,007	2,066	2,011	1,899	1,991	2,040	2,012	2,036	2,010	1,970	1,923	2,044	2,051			

April 2020																	
		Wednesday 4/1/2020	Thursday 4/2/2020	Friday 4/3/2020	Saturday 4/4/2020	Sunday 4/5/2020	Monday 4/6/2020	Tuesday 4/7/2020	Wednesday 4/8/2020	Thursday 4/9/2020	Friday 4/10/2020	Saturday 4/11/2020	Sunday 4/12/2020	Monday 4/13/2020	Tuesday 4/14/2020	Wednesday 4/15/2020	Thursday 4/16/2020
LFG and Biogas Flow to the Engines (KSCF)		971	1,178	1,190	1,168	1,172	1,166	1,168	1,189	1,166	1,161	1,227	1,250	841	1,119	1,122	1,172
LFG and Biogas Flow to the Engines (MMBTU HHV)		522	650	646	624	626	624	629	643	635	630	639	630	441	603	602	627
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	353	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	185	-	-	-
LFG and Biogas Total Flow (KSCF)		971	1,178	1,190	1,168	1,172	1,166	1,168	1,189	1,166	1,161	1,227	1,250	1,193	1,119	1,122	1,172
LFG and Biogas Total Flow (MMBTU HHV)		522	650	646	624	626	624	629	643	635	630	639	630	626	603	602	627
Average Methane Content (%)		53.1	54.5	53.7	52.8	52.8	52.8	53.2	53.4	53.8	53.6	51.5	49.8	51.8	53.3	53.0	52.9
Engine 1 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	24	24	24
Engine 2 Hours		19	24	24	24	24	24	24	24	24	24	24	24	17	24	24	24
Engine 3 Hours		20	24	23	24	24	24	24	24	24	24	24	24	18	24	21	24
Engine 4 Hours		19	24	24	24	24	24	24	24	24	23	24	24	16	-	-	-
Generator 1 Power Output (kWhr)		4	-	-	-	-	-	-	-	-	-	-	-	-	13,492	14,424	15,004
Generator 2 Power Output (kWhr)		12,916	17,580	17,984	17,284	16,796	16,796	16,796	16,788	17,192	17,696	16,800	16,796	10,584	17,096	17,380	17,336
Generator 3 Power Output (kWhr)		12,840	17,168	16,668	16,200	16,196	16,280	16,672	16,948	16,624	16,528	16,196	16,192	11,588	17,956	15,956	16,376
Generator 4 Power Output (kWhr)		12,912	17,500	17,744	16,712	16,704	17,152	17,016	16,712	17,068	15,824	16,756	16,748	10,852	-	-	-
Gross Power Output (kWhr)		38,954	52,252	52,398	50,184	49,715	50,242	50,512	50,482	50,905	50,086	49,767	49,751	33,030	48,606	47,803	48,807
Net Power Output (kWhr)		37,240	50,312	50,368	48,232	47,800	48,344	48,640	48,624	49,000	48,176	47,856	47,776	31,672	46,736	45,880	46,920
Power Sold as metered by NStar, (kWhr)		37,148	50,161	50,226	48,103	47,679	48,200	48,502	48,484	48,861	48,067	47,742	47,673	31,602	46,643	45,796	46,930
Offgrid RECs (kWhr)		1,713	1,941	2,029	1,954	1,914	1,899	1,870	1,860	1,904	1,910	1,912	1,973	1,357	1,871	1,923	1,892
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		-	-	-	-	-	-	-	-	-	-	-	-	-	562	601	625
Generator 2		680	733	749	720	700	700	700	700	716	737	700	700	623	712	724	722
Generator 3		642	715	725	675	675	678	695	706	693	689	675	675	644	748	760	682
Generator 4		680	729	739	696	696	715	709	696	711	688	698	698	678	-	-	-
Power output (kW average over 24-hrs)																	
Facility Gross		1,623	2,177	2,183	2,091	2,071	2,093	2,105	2,103	2,121	2,087	2,074	2,073	1,376	2,025	1,992	2,034
Facility Net		1,552	2,096	2,099	2,010	1,992	2,014	2,027	2,026	2,042	2,007	1,994	1,991	1,320	1,947	1,912	1,955
In-plant load		71	81	85	81	80	79	78	77	79	80	80	82	57	78	80	79
Daily availability factor																	
Facility		60%	75%	74%	75%	75%	75%	75%	75%	75%	74%	75%	75%	53%	75%	72%	75%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	100%	100%	100%
Engine 2		79%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	71%	100%	100%	100%
Engine 3		83%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	100%	88%	100%
Engine 4		79%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	67%	0%	0%	0%
Daily capacity factor																	
Facility		49%	66%	66%	63%	63%	63%	64%	64%	64%	63%	63%	63%	42%	61%	60%	62%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	68%	73%	76%
Engine 2		82%	89%	91%	87%	85%	85%	85%	85%	87%	89%	85%	85%	75%	86%	88%	88%
Engine 3		78%	88%	88%	82%	82%	82%	84%	86%	84%	83%	82%	82%	78%	91%	92%	83%
Engine 4		82%	88%	90%	84%	84%	87%	86%	84%	86%	83%	85%	85%	82%	0%	0%	0%
Cumulative by engine																	
Engine operating run hours in the month																	
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 1		0	0	0	0	0	0	0	0	0	0	0	0	0	24	48	72
Engine 2		19	43	67	91	115	139	163	187	211	235	259	283	300	324	348	372
Engine 3		20	44	67	91	115	139	163	187	211	235	259	283	301	325	346	370
Engine 4		19	43	67	91	115	139	163	187	211	234	258	282	298	298	298	298
Engine operating run hours total from 0 hours																	
Engine 1		111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,172	111,196	111,220	111,244
Engine 2		98,823	98,842	98,866	98,890	98,914	98,938	98,962	98,986	99,010	99,034	99,058	99,106	99,123	99,147	99,171	99,195
Engine 3		109,061	109,081	109,105	109,128	109,152	109,176	109,200	109,224	109,248	109,272	109,296	109,320	109,344	109,362	109,386	109,431
Engine 4		108,806	108,825	108,849	108,873	108,897	108,921	108,945	108,969	108,993	109,017	109,040	109,064	109,088	109,104	109,104	109,104
Cumulative availability, %		April 1, 2020 @ 00:00 hours															
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	7%	13%	19%
Engine 2		79%	90%	93%	95%	96%	97%	97%	97%	98%	98%	98%	98%	96%	96%	97%	97%
Engine 3		83%	92%	93%	95%	96%	97%	97%	97%	98%	98%	98%	98%	96%	97%	96%	96%
Engine 4		79%	90%	93%	95%	96%	97%	97%	97%	98%	98%	98%	98%	96%	89%	83%	78%
Engine cumulative gross output, kWhr																	
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200
Engine 1		-	-	-	-	-	-	-	-	-	-	-	-	-	562	1,163	1,788
Engine 2		680	1,412	2,162	2,882	3,582	4,281	4,981	5,681	6,397	7,134	7,834	8,534	9,157	9,869	10,593	11,316
Engine 3		642	1,357	2,082	2,757	3,432	4,110	4,805	5,511	6,204	6,892	7,567	8,242	8,886	9,634	10,394	11,076
Engine 4		680	1,409	2,148	2,844	3,540	4,255	4,964	5,660	6,372	7,060	7,758	8,456	9,134	9,134	9,134	9,134
Cumulative capacity factor, %																	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	9%	14%
Engine 2		82%	86%	87%	87%	86%	86%	86%	86%	86%	86%	86%	86%	85%	85%	86%	86%
Engine 3		78%	82%	84%	84%	83%	83%	83%	84%	84%	84%	83%	83%	83%	83%	84%	84%
Engine 4		82%	85%	87%	86%	86%	86%	86%	86%	86%	86%	85%	85%	85%	79%	74%	69%

		Wednesday 4/1/2020	Thursday 4/2/2020	Friday 4/3/2020	Saturday 4/4/2020	Sunday 4/5/2020	Monday 4/6/2020	Tuesday 4/7/2020	Wednesday 4/8/2020	Thursday 4/9/2020	Friday 4/10/2020	Saturday 4/11/2020	Sunday 4/12/2020	Monday 4/13/2020	Tuesday 4/14/2020	Wednesday 4/15/2020	Thursday 4/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		58	130	201	273	345	417	489	561	633	704	776	848	899	971	1,040	1,112
Cumulative Availability, %		60.4%	67.7%	69.8%	71.1%	71.9%	72.4%	72.8%	73.0%	73.3%	73.3%	73.5%	73.6%	72.0%	72.2%	72.2%	72.4%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		38,954	91,206	143,604	193,788	243,503	293,745	344,257	394,739	445,644	495,730	545,497	595,248	628,278	676,884	724,687	773,494
Cumulative Capacity Factor		49.2%	57.6%	60.4%	61.2%	61.5%	61.8%	62.1%	62.3%	62.5%	62.6%	62.6%	62.6%	61.0%	61.0%	61.0%	61.0%
Cumulative fuel input, MMBtu HHV		522	1,171	1,817	2,441	3,067	3,691	4,319	4,962	5,598	6,227	6,867	7,497	7,938	8,541	9,143	9,770
Cumulative gross output, kWhr		38,954	91,206	143,604	193,788	243,503	293,745	344,257	394,739	445,644	495,730	545,497	595,248	628,278	676,884	724,687	773,494
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		12,054	11,193	11,100	11,190	11,335	11,171	11,204	11,466	11,233	11,314	11,566	11,406	12,008	11,173	11,340	11,564
Daily heat rate, Btu/kWe gross HHV		13,390	12,434	12,331	12,430	12,592	12,410	12,447	12,737	12,478	12,568	12,848	12,671	13,339	12,412	12,598	12,847
Cumulative heat rate, Btu/kWe gross LHV		12,054	11,561	11,393	11,340	11,339	11,310	11,295	11,317	11,307	11,308	11,331	11,338	11,373	11,359	11,357	11,370
Cumulative heat rate, Btu/kWe gross HHV		13,390	12,842	12,656	12,597	12,596	12,564	12,547	12,571	12,561	12,561	12,588	12,595	12,634	12,618	12,616	12,631
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	8,736	8,832	8,928	9,024	9,120	9,216	9,312	9,408	9,504	9,600	9,696	9,792	9,888	9,984	10,080	10,176	
Actual cumulative engine run hours	6,449	6,521	6,592	6,664	6,736	6,808	6,880	6,952	7,024	7,096	7,167	7,239	7,290	7,362	7,431	7,503	
Cumulative Availability, %	73.8%	73.8%	73.8%	73.8%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.7%	73.7%	73.7%	73.7%
Max cumulative gross output, kWhr	7,203,900	7,283,100	7,362,300	7,441,500	7,520,700	7,599,900	7,679,100	7,758,300	7,837,500	7,916,700	7,995,900	8,075,100	8,154,300	8,233,500	8,312,700	8,391,900	
Actual cumulative gross output, kWhr	4,611,007	4,663,259	4,715,657	4,765,841	4,815,556	4,865,798	4,916,310	4,966,792	5,017,697	5,067,783	5,117,550	5,167,301	5,200,331	5,248,937	5,296,740	5,345,547	
Cumulative Capacity Factor	64.0%	64.0%	64.1%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	64.0%	63.8%	63.8%	63.7%	63.7%
Cumulative fuel input, MMBtu HHV	58,606	59,256	59,902	60,526	61,152	61,776	62,404	63,047	63,682	64,312	64,941	65,562	66,022	66,626	67,228	67,855	
Cumulative gross output, kWhr	4,611,007	4,663,259	4,715,657	4,765,841	4,815,556	4,865,798	4,916,310	4,966,792	5,017,697	5,067,783	5,117,550	5,167,301	5,200,331	5,248,937	5,296,740	5,345,547	
Cumulative heat rate, Btu/kWe gross LHV	11,442	11,439	11,435	11,432	11,431	11,429	11,426	11,427	11,425	11,424	11,425	11,425	11,425	11,429	11,426	11,427	
Cumulative heat rate, Btu/kWe gross HHV	12,710	12,707	12,703	12,700	12,699	12,696	12,693	12,694	12,692	12,690	12,692	12,692	12,692	12,696	12,693	12,694	
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Wednesday 4/1/2020	Thursday 4/2/2020	Friday 4/3/2020	Saturday 4/4/2020	Sunday 4/5/2020	Monday 4/6/2020	Tuesday 4/7/2020	Wednesday 4/8/2020	Thursday 4/9/2020	Friday 4/10/2020	Saturday 4/11/2020	Sunday 4/12/2020	Monday 4/13/2020	Tuesday 4/14/2020	Wednesday 4/15/2020	Thursday 4/16/2020
Hour																	
1		2,018	2,014	2,127	2,031	1,983	1,984	2,037	2,035	1,987	2,036	1,989	1,983	1,987	1,472	1,992	1,889
2		2,018	2,013	2,128	2,031	1,983	1,985	2,035	2,037	1,987	2,037	1,988	1,983	1,987	1,838	1,991	1,925
3		2,018	2,012	2,128	2,031	1,985	1,986	2,036	2,038	1,987	2,035	1,988	1,983	1,988	1,874	1,991	1,923
4		2,018	2,012	2,127	2,030	1,984	1,984	2,037	2,040	1,986	2,034	1,988	1,982	1,989	1,873	1,992	1,922
5		2,018	2,013	2,129	2,030	1,984	1,984	2,036	2,041	1,988	2,035	1,986	1,982	1,989	1,866	1,993	1,925
6		2,018	2,011	2,129	2,030	1,985	1,985	2,037	2,039	1,988	2,036	1,986	1,982	1,989	1,966	1,992	1,924
7		2,020	2,011	2,128	2,031	1,985	1,985	2,004	2,039	1,988	2,035	1,987	1,982	1,989	1,968	1,991	1,923
8		2,020	2,022	2,128	2,030	1,985	1,987	1,990	2,039	1,989	2,037	1,989	1,985	1,990	1,968	1,992	1,925
9		2,016	2,109	2,125	2,030	1,986	1,989	1,984	2,037	1,988	2,035	1,991	1,990	1,886	1,965	1,989	1,921
10		1,808	2,127	2,125	2,020	1,988	1,988	1,987	2,036	1,988	1,959	1,991	1,987	1,862	1,969	1,987	1,936
11		315	2,133	1,796	1,985	1,990	1,986	1,986	2,037	2,019	1,993	1,992	1,989	1,905	1,974	1,987	1,942
12		-	2,133	2,093	1,984	1,989	1,986	1,986	2,036	2,035	1,952	1,992	1,989	1,908	1,993	1,988	1,970
13		-	2,131	2,127	1,988	1,990	1,986	1,987	2,036	2,035	2,089	1,992	1,988	1,943	1,992	1,989	1,992
14		-	2,131	2,127	1,989	1,988	1,986	1,987	2,034	2,039	2,085	1,992	1,987	1,981	1,992	1,987	1,990
15		-	2,131	2,127	1,990	1,988	1,986	2,022	2,033	2,081	2,089	1,993	1,988	1,980	1,991	1,987	1,992
16		747	2,125	2,123	1,991	1,990	2,065	2,034	2,008	2,084	2,092	1,989	1,986	642	1,993	1,988	1,991
17		2,017	2,131	2,131	1,989	1,988	2,079	2,041	1,991	2,133	2,079	1,992	1,989	-	1,997	1,996	1,996
18		2,013	2,133	2,096	1,990	1,990	2,038	2,042	1,993	2,136	2,048	1,992	1,988	-	1,996	1,997	1,996
19		2,015	2,127	2,083	1,989	1,988	2,042	2,040	1,991	2,135	2,007	1,991	1,990	-	1,997	1,993	1,996
20		2,015	2,129	2,081	1,981	1,989	2,041	2,040	1,992	2,089	1,993	1,989	1,988	-	1,996	1,575	1,989
21		2,014	2,128	2,071	1,983	1,984	2,037	2,039	1,991	2,084	1,990	1,984	1,988	-	1,993	1,272	1,991
22		2,014	2,128	2,032	1,984	1,986	2,037	2,039	1,986	2,043	1,991	1,985	1,987	-	1,988	1,710	1,989
23		2,013	2,129	2,033	1,983	1,985	2,037	2,039	1,987	2,036	1,990	1,986	1,987	702	1,991	1,618	1,942
24		2,013	2,128	2,032	1,983	1,986	2,037	2,037	1,988	2,035	1,990	1,986	1,987	885	1,991	1,799	1,941
TOTAL		37,148	50,161	50,226	48,103	47,679	48,200	48,502	48,484	48,861	48,067	47,742	47,673	31,602	46,643	45,796	46,930
Cumulative Output Sold, kWhr		37,148	87,309	137,535	185,638	233,317	281,517	330,019	378,503	427,364	475,431	523,173	570,846	602,448	649,091	694,887	741,817
Transformer and line efficiency		99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	100.0%
Hourly average		1,548	2,090	2,093	2,004	1,987	2,008	2,021	2,020	2,036	2,003	1,989	1,986	1,317	1,943	1,908	1,955

April 2020																	
	Friday 4/17/2020	Saturday 4/18/2020	Sunday 4/19/2020	Monday 4/20/2020	Tuesday 4/21/2020	Wednesday 4/22/2020	Thursday 4/23/2020	Friday 4/24/2020	Saturday 4/25/2020	Sunday 4/26/2020	Monday 4/27/2020	Tuesday 4/28/2020	Wednesday 4/29/2020	Thursday 4/30/2020	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,111	1,125	1,154	1,184	1,187	1,184	1,151	1,149	1,185	1,167	1,162	1,155	1,176	1,238	34,588	1,265	33,323
LFG and Biogas Flow to the Engine	589	619	628	643	644	632	609	624	624	623	626	612	615	639	18,496	935	17,562
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	353	5.1%	95%
LFG and Biogas Flow to the Flare (t)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	185		
LFG and Biogas Total Flow (KSCF)	1,111	1,125	1,154	1,184	1,187	1,184	1,151	1,149	1,185	1,167	1,162	1,155	1,176	1,238	34,941		
LFG and Biogas Total Flow (MMBT)	589	619	628	643	644	632	609	624	624	623	626	612	615	639	18,681		
Average Methane Content (%)	52.4	54.4	53.8	53.7	53.6	52.7	52.3	53.7	52.0	52.7	53.3	52.4	51.6	51.0	52.8		
Engine 1 Hours	23	24	24	24	24	13	-	-	-	-	-	-	-	-	204		
Engine 2 Hours	23	24	24	24	24	24	24	24	24	24	24	24	24	24	707		
Engine 3 Hours	23	24	24	24	24	24	24	22	24	24	24	24	24	24	703		
Engine 4 Hours	-	-	-	-	-	13	24	24	24	24	23	25	24	24	503		
Generator 1 Power Output (kWhr)	14,136	14,440	14,436	14,804	15,036	7,936	-	-	-	-	-	-	-	-	123,712		
Generator 2 Power Output (kWhr)	16,320	17,388	17,388	17,612	18,236	16,608	15,544	16,304	15,956	15,604	15,600	15,624	16,188	16,788	494,980		
Generator 3 Power Output (kWhr)	14,820	16,764	16,760	17,228	16,304	15,900	15,496	14,940	15,576	16,392	17,052	15,592	16,520	17,356	483,088		
Generator 4 Power Output (kWhr)	-	-	-	-	-	7,628	15,956	16,796	16,724	16,708	16,700	16,724	16,408	16,720	350,064		
Gross Power Output (kWhr)	45,429	48,766	48,759	49,805	49,728	48,159	46,996	48,050	48,264	48,736	49,381	47,931	49,114	50,890	1,453,502		
Net Power Output (kWhr)	43,552	46,952	46,944	47,888	47,728	46,216	45,112	46,200	46,432	46,912	47,488	46,040	47,288	49,120	1,397,448		
Power Sold as metered by NStar, (Offgrid RECs (kWhr)	43,466	46,855	46,832	47,769	47,623	46,119	45,014	46,102	46,308	46,805	47,395	45,905	47,148	48,978	1,394,136	CRMCB inplant	
	1,878	1,814	1,815	1,916	2,000	1,944	1,881	1,852	1,832	1,824	1,893	1,891	1,826	1,770	56,058	16,709	
Calculated Performance Results																	
Daily																	
Power output (kW average whe																	
Generator 1	615	602	602	617	627	610	-	-	-	-	-	-	-	-			
Generator 2	710	725	725	734	760	692	648	679	665	650	650	651	675	700			
Generator 3	644	699	698	718	679	663	646	679	649	683	711	650	688	723			
Generator 4	-	-	-	-	-	587	665	700	697	696	726	669	684	697			
Power output (kW average ove																	
Facility Gross	1,893	2,032	2,032	2,075	2,072	2,007	1,958	2,002	2,011	2,031	2,058	1,997	2,046	2,120			
Facility Net	1,815	1,956	1,956	1,995	1,989	1,926	1,880	1,925	1,935	1,955	1,979	1,918	1,970	2,047			
In-plant load	78	76	76	80	83	81	79	77	76	76	79	79	76	74			
Daily availability factor																	
Facility	72%	75%	75%	75%	75%	77%	75%	73%	75%	75%	74%	76%	75%	75%			
Engine 1	96%	100%	100%	100%	100%	54%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	96%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%			
Engine 4	0%	0%	0%	0%	0%	54%	100%	100%	100%	100%	96%	104%	100%	100%			
Daily capacity factor																	
Facility	57%	62%	62%	63%	63%	61%	59%	61%	61%	62%	62%	61%	62%	64%			
Engine 1	74%	73%	73%	75%	76%	74%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	86%	88%	88%	89%	92%	84%	79%	82%	81%	79%	79%	79%	82%	85%			
Engine 3	78%	85%	85%	87%	82%	80%	78%	82%	79%	83%	86%	79%	83%	88%			
Engine 4	0%	0%	0%	0%	0%	71%	81%	85%	84%	84%	88%	81%	83%	84%			
Cumulative by engine																	
Engine operating run hours in ti																	
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine 1	95	119	143	167	191	204	204	204	204	204	204	204	204	204			
Engine 2	395	419	443	467	491	515	539	563	587	611	635	659	683	707			
Engine 3	393	417	441	465	489	513	537	559	583	607	631	655	679	703			
Engine 4	298	298	298	298	298	311	335	359	383	407	430	455	479	503			
Engine operating run hours tota																	
Engine 1	111,267	111,291	111,315	111,339	111,363	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376			
Engine 2	99,218	99,242	99,266	99,290	99,314	99,338	99,362	99,386	99,410	99,434	99,458	99,482	99,506	99,530			
Engine 3	109,454	109,478	109,502	109,526	109,550	109,574	109,598	109,620	109,644	109,668	109,692	109,716	109,740	109,764			
Engine 4	109,104	109,104	109,104	109,104	109,104	109,117	109,141	109,165	109,189	109,213	109,236	109,261	109,285	109,309			
Cumulative availability, %																	
Engine 1	23%	28%	31%	35%	38%	39%	37%	35%	34%	33%	31%	30%	29%	28%			
Engine 2	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%			
Engine 3	96%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%	97%			
Engine 4	73%	69%	65%	62%	59%	59%	61%	62%	64%	65%	66%	68%	69%	70%			
Engine cumulative gross output																	
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750			
Engine 1	2,403	3,005	3,606	4,223	4,849	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460	5,460			
Engine 2	12,025	12,750	13,474	14,208	14,968	15,660	16,308	16,987	17,652	18,302	18,952	19,603	20,277	20,977			
Engine 3	11,720	12,419	13,117	13,835	14,514	15,177	15,822	16,502	17,151	17,834	18,544	19,194	19,882	20,605			
Engine 4	9,134	9,134	9,134	9,134	9,134	9,721	10,385	11,085	11,782	12,478	13,204	13,873	14,557	15,254			
Cumulative capacity factor, %																	
Engine 1	17%	20%	23%	26%	28%	30%	29%	28%	26%	25%	25%	24%	23%	22%			
Engine 2	86%	86%	86%	86%	86%	86%	86%	86%	86%	85%	85%	85%	85%	85%			
Engine 3	84%	84%	84%	84%	84%	84%	83%	83%	83%	83%	83%	83%	83%	83%			
Engine 4	65%	62%	58%	55%	53%	54%	55%	56%	57%	58%	59%	60%	61%	62%			

	Friday 4/17/2020	Saturday 4/18/2020	Sunday 4/19/2020	Monday 4/20/2020	Tuesday 4/21/2020	Wednesday 4/22/2020	Thursday 4/23/2020	Friday 4/24/2020	Saturday 4/25/2020	Sunday 4/26/2020	Monday 4/27/2020	Tuesday 4/28/2020	Wednesday 4/29/2020	Thursday 4/30/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880			
Actual cumulative engine run	1,181	1,253	1,325	1,397	1,469	1,543	1,615	1,685	1,757	1,829	1,900	1,973	2,045	2,117			
Cumulative Availability, %	72.4%	72.5%	72.6%	72.8%	72.9%	73.1%	73.1%	73.1%	73.2%	73.3%	73.3%	73.4%	73.5%	73.5%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000			
Actual cumulative gross output, kWh	818,923	867,689	916,448	966,253	1,015,981	1,064,140	1,111,136	1,159,186	1,207,450	1,256,186	1,305,567	1,353,498	1,402,612	1,453,502			
Cumulative Capacity Factor	60.8%	60.9%	60.9%	61.0%	61.1%	61.1%	61.0%	61.0%	61.0%	61.0%	61.1%	61.0%	61.1%	61.2%			
Cumulative fuel input, MMBtu	10,359	10,978	11,606	12,249	12,893	13,525	14,134	14,758	15,382	16,005	16,631	17,243	17,858	18,496			
Cumulative gross output, kWh	818,923	867,689	916,448	966,253	1,015,981	1,064,140	1,111,136	1,159,186	1,207,450	1,256,186	1,305,567	1,353,498	1,402,612	1,453,502			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,673	11,419	11,596	11,627	11,660	11,804	11,661	11,698	11,640	11,502	11,419	11,496	11,265	11,294			
Daily heat rate, Btu/kWe gross	12,967	12,685	12,882	12,916	12,952	13,113	12,954	12,995	12,931	12,777	12,685	12,770	12,514	12,547			
Cumulative heat rate, Btu/kWe	11,387	11,389	11,400	11,412	11,424	11,441	11,450	11,461	11,468	11,469	11,467	11,468	11,461	11,455			
Cumulative heat rate, Btu/kWe	12,650	12,652	12,664	12,677	12,690	12,710	12,720	12,731	12,739	12,741	12,739	12,740	12,732	12,725			
Cumulative by Facility starting C																	
Max cumulative available engine	10,272	10,368	10,464	10,560	10,656	10,752	10,848	10,944	11,040	11,136	11,232	11,328	11,424	11,520			
Actual cumulative engine run	7,572	7,644	7,716	7,788	7,860	7,934	8,006	8,076	8,148	8,220	8,291	8,364	8,436	8,508			
Cumulative Availability, %	73.7%	73.7%	73.7%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.8%	73.9%			
Max cumulative gross output, kWh	8,471,100	8,550,300	8,629,500	8,708,700	8,787,900	8,867,100	8,946,300	9,025,500	9,104,700	9,183,900	9,263,100	9,342,300	9,421,500	9,500,700			
Actual cumulative gross output, kWh	5,390,976	5,439,742	5,488,501	5,538,306	5,588,034	5,636,193	5,683,189	5,731,239	5,779,503	5,828,239	5,877,620	5,925,551	5,974,665	6,025,555			
Cumulative Capacity Factor	63.6%	63.6%	63.6%	63.6%	63.6%	63.6%	63.5%	63.5%	63.5%	63.5%	63.5%	63.4%	63.4%	63.4%			
Cumulative fuel input, MMBtu	68,444	69,062	69,691	70,334	70,978	71,609	72,218	72,843	73,467	74,089	74,716	75,328	75,943	76,581			
Cumulative gross output, kWh	5,390,976	5,439,742	5,488,501	5,538,306	5,588,034	5,636,193	5,683,189	5,731,239	5,779,503	5,828,239	5,877,620	5,925,551	5,974,665	6,025,555			
Cumulative heat rate, Btu/kWe	11,429	11,429	11,430	11,432	11,434	11,437	11,439	11,441	11,443	11,443	11,443	11,444	11,442	11,441			
Cumulative heat rate, Btu/kWe	12,696	12,696	12,698	12,700	12,702	12,705	12,707	12,710	12,712	12,712	12,712	12,712	12,711	12,709			
Service																	
Engine 1	District tie-in																
Engine 2	of condensate																
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday			
Date	4/17/2020	4/18/2020	4/19/2020	4/20/2020	4/21/2020	4/22/2020	4/23/2020	4/24/2020	4/25/2020	4/26/2020	4/27/2020	4/28/2020	4/29/2020	4/30/2020			
Hour																	
1	1,944	1,949	1,949	1,949	1,948	1,968	1,887	1,282	1,962	1,917	1,987	1,913	1,912	2,043			
2	1,941	1,951	1,951	1,948	1,949	1,888	1,888	1,385	1,960	1,912	1,988	1,913	1,911	2,040			
3	1,937	1,953	1,950	1,949	1,947	1,970	1,885	1,789	1,957	1,915	1,989	1,914	1,912	2,042			
4	1,941	1,951	1,950	1,949	1,947	1,970	1,886	1,867	1,956	1,915	1,988	1,914	1,910	2,041			
5	1,941	1,951	1,948	1,949	1,948	1,969	1,888	1,869	1,962	1,916	1,989	1,913	1,911	2,041			
6	1,944	1,951	1,948	1,947	1,947	1,969	1,887	1,917	1,959	1,916	1,988	1,912	1,910	2,042			
7	1,937	1,950	1,948	1,948	1,950	1,970	1,889	1,916	1,961	1,917	1,990	1,913	1,910	2,042			
8	1,850	1,951	1,951	1,951	1,948	1,942	1,891	1,937	1,919	1,916	1,988	1,916	1,878	2,042			
9	1,845	1,953	1,953	1,943	1,936	1,869	1,804	1,983	1,915	1,919	1,986	1,911	1,861	2,036			
10	1,894	1,954	1,952	1,988	1,936	1,866	1,858	1,987	1,916	1,919	1,985	1,912	1,860	2,037			
11	1,904	1,954	1,951	1,995	1,940	1,980	1,888	1,987	1,917	1,918	1,982	1,911	1,866	2,036			
12	93	1,955	1,954	1,995	1,939	1,958	1,887	2,002	1,916	1,918	1,986	1,910	1,914	2,036			
13	1,079	1,956	1,956	1,995	1,952	1,704	1,889	2,048	1,919	1,920	1,986	1,910	1,976	2,036			
14	1,767	1,956	1,953	1,990	2,059	1,809	1,886	2,058	1,919	1,990	1,986	1,911	2,013	2,035			
15	1,904	1,955	1,955	2,005	2,060	1,880	1,889	2,057	1,916	1,991	1,985	1,910	2,036	2,035			
16	1,948	1,954	1,954	2,040	2,061	1,925	1,887	2,035	1,917	1,992	1,985	1,911	2,036	2,038			
17	1,949	1,953	1,953	2,048	2,060	1,944	1,894	2,038	1,918	1,991	1,991	1,918	2,042	2,043			
18	1,950	1,953	1,953	2,049	2,060	1,945	1,895	2,039	1,917	1,990	1,990	1,917	2,040	2,045			
19	1,950	1,954	1,953	2,050	2,068	1,942	1,890	2,035	1,917	1,991	1,986	1,917	2,038	2,046			
20	1,952	1,951	1,952	2,045	2,069	1,941	1,892	2,023	1,916	1,991	1,985	1,917	2,040	2,046			
21	1,948	1,951	1,950	2,043	1,988	1,939	1,890	1,965	1,917	1,989	1,917	1,912	2,044	2,044			
22	1,949	1,950	1,949	2,039	1,969	1,919	1,894	1,961	1,918	1,986	1,914	1,907	2,043	2,043			
23	1,951	1,950	1,949	2,005	1,971	1,888	1,893	1,962	1,917	1,988	1,913	1,910	2,043	2,044			
24	1,948	1,949	1,950	1,949	1,971	1,886	1,677	1,960	1,917	1,988	1,911	1,913	2,042	2,045			
TOTAL	43,466	46,855	46,832	47,769	47,623	46,119	45,014	46,102	46,308	46,805	47,395	45,905	47,148	48,978			
Cumulative Output Sold, kWh	785,283	832,138	878,970	926,739	974,362	1,020,481	1,065,495	1,111,597	1,157,905	1,204,710	1,252,105	1,298,010	1,345,158	1,394,136			
Transformer and line efficiency	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%			
Hourly average	1,811	1,952	1,951	1,990	1,984	1,922	1,876	1,921	1,930	1,950	1,975	1,913	1,965	2,041			

May 2020																	
		Friday 5/1/2020	Saturday 5/2/2020	Sunday 5/3/2020	Monday 5/4/2020	Tuesday 5/5/2020	Wednesday 5/6/2020	Thursday 5/7/2020	Friday 5/8/2020	Saturday 5/9/2020	Sunday 5/10/2020	Monday 5/11/2020	Tuesday 5/12/2020	Wednesday 5/13/2020	Thursday 5/14/2020	Friday 5/15/2020	Saturday 5/16/2020
LFG and Biogas Flow to the Engines (KSCF)		1,189	1,173	1,167	1,168	1,179	1,177	1,159	1,145	1,172	1,148	1,162	1,166	1,128	1,201	1,160	1,169
LFG and Biogas Flow to the Engines (MMBTU HHV)		632	617	617	622	615	608	601	592	609	588	599	596	576	609	598	604
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,189	1,173	1,167	1,168	1,179	1,177	1,159	1,145	1,172	1,148	1,162	1,166	1,128	1,201	1,160	1,169
LFG and Biogas Total Flow (MMBTU HHV)		632	617	617	622	615	608	601	592	609	588	599	596	576	609	598	604
Average Methane Content (%)		52.5	52.0	52.2	52.6	51.6	51.1	51.2	51.1	51.3	50.6	51.0	50.5	50.4	50.1	51.0	51.0
Engine 1 Hours		-	-	-	-	-	-	-	-	-	-	-	1	12	24	23	24
Engine 2 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	23	24	11	-	-	-
Engine 4 Hours		24	24	24	23	25	24	24	24	24	24	24	24	23	24	24	24
Generator 1 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	6,332	14,928	14,676	14,984
Generator 2 Power Output (kWhr)		16,792	16,796	16,788	16,684	15,608	15,608	15,568	15,600	15,596	15,604	15,608	15,600	14,920	15,380	14,672	15,372
Generator 3 Power Output (kWhr)		17,356	16,024	15,572	15,572	15,572	16,268	16,176	16,064	16,124	14,288	16,104	15,624	6,776	-	-	-
Generator 4 Power Output (kWhr)		16,720	16,720	16,720	16,728	16,752	15,924	16,196	15,628	16,136	16,000	15,548	15,612	15,832	16,736	15,712	16,676
Gross Power Output (kWhr)		50,939	49,585	49,180	49,067	47,970	47,775	47,923	47,285	47,880	45,955	47,358	46,928	43,920	47,159	45,253	47,153
Net Power Output (kWhr)		49,200	47,840	47,440	47,232	46,104	45,912	46,064	45,400	46,008	44,184	45,576	45,104	42,208	45,392	43,472	45,400
Power Sold as metered by NStar, (kWhr)		49,057	47,710	47,297	47,127	46,043	45,868	46,034	45,325	45,899	44,098	45,456	45,002	42,156	45,350	43,398	45,285
Offgrid RECs (kWhr)		1,739	1,745	1,740	1,835	1,866	1,864	1,858	1,886	1,873	1,769	1,782	1,824	1,712	1,767	1,780	1,754
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		-	-	-	-	-	-	-	-	-	-	-	-	528	622	638	624
Generator 2		700	700	700	695	650	650	649	650	650	650	650	650	622	641	611	641
Generator 3		723	668	649	649	649	678	674	669	672	621	671	651	616	-	-	-
Generator 4		697	697	697	727	670	664	675	651	672	667	648	651	688	697	655	695
Power output (kW average over 24-hrs)																	
Facility Gross		2,122	2,066	2,049	2,044	1,999	1,991	1,997	1,970	1,995	1,915	1,973	1,955	1,830	1,965	1,886	1,965
Facility Net		2,050	1,993	1,977	1,968	1,921	1,913	1,919	1,892	1,917	1,841	1,899	1,879	1,759	1,891	1,811	1,892
In-plant load		72	73	72	76	78	78	77	79	78	74	74	76	71	74	74	73
Daily availability factor																	
Facility		75%	75%	75%	74%	76%	75%	75%	75%	75%	74%	75%	76%	73%	75%	74%	75%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	50%	100%	96%	100%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	46%	0%	0%	0%
Engine 4		100%	100%	100%	96%	104%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%
Daily capacity factor																	
Facility		64%	63%	62%	62%	61%	60%	61%	60%	60%	58%	60%	59%	55%	60%	57%	60%
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	64%	75%	77%	76%
Engine 2		85%	85%	85%	84%	79%	79%	79%	79%	79%	79%	79%	79%	75%	78%	74%	78%
Engine 3		88%	81%	79%	79%	79%	82%	82%	81%	81%	75%	81%	79%	75%	0%	0%	0%
Engine 4		84%	84%	84%	88%	81%	80%	82%	79%	81%	81%	79%	79%	83%	85%	79%	84%
Cumulative by engine																	
Engine operating run hours in the month																	
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 1		0	0	0	0	0	0	0	0	0	0	0	1	13	37	60	84
Engine 2		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 3		24	48	72	96	120	144	168	192	216	239	263	287	298	298	298	298
Engine 4		24	48	72	95	120	144	168	192	216	240	264	288	311	335	359	383
Engine operating run hours total from 0 hours																	
Engine 1		111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,376	111,377	111,389	111,413	111,436	111,460
Engine 2		99,530	99,554	99,578	99,602	99,626	99,650	99,674	99,698	99,722	99,746	99,770	99,794	99,818	99,842	99,866	99,914
Engine 3		109,764	109,788	109,812	109,836	109,860	109,884	109,908	109,932	109,956	109,980	110,003	110,027	110,051	110,062	110,062	110,062
Engine 4		109,309	109,333	109,357	109,381	109,404	109,429	109,453	109,477	109,501	109,525	109,549	109,573	109,597	109,620	109,644	109,668
Cumulative availability, % May 1, 2020 @ 00:00 hours																	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	11%	17%	22%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	89%	83%	78%
Engine 4		100%	100%	100%	99%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine cumulative gross output, kWhr																	
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200
Engine 1		-	-	-	-	-	-	-	-	-	-	-	-	528	1,150	1,788	2,412
Engine 2		700	1,400	2,099	2,794	3,445	4,095	4,744	5,394	6,043	6,694	7,344	7,994	8,616	9,256	9,868	10,508
Engine 3		723	1,391	2,040	2,689	3,337	4,015	4,689	5,359	6,030	6,652	7,323	7,974	8,590	8,590	8,590	8,590
Engine 4		697	1,393	2,090	2,817	3,487	4,151	4,826	5,477	6,149	6,816	7,464	8,114	8,803	9,500	10,155	10,849
Cumulative capacity factor, %																	
Engine 1		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	10%	14%	18%
Engine 2		85%	85%	85%	85%	84%	83%	82%	82%	81%	81%	81%	81%	80%	80%	80%	80%
Engine 3		88%	84%	82%	81%	81%	81%	81%	81%	81%	81%	81%	81%	80%	74%	69%	65%
Engine 4		84%	84%	84%	85%	85%	84%	84%	83%	83%	83%	82%	82%	82%	82%	82%	82%

		Friday 5/1/2020	Saturday 5/2/2020	Sunday 5/3/2020	Monday 5/4/2020	Tuesday 5/5/2020	Wednesday 5/6/2020	Thursday 5/7/2020	Friday 5/8/2020	Saturday 5/9/2020	Sunday 5/10/2020	Monday 5/11/2020	Tuesday 5/12/2020	Wednesday 5/13/2020	Thursday 5/14/2020	Friday 5/15/2020	Saturday 5/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	287	360	432	504	576	648	719	791	864	934	1,006	1,077	1,149
Cumulative Availability, %		75.0%	75.0%	75.0%	74.7%	75.0%	75.0%	75.0%	75.0%	75.0%	74.9%	74.9%	75.0%	74.8%	74.9%	74.8%	74.8%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		50,939	100,524	149,704	198,771	246,741	294,516	342,439	389,724	437,604	483,559	530,917	577,845	621,765	668,924	714,177	761,330
Cumulative Capacity Factor		64.3%	63.5%	63.0%	62.7%	62.3%	62.0%	61.8%	61.5%	61.4%	61.1%	60.9%	60.8%	60.4%	60.3%	60.1%	60.1%
Cumulative fuel input, MMBtu HHV		632	1,249	1,866	2,488	3,103	3,711	4,312	4,904	5,513	6,101	6,700	7,296	7,871	8,480	9,078	9,682
Cumulative gross output, kWhr		50,939	100,524	149,704	198,771	246,741	294,516	342,439	389,724	437,604	483,559	530,917	577,845	621,765	668,924	714,177	761,330
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,172	11,201	11,294	11,402	11,547	11,458	11,284	11,276	11,442	11,518	11,388	11,427	11,804	11,617	11,900	11,521
Daily heat rate, Btu/kWe gross HHV		12,411	12,443	12,546	12,666	12,827	12,728	12,535	12,526	12,711	12,795	12,650	12,694	13,112	12,905	13,219	12,799
Cumulative heat rate, Btu/kWe gross LHV		11,172	11,187	11,222	11,266	11,321	11,343	11,335	11,328	11,340	11,357	11,360	11,365	11,396	11,412	11,443	11,448
Cumulative heat rate, Btu/kWe gross HHV		12,411	12,427	12,466	12,515	12,576	12,601	12,591	12,584	12,597	12,616	12,619	12,625	12,660	12,677	12,711	12,717
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		11,616	11,712	11,808	11,904	12,000	12,096	12,192	12,288	12,384	12,480	12,576	12,672	12,768	12,864	12,960	13,056
Actual cumulative engine run hours		8,580	8,652	8,724	8,795	8,868	8,940	9,012	9,084	9,156	9,227	9,299	9,372	9,442	9,514	9,585	9,657
Cumulative Availability, %		73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	73.9%	74.0%	74.0%	74.0%	74.0%	74.0%
Max cumulative gross output, kWhr		9,579,900	9,659,100	9,738,300	9,817,500	9,896,700	9,975,900	10,055,100	10,134,300	10,213,500	10,292,700	10,371,900	10,451,100	10,530,300	10,609,500	10,688,700	10,767,900
Actual cumulative gross output, kWhr		6,076,494	6,126,079	6,175,259	6,224,326	6,272,296	6,320,071	6,367,994	6,415,279	6,463,159	6,509,114	6,556,472	6,603,400	6,647,320	6,694,479	6,739,732	6,786,885
Cumulative Capacity Factor		63.4%	63.4%	63.4%	63.4%	63.4%	63.4%	63.3%	63.3%	63.3%	63.2%	63.2%	63.2%	63.1%	63.1%	63.1%	63.0%
Cumulative fuel input, MMBtu HHV		77,213	77,830	78,447	79,069	79,684	80,292	80,893	81,485	82,094	82,682	83,281	83,877	84,452	85,061	85,659	86,263
Cumulative gross output, kWhr		6,076,494	6,126,079	6,175,259	6,224,326	6,272,296	6,320,071	6,367,994	6,415,279	6,463,159	6,509,114	6,556,472	6,603,400	6,647,320	6,694,479	6,739,732	6,786,885
Cumulative heat rate, Btu/kWe gross LHV		11,439	11,437	11,436	11,435	11,436	11,436	11,435	11,434	11,434	11,435	11,434	11,434	11,437	11,438	11,441	11,442
Cumulative heat rate, Btu/kWe gross HHV		12,707	12,705	12,703	12,703	12,704	12,704	12,703	12,702	12,702	12,702	12,702	12,702	12,702	12,706	12,710	12,710
Service																	
Engine 1	Generator removed for overhaul.				In-Frame started												
Engine 2																	
Engine 3																	
Engine 4	District capped L09. Ran over covering trash.																
Oil - oil and filter change	up side slope.																
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Friday 5/1/2020	Saturday 5/2/2020	Sunday 5/3/2020	Monday 5/4/2020	Tuesday 5/5/2020	Wednesday 5/6/2020	Thursday 5/7/2020	Friday 5/8/2020	Saturday 5/9/2020	Sunday 5/10/2020	Monday 5/11/2020	Tuesday 5/12/2020	Wednesday 5/13/2020	Thursday 5/14/2020	Friday 5/15/2020	Saturday 5/16/2020
Hour																	
1		2,046	2,043	1,972	1,974	1,924	1,920	1,945	1,919	1,939	1,863	1,874	1,923	1,870	1,884	1,930	1,805
2		2,045	2,044	1,971	1,973	1,925	1,920	1,945	1,881	1,985	1,864	1,871	1,920	1,872	1,881	1,930	1,930
3		2,047	2,047	1,971	1,974	1,925	1,920	1,945	1,871	1,987	1,665	1,873	1,922	1,872	1,881	1,931	1,929
4		2,045	2,046	1,971	1,973	1,926	1,920	1,945	1,871	1,987	1,280	1,871	1,920	1,871	1,882	1,931	1,929
5		2,046	2,048	1,970	1,973	1,924	1,921	1,944	1,871	1,987	1,491	1,873	1,921	1,870	1,883	1,931	1,929
6		2,046	2,045	1,971	1,974	1,924	1,921	1,945	1,872	1,985	1,825	1,872	1,922	1,869	1,882	1,931	1,927
7		2,047	1,982	1,970	1,974	1,926	1,921	1,932	1,872	1,986	1,949	1,875	1,899	1,871	1,885	1,932	1,927
8		2,046	1,973	1,971	1,973	1,921	1,875	1,872	1,865	1,943	1,966	1,876	1,873	1,866	1,859	1,932	1,926
9		2,041	1,971	1,971	1,963	1,917	1,865	1,863	1,862	1,914	1,945	1,867	1,638	1,241	1,828	1,924	1,924
10		2,043	1,971	1,971	1,956	1,913	1,862	1,864	1,864	1,914	1,923	1,866	1,884	1,088	1,826	1,924	1,922
11		2,040	1,969	1,970	1,953	1,908	1,861	1,860	1,864	1,914	1,922	1,867	1,866	1,106	1,817	1,918	1,922
12		2,040	1,964	1,970	1,947	1,912	1,861	1,910	1,860	1,916	1,913	1,867	1,870	1,907	1,824	1,917	1,917
13		2,042	1,962	1,971	1,954	1,911	1,862	1,953	1,860	1,906	1,874	1,868	1,869	1,655	1,864	1,910	1,874
14		2,041	1,962	1,970	1,951	1,908	1,862	1,913	1,858	1,868	1,873	1,868	1,869	1,513	1,877	1,908	1,869
15		2,040	1,962	1,970	1,963	1,906	1,895	1,914	1,859	1,868	1,873	1,918	1,864	1,758	1,916	1,908	1,871
16		2,039	1,966	1,968	1,967	1,910	1,937	1,915	1,864	1,868	1,873	1,918	1,863	1,862	1,917	1,914	1,871
17		2,043	1,967	1,969	1,975	1,920	1,940	1,922	1,869	1,868	1,875	1,923	1,863	1,882	1,928	1,921	1,872
18		2,043	1,966	1,968	1,975	1,924	1,946	1,924	1,909	1,869	1,874	1,923	1,873	1,884	1,930	1,923	1,874
19		2,044	1,968	1,970	1,976	1,924	1,943	1,925	1,942	1,867	1,875	1,925	1,874	1,884	1,932	1,924	1,876
20		2,045	1,970	1,971	1,978	1,919	1,942	1,921	1,938	1,867	1,875	1,924	1,875	1,885	1,931	1,924	1,872
21		2,047	1,971	1,973	1,976	1,919	1,942	1,920	1,939	1,867	1,876	1,924	1,874	1,884	1,932	1,928	1,830
22		2,047	1,971	1,973	1,958	1,918	1,943	1,919	1,938	1,865	1,875	1,924	1,874	1,880	1,931	1,928	1,830
23		2,047	1,971	1,972	1,923	1,919	1,944	1,919	1,938	1,865	1,874	1,924	1,874	1,882	1,930	372	1,829
24		2,047	1,971	1,973	1,924	1,920	1,945	1,919	1,939	1,864	1,874	1,923	1,884	1,930	707	1,830	
TOTAL		49,057	47,710	47,297	47,127	46,043	45,868	46,034	45,325	45,899	44,098	45,456	45,002	42,156	45,350	43,398	45,285
Cumulative Output Sold, kWhr		49,057	96,767	144,064	191,191	237,234	283,102	329,136	374,461	420,360	464,458	509,914	554,916	597,072	642,422	685,820	731,105
Transformer and line efficiency		99.7%	99.7%	99.7%	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%	99.7%	99.8%	99.9%	99.9%	99.8%	99.7%
Hourly average		2,044	1,988	1,971	1,964	1,918	1,911	1,918	1,889	1,912	1,837	1,894	1,875	1,757	1,890	1,808	1,887

[illegible]

	Sunday 5/17/2020	Monday 5/18/2020	Tuesday 5/19/2020	Wednesday 5/20/2020	Thursday 5/21/2020	Friday 5/22/2020	Saturday 5/23/2020	Sunday 5/24/2020	Monday 5/25/2020	Tuesday 5/26/2020	Wednesday 5/27/2020	Thursday 5/28/2020	Friday 5/29/2020	Saturday 5/30/2020	Sunday 5/31/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,976			
Actual cumulative engine run	1,221	1,293	1,365	1,437	1,509	1,580	1,652	1,724	1,796	1,868	1,938	2,009	2,082	2,154	2,225			
Cumulative Availability, %	74.8%	74.8%	74.8%	74.8%	74.9%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.7%	74.8%	74.8%	74.8%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,455,200			
Actual cumulative gross output, kWh	807,313	854,224	900,242	945,362	990,797	1,037,247	1,083,574	1,128,699	1,173,839	1,218,772	1,263,937	1,309,629	1,355,323	1,401,015	1,445,316			
Cumulative Capacity Factor	60.0%	59.9%	59.8%	59.7%	59.6%	59.5%	59.5%	59.4%	59.3%	59.2%	59.1%	59.1%	59.0%	59.0%	58.9%			
Cumulative fuel input, MMBtu	10,273	10,872	11,483	12,088	12,698	13,309	13,926	14,528	15,110	15,690	16,274	16,871	17,467	18,061	18,645			
Cumulative gross output, kWh	807,313	854,224	900,242	945,362	990,797	1,037,247	1,083,574	1,128,699	1,173,839	1,218,772	1,263,937	1,309,629	1,355,323	1,401,015	1,445,316			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,574	11,504	11,939	12,076	12,078	11,847	11,987	12,005	11,622	11,614	11,642	11,758	11,740	11,701	11,875			
Daily heat rate, Btu/kWe gross	12,857	12,780	13,262	13,415	13,417	13,160	13,316	13,336	12,911	12,901	12,933	13,061	13,041	12,998	13,192			
Cumulative heat rate, Btu/kWe	11,455	11,458	11,482	11,510	11,537	11,550	11,569	11,587	11,588	11,589	11,591	11,597	11,601	11,605	11,613			
Cumulative heat rate, Btu/kWe	12,725	12,728	12,755	12,787	12,816	12,831	12,852	12,871	12,873	12,874	12,876	12,882	12,888	12,891	12,900			
Cumulative by Facility starting C																		
Max cumulative available engine	13,152	13,248	13,344	13,440	13,536	13,632	13,728	13,824	13,920	14,016	14,112	14,208	14,304	14,400	14,496			
Actual cumulative engine run	9,729	9,801	9,873	9,945	10,017	10,088	10,160	10,232	10,304	10,376	10,446	10,517	10,590	10,662	10,733			
Cumulative Availability, %	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%	74.0%			
Max cumulative gross output, kWh	10,847,100	10,926,300	11,005,500	11,084,700	11,163,900	11,243,100	11,322,300	11,401,500	11,480,700	11,559,900	11,639,100	11,718,300	11,797,500	11,876,700	11,955,900			
Actual cumulative gross output, kWh	6,832,868	6,879,779	6,925,797	6,970,917	7,016,352	7,062,802	7,109,129	7,154,254	7,199,394	7,244,327	7,289,492	7,335,184	7,380,878	7,426,570	7,470,871			
Cumulative Capacity Factor	63.0%	63.0%	62.9%	62.9%	62.8%	62.8%	62.8%	62.7%	62.7%	62.7%	62.6%	62.6%	62.6%	62.5%	62.5%			
Cumulative fuel input, MMBtu	86,854	87,454	88,064	88,669	89,279	89,890	90,507	91,109	91,692	92,271	92,855	93,452	94,048	94,642	95,226			
Cumulative gross output, kWh	6,832,868	6,879,779	6,925,797	6,970,917	7,016,352	7,062,802	7,109,129	7,154,254	7,199,394	7,244,327	7,289,492	7,335,184	7,380,878	7,426,570	7,470,871			
Cumulative heat rate, Btu/kWe	11,443	11,443	11,446	11,450	11,454	11,457	11,460	11,464	11,465	11,466	11,467	11,469	11,470	11,472	11,474			
Cumulative heat rate, Btu/kWe	12,711	12,712	12,715	12,720	12,724	12,727	12,731	12,735	12,736	12,737	12,738	12,740	12,742	12,744	12,746			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Sunday 5/17/2020	Monday 5/18/2020	Tuesday 5/19/2020	Wednesday 5/20/2020	Thursday 5/21/2020	Friday 5/22/2020	Saturday 5/23/2020	Sunday 5/24/2020	Monday 5/25/2020	Tuesday 5/26/2020	Wednesday 5/27/2020	Thursday 5/28/2020	Friday 5/29/2020	Saturday 5/30/2020	Sunday 5/31/2020	TOTAL		
Date																		
Hour																		
1	1,830	1,878	1,879	1,831	1,814	1,851	1,904	1,806	1,805	1,804	1,804	1,827	1,827	1,826	1,827			
2	1,830	1,879	1,879	1,831	1,812	1,852	1,903	1,806	1,807	1,803	1,804	1,827	1,826	1,826	1,828			
3	1,832	1,879	1,879	1,831	1,812	1,852	1,902	1,806	1,807	1,804	1,804	1,826	1,825	1,827	1,828			
4	1,831	1,879	1,879	1,828	1,812	1,852	1,903	1,806	1,807	1,806	1,804	1,826	1,826	1,827	1,827			
5	1,831	1,879	1,880	1,831	1,812	1,852	1,903	1,806	1,808	1,805	1,804	1,825	1,826	1,827	1,827			
6	1,832	1,879	1,879	1,830	1,813	1,852	1,862	1,807	1,808	1,805	1,804	1,826	1,826	1,828	1,824			
7	1,832	1,879	1,880	1,834	1,816	1,851	1,856	1,806	1,806	1,806	1,805	1,826	1,827	1,829	1,821			
8	1,831	1,879	1,841	1,770	1,815	1,849	1,856	1,806	1,807	1,807	1,804	1,826	1,827	1,829	1,795			
9	1,830	1,870	1,822	1,754	1,803	1,840	1,856	1,807	1,809	1,804	1,792	1,816	1,820	1,828	1,777			
10	1,829	1,871	1,820	1,752	1,793	1,825	1,856	1,809	1,806	1,795	1,783	1,819	1,819	1,825	1,777			
11	1,829	1,872	1,811	1,783	1,793	1,822	1,853	1,809	1,807	1,612	1,566	1,805	1,820	1,819	1,768			
12	1,820	1,868	1,810	1,791	1,792	1,780	1,854	1,806	1,809	1,789	1,553	1,803	1,821	1,817	1,763			
13	1,825	1,870	1,810	1,788	1,792	2,005	1,858	1,805	1,808	1,789	1,748	1,803	1,821	1,817	1,766			
14	1,825	1,869	1,809	1,790	1,791	2,002	1,859	1,804	1,808	1,788	1,919	1,807	1,821	1,818	1,766			
15	1,830	1,867	1,810	1,794	1,791	1,924	1,860	1,804	1,807	1,788	1,891	1,810	1,818	1,818	1,765			
16	1,830	1,867	1,816	1,795	1,805	1,882	1,855	1,805	1,804	1,789	1,860	1,811	1,816	1,819	1,765			
17	1,831	1,874	1,827	1,804	1,846	1,892	1,853	1,807	1,803	1,795	1,855	1,818	1,827	1,819	1,772			
18	1,832	1,874	1,828	1,806	1,846	1,897	1,853	1,808	1,804	1,796	1,819	1,820	1,828	1,819	1,778			
19	1,847	1,876	1,830	1,809	1,848	1,899	1,853	1,809	1,807	1,798	1,821	1,820	1,827	1,821	1,779			
20	1,880	1,877	1,830	1,810	1,851	1,900	1,815	1,810	1,809	1,799	1,822	1,822	1,827	1,822	1,779			
21	1,880	1,878	1,830	1,809	1,851	1,904	1,806	1,804	1,811	1,804	1,827	1,824	1,827	1,822	1,652			
22	1,879	1,878	1,831	1,811	1,851	1,905	1,806	1,803	1,811	1,803	1,826	1,827	1,827	1,826	1,294			
23	1,879	1,879	1,830	1,814	1,851	1,904	1,806	1,803	1,811	1,804	1,827	1,827	1,826	1,828	1,824			
24	1,879	1,879	1,830	1,814	1,851	1,904	1,806	1,803	1,811	1,804	1,827	1,827	1,826	1,828	1,873			
TOTAL	44,174	45,000	44,140	43,310	43,661	44,596	44,538	43,345	43,380	42,997	43,170	43,657	43,782	43,765	42,475			
Cumulative Output Sold, kWh	775,279	820,279	864,419	907,729	951,390	995,986	1,040,524	1,083,869	1,127,249	1,170,246	1,213,416	1,257,073	1,300,855	1,344,620	1,387,995			
Transformer and line efficiency	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	100.0%	99.9%	100.0%	99.8%	99.7%	99.7%	99.7%	99.7%	99.8%			
Hourly average	1,841	1,875	1,839	1,805	1,819	1,858	1,856	1,806	1,808	1,792	1,799	1,819	1,824	1,824	1,770	1,864		

June 2020																	
		Monday 6/1/2020	Tuesday 6/2/2020	Wednesday 6/3/2020	Thursday 6/4/2020	Friday 6/5/2020	Saturday 6/6/2020	Sunday 6/7/2020	Monday 6/8/2020	Tuesday 6/9/2020	Wednesday 6/10/2020	Thursday 6/11/2020	Friday 6/12/2020	Saturday 6/13/2020	Sunday 6/14/2020	Monday 6/15/2020	Tuesday 6/16/2020
LFG and Biogas Flow to the Engines (KSCF)		1,185	1,170	1,113	1,197	1,144	1,132	1,146	1,164	1,114	1,149	1,150	1,140	1,141	1,176	1,157	1,161
LFG and Biogas Flow to the Engines (MMBTU HHV)		600	598	582	608	582	582	580	588	569	580	580	582	574	581	577	585
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,185	1,170	1,113	1,197	1,144	1,132	1,146	1,164	1,114	1,149	1,150	1,140	1,141	1,176	1,157	1,161
LFG and Biogas Total Flow (MMBTU HHV)		600	598	582	608	582	582	580	588	569	580	580	582	574	581	577	585
Average Methane Content (%)		50.0	50.5	51.7	50.2	50.3	50.8	50.0	49.9	50.5	49.8	49.8	50.4	49.7	48.8	49.2	49.8
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Engine 2 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	14	24	24	24	24
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	24	12	-	-	-	-
Generator 1 Power Output (kWhr)		15,204	15,188	15,536	15,604	15,604	15,600	15,604	15,600	15,604	15,604	15,608	15,600	15,604	15,600	15,364	15,604
Generator 2 Power Output (kWhr)		14,404	14,060	14,472	13,816	14,084	14,788	14,144	13,804	13,812	13,812	13,888	14,496	13,968	13,808	13,812	14,100
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	7,572	14,384	14,380	14,380	14,376
Generator 4 Power Output (kWhr)		15,728	16,384	16,716	15,328	14,956	14,956	14,956	14,584	14,372	14,364	14,232	6,116	-	-	-	-
Gross Power Output (kWhr)		45,448	45,739	46,842	44,872	44,773	45,459	44,825	44,073	43,889	43,902	43,843	43,871	44,041	43,820	43,611	44,115
Net Power Output (kWhr)		43,648	43,904	44,928	42,912	42,848	43,552	42,992	42,120	41,952	42,008	41,960	41,968	42,224	41,960	41,680	42,224
Power Sold as metered by NStar, (kWhr)		43,559	43,766	44,810	42,803	42,741	43,440	42,896	42,005	41,859	41,905	41,865	41,884	42,168	41,906	41,601	42,125
Offgrid RECs (kWhr)		1,801	1,834	1,914	1,960	1,925	1,907	1,833	1,953	1,937	1,895	1,882	1,903	1,817	1,861	1,930	1,891
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		634	633	647	650	650	650	650	650	650	650	650	650	650	650	640	650
Generator 2		600	586	603	576	587	616	589	575	576	576	579	604	582	575	576	588
Generator 3		-	-	-	-	-	-	-	-	-	-	-	541	599	599	599	599
Generator 4		655	683	697	639	623	623	623	608	599	599	593	510	-	-	-	-
Power output (kW average over 24-hrs)																	
Facility Gross		1,894	1,906	1,952	1,870	1,866	1,894	1,868	1,836	1,829	1,829	1,827	1,828	1,835	1,826	1,817	1,838
Facility Net		1,819	1,829	1,872	1,788	1,785	1,815	1,791	1,755	1,748	1,750	1,748	1,749	1,759	1,748	1,737	1,759
In-plant load		75	76	80	82	80	79	76	81	81	79	78	79	76	78	80	79
Daily availability factor																	
Facility		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	77%	75%	75%	75%	75%
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	58%	100%	100%	100%	100%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	0%	0%	0%	0%
Daily capacity factor																	
Facility		57%	58%	59%	57%	57%	57%	57%	56%	55%	55%	55%	55%	56%	55%	55%	56%
Engine 1		77%	77%	78%	79%	79%	79%	79%	79%	79%	79%	79%	79%	79%	79%	78%	79%
Engine 2		73%	71%	73%	70%	71%	75%	71%	70%	70%	70%	70%	73%	71%	70%	70%	71%
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	66%	73%	73%	73%	73%
Engine 4		79%	83%	84%	77%	76%	76%	76%	74%	73%	73%	72%	62%	0%	0%	0%	0%
Cumulative by engine																	
Engine operating run hours in the month																	
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 1		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 2		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 3		0	0	0	0	0	0	0	0	0	-	-	14	38	62	86	110
Engine 4		24	48	72	96	120	144	168	192	216	240	264	276	276	276	276	276
Engine operating run hours total from 0 hours																	
Engine 1		111,844	111,868	111,892	111,916	111,940	111,964	111,988	112,012	112,036	112,060	112,084	112,108	112,132	112,156	112,180	112,204
Engine 2		100,331	100,355	100,403	100,427	100,451	100,475	100,499	100,523	100,547	100,571	100,595	100,619	100,643	100,667	100,691	100,715
Engine 3		110,062	110,062	110,062	110,062	110,062	110,062	110,062	110,062	110,062	110,062	110,062	110,076	110,100	110,124	110,148	110,172
Engine 4		110,051	110,075	110,099	110,123	110,147	110,171	110,195	110,219	110,243	110,267	110,291	110,315	110,327	110,327	110,327	110,327
Cumulative availability, %		June 1, 2020 @ 00:00 hours															
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	12%	18%	24%	29%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	88%	82%	77%	72%
Engine cumulative gross output, kWhr																	
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200
Engine 1		634	1,266	1,914	2,564	3,214	3,864	4,514	5,164	5,814	6,465	7,115	7,765	8,415	9,065	9,705	10,355
Engine 2		600	1,186	1,789	2,365	2,952	3,568	4,157	4,732	5,308	5,883	6,462	7,066	7,648	8,223	8,799	9,386
Engine 3		-	-	-	-	-	-	-	-	-	-	-	541	1,140	1,739	2,339	2,938
Engine 4		655	1,338	2,035	2,673	3,296	3,920	4,543	5,150	5,749	6,348	6,941	7,450	7,450	7,450	7,450	7,450
Cumulative capacity factor, %																	
Engine 1		77%	77%	77%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%	78%
Engine 2		73%	72%	72%	72%	71%	72%	72%	72%	71%	71%	71%	71%	71%	71%	71%	71%
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	11%	15%	19%	22%
Engine 4		79%	81%	82%	81%	80%	79%	79%	78%	77%	77%	76%	75%	69%	65%	60%	56%

		Monday 6/1/2020	Tuesday 6/2/2020	Wednesday 6/3/2020	Thursday 6/4/2020	Friday 6/5/2020	Saturday 6/6/2020	Sunday 6/7/2020	Monday 6/8/2020	Tuesday 6/9/2020	Wednesday 6/10/2020	Thursday 6/11/2020	Friday 6/12/2020	Saturday 6/13/2020	Sunday 6/14/2020	Monday 6/15/2020	Tuesday 6/16/2020
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	288	360	432	504	576	648	720	792	866	938	1,010	1,082	1,154
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.2%	75.2%	75.1%	75.1%	75.1%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		45,448	91,187	138,029	182,901	227,674	273,133	317,958	362,031	405,920	449,822	493,665	537,536	581,577	625,397	669,008	713,123
Cumulative Capacity Factor		57.4%	57.6%	58.1%	57.7%	57.5%	57.5%	57.4%	57.1%	56.9%	56.8%	56.7%	56.6%	56.5%	56.4%	56.3%	56.3%
Cumulative fuel input, MMBtu HHV		600	1,198	1,780	2,388	2,970	3,553	4,133	4,721	5,290	5,870	6,450	7,032	7,606	8,186	8,763	9,348
Cumulative gross output, kWhr		45,448	91,187	138,029	182,901	227,674	273,133	317,958	362,031	405,920	449,822	493,665	537,536	581,577	625,397	669,008	713,123
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,876	11,773	11,192	12,195	11,706	11,531	11,652	12,014	11,679	11,882	11,911	11,940	11,724	11,927	11,900	11,937
Daily heat rate, Btu/kWe gross HHV		13,193	13,079	12,433	13,547	13,003	12,809	12,944	13,346	12,974	13,200	13,231	13,264	13,024	13,250	13,219	13,261
Cumulative heat rate, Btu/kWe gross LHV		11,876	11,825	11,610	11,754	11,744	11,709	11,701	11,739	11,732	11,747	11,762	11,776	11,772	11,783	11,791	11,800
Cumulative heat rate, Btu/kWe gross HHV		13,193	13,136	12,897	13,057	13,046	13,007	12,998	13,040	13,033	13,049	13,066	13,082	13,077	13,089	13,098	13,108
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		14,592	14,688	14,784	14,880	14,976	15,072	15,168	15,264	15,360	15,456	15,552	15,648	15,744	15,840	15,936	16,032
Actual cumulative engine run hours		10,805	10,877	10,949	11,021	11,093	11,165	11,237	11,309	11,381	11,453	11,525	11,599	11,671	11,743	11,815	11,887
Cumulative Availability, %		74.0%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%	74.1%
Max cumulative gross output, kWhr		12,035,100	12,114,300	12,193,500	12,272,700	12,351,900	12,431,100	12,510,300	12,589,500	12,668,700	12,747,900	12,827,100	12,906,300	12,985,500	13,064,700	13,143,900	13,223,100
Actual cumulative gross output, kWhr		7,516,319	7,562,058	7,608,900	7,653,772	7,698,545	7,744,004	7,788,829	7,832,902	7,876,791	7,920,693	7,964,536	8,008,407	8,052,448	8,096,268	8,139,879	8,183,994
Cumulative Capacity Factor		62.5%	62.4%	62.4%	62.4%	62.3%	62.3%	62.3%	62.2%	62.2%	62.1%	62.1%	62.1%	62.0%	62.0%	61.9%	61.9%
Cumulative fuel input, MMBtu HHV		95,826	96,424	97,007	97,614	98,197	98,779	99,359	99,947	100,517	101,096	101,676	102,258	102,832	103,412	103,989	104,574
Cumulative gross output, kWhr		7,516,319	7,562,058	7,608,900	7,653,772	7,698,545	7,744,004	7,788,829	7,832,902	7,876,791	7,920,693	7,964,536	8,008,407	8,052,448	8,096,268	8,139,879	8,183,994
Cumulative heat rate, Btu/kWe gross LHV		11,477	11,478	11,477	11,481	11,482	11,483	11,483	11,486	11,488	11,490	11,492	11,494	11,496	11,498	11,500	11,503
Cumulative heat rate, Btu/kWe gross HHV		12,749	12,751	12,749	12,754	12,755	12,756	12,757	12,760	12,761	12,764	12,766	12,769	12,770	12,773	12,775	12,778
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Monday 6/1/2020	Tuesday 6/2/2020	Wednesday 6/3/2020	Thursday 6/4/2020	Friday 6/5/2020	Saturday 6/6/2020	Sunday 6/7/2020	Monday 6/8/2020	Tuesday 6/9/2020	Wednesday 6/10/2020	Thursday 6/11/2020	Friday 6/12/2020	Saturday 6/13/2020	Sunday 6/14/2020	Monday 6/15/2020	Tuesday 6/16/2020
Date																	
Hour																	
1		1.872	1.823	1.875	1.845	1.774	1.774	1.823	1.775	1.755	1.753	1.749	1.751	1.801	1.751	1.747	1.745
2		1.871	1.824	1.876	1.846	1.774	1.774	1.823	1.776	1.756	1.754	1.749	1.751	1.801	1.747	1.748	1.746
3		1.850	1.824	1.876	1.846	1.775	1.775	1.823	1.769	1.750	1.754	1.750	1.751	1.800	1.747	1.750	1.745
4		1.825	1.825	1.876	1.846	1.775	1.775	1.824	1.769	1.754	1.754	1.750	1.751	1.753	1.748	1.751	1.744
5		1.826	1.827	1.876	1.846	1.775	1.801	1.825	1.770	1.751	1.754	1.750	1.751	1.753	1.748	1.750	1.744
6		1.825	1.825	1.876	1.778	1.779	1.823	1.824	1.770	1.751	1.754	1.750	1.751	1.753	1.747	1.749	1.746
7		1.825	1.827	1.876	1.777	1.825	1.824	1.799	1.772	1.752	1.754	1.750	1.752	1.753	1.749	1.751	1.747
8		1.780	1.826	1.876	1.775	1.825	1.824	1.772	1.774	1.751	1.753	1.749	1.753	1.753	1.751	1.750	1.750
9		1.773	1.820	1.865	1.763	1.817	1.823	1.774	1.766	1.742	1.744	1.738	1.744	1.751	1.750	1.742	1.744
10		1.773	1.818	1.800	1.760	1.817	1.821	1.773	1.738	1.735	1.740	1.647	1.609	1.750	1.750	1.732	1.739
11		1.772	1.626	1.858	1.763	1.817	1.818	1.774	1.718	1.734	1.738	1.755	1.434	1.750	1.745	1.718	1.736
12		1.767	1.714	1.854	1.762	1.779	1.816	1.773	1.721	1.726	1.739	1.759	1.612	1.746	1.739	1.682	1.733
13		1.771	1.720	1.861	1.763	1.762	1.815	1.773	1.723	1.727	1.737	1.743	1.746	1.745	1.738	1.680	1.733
14		1.772	1.755	1.860	1.762	1.761	1.808	1.774	1.717	1.727	1.736	1.741	1.773	1.748	1.738	1.674	1.730
15		1.773	1.864	1.861	1.761	1.760	1.809	1.774	1.718	1.727	1.735	1.740	1.781	1.750	1.737	1.684	1.729
16		1.840	1.864	1.868	1.763	1.761	1.811	1.774	1.729	1.738	1.736	1.744	1.782	1.749	1.737	1.710	1.735
17		1.857	1.870	1.890	1.766	1.767	1.816	1.774	1.745	1.744	1.741	1.748	1.795	1.750	1.743	1.747	1.745
18		1.827	1.873	1.890	1.767	1.767	1.817	1.774	1.746	1.745	1.743	1.751	1.797	1.750	1.746	1.749	1.747
19		1.828	1.873	1.890	1.767	1.769	1.818	1.775	1.748	1.747	1.743	1.751	1.798	1.752	1.747	1.750	1.788
20		1.829	1.873	1.890	1.768	1.769	1.817	1.774	1.748	1.748	1.745	1.750	1.800	1.752	1.750	1.750	1.798
21		1.829	1.873	1.890	1.768	1.772	1.818	1.774	1.750	1.748	1.749	1.750	1.800	1.752	1.751	1.750	1.800
22		1.828	1.873	1.842	1.768	1.774	1.820	1.774	1.753	1.750	1.749	1.750	1.801	1.752	1.751	1.748	1.800
23		1.823	1.874	1.841	1.770	1.774	1.822	1.775	1.755	1.753	1.750	1.751	1.800	1.752	1.749	1.744	1.801
24		1.823	1.875	1.843	1.773	1.773	1.821	1.774	1.755	1.753	1.750	1.750	1.801	1.752	1.747	1.745	1.800
TOTAL		43,559	43,766	44,810	42,803	42,741	43,440	42,896	42,005	41,859	41,905	41,865	41,884	42,168	41,906	41,601	42,125
Cumulative Output Sold, kWhr		43,559	87,325	132,135	174,938	217,679	261,119	304,015	346,020	387,879	429,784	471,649	513,533	555,701	597,607	639,208	681,333
Transformer and line efficiency		99.8%	99.7%	99.7%	99.7%	99.8%	99.7%	99.8%	99.7%	99.8%	99.8%	99.8%	99.8%	99.9%	99.9%	99.8%	99.8%
Hourly average		1.815	1.824	1.867	1.783	1.781	1.810	1.787	1.750	1.744	1.746	1.744	1.745	1.757	1.746	1.733	1.755

June 2020																		
		Wednesday 6/17/2020	Thursday 6/18/2020	Friday 6/19/2020	Saturday 6/20/2020	Sunday 6/21/2020	Monday 6/22/2020	Tuesday 6/23/2020	Wednesday 6/24/2020	Thursday 6/25/2020	Friday 6/26/2020	Saturday 6/27/2020	Sunday 6/28/2020	Monday 6/29/2020	Tuesday 6/30/2020	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine		1,180	1,162	1,207	1,193	1,175	1,175	1,151	1,172	1,191	1,195	1,197	1,191	1,164	1,175	34,969	1,365	33,605
LFG and Biogas Flow to the Engine		598	597	618	614	605	610	604	614	611	613	622	619	605	617	17,893	1,008	16,885
LFG and Biogas Flow to the Flare (t)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.6%	94%
LFG and BiogasFlow to the Flare (t)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,180	1,162	1,207	1,193	1,175	1,175	1,151	1,172	1,191	1,195	1,197	1,191	1,164	1,175	34,969		
LFG and Biogas Total Flow (MMBTU)		598	597	618	614	605	610	604	614	611	613	622	619	605	617	17,893		
Average Methane Content (%)		50.1	50.8	50.6	50.8	50.9	51.3	51.8	51.8	50.7	50.6	51.3	51.3	51.4	51.9	50.6		
Engine 1 Hours		24	23	24	24	24	24	24	24	24	24	24	24	24	24	719		
Engine 2 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	720		
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	446		
Engine 4 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	276		
Generator 1 Power Output (kWhr)		15,696	14,112	16,196	16,196	16,188	16,200	16,208	16,204	16,208	16,208	16,208	16,204	16,208	16,540	473,104		
Generator 2 Power Output (kWhr)		15,212	15,712	15,596	15,596	15,596	14,888	15,024	15,024	15,028	15,024	15,020	15,020	15,020	15,612	438,640		
Generator 3 Power Output (kWhr)		14,816	16,120	15,572	15,576	14,784	15,080	15,576	15,688	15,316	16,188	16,188	16,188	16,192	16,440	284,816		
Generator 4 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	172,692		
Gross Power Output (kWhr)		45,784	45,966	47,345	47,379	46,585	46,210	46,879	47,002	46,621	47,496	47,507	47,486	47,501	48,686	1,371,570		
Net Power Output (kWhr)		43,864	44,032	45,368	45,424	44,648	44,248	44,880	45,000	44,672	45,592	45,672	45,640	45,600	46,848	1,314,368		
Power Sold as metered by NStar, (Offgrid RECs (kWhr)		43,794	43,973	45,270	45,319	44,566	44,156	44,763	44,872	44,562	45,474	45,543	45,520	45,462	46,719	1,311,326	CRMCB Inplant	
		1,920	1,935	1,976	1,956	1,936	1,963	1,998	2,003	1,949	1,904	1,835	1,846	1,901	1,838	57,203	11,917	
Calculated Performance Results																	21%	
Daily																	of total in-plant power	
Power output (kW average whe																		
Generator 1		654	614	675	675	675	675	675	675	675	675	675	675	675	689			
Generator 2		634	655	650	650	650	620	626	626	626	626	626	626	626	651			
Generator 3		617	672	649	649	616	628	649	654	638	675	675	675	675	685			
Generator 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Power output (kW average ove																		
Facility Gross		1,908	1,915	1,973	1,974	1,941	1,925	1,953	1,958	1,943	1,979	1,979	1,979	1,979	2,029			
Facility Net		1,828	1,835	1,890	1,893	1,860	1,844	1,870	1,875	1,861	1,900	1,903	1,902	1,900	1,952			
In-plant load		80	81	82	81	81	82	83	83	81	79	76	77	79	77			
Daily availability factor																		
Facility		75%	74%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%			
Engine 1		100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Daily capacity factor																		
Facility		58%	58%	60%	60%	59%	58%	59%	59%	59%	60%	60%	60%	60%	61%			
Engine 1		79%	74%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	84%			
Engine 2		77%	79%	79%	79%	79%	75%	76%	76%	76%	76%	76%	76%	76%	79%			
Engine 3		75%	81%	79%	79%	75%	76%	79%	79%	77%	82%	82%	82%	82%	83%			
Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Cumulative by engine																		
Engine operating run hours in ti																		
Max Cumulative Available,		408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine 1		408	431	455	479	503	527	551	575	599	623	647	671	695	719			
Engine 2		408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine 3		134	158	182	206	230	254	278	302	326	350	374	398	422	446			
Engine 4		276	276	276	276	276	276	276	276	276	276	276	276	276	276			
Engine operating run hours tota																		
Engine 1		112,228	112,251	112,275	112,299	112,323	112,347	112,371	112,395	112,419	112,443	112,467	112,491	112,515	112,539			
Engine 2		100,739	100,763	100,787	100,811	100,835	100,859	100,883	100,907	100,931	100,955	100,979	101,003	101,027	101,051			
Engine 3		110,196	110,220	110,244	110,268	110,292	110,316	110,340	110,364	110,388	110,412	110,436	110,460	110,484	110,508			
Engine 4		110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327	110,327			
Cumulative availability, %																		
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3		33%	37%	40%	43%	46%	48%	50%	52%	54%	56%	58%	59%	61%	62%			
Engine 4		68%	64%	61%	58%	55%	52%	50%	48%	46%	44%	43%	41%	40%	38%			
Engine cumulative gross output																		
Max cumulative capacity or		14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750			
Engine 1		11,009	11,623	12,298	12,973	13,647	14,322	14,997	15,673	16,348	17,023	17,699	18,374	19,049	19,738			
Engine 2		10,020	10,675	11,325	11,974	12,624	13,273	13,922	14,571	15,220	15,869	16,518	17,167	17,816	18,277			
Engine 3		3,555	4,227	4,875	5,524	6,140	6,769	7,418	8,071	8,710	9,384	10,059	10,733	11,408	12,093			
Engine 4		7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450	7,450			
Cumulative capacity factor, %																		
Engine 1		78%	78%	78%	79%	79%	79%	79%	79%	79%	79%	79%	80%	80%	80%			
Engine 2		71%	72%	72%	73%	73%	73%	73%	73%	73%	73%	74%	74%	74%	74%			
Engine 3		25%	28%	31%	33%	35%	37%	39%	41%	42%	44%	45%	46%	48%	49%			
Engine 4		53%	50%	48%	45%	43%	41%	39%	38%	36%	35%	33%	32%	31%	30%			

	Wednesday 6/17/2020	Thursday 6/18/2020	Friday 6/19/2020	Saturday 6/20/2020	Sunday 6/21/2020	Monday 6/22/2020	Tuesday 6/23/2020	Wednesday 6/24/2020	Thursday 6/25/2020	Friday 6/26/2020	Saturday 6/27/2020	Sunday 6/28/2020	Monday 6/29/2020	Tuesday 6/30/2020	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880			
Actual cumulative engine run	1,226	1,297	1,369	1,441	1,513	1,585	1,657	1,729	1,801	1,873	1,945	2,017	2,089	2,161			
Cumulative Availability, %	75.1%	75.1%	75.1%	75.1%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000			
Actual cumulative gross output, kWh	758,907	804,873	852,218	899,597	946,182	992,392	1,039,271	1,086,273	1,132,894	1,180,390	1,227,897	1,275,383	1,322,884	1,371,570			
Cumulative Capacity Factor	56.4%	56.5%	56.6%	56.8%	56.9%	57.0%	57.1%	57.1%	57.2%	57.3%	57.4%	57.5%	57.6%	57.7%			
Cumulative fuel input, MMBtu	9,946	10,543	11,160	11,774	12,379	12,988	13,592	14,207	14,818	15,430	16,052	16,671	17,276	17,893			
Cumulative gross output, kWh	758,907	804,873	852,218	899,597	946,182	992,392	1,039,271	1,086,273	1,132,894	1,180,390	1,227,897	1,275,383	1,322,884	1,371,570			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,762	11,688	11,745	11,656	11,689	11,877	11,593	11,767	11,802	11,609	11,786	11,725	11,473	11,408			
Daily heat rate, Btu/kWe net	13,066	12,984	13,047	12,949	12,985	13,194	12,878	13,072	13,110	12,896	13,093	13,025	12,745	12,673			
Cumulative heat rate, Btu/kWe	11,797	11,791	11,789	11,782	11,777	11,782	11,773	11,773	11,774	11,767	11,768	11,767	11,756	11,744			
Cumulative heat rate, Btu/kWe net	13,105	13,098	13,096	13,088	13,083	13,088	13,078	13,078	13,080	13,072	13,073	13,071	13,059	13,046			
Cumulative by Facility starting C																	
Max cumulative available engine	16,128	16,224	16,320	16,416	16,512	16,608	16,704	16,800	16,896	16,992	17,088	17,184	17,280	17,376			
Actual cumulative engine run	11,959	12,030	12,102	12,174	12,246	12,318	12,390	12,462	12,534	12,606	12,678	12,750	12,822	12,894			
Cumulative Availability, %	74.2%	74.1%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%	74.2%			
Max cumulative gross output, kWh	13,302,300	13,381,500	13,460,700	13,539,900	13,619,100	13,698,300	13,777,500	13,856,700	13,935,900	14,015,100	14,094,300	14,173,500	14,252,700	14,331,900			
Actual cumulative gross output, kWh	8,229,778	8,275,744	8,323,089	8,370,468	8,417,053	8,463,263	8,510,142	8,557,144	8,603,765	8,651,261	8,698,768	8,746,254	8,793,755	8,842,441			
Cumulative Capacity Factor	61.9%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.8%	61.7%	61.7%	61.7%	61.7%	61.7%	61.7%			
Cumulative fuel input, MMBtu	105,172	105,769	106,387	107,000	107,605	108,215	108,818	109,433	110,044	110,657	111,279	111,897	112,502	113,119			
Cumulative gross output, kWh	8,229,778	8,275,744	8,323,089	8,370,468	8,417,053	8,463,263	8,510,142	8,557,144	8,603,765	8,651,261	8,698,768	8,746,254	8,793,755	8,842,441			
Cumulative heat rate, Btu/kWe	11,504	11,505	11,506	11,507	11,508	11,510	11,511	11,512	11,514	11,514	11,516	11,517	11,517	11,516			
Cumulative heat rate, Btu/kWe net	12,779	12,781	12,782	12,783	12,784	12,786	12,787	12,788	12,790	12,791	12,792	12,794	12,793	12,793			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports	Wednesday 6/17/2020	Thursday 6/18/2020	Friday 6/19/2020	Saturday 6/20/2020	Sunday 6/21/2020	Monday 6/22/2020	Tuesday 6/23/2020	Wednesday 6/24/2020	Thursday 6/25/2020	Friday 6/26/2020	Saturday 6/27/2020	Sunday 6/28/2020	Monday 6/29/2020	Tuesday 6/30/2020	TOTAL		
Date																	
Hour																	
1	1,796	1,853	1,892	1,892	1,891	1,844	1,871	1,872	1,824	1,898	1,899	1,900	1,900	1,900			
2	1,797	1,853	1,892	1,893	1,891	1,844	1,872	1,871	1,824	1,897	1,899	1,901	1,899	1,901			
3	1,798	1,854	1,892	1,894	1,892	1,845	1,873	1,872	1,822	1,898	1,899	1,899	1,899	1,901			
4	1,797	1,854	1,892	1,893	1,891	1,845	1,873	1,871	1,823	1,898	1,899	1,899	1,899	1,901			
5	1,798	1,853	1,892	1,893	1,891	1,845	1,872	1,872	1,821	1,898	1,898	1,899	1,899	1,901			
6	1,798	1,853	1,892	1,893	1,892	1,844	1,872	1,872	1,822	1,899	1,897	1,899	1,899	1,901			
7	1,801	1,853	1,893	1,894	1,891	1,846	1,873	1,872	1,824	1,899	1,899	1,901	1,899	1,902			
8	1,801	1,851	1,891	1,891	1,890	1,846	1,874	1,871	1,822	1,897	1,898	1,899	1,900	1,902			
9	1,793	1,846	1,885	1,888	1,846	1,837	1,862	1,878	1,815	1,890	1,895	1,897	1,889	1,895			
10	1,792	1,835	1,881	1,886	1,839	1,819	1,855	1,880	1,812	1,887	1,894	1,896	1,883	1,893			
11	1,787	1,501	1,881	1,886	1,839	1,626	1,851	1,880	1,811	1,888	1,892	1,893	1,882	1,927			
12	1,784	1,552	1,878	1,884	1,838	1,823	1,852	1,879	1,844	1,892	1,893	1,894	1,879	1,938			
13	1,779	1,972	1,876	1,882	1,836	1,829	1,851	1,878	1,887	1,888	1,893	1,893	1,877	1,937			
14	1,777	1,947	1,866	1,882	1,835	1,834	1,849	1,876	1,885	1,888	1,895	1,892	1,882	1,977			
15	1,778	1,548	1,876	1,883	1,835	1,837	1,853	1,877	1,882	1,889	1,896	1,892	1,885	1,988			
16	1,838	1,824	1,878	1,883	1,836	1,838	1,859	1,884	1,884	1,890	1,897	1,893	1,893	1,989			
17	1,894	1,888	1,885	1,884	1,838	1,866	1,866	1,890	1,891	1,895	1,898	1,893	1,899	1,996			
18	1,897	1,889	1,887	1,886	1,839	1,867	1,867	1,891	1,893	1,896	1,899	1,894	1,900	1,996			
19	1,899	1,890	1,888	1,887	1,841	1,869	1,868	1,892	1,895	1,896	1,900	1,896	1,900	1,996			
20	1,900	1,890	1,889	1,887	1,842	1,869	1,869	1,892	1,895	1,896	1,900	1,896	1,900	1,996			
21	1,900	1,891	1,889	1,888	1,842	1,870	1,870	1,834	1,896	1,898	1,901	1,898	1,899	1,996			
22	1,885	1,892	1,891	1,889	1,843	1,871	1,870	1,821	1,896	1,898	1,901	1,898	1,900	1,995			
23	1,852	1,892	1,891	1,890	1,843	1,870	1,871	1,823	1,897	1,900	1,901	1,899	1,900	1,995			
24	1,853	1,892	1,893	1,891	1,845	1,872	1,870	1,824	1,897	1,899	1,900	1,899	1,900	1,996			
TOTAL	43,794	43,973	45,270	45,319	44,566	44,156	44,763	44,872	44,562	45,474	45,543	45,520	45,462	46,719			
Cumulative Output Sold, kWh	725,127	769,100	814,370	859,689	904,255	948,411	993,174	1,038,046	1,082,608	1,128,082	1,173,625	1,219,145	1,264,607	1,311,326			
Transformer and line efficiency	99.8%	99.9%	99.8%	99.8%	99.8%	99.8%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%			
Hourly average	1,825	1,832	1,886	1,888	1,857	1,840	1,865	1,870	1,857	1,895	1,898	1,897	1,894	1,947			

CRMC Bioenergy Biogas Flow Rate from SCADA														
			Minutes	Totalizer Reading,	scfm	Tot KSCF	% Methane			Heat valued per time period,	Tot Heat value in month,	Average methane content,	Biogas flow rate,	Biogas flow rate 50% methane,
Data Point	Date	Time	in Period	KSCF		in month	Month	End	Start	MMBtu	MMBtu	%	ave scfm	ave scfm
2019-123	1-Oct-19	0:00	619	74.46	11	447.44		70%	70%	5.0	319.1	70.5	10	14.6
2019-124	1-Oct-19	12:15	735	82.91	11			70%	70%	6.0				
2019-125	2-Oct-19	11:12	1,377	98.71	11			70%	70%	11.2				
2019-126	14-Oct-19	8:00	17,088	326.73	13			70%	70%	161.5				
2019-127	14-Oct-19	8:00	-	-		Reset to 0		70%	70%					
2019-128	15-Oct-19	15:54	1,914	22.03	12			70%	70%	15.6				
2019-129	16-Oct-19	14:44	1,370	39.89	13			70%	70%	12.7				
2019-130	17-Oct-19	16:12	1,528	59.48	13			70%	70%	13.9				
2019-131	18-Oct-19	9:41	1,049	72.38	12			70%	70%	9.1				
2019-132	21-Oct-19	10:05	4,344	126.91	13			70%	70%	38.6				
2019-133	23-Oct-19	22:44	3,639	174.22	13			70%	70%	33.5				
2019-134	23-Oct-19	22:44	-	-		Reset to 0		70%	70%					
2019-135	30-Oct-19	10:44	9,360	117.67	13			70%	70%	83.4				
2019-136	31-Oct-19	9:48	1,384	134.21	12			70%	70%	11.7				
2019-137	1-Nov-19	0:00	852	144.41	12	570.91		70%	70%	7.2	404.4	70.0	13	17.9
2019-138	1-Nov-19	13:57	837	154.44	12			70%	70%	7.1				
2019-139	3-Nov-19	15:34	2,977	192.01	13			70%	70%	26.6				
2019-140	7-Nov-19	10:00	5,426	262.55	13			70%	70%	50.0				
2019-141	14-Nov-19	10:25	10,105	393.91	13			70%	70%	93.1				
2019-142	21-Nov-19	11:02	10,117	525.28	13			70%	70%	93.1				
2019-143	28-Nov-19	9:45	10,003	656.64	13			70%	70%	93.1				
2019-144	1-Dec-19	0:00	3,735	705.19	13	560.78		70%	70%	34.4	397.3	70.0	13	17.6
2019-145	2-Dec-19	10:13	2,053	731.88	13			70%	70%	18.9				
2019-146	3-Dec-19	11:00	1,487	758.65	18			70%	70%	19.0				
2019-147	5-Dec-19	12:08	2,948	826.45	23			70%	70%	48.0				
2019-148	12-Dec-19	10:00	9,952	1,045.40	22			70%	70%	155.1				
2019-149	16-Dec-19	12:01	5,881	1,174.78	22			70%	70%	91.7				
2019-150	16-Dec-19	12:01	-	-		Reset to 0		70%	70%					
2019-151	16-Dec-19	14:19	138	3.05	22			70%	70%	2.2				
2019-152	20-Dec-19	8:57	5,438	114.76	21			70%	70%	79.1				
2019-153	23-Dec-19	10:03	4,386	205.16	21			70%	70%	64.0				
2019-154	26-Dec-19	11:08	4,385	296.97	21			70%	70%	65.0				
2019-155	27-Dec-19	9:16	1,328	324.21	21			70%	70%	19.3				
2019-156	30-Dec-19	10:48	4,412	419.62	22			70%	70%	67.6				
2020-01	1-Jan-20	0:00	2,232	469.94	23	939.52		70%	70%	35.6	665.6	70.0	21	29.5
2020-02	2-Jan-20	9:52	2,032	515.75	23			65%	70%	31.3				
2020-03	6-Jan-20	10:04	5,772	650.24	23			60%	65%	85.1				
2020-04	7-Jan-20	10:05	1,441	685.12	24			55%	60%	20.3				
2020-05	9-Jan-20	17:03	3,298	764.37	24			50%	55%	42.1				
2020-06	10-Jan-20	14:46	1,303	796.28	24			49%	50%	16.0				
2020-07	13-Jan-20	12:58	4,212	894.30	23			50%	49%	48.9				
2020-08	14-Jan-20	8:58	1,200	923.45	24			50%	50%	14.7				
2020-09	15-Jan-20	11:42	1,604	962.74	24			50%	50%	20.0				
2020-10	16-Jan-20	9:55	1,333	995.97	25			51%	50%	17.1				

CRMC Bioenergy Biogas Flow Rate from SCADA														
			Minutes	Totalizer Reading,	scfm	Tot KSCF	% Methane			Heat valued per time period,	Tot Heat value in month,	Average methane content,	Biogas flow rate,	Biogas flow rate 50% methane,
Data Point	Date	Time	in Period	KSCF		in month	Month	End	Start	MMBtu	MMBtu	%	ave scfm	ave scfm
2020-11	17-Jan-20	9:43	1,428	1,032.14	25			52%	51%	18.9				
2020-12	20-Jan-20	9:47	4,324	1,142.36	25			53%	52%	58.8				
2020-13	23-Jan-20	9:44	4,317	1,252.48	26			54%	53%	60.1				
2020-14	27-Jan-20	9:00	5,716	1395.38	25			55%	54%	79.4				
2020-15	29-Jan-20	7:40	2,800	1462.58	24			55%	55%	37.7				
2020-16	29-Jan-20	7:40	-	-		Reset to 0		56%	55%					
2020-17	30-Jan-20	7:24	1,424	32.95	23			57%	56%	18.9				
2020-18	31-Jan-20	11:10	1,666	74.07	25			58%	57%	23.9				
2020-19	1-Feb-20	0:00	770	94.25	26	1,086.89		58%	58%	11.8	604.8	55.0	24	26.8
2020-20	3-Feb-20	10:32	3,512	186.28	26			58%	58%	54.0				
2020-21	4-Feb-20	13:11	1,599	228.42	26			58%	58%	24.8				
2020-22	10-Feb-20	14:00	8,689	450.00	26			67%	58%	140.6				
2020-23	10-Feb-20	14:00	-	-		Reset to 0		69%	67%					
2020-24	11-Feb-20	14:57	1,497	37.43	25			70%	69%	26.3				
2020-25	12-Feb-20	11:27	1,230	71.58	28			72%	70%	24.5				
2020-26	13-Feb-20	11:28	1,441	111.89	28			74%	72%	29.8				
2020-27	17-Feb-20	10:43	5,715	271.12	28			74%	74%	119.2				
2020-28	18-Feb-20	12:28	1,545	313.74	28			74%	74%	31.9				
2020-29	19-Feb-20	9:31	1,263	349.32	28			74%	74%	26.6				
2020-30	21-Feb-20	10:46	2,955	434.61	29			74%	74%	63.9				
2020-31	27-Feb-20	10:00	8,594	660.00	26			73%	74%	167.6				
2020-32	27-Feb-20	10:00	-	-		Reset to 0		73%	73%					
2020-33	1-Mar-20	0:00	3,720	104.34	28	1,120.10		73%	73%	77.1	786.5	69.4	27	37.2
2020-34	2-Mar-20	9:32	2,012	160.78	28			73%	73%	41.7				
2020-35	9-Mar-20	10:42	10,150	450.48	29			70%	73%	209.6				
2020-36	10-Mar-20	9:44	1,382	490.36	29			70%	70%	28.3				
2020-37	11-Mar-20	10:38	1,494	533.90	29			70%	70%	30.8				
2020-38	12-Mar-20	10:46	1,448	577.31	30			70%	70%	30.8				
2020-39	17-Mar-20	15:42	7,496	805.42	30			70%	70%	161.6				
2020-40	20-Mar-20	13:55	4,213	931.35	30			71%	70%	89.8				
2020-41	23-Mar-20	10:06	4,091	1,054.68	30			72%	71%	89.2				
2020-42	25-Mar-20	9:45	2,859	1,139.76	30			72%	72%	62.0				
2020-43	27-Mar-20	13:18	3,093	1,230.50	29			72%	72%	66.1				
2020-44	30-Mar-20	10:32	4,154	1,361.97	32			73%	72%	96.5				
2020-45	31-Mar-20	11:59	1,527	1,410.92	32			74%	73%	36.4				
2020-46	1-Apr-20	0:00	721	1,433.74	32	1,329.40		73%	74%	17.0	959.8	71.3	32	45.4
2020-47	1-Apr-20	10:35	635	1,453.84	32			73%	73%	14.8				
2020-48	2-Apr-20	10:52	1,457	1,495.20	28			73%	73%	30.6				
2020-49	3-Apr-20	9:49	1,377	1,534.39	28			73%	73%	29.0				
2020-50	6-Apr-20	11:54	4,445	1,659.19	28			73%	73%	92.2				
2020-51	7-Apr-20	9:46	1,312	1,699.00	30			73%	73%	29.4				
2020-52	8-Apr-20	8:58	1,392	1,740.53	30			73%	73%	30.7				
2020-53	9-Apr-20	16:16	1,878	1,798.09	31			73%	73%	42.5				
2020-54	10-Apr-20	13:04	1,248	1,836.08	30			73%	73%	28.1				

CRMC Bioenergy Biogas Flow Rate from SCADA														
			Minutes	Totalizer Reading,	scfm	Tot KSCF	% Methane			Heat valued per time period,	Tot Heat value in month,	Average methane content,	Biogas flow rate,	Biogas flow rate 50% methane,
Data Point	Date	Time	in Period	KSCF		in month	Month	End	Start	MMBtu	MMBtu	%	ave scfm	ave scfm
2020-55	13-Apr-20	13:52	4,368	1,966.51	30	130.43		73%	73%	96.4				
2020-56	13-Apr-20	21:00	428	1,978.92	29			73%	73%	9.2				
2020-57	13-Apr-20	21:00	-	-				73%	73%					
2020-58	14-Apr-20	9:41	761	21.24	28			73%	73%	15.7				
2020-59	15-Apr-20	14:40	1,739	73.86	30			73%	73%	38.9				
2020-60	17-Apr-20	12:36	2,756	158.50	31			73%	73%	62.5				
2020-61	20-Apr-20	13:14	4,358	292.59	31			73%	73%	99.1				
2020-62	21-Apr-20	13:09	1,435	335.35	30			73%	73%	31.6				
2020-63	23-Apr-20	11:54	2,805	413.29	28			73%	73%	57.6				
2020-64	24-Apr-20	12:29	1,475	456.48	29			73%	73%	31.9				
2020-65	27-Apr-20	9:13	4,124	570.94	28			73%	73%	84.6				
2020-66	28-Apr-20	10:34	1,521	610.93	26			73%	73%	29.5				
2020-67	30-Apr-20	11:00	2,906	695.66	29			73%	73%	62.6				
2020-68	1-May-20	0:00	780	720.02	31	1,265.20		73%	73%	18.0	934.7	73.0	30	44.2
2020-69	1-May-20	8:54	534	736.70	31			73%	73%	12.3				
2020-70	4-May-20	14:31	4,657	872.69	29			73%	73%	100.5				
2020-71	5-May-20	10:43	1,212	908.00	29			73%	73%	26.1				
2020-72	6-May-20	9:30	1,367	946.99	29			73%	73%	28.8				
2020-73	7-May-20	12:40	1,630	995.93	30			73%	73%	36.2				
2020-74	11-May-20	9:46	5,586	1,157.58	29			73%	73%	119.4				
2020-75	12-May-20	10:00	1,454	1,200.00	29			73%	73%	31.3				
2020-76	14-May-20	13:17	3,077	1,292.31	30			73%	73%	68.2				
2020-77	18-May-20	14:10	5,813	1,466.70	30			73%	73%	128.8				
2020-78	21-May-20	12:35	4,225	1,593.45	30			73%	73%	93.6				
2020-79	22-May-20	9:18	1,243	1,630.74	30			73%	73%	27.5				
2020-80	22-May-20	9:18	-	-		Reset to 0		73%	73%					
2020-81	26-May-20	10:04	5,806	180.45	31			73%	73%	133.3				
2020-82	27-May-20	9:59	1,435	223.66	30			73%	73%	31.9				
2020-83	28-May-20	9:32	1,413	265.91	30			73%	73%	31.2				
2020-84	29-May-20	13:31	1,679	317.36	31			73%	73%	38.0				
2020-85	1-Jun-20	0:00	3,509	424.78	31	1,335.50		73%	73%	79.4	986.6	73.0	32	46.7
2020-86	1-Jun-20	10:39	639	444.34	31			73%	73%	14.5				
2020-87	2-Jun-20	14:38	1,679	498.07	32			73%	73%	39.7				
2020-88	4-Jun-20	12:56	2,778	586.00	32			73%	73%	65.0				
2020-89	8-Jun-20	9:22	5,546	761.20	32			73%	73%	129.4				
2020-90	12-Jun-20	15:09	6,107	951.76	31			73%	73%	140.8				
2020-91	15-Jun-20	11:46	4,117	1,079.58	31			73%	73%	94.4				
2020-92	18-Jun-20	15:38	4,552	1,224.36	32			73%	73%	107.0				
2020-93	24-Jun-20	12:34	8,456	1,489.38	31			73%	73%	195.8				
2020-94	25-Jun-20	14:40	1,566	1,539.10	32			73%	73%	36.7				
2020-95	29-Jun-20	9:49	5,469	1,714.56	32			73%	73%	129.6				
2020-96	30-Jun-20	10:12	1,463	1,761.96	32			73%	73%	35.0				
2020-97	1-Jul-20	0:00	828	1,789.47	33	1,364.69		73%	73%	20.3	1,008.2	73.0	33	47.7

Exhibit 6

Calibration of the LFG and biogas flow rates and composition meters for the periods.

Landfill Gas Flow Calculation											
Crapo Hill Landfill, New Bedford/Dartmouth, Massachusetts											
Note: Calculation of volumetric flow of LFG through a pipe using a pitot tube											
		Engine 1, kW	670	-	-	740	-	-	-	-	640
		Engine 2, kW	620	700	730	650	750	660	700	650	590
		Engine 3, kW	700	680	610	-	730	750	700	650	-
		Engine 4, kW	-	700	730	730	710	725	710	650	620
		Gross, kW	1,990	2,080	2,070	2,120	2,190	2,135	2,110	1,950	1,850
MEASURING INSTRUMENT:		Pitot Tube:	166	166	166	166	166	166	166	166	166
		Manometer:	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II
DATE OF MEASUREMENT:			15-Oct-19	5-Nov-19	5-Dec-19	8-Jan-20	14-Feb-20	6-Mar-20	7-Apr-20	12-May-20	5-Jun-20
TIME OF MEASUREMENT:			14:00	11:30	11:30	11:30	11:00	10:50	14:00	12:00	11:30
PARAMETERS		UNITS	VALUES	VALUES	VALUES	VALUES	VALUES	VALUES	VALUES	VALUES	VALUES
Pipe dimensions											
		Inside Diameter	inches	10.420	10.420	10.420	10.420	10.420	10.420	10.420	10.420
		Area of cross section	square feet	0.5922	0.5922	0.5922	0.5922	0.5922	0.5922	0.5922	0.5922
Flow Calculation											
Kp	pitot tube constant		ft/sec((lb/lb-mole)/(in. Hg)/(R)(in H2O))^1/2	85.49	85.49	85.49	85.49	85.49	85.49	85.49	85.49
Cp	Pitot tube coefficient		dimensionless	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
dP	Average velocity pressure of stack gas		in H2O	0.133	0.138	0.121	0.148	0.152	0.152	0.129	0.134
Blower Inlet											
Ts	Stack temperature		Degrees Fahrenheit	80	76	70	68	67	66	70	75
			Degrees Rankine	540	536	530	528	527	526	530	535
Pg	Stack static pressure		inch H2O	-66	-68	-68	-68	-60	-60	-60	-61
			inch Hg	(4.85)	(5.00)	(5.00)	(5.00)	(4.41)	(4.41)	(4.41)	(4.49)
Ps	Absolute stack gas pressure		inch Hg	25.21	25.25	24.59	24.83	25.64	25.57	25.44	25.36
Blower Outlet											
Ts	Stack temperature		Degrees Fahrenheit	120	119	121	119	120	117	121	120
			Degrees Rankine	580	579	581	579	580	577	581	580
Pg	Stack static pressure		inch H2O	55.4	52.6	55.4	55.4	55.4	55.4	55.4	55.4
			inch Hg	4.07	3.87	4.07	4.07	4.07	4.07	4.07	4.07
			psig	2.00	1.90	2.00	2.00	2.00	2.00	2.00	2.00
Pbar	Barometric pressure		inch Hg	30.06	30.25	29.59	29.83	30.05	29.98	29.85	29.85
Ps	Absolute stack gas pressure		inch Hg	34.13	34.12	33.66	33.90	34.12	34.05	33.92	33.92
Ms	Molecular weight of stack gas, wet		lb/lb-mole	27.21	27.35	27.03	27.16	27.55	27.59	27.37	27.56
Vs	Average stack gas velocity		feet per second	27.6	28.0	26.6	29.1	28.8	28.8	26.8	27.4
Qact	Volumetric Flow		actual cubic feet per minute	982	993	944	1,033	1,024	1,023	952	974
Qstd	Volumetric Flow at actual methane content		standard cubic feet per minute *	809	826	773	857	879	878	806	815
Qstd corr	Volumetric Flow at 50% methane		standard cubic feet per minute **	841	892	850	926	888	895	854	823
Ht HHV	Heat input		MMBtu per hour HHV	25.54	27.07	25.81	28.12	26.95	27.19	25.94	25.00
Ht LHV	Heat input		MMBtu per hour LHV	22.99	24.37	23.23	25.31	24.26	24.47	23.35	22.50
	Methane Content		%, vol/vol wet	52.00%	54.00%	55.00%	54.00%	50.50%	51.00%	53.00%	50.50%
Diff. between pitot tube and orifice reading:				0.4%	0.0%	1.6%	0.9%	-0.8%	-0.1%	-1.4%	0.7%
dP	Delta pressure across orifice plate		inches H2O	4.80	5.00	4.40	5.40	5.80	5.70	5.00	4.90
Qact	Volumetric Flow		acfm	776	794	744	822	853	844	793	784
Qstd	Volumetric Flow at actual methane content		standard cubic feet per minute *	806	825	760	850	886	879	817	809
Qstd	V										

Landfill Gas Flow Measurements									
Crapo Hill Landfill, New Bedford/Dartmouth									
Measurements by	TY, RB	TY, RB	TY, RB	TY, RB	TY, RB	TY, RB	TY, RB	TY, RB	TY, RB
Date	15-Oct-19	5-Nov-19	5-Dec-19	8-Jan-20	14-Feb-20	6-Mar-20	7-Apr-20	12-May-20	5-Jun-20
Time	14:00	11:30	11:30	11:30	11:00	10:50	14:00	12:00	11:30
Flow valve									
Pipe inside diameter, inches	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42
Orifice measurement, cfm	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ambient Temperature, F	63	56	40	35	36	40	54	56	80
Barometric Pressure, In Hg	30.06	30.25	29.59	29.83	30.05	29.98	29.85	29.85	29.89
Blower Inlet Temperature, F	80	76	70	68	67	66	70	75	80
Outlet Temperature, F	120	119	121	119	120	117	121	120	120
Blower Inlet Pressure (SP), In H2O	-66	-68	-68	-68	-60	-60	-60	-61	-61
Blower Outlet Pressure, PSIG	2.0	1.9	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Blower Outlet Pressure, In H2O	55.36	52.59	55.36	55.36	55.36	55.36	55.36	55.36	55.36
Measurement									
Manometer									
Pitot Tube									
Velocity Pressure (dP)									
Point									
1	0.13	0.13	0.11	0.14	0.14	0.14	0.12	0.12	0.09
2	0.14	0.14	0.11	0.15	0.15	0.15	0.13	0.13	0.10
3	0.14	0.14	0.12	0.15	0.16	0.16	0.13	0.13	0.11
4	0.14	0.14	0.13	0.15	0.16	0.16	0.13	0.14	0.11
5	0.14	0.14	0.13	0.15	0.16	0.16	0.13	0.14	0.12
6	0.14	0.14	0.13	0.15	0.16	0.16	0.13	0.14	0.12
7	0.14	0.14	0.13	0.15	0.15	0.15	0.13	0.14	0.12
8	0.14	0.14	0.12	0.15	0.15	0.15	0.13	0.14	0.11
9	0.13	0.13	0.11	0.14	0.14	0.14	0.13	0.13	0.10
Average	0.133	0.138	0.121	0.148	0.152	0.152	0.129	0.134	0.109
Gas Composition									
Compound, %v/v									
Methane (CH4)	52.0%	54.0%	55.0%	54.0%	50.5%	51.0%	53.0%	50.5%	50.3%
Carbon dioxide (CO2)	36.0%	36.6%	36.6%	36.5%	36.1%	36.8%	37.2%	36.6%	36.6%
Oxygen (O2)	1.00%	1.22%	0.70%	0.70%	1.40%	1.00%	0.60%	1.40%	1.50%
Balance gas	11.00%	9.00%	7.70%	8.80%	12.00%	11.20%	9.20%	11.50%	11.60%
Total	100.0%	100.8%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Moisture (H2O) (included in balance gas)	3.5%	3.0%	2.5%	2.3%	2.2%	2.2%	2.5%	2.9%	3.5%
Molecular weight, lb/lb-mole wet	27.21	27.35	27.03	27.16	27.55	27.59	27.37	27.56	27.53

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'California Analytical' Analyzer Calibration Results

Month: October 2019		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
9/29/19	10/3/19	81 Deg F	55%	54.30%	50.90%	0.00%	53.75%	50.98%
10/6/19	10/7/19	81 Deg F	55%	54.30%	51.01%	-0.07%	53.60%	50.26%
10/13/19	10/16/19	78 Deg F	55%	54.36%	51.98%	0.02%	54.28%	51.94%
10/20/19	10/24/19	76 Deg F	55%	54.40%	51.76%	-0.01%	53.89%	51.78%
10/27/19	10/28/19	74 Deg F	55%	54.44%	51.80%	0.01%	54.21%	51.90%

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'California Analytical' Analyzer Calibration Results

Month: November 2019		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
11/3/19	11/8/19	73 Deg F	55%	54.46%	54.00%	0.04%	54.10%	54.05%
11/10/19	11/12/19	72 Deg F	55%	54.47%	54.18%	0.02%	54.05%	54.16%
11/17/19	11/20/19	68 Deg F	55%	54.53%	53.62%	0.01%	54.08%	53.68%
11/24/19	11/26/19	68 Deg F	55%	54.53%	53.62%	-0.08%	54.14%	53.72%

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'California Analytical' Analyzer Calibration Results

Month: December 2019		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
12/1/19	12/4/19	63 Deg F	55%	54.60%	54.70%	0.02%	54.20%	54.75%
12/8/19	12/12/19	63 Deg F	55%	54.60%	52.38%	0.01%	54.09%	52.35%
12/15/19	12/19/19	59 Deg F	55%	54.65%	54.95%	0.01%	54.15%	54.92%
12/22/19	12/26/19	61 Deg F	55%	54.63%	52.25%	-0.01%	54.25%	52.28%

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'California Analytical' Analyzer Calibration Results

Month: Jan-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
12/29/19	1/3/20	59 Deg F	55%	54.65%	55.64%	-0.07%	53.57%	55.75%
1/5/20	1/10/20	59 Deg F	55%	54.65%	52.74%	-0.01%	56.28%	53.10%
1/12/20	1/17/20	59 Deg F	55%	54.65%	49.94%	0.03%	55.24%	49.43%
1/19/20	1/24/20	59 Deg F	55%	54.65%	49.44%	-0.02%	54.10%	49.65%
1/26/20	1/31/20	59 Deg F	55%	54.65%	49.70%	-0.01%	55.10%	49.79%

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'California Analytical' Analyzer Calibration Results

Month: Feb-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
2/2/20	2/7/20	59 Deg F	55%	54.65%	54.49%	0.01%	54.24%	54.42%
2/9/20	2/13/20	59 Deg F	55%	54.65%	52.62%	0.00%	54.35%	52.61%
2/16/20	2/21/20	59 Deg F	55%	54.65%	50.80%	-0.06%	54.63%	50.79%
2/23/20	2/26/20	59 Deg F	55%	54.65%	53.82%	-0.01%	54.45%	53.89%

CommonWealth New Bedford Energy, LLC
 Greater New Bedford LFG Utilization Project
 300 Samuel Barnett Blvd.
 New Bedford, Massachusetts
 (508) 985-0923

'California Analytical' Analyzer Calibration Results

Month: Mar-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
3/1/20	3/6/20	59 Deg F	55%	54.65%	51.30%	-0.05%	53.59%	50.98%
3/8/20	3/11/20	60 Deg F	55%	54.64%	50.58%	-0.02%	54.25%	50.55%
3/15/20	3/19/20	60 Deg F	55%	54.64%	50.45%	0.01%	50.49%	50.86%
3/22/20	3/27/20	62 Deg F	55%	54.62%	51.77%	-0.04%	54.27%	51.94%

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'California Analytical' Analyzer Calibration Results

Month: Apr-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
3/29/20	4/3/20	60 Deg F	55%	54.64%	53.45%	-0.08%	54.20%	53.34%
4/5/20	4/10/20	61 Deg F	55%	54.63%	53.37%	0.04%	53.82%	53.13%
4/12/20	4/17/20	63 Deg F	55%	54.60%	52.87%	0.03%	56.85%	53.07%
4/19/20	4/24/20	61 Deg F	55%	54.63%	53.25%	-0.10%	53.85%	53.18%

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Month: May-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
4/26/20	5/1/20	63 Deg F	55%	54.60%	52.65%	-0.08%	54.06%	52.77%
5/3/20	5/7/20	64 Deg F	55%	54.59%	50.30%	0.04%	55.44%	50.08%
5/10/20	5/15/20	67 Deg F	55%	54.55%	50.03%	-0.06%	54.04%	50.33%
5/17/20	5/22/20	70 Deg F	55%	54.50%	50.54%	-0.02%	55.41%	50.32%
5/24/20	5/29/20	71 Deg F	55%	54.49%	49.88%	-0.04%	54.69%	49.76%

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'California Analytical' Analyzer Calibration Results

Month: May-20		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
5/31/20	6/5/20	74 Deg F	55%	54.44%	49.97%	0.01%	53.94%	49.84%
6/7/20	6/12/20	77 Deg F	55%	54.38%	50.10%	0.01%	54.96%	50.01%
6/14/20	6/19/20	79 Deg F	55%	54.34%	49.94%	-0.04%	54.08%	50.06%
6/21/20	6/26/20	82 Deg F	55%	54.28%	50.33%	-0.01%	53.93%	50.29%

Biogas Flow Measurements									
$Q = \sqrt{\frac{dP}{S_s} \cdot \frac{(T + 460)}{(K^2 \cdot D^4 \cdot P \cdot 16590)}}$									
		SCADA Reading				SCADA Reading	P	P	T
		Pre-calibration	Measured	Measured	Difference between	Post-calibration	static pressure	static pressure	temperature
Month	Date	flow rate, scfm	dP, inch WG	flow rate, scfm	Measured and SCADA, %	flow rate, scfm	inch WG	psia	F
Oct-19	15-Oct-19	13	0.035	13	0.9%	13	6	14.92	85
Nov-19	5-Nov-19	13	0.035	13	0.9%	13	6	14.92	85
Dec-19	5-Dec-19	23	0.11	23	0.7%	23	6	14.92	85
Jan-20	8-Jan-20	24	0.12	24	0.6%	24	6	14.92	85
Feb-20	14-Feb-20	28	0.17	28	-1.4%	28	6	14.92	85
Mar-20	6-Mar-20	29	0.17	28	2.1%	29	6	14.92	85
Apr-20	7-Apr-20	30	0.19	30	-0.1%	30	6	14.92	85
May-20	12-May-20	29	0.18	29	-0.7%	29	6	14.92	85
Jun-20	5-Jun-20	32	0.22	32	-0.9%	32	6	14.92	85

CRMC Bioenergy LLC						
Biogas Methane Calibration						
		SCADA Reading		Measured		SCADA Reading
		Pre-calibration	Calibration	Calibration	Difference between	Post-calibration
Month	Date	Methane, %	Methane, %	Methane, %	Measured and SCADA, %	Methane, %
Oct-19	15-Oct-19	70.0%	50.0%	49.9%	0.2%	70.0%
Nov-19	5-Nov-19	70.0%	50.0%	50.3%	-0.6%	70.0%
Dec-19	5-Dec-19	70.0%	50.0%	51.0%	-2.0%	70.0%
Jan-20	8-Jan-20	52.0%	50.0%	50.0%	0.0%	52.0%
Feb-20	14-Feb-20	73.0%	50.0%	49.8%	0.4%	73.0%
Mar-20	6-Mar-20	71.0%	50.0%	49.5%	1.0%	71.0%
Apr-20	7-Apr-20	73.0%	50.0%	50.4%	-0.8%	73.0%
May-20	12-May-20	73.0%	50.0%	49.8%	0.4%	73.0%
Jun-20	5-Jun-20	73.0%	50.0%	50.3%	-0.6%	73.0%

Exhibit 7

Attestation Statement

Attestation Statement

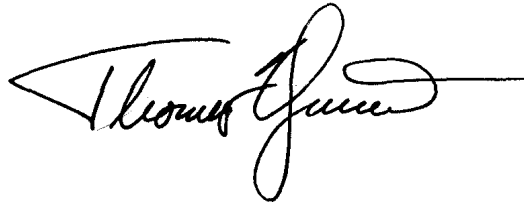
As an officer of Commonwealth New Bedford Energy LLC (CNBE) I hereby certify that the verified carbon units (VCUs) verified under the verified carbon standard (VCS) for the period October 1, 2019 through June 30, 2020 from the Project Activity will be registered on the Markit Environmental Registry (formerly TZ1) only, which is an accredited VCS register.

Thomas Yeransian

Name

Principal of Commonwealth Resource Management Corporation,
Member of Commonwealth New Bedford Energy LLC

Title

A handwritten signature in black ink, appearing to read 'Thomas Yeransian', with a long horizontal flourish extending to the right.

Signature

Date: July 13, 2020