

MONITORING REPORT #2017-2
FOR THE GREATER NEW BEDFORD LFG
UTILIZATION PROJECT
DARTMOUTH, MASSACHUSETTS

FOR VERIFICATION PERIOD
MAY1, 2017 THROUGH DECEMBER 31, 2017

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CommonWealth
Resource Management Corporation

Document Prepared By: CommonWealth Resource Management Corporation
For it's wholly-owned subsidiary
CommonWealth New Bedford Energy, LLC

Contact Information: Thomas Yeransian, Principal

199 Corey Street

Boston, MA 02132

Tel: (617) 327-8146 or (508) 339-3074

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Prepared By	Thomas Yeransian, Principal of Commonwealth Resource Management Corporation
Contact	7 Winslow Way Mansfield, MA 02049, 508-339-3074, tyeransian@crmcx.com , www.crmcx.com

Table of Contents

1.0	Project Details
2.0	Implementation Status
3.0	Data and Parameters
4.0	Data and Parameters Monitored
5.0	Quantification of GHG Emission Reductions and Removals
Appendix A: Exhibits 1 through 7	

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 destructed 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 56,613 metric tons of CO₂e for the verification period May 1, 2017 through December 31, 2017.

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
Address	199 Corey Street Boston, MA 02132
Telephone	(617) 327-8146 or (508) 339-3074
Email	tyeransian@crmcx.com

1.4 Other Entities Involved in the Project

None

1.5 Project Start Date

January 1, 2002

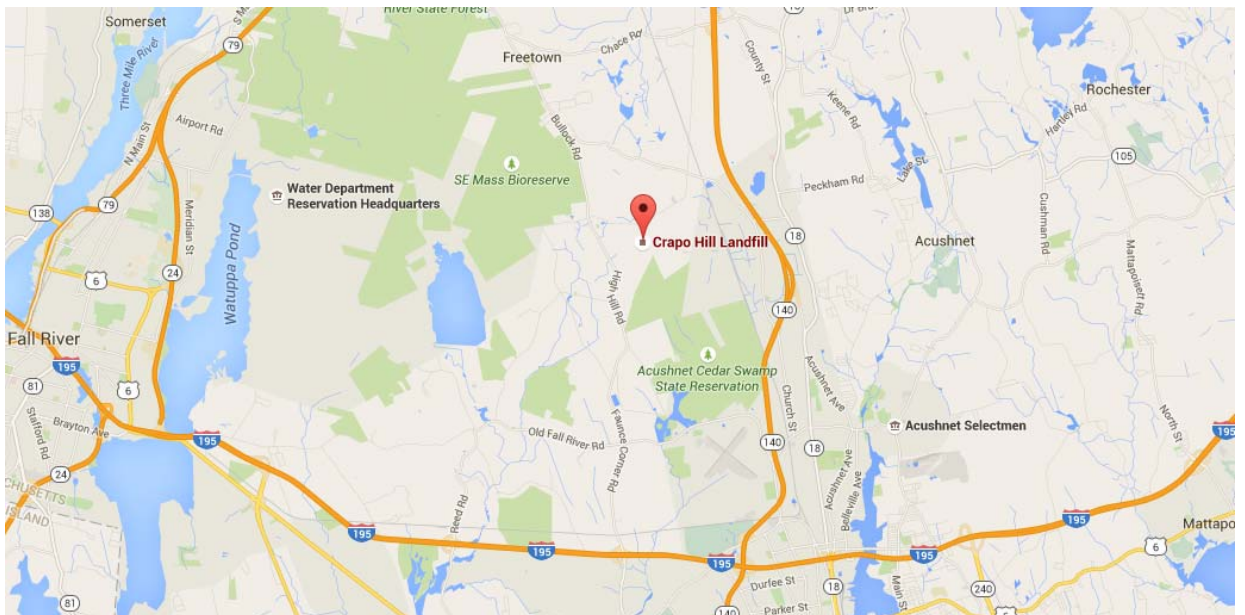
1.6 Project Crediting Period

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 Barnett 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 Other Programs

- Emission Trading Programs and Other Binding Limits: Not Applicable.
- 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.
- 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.
- 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.

1.10 Sustainable Development

The project is a renewable energy project that supports sustainable development in the United States.

2 IMPLEMENTATION STATUS

2.1 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.

2.2 Deviations

2.2.1 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 $F_{CH_4, BL, y}$ 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.

2.2.2 Project Description Deviations

Since the last verification report, the VCS Organization approved the updated global warming potential for methane of 25 that is provided in the IPCC's Fourth Assessment Report (Sections 3.15.3 and 4.8.3). The VCS Organization instructed Project Proponents to use the Project Description Deviations to switch to the Fourth Assessment Report GWPs for any verification completed on or after 21 June 2017, and the Fourth Assessment Report GWPs would apply to the full monitoring period included in that verification. So, in a monitoring period from 1 Jan 2017 – 31 Dec 2017, the Fourth Assessment Report GWPs could be used for the full monitoring period.

Project's re-validation report dated May 16, 2016 anticipated and approved of this VCS update. Therefore, this update is consistent with the re-validation report.

2.3 Grouped Project

Not Applicable.

2.4 Safeguards

2.4.1 No Net Harm

None.

2.4.2 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.

3 DATA AND PARAMETERS

3.1 Data and Parameters Available at Validation

4 DATA / PARAMETER	OX _{top_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	GWP _{CH4}
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
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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

3.2 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
Description of measurement methods and procedures to be applied:	Non-dispersive infrared
Frequency of monitoring/recording:	Continuous, hourly, daily

Data Unit / Parameter:	Methane content of gas (LFG and biogas)
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

Data Unit / Parameter:	Temperature of gas (LFG and biogas) to engines
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	Pressure transducer

procedures to be applied:	
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.
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
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
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 July 2016 through March 2017
Monitoring equipment	Landtec GEM 2000 and GEM 5000
QA/QC procedures to be applied	Calibrations will be 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 CO ₂ /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 CO ₂ /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 CO ₂ /MWh
Monitoring equipment	None
QA/QC procedures to be applied	None
Purpose of data	Calculation of project emissions
Calculation method	570.90 lbs CO ₂ /MWh*0.454545455 kg/lbs*0.001 tonnes/kg = 0.260 tonnes CO ₂ /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: 6.3 MWh/year based on 2014 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:	FC _{Diesel,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 2014-2015 usage, the engine ran for 19 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:	NCV _{diesel}
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 <i>ExAnteEstimate</i> or <i>Annual Calculation Workbooks</i> 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.

3.3 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.

3.3.1 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 twice a month, 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.

3.3.2 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.

3.3.3 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.

3.3.4 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.

4 QUANTIFICATION OF GHG EMISSION REDUCTIONS AND REMOVALS

4.1 Baseline Emissions

See attached Exhibits 1 through 4.

4.2 Project Emissions

See attached Exhibits 1 through 4.

4.3 Leakage

See attached Exhibits 1 through 4.

4.4 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)
2017 (May 1 - Dec 31)	56,613	0	0	56,613
Total	56,613	0	0	56,613

APPENDIX A: SEE ATTACHED EXHIBITS 1 THROUGH 7.

1. Exhibit 1 summarizes the emission reductions credits in CO2 equivalent tons in accordance with Project Methodology from May 1, 2017 through December 31, 2017.
2. Exhibit 2 provides gas totalizer readings, and methane content readings for the period from May 1, 2017 through December 31, 2017, and calculations using the verification protocols under the VCS to obtain emission reductions from methane oxidation during energy generation.
3. Exhibit 3 provides LFG totalizer readings, and methane content readings for the periods from May 1, 2017 through December 31, 2017, and calculations using the verification protocols under the VCS to obtain emission reductions from methane oxidation during flaring.
4. Exhibit 4 provides 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).
5. Exhibit 5 is a compilation of the field data logs recording the total gas volumes and methane content readings for the identified reporting period.
6. Exhibit 6 documents calibration of the LFG and biogas flow rates and composition meters for the periods.
7. Exhibit 7 provides Attestation Statement

Exhibit 1

Emission reductions credits in CO2 equivalent tons in accordance with Project Methodology from May 1, 2017 through December 31, 2017.

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
Methane oxidation efficiency electricity generation	100.0%
Methane oxidation efficiency LFG flaring	50.0%
Methane, molecular weight	16
Pounds per metric ton	2,205
Gas constant (scf per lb-mole)	385
Global Warming Potential (GWP) methane	25

Summary results

	Unit	
Electricity generation		
Start date		1-May-17
End date		31-Dec-17
Methane delivered	scf	137,318,702
Emission Reductions	metric tons CO2e	64,702
Flaring		
Start date		1-May-17
End date		31-Dec-17
Methane delivered	scf	-
Emission Reductions	metric tons CO2e	-
Subtotal		
Methane delivered	scf	137,318,702
Emission Reductions	metric tons CO2e	64,702
Deductions		
Oxidation potential	metric tons CO2e	6,470
District Initial System	metric tons CO2e	1,618
Electricity use utility and diesel backup	metric tons CO2e	1
Total		
Emission Reductions eligible under VCS program	metric tons CO2e	56,613

Exhibit 2

Gas totalizer readings, and methane content readings for the period from May 1, 2017 through December 31, 2017, 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:									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, molecular weight (lb per lb-mole)				16										
Pounds to metric ton				2,205										
Gas constant, scf per lb-mole				385										
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	Emission reduction	Emission reduction cumulative
mm/dd/yy	mm/dd/yy	MMBtu HHV	MMBtu HHV	MMBtu HHV	scf	scf	metric tons	metric tons	%	metric tons	metric tons	tons CO2 equivalent per ton methane	CO2 equivalent metric tons	CO2 equivalent metric tons
	1-May-17													
1-May-17	31-May-17	18,628	-	18,628	18,407,161	18,407,161	347	347	100.0%	347	347	25	8,673	8,673
1-Jun-17	30-Jun-17	35,352	18,628	16,724	16,525,370	34,932,531	311	658	100.0%	311	658	25	7,786	16,460
1-Jul-17	31-Jul-17	52,387	35,352	17,035	16,833,227	51,765,757	317	976	100.0%	317	976	25	7,932	24,391
1-Aug-17	31-Aug-17	70,041	52,387	17,654	17,444,912	69,210,669	329	1,304	100.0%	329	1,304	25	8,220	32,611
1-Sep-17	30-Sep-17	86,056	70,041	16,015	15,824,646	85,035,315	298	1,603	100.0%	298	1,603	25	7,456	40,067
1-Oct-17	31-Oct-17	103,552	86,056	17,496	17,288,944	102,324,259	326	1,929	100.0%	326	1,929	25	8,146	48,214
1-Nov-17	30-Nov-17	121,309	103,552	17,757	17,546,021	119,870,280	331	2,259	100.0%	331	2,259	25	8,267	56,481
1-Dec-17	31-Dec-17	138,967	121,309	17,658	17,448,422	137,318,702	329	2,588	100.0%	329	2,588	25	8,221	64,702

Exhibit 3

LFG totalizer readings, and methane content readings for the periods from May 1, 2017 through December 31, 2017, 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
Pounds to metric ton	2,205
Gas constant, scf per lb-mole	385

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	-	-	-	-								

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
$ER_y = BE_y - PE_y$				
56,613	BE_y	see below	tCO ₂ e/period	
	PE_y	1.28	tCO ₂ e/period	See Electricity Tab + Emergency Generator Tab
$BE_y = BE_{CH_4,y}$				
56,615	$BE_{CH_4,y}$	see below	tCO ₂ e/period	
$BE_{CH_4,y} = ((1 - OX_{top_layer}) \times F_{CH_4,PJ,y} - F_{CH,BL,y}) \times GWP_{CH_4}$				
56,615	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	
$F_{CH_4,PJ,y} = F_{CH_4,flared,y} + F_{CH_4,EL,y}$				
2,588	$F_{CH_4,flared,y}$	0	t CH ₄ /period	See Exhibit 3 tab
	$F_{CH_4,EL,y}$	2588	t CH ₄ /period	See Exhibit 2 tab
$F_{CH_4,BL,y} = F_{CH_4,BL,sys,y}$				
$F_{CH_4,BL,sys,y} = \%DistrictInitialSystem \times F_{CH_4,PJ,y}$				
65	%DistrictInitialSystem	5		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

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

0.58 tCO2

Variable	Value	Units	Data Source
ECPJ,Grid, y	2.1	MW hr	See Nstar bill
FEEL,Grid,y	0.26	tonnes CO2/MWh	USEPA Conversions tab/eGrid data
TDLGrid,y	0.07	None	EIA Annual Energy Report 2011

EVERSOURCE

Account Number: **2746 192 0012**

Customer name key: COMM

COMMONWLTH NB ENERGY LLC
300 SAMUEL-BARNET BLV CGN
NEW BEDFRD MA 02745

Billing Cycle: 12

Service from 11/16/17 - 12/15/17 29 Days

Next read date on or about: Jan 18, 2018

Meter Number	Current Read	Previous Read	Current Usage	Reading Type
5081568	7	7	0	Actual

Current Demand = 21.0 KW

0 x Meter Constant of 2100 = 0 Billed Usage for 29 Days

Monthly kWh Use

Dec	Jan	Feb	Mar	Apr	May	Jun
0	0	0	0	0	0	0
Jul	Aug	Sep	Oct	Nov	Dec	
0	0	0	0	2100	0	

Contact Information

Emergency: 800-592-2000

www.eversource.com

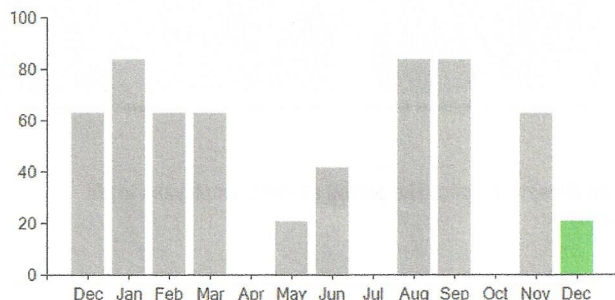
BusinessCenterMA@eversource.com

Pay by Phone: 800-340-9822

Customer Service: 800-340-9822

Demand Profile

Max. kW Demand



Total Amount Due
by 01/14/18

\$56.08

Electric Account Summary

Amount Due On 12/12/17	\$625.64
Last Payment Received On 12/04/17	-\$625.64
Balance Forward	\$0.00
Current Charges/Credits	
Electric Supply Services	\$0.00
Delivery Services	\$6.08
Total Current Charges	\$6.08
Total Amount Due	\$56.08

Total Charges for Electricity

Supplier (CONSTELLATION NEWENERGY, INC.)

Generation Service Charge	0 kWh X .09490	\$0.00
Subtotal Supplier Services		\$0.00

Delivery (Rate 33-GENERAL - ANNUAL)

Customer Charge		\$5.53
Distribution Demand Charge		
1st 10	No Charge	\$0.00
Over 10	11.0 KW X 4.86	\$53.46
Subtotal Delivery Services		\$56.08
Total Cost of Electricity		\$56.08

Total Current Charges \$56.08

EM_171214.TXT-109140-000002522

Supporting Information for Exhibit 4

Fossil Fuel Project Emissions

Emergency Generator - Diesel Use

Gallons of Diesel Consumed (1 year Actual)

$$68 \quad FC_{\text{Diesel}} = \text{Number of hours run} * \text{Gallons used/hour}$$

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

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

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

$$PE_{FC, 2010} \quad \boxed{0.70} \text{ tonnes CO}_2$$

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)

In July 1, 2016 - April 30, 2017, the generator ran 0 hours (see log sheet)

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

$$\begin{aligned} & 8.1 \text{ hours} * 8.4 \text{ gallons/hour} \\ & 68.04 \text{ gallons} \end{aligned}$$

[illegible]

Supporting Information for Exhibit 4

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

Month	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
6-Jun-13	77	1,348	6%
6-Aug-13	82	1,225	7%
23-Aug-13	65	1,015	6%
6-Sep-13	60	1,003	6%
26-Sep-13	57	886	6%
11-Oct-13	65	1,056	6%
25-Oct-13	100	1,197	8%
15-Nov-13	50	1,095	5%
25-Nov-13	63	1,084	6%
11-Dec-13	50	1,094	5%
10-Jan-14	49	1,309	4%
29-Jan-14	58	1,371	4%
21-Mar-14	70	1,417	5%
25-Apr-14	93	1,327	7%
1-May-14	76	1,119	7%
15-May-14	51	1,039	5%
1-Jun-14	65	1,071	6%
15-Jun-14	45	1,016	4%
1-Jul-14	55	1,023	5%
1-Aug-14	56	1,091	5%
1-Sep-14	91	1,188	8%
15-Sep-14	48	1,055	5%
1-Oct-14	97	1,081	9%
1-Dec-14	65	1,086	6%
15-Dec-14	64	1,075	6%
1-Mar-15	50	1,019	5%
1-Apr-15	48	1,329	4%
15-Apr-15	90	1,183	8%
1-May-15	57	1,227	5%
14-May-15	35	1,090	3%
5-Jun-15	53	1,106	5%
9-Jun-15	38	1,101	3%
18-Jun-15	55	1,089	5%
29-Jul-15	101	1,194	8%
26-Aug-15	104	1,588	7%
4-Sep-15	41	1,306	3%
16-Sep-15	62	1,604	4%
13-Oct-15	63	1,305	5%
28-Oct-15	69	1,297	5%
15-Nov-15	100	1,534	7%
14-Jan-16	69	1,080	6%
19-Feb-16	30	1,150	3%
8-Mar-16	66	1,150	6%
13-Apr-16	64	1,000	6%
16-May-16	66	1,100	6%
Jul-16	57	1,100	5%
Aug-16	62	1,100	6%
Sep-16	65	1,100	6%
Oct-16	62	1,000	6%
Nov-16	62	1,000	6%
Dec-16	50	1,100	5%
Jan-17	50	1,100	5%
Feb-17	42	920	5%
Mar-17	42	920	5%
Apr-17	17	916	2%
May-17	25	850	3%
Jun-17	30	840	4%
Jul-17	30	820	4%
Aug-17	45	872	5%
Sep-17	51	778	7%
Oct-17	40	790	5%
Nov-17	32	830	4%
Dec-17	25	800	3%
Average			5%

Fossil Fuel Consumption

NCV Conversion						NCV Comparison to IPCC Values									
5.809	42	0.13831				0.13831	1000000	1.06E-06	0.001	0.26417	1.176471	1000000	45.35173		
mmBtu/bar		gallons/bar	mmBtu/gallon			MMBtu/gal		Btu/MMBtu	GJ/Btu	TJ/GJ	gallons/lite		liter/kg	kg/Gg	TJ/Gg
Emissions Factor						IPCC Values state 41.4-43.3 TJ/Gg This value is higher and therefore conservative.									
20.17	1E-15	1000000	3.666667	1E+12	0.000001	0.073957									
Tg C/Qbtu	Qbtu/btu	btu/Mmbtu	g C02/g C	g/Tg	Tonnes/g	Tonnes CO2/Mmbtu									
						Data obtained from the Draft 2011 US Greenhouse Gas Report: US EPA Inventory of US Greenhouse Gas Emissions and Sinks to provide a national factor. Results were compared to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories									

Electricity Consumption

eGRID Emissions Factor				
637.9	0.454545	0.001	0.289955	eGRID Factor taken from NEWE region of eGRID2012 data
lbs CO2/M	kg/lbs	tonnes/kg	tonnes CO2/MWh	

Exhibit 5

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

MAY 2017																		
		Monday 5/1/2017	Tuesday 5/2/2017	Wednesday 5/3/2017	Thursday 5/4/2017	Friday 5/5/2017	Saturday 5/6/2017	Sunday 5/7/2017	Monday 5/8/2017	Tuesday 5/9/2017	Wednesday 5/10/2017	Thursday 5/11/2017	Friday 5/12/2017	Saturday 5/13/2017	Sunday 5/14/2017	Monday 5/15/2017	Tuesday 5/16/2017	
LFG and Biogas Flow to the Engines (KSCF)		1,284	1,294	1,267	1,250	1,253	1,202	1,017	948	949	1,097	1,257	1,286	1,232	1,259	1,201	1,232	
LFG and Biogas Flow to the Engines (MMBTU HHV)		672	691	666	648	665	651	571	543	540	603	662	670	637	674	642	640	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,284	1,294	1,267	1,250	1,253	1,202	1,017	948	949	1,097	1,257	1,286	1,232	1,259	1,201	1,232	
LFG and Biogas Total Flow (MMBTU HHV)		672	691	666	648	665	651	571	543	540	603	662	670	637	674	642	640	
Average Methane Content (%)		51.7	52.8	51.9	51.2	52.4	53.5	55.5	56.6	56.2	54.3	52.1	51.4	51.1	52.9	52.8	51.3	
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	23	24	24	24	24	23	
Engine 2 Hours		24	24	24	24	24	22	-	-	-	-	-	-	-	-	-	-	
Engine 3 Hours		-	-	14	12	-	-	7	-	-	11	24	24	24	24	24	23	
Engine 4 Hours		24	24	10	12	24	24	24	24	24	24	24	24	24	24	24	24	
Generator 1 Power Output (kWhr)		16,746	17,160	18,142	18,706	18,268	17,926	19,332	19,742	19,742	19,502	16,434	17,896	17,058	18,670	17,960	16,622	
Generator 2 Power Output (kWhr)		17,270	18,062	18,896	19,278	19,704	18,138	-	-	-	-	-	-	-	-	-	-	
Generator 3 Power Output (kWhr)		-	-	6,950	6,798	-	-	3,740	-	-	6,130	16,744	16,304	15,562	16,174	15,792	16,162	
Generator 4 Power Output (kWhr)		17,290	17,954	7,340	6,434	13,184	13,182	16,360	19,702	19,702	19,454	19,100	18,820	17,348	17,752	17,018	16,652	
Gross Power Output (kWhr)		51,348	53,206	51,395	51,253	51,251	49,328	39,323	39,318	39,321	44,992	52,243	53,026	49,979	52,623	50,806	49,457	
Net Power Output (kWhr)		49,594	51,408	49,694	49,612	49,702	47,824	38,116	38,150	38,048	43,578	50,690	51,366	48,466	51,082	49,256	47,828	
Power Sold as metered by NStar, (kWhr)		49,442	51,243	49,503	49,450	49,522	47,708	38,109	38,174	38,079	43,508	50,544	51,208	48,320	50,919	49,103	47,665	
Offgrid RECs (kWhr)		1,755	1,797	1,700	1,642	1,549	1,502	1,206	1,169	1,273	1,415	1,553	1,661	1,512	1,542	1,550	1,629	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		698	715	756	779	761	747	806	823	823	813	715	746	711	778	748	723	
Generator 2		720	753	787	803	821	824	-	-	-	-	-	-	-	-	-	-	
Generator 3		-	-	496	567	-	-	534	-	-	557	698	679	648	674	658	703	
Generator 4		720	748	734	536	549	549	682	821	821	811	796	784	723	740	709	694	
Power output (kW average over 24-hrs)																		
Facility Gross		2,140	2,217	2,141	2,136	2,135	2,055	1,638	1,638	1,638	1,875	2,177	2,209	2,082	2,193	2,117	2,061	
Facility Net		2,066	2,142	2,071	2,067	2,071	1,993	1,588	1,590	1,585	1,816	2,112	2,140	2,019	2,128	2,052	1,993	
In-plant load		73	75	71	68	65	63	50	49	53	59	65	69	63	64	65	68	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	73%	57%	50%	50%	61%	74%	75%	75%	75%	75%	73%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	96%	
Engine 2		100%	100%	100%	100%	100%	92%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 3		0%	0%	58%	50%	0%	0%	29%	0%	0%	46%	100%	100%	100%	100%	100%	96%	
Engine 4		100%	100%	42%	50%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Daily capacity factor																		
Facility		65%	67%	65%	65%	65%	62%	50%	50%	50%	57%	66%	67%	63%	66%	64%	62%	
Engine 1		85%	87%	92%	94%	92%	91%	98%	100%	100%	98%	87%	90%	86%	94%	91%	88%	
Engine 2		87%	91%	95%	97%	100%	100%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 3		0%	0%	60%	69%	0%	0%	65%	0%	0%	68%	85%	82%	79%	82%	80%	85%	
Engine 4		87%	91%	89%	65%	67%	67%	83%	100%	100%	98%	96%	95%	88%	90%	86%	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		24	48	72	96	120	144	168	192	216	240	263	287	311	335	359	382	
Engine 2		24	48	72	96	120	142	142	142	142	142	142	142	142	142	142	142	
Engine 3		0	0	14	26	26	33	33	33	33	44	68	92	116	140	164	187	
Engine 4		24	48	58	70	94	118	142	166	190	214	238	262	286	310	334	358	
Engine operating run hours total from 0 hours																		
Engine 1		91,116	91,140	91,164	91,188	91,212	91,236	91,260	91,284	91,308	91,332	91,356	91,379	91,403	91,427	91,451	91,475	91,498
Engine 2		86,497	86,521	86,545	86,569	86,593	86,617	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639
Engine 3		89,115	89,115	89,115	89,129	89,141	89,141	89,148	89,148	89,148	89,159	89,183	89,207	89,231	89,255	89,279	89,302	
Engine 4		87,021	87,045	87,069	87,079	87,091	87,115	87,139	87,163	87,187	87,211	87,235	87,259	87,283	87,307	87,331	87,379	
Cumulative availability, %		May 1, 2017 @ 00:00 hours																
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	
Engine 2		100%	100%	100%	100%	100%	99%	85%	74%	66%	59%	54%	49%	46%	42%	39%	37%	
Engine 3		0%	0%	19%	27%	22%	18%	20%	17%	15%	18%	26%	32%	37%	42%	46%	49%	
Engine 4		100%	100%	81%	73%	78%	82%	85%	86%	88%	89%	90%	91%	92%	92%	93%	93%	
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		698	1,413	2,169	2,948	3,709	4,456	5,262	6,084	6,907	7,719	8,434	9,180	9,890	10,668	11,417	12,139	
Engine 2		720	1,472	2,260	3,063	3,884	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	
Engine 3		-	-	496	1,063	1,063	1,063	1,597	1,597	1,597	2,154	2,852	3,531	4,180	4,854	5,512	6,215	
Engine 4		720	1,469	2,203	2,739	3,288	3,837	4,519	5,340	6,161	6,971	7,767	8,551	9,274	10,014	10,723	11,417	
Cumulative capacity factor, %																		
Engine 1		85%	86%	88%	89%	90%	90%	91%	92%	93%	94%	93%	93%	92%	92%	92%	92%	
Engine 2		87%	89%	91%	93%	94%	95%	82%	71%	63%	57%	52%	48%	44%	41%	38%	36%	
Engine 3		0%	0%	20%	32%	26%	21%	28%	24%	22%	26%	31%	36%	39%	42%	45%	47%	
Engine 4		87%	89%	89%	83%	80%	78%	78%	81%	83%	85%	86%	86%	86%	87%	87%	86%	

		Monday 5/1/2017	Tuesday 5/2/2017	Wednesday 5/3/2017	Thursday 5/4/2017	Friday 5/5/2017	Saturday 5/6/2017	Sunday 5/7/2017	Monday 5/8/2017	Tuesday 5/9/2017	Wednesday 5/10/2017	Thursday 5/11/2017	Friday 5/12/2017	Saturday 5/13/2017	Sunday 5/14/2017	Monday 5/15/2017	Tuesday 5/16/2017
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	430	485	533	581	640	711	783	855	927	999	1,069
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	74.7%	72.2%	69.4%	67.2%	66.7%	67.3%	68.0%	68.5%	69.0%	69.4%	69.6%
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		51,348	104,554	155,949	207,202	258,453	307,781	347,104	386,422	425,743	470,735	522,978	576,004	625,983	678,606	729,412	778,869
Cumulative Capacity Factor		64.8%	66.0%	65.6%	65.4%	65.3%	64.8%	62.6%	61.0%	59.7%	59.4%	60.0%	60.6%	60.8%	61.2%	61.4%	61.5%
Cumulative fuel input, MMBtu HHV		672	1,363	2,029	2,677	3,342	3,993	4,564	5,107	5,647	6,250	6,912	7,582	8,218	8,892	9,534	10,174
Cumulative gross output, kWhr		51,348	104,554	155,949	207,202	258,453	307,781	347,104	386,422	425,743	470,735	522,978	576,004	625,983	678,606	729,412	778,869
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,785	11,693	11,663	11,385	11,672	11,884	13,067	12,439	12,353	12,061	11,414	11,366	11,466	11,526	11,373	11,649
Daily heat rate, Btu/kWe gross HHV		13,091	12,989	12,957	12,647	12,966	13,201	14,516	13,818	13,723	13,398	12,679	12,626	12,737	12,804	12,634	12,941
Cumulative heat rate, Btu/kWe gross LHV		11,785	11,738	11,713	11,632	11,640	11,679	11,836	11,898	11,940	11,951	11,898	11,849	11,818	11,795	11,766	11,759
Cumulative heat rate, Btu/kWe gross HHV		13,091	13,039	13,012	12,922	12,930	12,974	13,149	13,217	13,263	13,276	13,217	13,162	13,128	13,103	13,071	13,062
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		11,424	11,520	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
Actual cumulative engine run hours		8,975	9,047	9,119	9,191	9,263	9,333	9,388	9,436	9,484	9,543	9,614	9,686	9,758	9,830	9,902	9,972
Cumulative Availability, %		78.6%	78.5%	78.5%	78.5%	78.4%	78.4%	78.2%	78.0%	77.8%	77.7%	77.6%	77.6%	77.6%	77.6%	77.6%	77.5%
Max cumulative gross output, kWhr		9,421,500	9,500,700	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
Actual cumulative gross output, kWhr		6,737,222	6,790,428	6,841,823	6,893,076	6,944,327	6,993,655	7,032,978	7,072,296	7,111,617	7,156,609	7,208,852	7,261,878	7,311,857	7,364,480	7,415,286	7,464,743
Cumulative Capacity Factor		71.5%	71.5%	71.4%	71.4%	71.3%	71.2%	71.1%	70.9%	70.7%	70.6%	70.6%	70.6%	70.5%	70.5%	70.4%	70.4%
Cumulative fuel input, MMBtu HHV		84,587	85,278	85,944	86,592	87,256	87,907	88,478	89,022	89,561	90,164	90,826	91,496	92,132	92,806	93,448	94,088
Cumulative gross output, kWhr		6,737,222	6,790,428	6,841,823	6,893,076	6,944,327	6,993,655	7,032,978	7,072,296	7,111,617	7,156,609	7,208,852	7,261,878	7,311,857	7,364,480	7,415,286	7,464,743
Cumulative heat rate, Btu/kWe gross LHV		11,302	11,305	11,308	11,308	11,311	11,315	11,325	11,331	11,337	11,341	11,342	11,342	11,343	11,344	11,344	11,346
Cumulative heat rate, Btu/kWe gross HHV		12,555	12,559	12,561	12,562	12,565	12,570	12,580	12,587	12,594	12,599	12,599	12,599	12,600	12,602	12,602	12,604
Service																	
Engine 1																	
Engine 2							E-2 backfire trip				E-2 repaired. Generator stator failed.	E-2 restarted.					Nstar trip
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Monday 5/1/2017	Tuesday 5/2/2017	Wednesday 5/3/2017	Thursday 5/4/2017	Friday 5/5/2017	Saturday 5/6/2017	Sunday 5/7/2017	Monday 5/8/2017	Tuesday 5/9/2017	Wednesday 5/10/2017	Thursday 5/11/2017	Friday 5/12/2017	Saturday 5/13/2017	Sunday 5/14/2017	Monday 5/15/2017	Tuesday 5/16/2017
Date																	
Hour																	
1		2,044	2,107	2,117	2,125	2,005	2,122	1,329	1,590	1,592	1,593	2,175	2,191	2,052	2,051	2,051	1,979
2		2,003	2,090	2,117	2,077	2,006	2,122	1,331	1,589	1,590	1,593	2,098	2,050	2,049	1,935	2,051	1,979
3		2,002	2,027	2,118	2,001	2,006	2,102	1,330	1,592	1,590	1,592	2,099	2,051	2,052	2,028	2,051	1,979
4		2,002	2,027	2,118	2,002	2,005	2,081	1,331	1,595	1,590	1,592	2,098	2,051	2,051	2,051	2,051	1,977
5		2,003	2,027	2,120	2,002	2,006	2,122	1,331	1,598	1,592	1,592	2,098	2,048	2,051	2,051	2,051	1,976
6		2,004	2,028	2,121	1,996	2,006	2,083	1,332	1,599	1,592	1,593	2,099	2,050	2,052	2,052	2,052	1,978
7		2,003	2,029	2,053	1,999	2,007	2,099	1,332	1,598	1,594	1,593	2,099	2,016	2,051	2,052	2,051	1,979
8		2,008	2,028	1,998	1,911	2,004	2,100	1,330	1,592	1,592	1,592	2,098	1,927	2,051	2,052	1,951	1,968
9		2,000	2,024	1,989	1,873	1,999	2,053	1,538	1,586	1,583	1,584	1,901	1,956	2,050	2,052	1,925	1,967
10		2,010	2,028	1,807	1,960	1,998	2,048	2,228	1,583	1,585	1,574	1,429	2,204	2,029	2,045	1,996	1,967
11		2,049	2,122	1,821	2,067	1,996	2,004	2,268	1,585	1,584	1,573	1,559	2,203	1,929	2,048	2,048	1,966
12		2,054	2,163	2,014	2,071	1,999	2,005	2,166	1,584	1,581	1,575	2,176	2,137	1,930	2,221	2,047	2,033
13		2,089	2,212	2,015	2,014	2,116	2,006	2,148	1,588	1,580	1,574	2,211	2,130	1,929	2,222	2,045	2,084
14		2,090	2,232	2,016	2,107	2,118	2,006	1,747	1,588	1,582	1,573	2,211	2,204	1,960	2,221	2,045	2,082
15		2,098	2,231	2,053	2,108	2,122	2,005	1,440	1,588	1,581	1,596	2,213	2,205	2,048	2,222	2,045	528
16		2,101	2,230	2,065	2,114	2,124	2,002	1,520	1,588	1,585	1,987	2,214	2,212	2,049	2,222	2,046	1,924
17		2,108	2,235	2,098	2,121	2,127	2,002	1,521	1,589	1,584	2,208	2,219	2,218	2,049	2,220	2,052	2,206
18		2,110	2,236	2,122	2,123	2,129	2,004	1,519	1,590	1,582	2,214	2,221	2,220	2,048	2,221	2,052	2,206
19		2,110	2,235	2,123	2,124	2,127	2,005	1,533	1,589	1,583	2,215	2,221	2,219	1,931	2,220	2,052	2,208
20		2,112	2,236	2,123	2,126	2,126	2,007	1,541	1,594	1,581	2,219	2,221	2,220	1,931	2,220	2,086	2,213
21		2,113	2,237	2,124	2,126	2,125	2,006	1,541	1,594	1,587	2,219	2,222	2,221	1,931	2,219	2,099	2,171
22		2,111	2,227	2,123	2,126	2,125	2,002	1,573	1,594	1,587	2,218	2,221	2,221	1,997	2,100	2,100	2,098
23		2,109	2,115	2,122	2,126	2,124	1,395	1,589	1,590	1,590	2,219	2,220	2,202	2,050	2,122	2,101	2,115
24		2,109	2,117	2,126	2,114	2,122	1,327	1,591	1,591	1,592	2,220	2,221	2,051	2,050	2,072	2,055	2,082
TOTAL		49,442	51,243	49,503	49,450	49,522	47,708	38,109	38,174	38,079	43,508	50,544	51,208	48,320	50,919	49,103	47,665
Cumulative Output Sold, kWhr		49,442	100,685	150,188	199,638	249,160	296,868	334,977	373,151	411,230	454,738	505,282	556,490	604,810	655,729	704,832	752,497
Transformer and line efficiency		99.7%	99.7%	99.6%	99.7%	99.6%	99.8%	100.0%	100.1%	100.1%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%
Hourly average		2,060	2,135	2,063	2,060	2,063	1,988	1,588	1,591	1,587	1,813	2,106	2,134	2,013	2,122	2,046	1,986

MAY 2017																					
	Wednesday 5/17/2017	Thursday 5/18/2017	Friday 5/19/2017	Saturday 5/20/2017	Sunday 5/21/2017	Monday 5/22/2017	Tuesday 5/23/2017	Wednesday 5/24/2017	Thursday 5/25/2017	Friday 5/26/2017	Saturday 5/27/2017	Sunday 5/28/2017	Monday 5/29/2017	Tuesday 5/30/2017	Wednesday 5/31/2017	TOTAL	Biogas	LFG			
LFG and Biogas Flow to the Engine	1,272	1,294	1,242	1,271	1,218	1,233	1,242	1,292	1,297	1,265	1,280	1,268	1,266	1,269	1,236	37,974	1,937	36,038			
LFG and Biogas Flow to the Engine	672	695	662	657	625	650	673	699	695	675	645	633	622	629	635	20,039	1,411	18,628			
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.0%	93%			
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)	1,272	1,294	1,242	1,271	1,218	1,233	1,242	1,292	1,297	1,265	1,280	1,268	1,266	1,269	1,236	37,974					
LFG and Biogas Total Flow (MMBT	672	695	662	657	625	650	673	699	695	675	645	633	622	629	635	20,039					
Average Methane Content (%)	52.2	53.1	52.7	51.0	50.6	52.1	53.5	53.5	52.9	52.7	49.8	49.3	48.6	49.0	50.8	52.1					
Engine 1 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	742					
Engine 2 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	142					
Engine 3 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	22	545					
Engine 4 Hours	24	24	23	24	22	24	24	24	24	24	24	24	24	24	24	715					
Generator 1 Power Output (kWhr)	17,974	17,872	17,038	16,214	15,984	17,156	18,364	17,500	18,342	18,914	16,900	17,276	16,796	16,242	16,980	549,458					
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	111,348					
Generator 3 Power Output (kWhr)	16,202	16,098	15,902	15,562	16,196	16,746	16,744	17,196	16,212	16,572	15,560	15,558	15,560	15,844	15,536	361,844					
Generator 4 Power Output (kWhr)	17,714	17,354	16,274	16,156	13,862	14,378	16,578	18,870	18,804	19,166	17,070	16,740	16,738	16,178	16,468	509,642					
Gross Power Output (kWhr)	51,931	51,356	49,224	47,957	46,051	48,298	51,724	53,581	53,393	54,678	49,554	49,596	49,118	48,266	48,998	1,532,594					
Net Power Output (kWhr)	50,178	49,500	47,384	46,362	44,442	46,716	50,034	51,762	51,630	52,928	47,922	47,916	47,370	46,542	47,408	1,482,508					
Power Sold as metered by NStar, (l	49,976	49,292	47,217	46,218	44,326	46,570	49,837	51,568	51,475	52,768	47,766	47,761	47,233	46,404	47,255	1,478,163	CRMCB inplant				
Offgrid RECs (kWhr)	1,752	1,857	1,840	1,595	1,609	1,582	1,690	1,818	1,763	1,750	1,632	1,680	1,748	1,724	1,590	50,085	6,596	13%			
Calculated Performance Results																					
Daily																		of total in-plant power			
Power output (kW average whe																					
Generator 1	749	745	710	676	666	715	765	729	764	788	704	720	700	677	708						
Generator 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-						
Generator 3	675	671	663	648	675	698	698	717	676	691	648	648	648	660	706						
Generator 4	738	723	708	673	630	599	691	786	784	799	711	698	697	674	686						
Power output (kW average ove																					
Facility Gross	2,164	2,140	2,051	1,998	1,919	2,012	2,155	2,233	2,225	2,278	2,065	2,067	2,047	2,011	2,042						
Facility Net	2,091	2,063	1,974	1,932	1,852	1,947	2,085	2,157	2,151	2,205	1,997	1,997	1,974	1,939	1,975						
In-plant load	73	77	77	66	67	66	70	76	73	73	68	70	73	72	66						
Daily availability factor																					
Facility	75%	75%	74%	75%	73%	75%	75%	75%	75%	75%	75%	75%	75%	75%	73%						
Engine 1	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%	0%	0%						
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%						
Engine 4	100%	100%	96%	100%	92%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Daily capacity factor																					
Facility	66%	65%	62%	61%	58%	61%	65%	68%	67%	69%	63%	63%	62%	61%	62%						
Engine 1	91%	90%	86%	82%	81%	87%	93%	88%	93%	96%	85%	87%	85%	82%	86%						
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Engine 3	82%	81%	80%	79%	82%	85%	85%	87%	82%	84%	79%	79%	79%	80%	86%						
Engine 4	89%	88%	86%	82%	76%	73%	84%	95%	95%	97%	86%	85%	85%	82%	83%						
Cumulative by engine																					
Engine operating run hours in tl																					
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720						
Engine 1	406	430	454	478	502	526	550	574	598	622	646	670	694	718	718						
Engine 2	142	142	142	142	142	142	142	142	142	142	142	142	142	142	142						
Engine 3	211	235	259	283	307	331	355	379	403	427	451	475	499	523	521						
Engine 4	382	406	429	453	475	499	523	547	571	595	619	643	667	691	691						
Engine operating run hours tota																					
Engine 1	91,522	91,546	91,570	91,594	91,618	91,642	91,666	91,690	91,714	91,738	91,762	91,786	91,810	91,834	91,834						
Engine 2	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639	86,639						
Engine 3	89,326	89,350	89,374	89,398	89,422	89,446	89,470	89,494	89,518	89,542	89,566	89,590	89,614	89,638	89,638						
Engine 4	87,403	87,427	87,450	87,474	87,496	87,520	87,544	87,568	87,592	87,616	87,640	87,664	87,688	87,712	87,712						
Cumulative availability, %																					
Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Engine 2	35%	33%	31%	30%	28%	27%	26%	25%	24%	23%	22%	21%	20%	20%	20%						
Engine 3	52%	54%	57%	59%	61%	63%	64%	66%	67%	68%	70%	71%	72%	73%	72%						
Engine 4	94%	94%	94%	94%	94%	95%	95%	95%	95%	95%	96%	96%	96%	96%	96%						
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	12,888	13,633	14,343	15,018	15,684	16,399	17,164	17,894	18,658	19,446	20,150	20,870	21,570	22,246	22,277						
Engine 2	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708	4,708						
Engine 3	6,890	7,560	8,223	8,871	9,546	10,244	10,942	11,658	12,334	13,024	13,672	14,321	14,969	15,629	15,675						
Engine 4	12,155	12,878	13,585	14,259	14,889	15,488	16,179	16,965	17,748	18,547	19,258	19,956	20,653	21,327	21,339						
Cumulative capacity factor, %																					
Engine 1	92%	92%	92%	91%	91%	90%	90%	90%	90%	91%	90%	90%	90%	90%	90%						
Engine 2	34%	32%	30%	29%	27%	26%	25%	24%	23%	22%	21%	20%	20%	20%	19%						
Engine 3	49%	51%	52%	54%	55%	56%	58%	59%	60%	61%	61%	62%	63%	63%	63%						
Engine 4	87%	87%	87%	86%	86%	85%	85%	86%	86%	86%	86%	86%	86%	86%	86%						

	Wednesday 5/17/2017	Thursday 5/18/2017	Friday 5/19/2017	Saturday 5/20/2017	Sunday 5/21/2017	Monday 5/22/2017	Tuesday 5/23/2017	Wednesday 5/24/2017	Thursday 5/25/2017	Friday 5/26/2017	Saturday 5/27/2017	Sunday 5/28/2017	Monday 5/29/2017	Tuesday 5/30/2017	Wednesday 5/31/2017	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 h	1,141	1,213	1,284	1,356	1,426	1,498	1,570	1,642	1,714	1,786	1,858	1,930	2,002	2,074	2,072			
Cumulative Availability, %	69.9%	70.2%	70.4%	70.6%	70.7%	70.9%	71.1%	71.3%	71.4%	71.6%	71.7%	71.8%	71.9%	72.0%	71.9%			
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	830,800	882,156	931,380	979,337	1,025,388	1,073,686	1,125,410	1,178,991	1,232,384	1,287,062	1,336,616	1,386,212	1,435,330	1,483,596	1,484,328			
Cumulative Capacity Factor	61.7%	61.9%	61.9%	61.8%	61.7%	61.6%	61.8%	62.0%	62.2%	62.5%	62.5%	62.5%	62.5%	62.4%	62.5%			
Cumulative fuel input, MMBtu	10,846	11,541	12,203	12,859	13,484	14,134	14,807	15,506	16,201	16,875	17,520	18,153	18,776	19,405	19,410			
Cumulative gross output, kWh	830,800	882,156	931,380	979,337	1,025,388	1,073,686	1,125,410	1,178,991	1,232,384	1,287,062	1,336,616	1,386,212	1,435,330	1,483,596	1,484,328			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,647	12,179	12,110	12,323	12,208	12,122	11,706	11,744	11,716	11,106	11,719	11,489	11,407	11,729	11,661			
Daily heat rate, Btu/kWe net	12,938	13,529	13,453	13,689	13,561	13,466	13,004	13,046	13,015	12,338	13,018	12,763	12,672	13,030	12,954			
Cumulative heat rate, Btu/kWe gross	11,752	11,777	11,794	11,820	11,837	11,850	11,844	11,839	11,834	11,803	11,800	11,789	11,776	11,774	11,772			
Cumulative heat rate, Btu/kWe net	13,055	13,082	13,102	13,131	13,150	13,164	13,157	13,152	13,146	13,111	13,108	13,096	13,081	13,079	13,077			
Cumulative by Facility starting 5/1/2017																		
Max cumulative available engine	12,960	13,056	13,152	13,248	13,344	13,440	13,536	13,632	13,728	13,824	13,920	14,016	14,112	14,208	14,208			
Actual cumulative engine run h	10,044	10,116	10,187	10,259	10,329	10,401	10,473	10,545	10,617	10,689	10,761	10,833	10,905	10,977	10,975			
Cumulative Availability, %	77.5%	77.5%	77.5%	77.4%	77.4%	77.4%	77.4%	77.4%	77.3%	77.3%	77.3%	77.3%	77.3%	77.3%	77.2%			
Max cumulative gross output, kWh	10,688,700	10,767,900	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	11,718,300			
Actual cumulative gross output, kWh	7,516,674	7,568,030	7,617,254	7,665,211	7,711,262	7,759,560	7,811,284	7,864,865	7,918,258	7,972,936	8,022,490	8,072,086	8,121,204	8,169,470	8,170,202			
Cumulative Capacity Factor	70.3%	70.3%	70.2%	70.2%	70.1%	70.0%	70.0%	70.0%	69.9%	69.9%	69.9%	69.8%	69.8%	69.7%	69.7%			
Cumulative fuel input, MMBtu	94,760	95,455	96,117	96,774	97,398	98,048	98,721	99,420	100,115	100,790	101,435	102,068	102,690	103,319	103,325			
Cumulative gross output, kWh	7,516,674	7,568,030	7,617,254	7,665,211	7,711,262	7,759,560	7,811,284	7,864,865	7,918,258	7,972,936	8,022,490	8,072,086	8,121,204	8,169,470	8,170,202			
Cumulative heat rate, Btu/kWe gross	11,348	11,354	11,359	11,365	11,370	11,375	11,377	11,379	11,382	11,380	11,382	11,383	11,383	11,385	11,384			
Cumulative heat rate, Btu/kWe net	12,607	12,613	12,618	12,625	12,631	12,636	12,638	12,641	12,644	12,641	12,644	12,645	12,645	12,647	12,647			
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 5/17/2017	Thursday 5/18/2017	Friday 5/19/2017	Saturday 5/20/2017	Sunday 5/21/2017	Monday 5/22/2017	Tuesday 5/23/2017	Wednesday 5/24/2017	Thursday 5/25/2017	Friday 5/26/2017	Saturday 5/27/2017	Sunday 5/28/2017	Monday 5/29/2017	Tuesday 5/30/2017	Wednesday 5/31/2017	TOTAL		
Hour																		
1	2,049	2,033	2,088	1,944	1,923	1,854	2,025	2,112	2,114	2,219	2,163	1,969	1,970	1,964	1,949			
2	2,049	2,031	2,013	1,927	1,922	1,854	2,024	2,117	2,114	2,219	2,076	1,969	1,970	1,964	1,951			
3	2,050	2,032	1,971	1,929	1,922	1,855	2,026	2,115	2,114	2,219	2,068	1,970	1,968	1,964	1,951			
4	2,046	2,036	1,969	1,929	1,923	1,855	2,024	2,117	2,113	2,219	2,009	1,970	1,970	1,964	1,951			
5	2,003	2,038	1,980	1,926	1,922	1,854	2,022	2,118	2,047	2,217	1,972	1,969	1,968	1,964	1,951			
6	1,931	2,039	1,981	1,923	1,923	1,855	2,023	2,034	2,036	2,219	1,973	1,969	1,970	1,963	1,952			
7	1,930	2,031	1,981	1,926	1,922	1,854	2,022	1,996	2,055	2,219	1,973	1,971	1,970	1,964	1,953			
8	1,928	2,019	1,972	1,926	1,925	1,853	2,003	1,996	2,061	2,235	1,975	1,967	1,969	1,807	1,951			
9	1,917	1,928	1,953	1,926	1,921	1,850	2,098	1,991	1,832	2,292	1,973	1,973	1,970	1,720	1,946			
10	1,996	1,900	1,944	1,925	1,916	1,852	2,073	1,989	1,933	2,302	1,973	1,964	1,970	1,864	1,943			
11	2,048	1,956	1,940	1,925	1,691	1,849	2,081	2,123	2,156	2,262	1,974	1,966	1,970	1,945	1,945			
12	2,076	2,023	1,933	1,925	1,432	1,901	2,113	2,221	2,186	2,228	1,976	1,967	1,972	1,945	2,020			
13	2,082	2,028	1,930	1,924	1,534	2,020	2,111	2,246	2,253	2,230	1,974	1,971	1,970	1,944	2,020			
14	2,103	2,078	1,982	1,924	1,914	2,022	2,110	2,241	2,263	2,231	1,973	1,971	1,970	1,942	2,019			
15	2,159	2,091	2,048	1,924	1,850	2,022	2,106	2,252	2,261	2,236	1,972	1,972	1,968	1,944	2,030			
16	2,165	2,107	2,024	1,924	1,850	2,023	2,110	2,298	2,253	2,178	1,972	2,040	1,967	1,944	2,114			
17	2,172	2,099	1,450	1,924	1,851	2,028	2,110	2,304	2,220	2,165	1,973	2,069	1,968	1,946	2,120			
18	2,177	2,102	1,753	1,924	1,856	2,029	2,114	2,200	2,164	2,164	1,973	2,070	1,966	1,948	2,122			
19	2,181	2,106	2,152	1,927	1,857	2,021	2,118	2,265	2,221	2,166	1,973	2,071	1,967	1,948	2,123			
20	2,187	2,119	1,915	1,926	1,857	2,023	2,118	2,260	2,214	2,157	1,973	2,002	1,966	1,953	1,836			
21	2,194	2,118	2,108	1,927	1,857	2,025	2,119	2,173	2,214	2,072	1,974	2,044	1,964	1,954	1,410			
22	2,197	2,121	2,041	1,924	1,853	2,024	2,094	2,118	2,217	2,065	1,971	1,994	1,963	1,954	1,858			
23	2,198	2,127	2,043	1,919	1,850	2,023	2,075	2,171	2,216	2,087	1,965	1,966	1,964	1,952	2,070			
24	2,138	2,130	2,046	1,920	1,855	2,024	2,118	2,111	2,218	2,167	1,968	1,967	1,963	1,947	2,070			
TOTAL	49,976	49,292	47,217	46,218	44,326	46,570	49,837	51,568	51,475	52,768	47,766	47,761	47,233	46,404	47,255			
Cumulative Output Sold, kWh	802,473	851,765	898,982	945,200	989,526	1,036,096	1,085,933	1,137,501	1,188,976	1,241,744	1,289,510	1,337,271	1,384,504	1,430,908	1,478,163			
Transformer and line efficiency	99.6%	99.6%	99.6%	99.7%	99.7%	99.7%	99.6%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%			
Hourly average	2,082	2,054	1,967	1,926	1,847	1,940	2,077	2,149	2,145	2,199	1,990	1,990	1,968	1,934	1,969			

JUNE 2017																	
		Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
		6/1/2017	6/2/2017	6/3/2017	6/4/2017	6/5/2017	6/6/2017	6/7/2017	6/8/2017	6/9/2017	6/10/2017	6/11/2017	6/12/2017	6/13/2017	6/14/2017	6/15/2017	6/16/2017
LFG and Biogas Flow to the Engines (KSCF)		1,300	1,201	1,228	1,225	1,232	1,231	1,201	799	1,261	1,269	1,152	975	991	1,004	957	1,051
LFG and Biogas Flow to the Engines (MMBTU HHV)		662	604	630	612	623	631	609	434	658	641	589	526	529	525	499	571
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,300	1,201	1,228	1,225	1,232	1,231	1,201	799	1,261	1,269	1,152	975	991	1,004	957	1,051
LFG and Biogas Total Flow (MMBTU HHV)		662	604	630	612	623	631	609	434	658	641	589	526	529	525	499	571
Average Methane Content (%)		50.3	49.7	50.7	49.4	50.0	50.6	50.1	53.7	51.5	49.9	50.5	53.4	52.7	51.7	51.5	53.7
Engine 1 Hours		24	24	24	24	10	-	-	-	12	24	24	24	24	24	24	24
Engine 2 Hours		-	-	-	-	16	24	21	13	24	24	24	24	24	24	24	22
Engine 3 Hours		24	24	24	24	24	24	24	16	13	-	-	-	-	-	-	13
Engine 4 Hours		24	24	24	24	24	24	24	18	23	24	19	1	-	-	-	-
Generator 1 Power Output (kWhr)		17,980	16,730	17,054	15,864	6,676	-	-	-	8,208	16,776	17,148	19,748	19,740	19,740	19,600	19,736
Generator 2 Power Output (kWhr)		-	-	-	-	8,952	15,624	13,540	9,924	17,732	17,364	18,354	19,714	19,706	19,704	19,120	16,756
Generator 3 Power Output (kWhr)		16,742	13,740	14,288	16,742	16,760	16,746	16,744	10,224	9,544	-	-	-	-	-	-	8,894
Generator 4 Power Output (kWhr)		16,740	16,738	16,734	14,600	15,772	16,730	16,726	13,904	17,182	17,370	10,130	42	-	-	-	-
Gross Power Output (kWhr)		51,475	47,219	48,129	47,250	48,169	49,070	46,962	33,973	52,671	51,568	45,681	39,491	39,443	39,425	38,674	45,384
Net Power Output (kWhr)		49,688	45,556	46,544	45,634	46,478	47,378	45,184	32,702	50,750	49,624	43,828	37,652	37,512	37,614	36,980	43,598
Power Sold as metered by NStar, (kWhr)		49,513	45,443	46,379	45,519	46,295	47,228	45,076	32,616	50,593	49,477	43,741	37,609	37,473	37,576	36,964	43,496
Offgrid RECs (kWhr)		1,787	1,662	1,586	1,617	1,689	1,693	1,776	1,274	1,920	1,944	1,852	1,840	1,931	1,811	1,693	1,788
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		749	697	711	661	668	-	-	-	684	699	715	823	823	823	817	822
Generator 2		-	-	-	-	560	651	645	763	739	724	765	821	821	821	797	762
Generator 3		698	573	595	698	698	698	698	639	734	-	-	-	-	-	-	684
Generator 4		698	697	697	608	657	697	697	772	747	724	533	42	-	-	-	-
Power output (kW average over 24-hrs)																	
Facility Gross		2,145	1,967	2,005	1,969	2,007	2,045	1,957	1,416	2,195	2,149	1,903	1,645	1,643	1,643	1,611	1,891
Facility Net		2,070	1,898	1,939	1,901	1,937	1,974	1,883	1,363	2,115	2,068	1,826	1,569	1,563	1,567	1,541	1,817
In-plant load		74	69	66	67	70	71	74	53	80	81	77	77	80	75	71	74
Daily availability factor																	
Facility		75%	75%	75%	75%	77%	75%	72%	49%	75%	75%	70%	51%	50%	50%	50%	61%
Engine 1		100%	100%	100%	100%	42%	0%	0%	0%	50%	100%	100%	100%	100%	100%	100%	100%
Engine 2		0%	0%	0%	0%	67%	100%	88%	54%	100%	100%	100%	100%	100%	100%	100%	92%
Engine 3		100%	100%	100%	100%	100%	100%	100%	67%	54%	0%	0%	0%	0%	0%	0%	54%
Engine 4		100%	100%	100%	100%	100%	100%	100%	75%	96%	100%	79%	4%	0%	0%	0%	0%
Daily capacity factor																	
Facility		65%	60%	61%	60%	61%	62%	59%	43%	67%	65%	58%	50%	50%	50%	49%	57%
Engine 1		91%	84%	86%	80%	81%	0%	0%	0%	83%	85%	87%	100%	100%	100%	99%	100%
Engine 2		0%	0%	0%	0%	68%	79%	78%	93%	90%	88%	93%	100%	100%	100%	97%	92%
Engine 3		85%	69%	72%	85%	85%	85%	85%	77%	89%	0%	0%	0%	0%	0%	0%	83%
Engine 4		85%	85%	85%	74%	80%	84%	84%	94%	91%	88%	65%	5%	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	106	106	106	106	118	142	166	190	214	238	262	286
Engine 2		0	0	0	0	16	40	61	74	98	122	146	170	194	218	242	264
Engine 3		24	48	72	96	120	144	168	184	197	197	197	197	197	197	197	210
Engine 4		24	48	72	96	120	144	168	186	209	233	252	253	253	253	253	253
Engine operating run hours total from 0 hours																	
Engine 1		91,858	91,882	91,906	91,930	91,954	91,964	91,964	91,964	91,976	92,000	92,024	92,048	92,072	92,096	92,120	92,144
Engine 2		86,639	86,639	86,639	86,639	86,655	86,679	86,700	86,713	86,737	86,761	86,785	86,809	86,833	86,857	86,881	86,903
Engine 3		89,660	89,684	89,708	89,732	89,756	89,780	89,804	89,828	89,844	89,857	89,857	89,857	89,857	89,857	89,857	89,870
Engine 4		87,736	87,760	87,784	87,808	87,832	87,856	87,880	87,904	87,922	87,945	87,969	87,988	87,989	87,989	87,989	87,989
Cumulative availability, %		June 1, 2017 @ 00:00 hours															
Engine 1		100%	100%	100%	100%	88%	74%	63%	55%	55%	59%	63%	66%	69%	71%	73%	74%
Engine 2		0%	0%	0%	0%	13%	28%	36%	39%	45%	51%	55%	59%	62%	65%	67%	69%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	96%	91%	82%	75%	68%	63%	55%	55%
Engine 4		100%	100%	100%	100%	100%	100%	100%	97%	97%	97%	95%	88%	81%	75%	70%	66%
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		749	1,446	2,157	2,818	3,485	3,485	3,485	4,169	4,868	5,583	6,406	7,228	8,051	8,867	9,690	10,513
Engine 2		-	-	-	-	560	1,211	1,855	2,619	3,357	4,081	4,846	5,667	6,488	7,309	8,106	8,868
Engine 3		698	1,270	1,865	2,563	3,261	3,959	4,657	5,296	6,030	6,030	6,030	6,030	6,030	6,030	6,030	6,714
Engine 4		698	1,395	2,092	2,701	3,358	4,055	4,752	5,524	6,271	6,995	7,528	7,570	7,570	7,570	7,570	7,570
Cumulative capacity factor, %																	
Engine 1		91%	88%	87%	85%	84%	70%	60%	53%	56%	59%	62%	65%	67%	70%	72%	73%
Engine 2		0%	0%	0%	0%	14%	32%	32%	40%	45%	49%	53%	57%	60%	63%	66%	67%
Engine 3		85%	77%	75%	78%	79%	80%	81%	80%	81%	73%	66%	61%	56%	52%	49%	51%
Engine 4		85%	85%	85%	82%	81%	82%	82%	84%	84%	85%	83%	76%	71%	66%	61%	57%

		Thursday 6/1/2017	Friday 6/2/2017	Saturday 6/3/2017	Sunday 6/4/2017	Monday 6/5/2017	Tuesday 6/6/2017	Wednesday 6/7/2017	Thursday 6/8/2017	Friday 6/9/2017	Saturday 6/10/2017	Sunday 6/11/2017	Monday 6/12/2017	Tuesday 6/13/2017	Wednesday 6/14/2017	Thursday 6/15/2017	Friday 6/16/2017
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	362	434	503	550	622	694	761	810	858	906	954	1,013
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.4%	75.3%	74.9%	71.6%	72.0%	72.3%	72.1%	70.3%	68.8%	67.4%	66.3%	66.0%
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		51,475	98,694	146,823	194,073	242,242	291,312	338,274	372,247	424,918	476,486	522,167	561,658	601,101	640,526	679,200	724,584
Cumulative Capacity Factor		65.0%	62.3%	61.8%	61.3%	61.2%	61.3%	61.0%	58.8%	59.6%	60.2%	59.9%	59.1%	58.4%	57.8%	57.2%	57.2%
Cumulative fuel input, MMBtu HHV		662	1,267	1,896	2,508	3,131	3,762	4,371	4,805	5,463	6,104	6,693	7,219	7,748	8,273	8,772	9,343
Cumulative gross output, kWhr		51,475	98,694	146,823	194,073	242,242	291,312	338,274	372,247	424,918	476,486	522,167	561,658	601,101	640,526	679,200	724,584
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,579	11,522	11,778	11,662	11,641	11,572	11,679	11,500	11,237	11,190	11,605	11,999	12,064	11,992	11,617	11,332
Daily heat rate, Btu/kWe gross HHV		12,863	12,800	13,084	12,954	12,932	12,855	12,974	12,775	12,483	12,430	12,892	13,330	13,402	13,321	12,905	12,588
Cumulative heat rate, Btu/kWe gross LHV		11,579	11,552	11,626	11,635	11,636	11,625	11,633	11,621	11,573	11,532	11,538	11,570	11,603	11,627	11,626	11,608
Cumulative heat rate, Btu/kWe gross HHV		12,863	12,833	12,915	12,925	12,926	12,914	12,922	12,909	12,856	12,810	12,817	12,853	12,889	12,916	12,915	12,895
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	14,304	14,400	14,496	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
Actual cumulative engine run hours	11,047	11,119	11,191	11,263	11,337	11,409	11,478	11,525	11,597	11,669	11,736	11,785	11,833	11,881	11,929	11,988	12,036
Cumulative Availability, %	77.2%	77.2%	77.2%	77.2%	77.2%	77.2%	77.1%	77.0%	76.9%	76.9%	76.9%	76.7%	76.6%	76.4%	76.2%	76.1%	76.1%
Max cumulative gross output, kWhr	11,797,500	11,876,700	11,955,900	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
Actual cumulative gross output, kWhr	8,221,677	8,268,896	8,317,025	8,364,275	8,412,444	8,461,514	8,508,476	8,542,449	8,595,120	8,646,688	8,692,369	8,731,860	8,771,303	8,810,728	8,849,402	8,889,402	8,929,402
Cumulative Capacity Factor	69.7%	69.6%	69.6%	69.5%	69.4%	69.4%	69.3%	69.2%	69.1%	69.1%	69.0%	68.9%	68.8%	68.7%	68.6%	68.5%	68.5%
Cumulative fuel input, MMBtu HHV	103,987	104,591	105,221	105,833	106,456	107,087	107,696	108,300	108,788	109,429	110,017	110,544	111,072	111,598	112,127	112,658	113,188
Cumulative gross output, kWhr	8,221,677	8,268,896	8,317,025	8,364,275	8,412,444	8,461,514	8,508,476	8,542,449	8,595,120	8,646,688	8,692,369	8,731,860	8,771,303	8,810,728	8,849,402	8,889,402	8,929,402
Cumulative heat rate, Btu/kWe gross LHV	11,386	11,386	11,389	11,390	11,392	11,393	11,394	11,395	11,394	11,392	11,394	11,396	11,399	11,402	11,403	11,403	11,403
Cumulative heat rate, Btu/kWe gross HHV	12,648	12,649	12,651	12,653	12,655	12,656	12,657	12,658	12,657	12,656	12,657	12,660	12,663	12,666	12,667	12,667	12,667
Service																	
Engine 1								Top-end overhaul start		Restart E-1							
Engine 2			New Generator installed, and restarted.														
Engine 3																	
Engine 4																	
Oil - oil and filter change			Foaming event														
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Thursday 6/1/2017	Friday 6/2/2017	Saturday 6/3/2017	Sunday 6/4/2017	Monday 6/5/2017	Tuesday 6/6/2017	Wednesday 6/7/2017	Thursday 6/8/2017	Friday 6/9/2017	Saturday 6/10/2017	Sunday 6/11/2017	Monday 6/12/2017	Tuesday 6/13/2017	Wednesday 6/14/2017	Thursday 6/15/2017	Friday 6/16/2017
Date																	
Hour																	
1		2,073	2,038	1,786	1,969	1,873	1,921	1,944	1,332	2,204	2,092	2,018	1,578	1,569	1,568	1,574	1,578
2		2,074	1,964	1,786	1,969	1,907	1,922	1,945	1,050	2,204	2,092	2,017	1,578	1,569	1,569	1,574	1,577
3		2,071	1,964	1,787	1,929	1,973	1,921	1,945	1,101	2,159	2,086	1,962	1,579	1,570	1,570	1,572	1,577
4		2,066	1,969	1,786	1,875	1,972	1,923	1,944	1,322	2,109	2,088	1,931	1,580	1,570	1,570	1,566	1,577
5		2,067	1,968	1,787	1,877	1,973	1,923	1,944	1,423	2,109	2,089	1,932	1,579	1,570	1,571	1,566	1,577
6		2,071	1,968	1,787	1,877	1,973	1,924	1,945	1,770	2,111	2,088	1,931	1,580	1,572	1,572	1,569	1,578
7		2,070	1,971	1,788	1,878	1,974	1,924	1,946	2,199	2,111	2,091	1,931	1,578	1,570	1,571	1,571	1,578
8		2,064	1,968	1,787	1,879	1,969	1,930	1,940	1,152	2,110	2,091	1,929	1,610	1,559	1,564	1,570	1,572
9		2,064	1,964	1,948	1,877	1,934	1,963	1,928	-	2,104	2,079	1,923	1,566	1,555	1,560	1,458	1,562
10		2,061	1,964	2,065	1,874	1,883	2,012	1,931	-	2,074	2,014	1,937	1,561	1,552	1,557	952	1,564
11		2,053	1,964	2,064	1,873	1,915	2,013	1,933	-	2,039	2,011	1,988	1,559	1,552	1,557	1,562	1,504
12		2,049	1,964	2,063	1,868	1,916	2,013	1,930	-	2,088	2,006	1,989	1,559	1,552	1,558	1,564	1,367
13		2,045	1,962	2,068	1,869	1,916	2,013	1,927	-	1,982	2,029	1,463	1,554	1,554	1,559	1,565	1,447
14		2,044	2,020	2,069	1,965	1,916	2,012	1,931	546	2,028	2,076	1,642	1,552	1,554	1,558	1,564	1,632
15		2,053	1,728	2,037	1,969	1,917	2,013	1,930	1,512	2,110	2,078	1,449	1,551	1,553	1,556	1,566	2,246
16		2,057	1,776	1,976	1,935	1,917	2,011	1,931	1,592	2,155	2,077	1,709	1,552	1,554	1,560	1,564	2,227
17		2,065	1,785	1,973	1,878	1,923	2,013	1,931	2,176	2,160	2,083	2,075	1,555	1,555	1,563	1,567	2,047
18		2,065	1,788	1,974	1,879	1,923	2,014	1,934	2,206	2,161	2,086	1,467	1,554	1,556	1,563	1,574	2,182
19		2,065	1,789	1,974	1,880	1,923	2,016	1,937	2,208	2,113	2,087	1,537	1,557	1,559	1,567	1,577	2,183
20		2,066	1,789	1,975	1,880	1,917	1,973	1,938	2,209	2,091	2,065	1,731	1,559	1,561	1,571	1,578	2,184
21		2,068	1,790	1,975	1,880	1,919	1,944	1,944	2,209	2,093	2,016	1,820	1,566	1,564	1,572	1,578	2,185
22		2,067	1,785	1,975	1,880	1,920	1,943	1,735	2,205	2,093	2,018	1,821	1,567	1,568	1,573	1,578	2,184
23		2,067	1,782	1,974	1,879	1,920	1,944	1,331	2,200	2,093	2,017	1,821	1,567	1,568	1,573	1,577	2,184
24		2,068	1,783	1,975	1,880	1,922	1,943	1,332	2,204	2,092	2,018	1,718	1,568	1,567	1,574	1,578	2,184
TOTAL		49,513	45,443	46,379	45,519	46,295	47,228	45,076	32,616	50,593	49,477	43,741	37,809	37,473	37,576	36,964	43,496
Cumulative Output Sold, kWhr		49,513	94,956	141,335	186,854	233,149	280,377	325,453	358,069	408,662	458,139	501,880	539,489	576,962	614,538	651,502	694,998
Transformer and line efficiency		99.6%	99.8%	99.6%	99.7%	99.6%	99.7%	99.8%	99.7%	99.7%	99.7%	99.8%	99.9%	99.9%	99.9%	100.0%	99.8%
Hourly average		2,063	1,893	1,932	1,897	1,929	1,968	1,878	1,359	2,108	2,062	1,823	1,567	1,561	1,566	1,540	1,812

1/15/2018

	Saturday 6/17/2017	Sunday 6/18/2017	Monday 6/19/2017	Tuesday 6/20/2017	Wednesday 6/21/2017	Thursday 6/22/2017	Friday 6/23/2017	Saturday 6/24/2017	Sunday 6/25/2017	Monday 6/26/2017	Tuesday 6/27/2017	Wednesday 6/28/2017	Thursday 6/29/2017	Friday 6/30/2017	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 h	1,085	1,157	1,229	1,301	1,373	1,445	1,517	1,589	1,661	1,733	1,805	1,877	1,948	2,020			
Cumulative Availability, %	66.5%	67.0%	67.4%	67.8%	68.1%	68.4%	68.7%	69.0%	69.2%	69.4%	69.6%	69.8%	70.0%	70.1%			
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	776,681	827,053	877,757	930,487	981,998	1,032,182	1,081,678	1,130,366	1,179,201	1,228,687	1,280,182	1,331,868	1,380,848	1,431,218			
Cumulative Capacity Factor	57.7%	58.0%	58.3%	58.7%	59.0%	59.2%	59.4%	59.5%	59.6%	59.7%	59.9%	60.1%	60.1%	60.2%			
Cumulative fuel input, MMBtu	9,981	10,592	11,203	11,845	12,459	13,090	13,718	14,326	14,948	15,566	16,179	16,793	17,382	18,003			
Cumulative gross output, kWh	776,681	827,053	877,757	930,487	981,998	1,032,182	1,081,678	1,130,366	1,179,201	1,228,687	1,280,182	1,331,868	1,380,848	1,431,218			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,019	10,916	10,858	10,957	10,721	11,319	11,434	11,236	11,456	11,255	10,716	10,690	10,818	11,097			
Daily heat rate, Btu/kWe	12,241	12,126	12,062	12,171	11,910	12,574	12,702	12,482	12,727	12,503	11,904	11,876	12,017	12,327			
Cumulative heat rate, Btu/kWe	11,568	11,529	11,490	11,460	11,421	11,416	11,417	11,409	11,411	11,405	11,377	11,350	11,331	11,323			
Cumulative heat rate, Btu/kWe	12,851	12,807	12,764	12,730	12,687	12,682	12,683	12,674	12,676	12,669	12,638	12,609	12,588	12,579			
Cumulative by Facility starting 6/1/2017																	
Max cumulative available engine	15,840	15,936	16,032	16,128	16,224	16,320	16,416	16,512	16,608	16,704	16,800	16,896	16,992	17,088			
Actual cumulative engine run h	12,060	12,132	12,204	12,276	12,348	12,420	12,492	12,564	12,636	12,708	12,780	12,852	12,923	12,995			
Cumulative Availability, %	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.1%	76.0%			
Max cumulative gross output, kWh	13,064,700	13,143,900	13,223,100	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			
Actual cumulative gross output, kWh	8,946,883	8,997,255	9,047,959	9,100,689	9,152,200	9,202,384	9,251,880	9,300,568	9,349,403	9,398,889	9,450,384	9,502,070	9,551,050	9,601,420			
Cumulative Capacity Factor	68.5%	68.5%	68.4%	68.4%	68.4%	68.4%	68.3%	68.3%	68.3%	68.2%	68.2%	68.2%	68.1%	68.1%			
Cumulative fuel input, MMBtu	113,306	113,917	114,528	115,170	115,783	116,414	117,043	117,651	118,272	118,891	119,504	120,118	120,706	121,327			
Cumulative gross output, kWh	8,946,883	8,997,255	9,047,959	9,100,689	9,152,200	9,202,384	9,251,880	9,300,568	9,349,403	9,398,889	9,450,384	9,502,070	9,551,050	9,601,420			
Cumulative heat rate, Btu/kWe	11,400	11,398	11,395	11,392	11,388	11,388	11,388	11,387	11,388	11,387	11,383	11,380	11,377	11,375			
Cumulative heat rate, Btu/kWe	12,664	12,661	12,658	12,655	12,651	12,650	12,651	12,650	12,650	12,649	12,645	12,641	12,638	12,636			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports	Saturday 6/17/2017	Sunday 6/18/2017	Monday 6/19/2017	Tuesday 6/20/2017	Wednesday 6/21/2017	Thursday 6/22/2017	Friday 6/23/2017	Saturday 6/24/2017	Sunday 6/25/2017	Monday 6/26/2017	Tuesday 6/27/2017	Wednesday 6/28/2017	Thursday 6/29/2017	Friday 6/30/2017	TOTAL		
Hour																	
1	2,184	2,012	2,008	2,108	2,108	2,012	1,938	1,936	1,937	1,961	2,038	2,111	1,962	2,032			
2	2,183	2,013	2,009	2,108	2,109	2,010	1,938	1,936	1,937	1,962	2,038	2,111	1,957	1,569			
3	2,184	2,013	2,009	2,108	2,109	2,012	1,939	1,984	1,936	1,949	2,039	2,112	1,956	1,842			
4	2,184	2,013	2,009	2,108	2,110	1,998	1,939	1,977	1,937	1,893	2,039	2,105	1,962	2,054			
5	2,184	2,012	2,009	2,108	2,110	1,941	1,938	1,937	1,937	1,893	2,039	2,107	1,964	2,054			
6	2,185	2,012	1,948	2,107	2,110	1,942	1,939	1,938	1,937	1,894	2,037	2,107	1,965	2,008			
7	2,185	2,012	1,938	2,108	2,110	1,941	1,939	1,938	1,938	1,893	2,036	2,105	1,965	1,988			
8	2,184	2,012	1,930	2,100	2,108	1,938	1,937	1,936	1,935	1,890	1,970	2,084	1,963	1,986			
9	2,182	2,011	1,929	2,099	2,099	1,931	1,930	1,936	1,931	1,881	1,958	2,067	1,958	1,980			
10	2,094	2,007	1,947	2,097	2,085	1,922	2,003	1,938	1,922	1,915	1,955	2,053	1,951	2,009			
11	2,108	2,006	2,023	2,099	2,080	1,937	2,018	1,939	1,897	1,951	1,955	2,092	1,952	2,050			
12	2,017	2,010	2,023	2,099	2,051	2,088	2,015	1,937	1,948	1,952	1,985	2,087	1,952	2,049			
13	2,011	2,008	2,024	2,097	1,986	2,086	2,018	1,936	1,949	1,953	2,074	2,093	1,953	2,049			
14	2,010	2,007	2,024	2,093	1,986	2,086	2,017	1,933	1,949	1,992	2,102	2,091	1,981	1,982			
15	2,010	2,008	2,025	2,094	1,987	2,085	2,018	1,931	1,949	2,024	2,103	2,091	2,025	1,978			
16	2,009	2,008	2,029	2,093	1,996	2,093	2,019	1,930	1,953	2,026	2,101	2,053	2,028	2,048			
17	2,010	2,009	2,034	2,093	2,003	2,082	2,026	1,930	1,957	2,031	2,101	2,033	2,032	2,056			
18	2,010	2,010	2,034	2,099	2,006	2,003	2,028	1,931	1,958	2,033	2,103	2,033	2,032	2,058			
19	2,012	2,010	2,034	2,103	2,009	2,006	1,968	1,933	1,961	2,034	2,105	2,034	1,986	2,059			
20	2,012	2,010	2,062	2,104	2,009	2,006	1,936	1,933	1,960	2,033	2,109	2,025	1,962	2,060			
21	2,013	2,010	2,107	2,106	2,011	1,988	1,937	1,935	1,961	2,036	2,110	1,964	1,609	2,060			
22	2,013	2,009	2,105	2,108	2,013	1,937	1,937	1,937	1,962	2,038	2,109	1,964	1,646	2,060			
23	2,012	2,009	2,107	2,108	2,012	1,937	1,936	1,936	1,961	2,037	2,109	1,962	1,998	2,060			
24	2,012	2,010	2,107	2,109	2,012	1,938	1,936	1,936	1,961	2,038	2,112	1,963	2,050	2,060			
TOTAL	50,008	48,241	48,474	50,456	49,219	47,919	47,249	46,533	46,673	47,309	49,327	49,447	46,809	48,151			
Cumulative Output Sold, kWh	745,006	793,247	841,721	892,177	941,396	989,315	1,036,564	1,083,097	1,129,770	1,177,079	1,226,406	1,275,853	1,322,662	1,370,813			
Transformer and line efficiency	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.6%	99.6%	99.6%	99.6%	99.7%			
Hourly average	2,084	2,010	2,020	2,102	2,051	1,997	1,969	1,939	1,945	1,971	2,055	2,060	1,950	2,006			

JULY 2017																		
		Saturday 7/1/2017	Sunday 7/2/2017	Monday 7/3/2017	Tuesday 7/4/2017	Wednesday 7/5/2017	Thursday 7/6/2017	Friday 7/7/2017	Saturday 7/8/2017	Sunday 7/9/2017	Monday 7/10/2017	Tuesday 7/11/2017	Wednesday 7/12/2017	Thursday 7/13/2017	Friday 7/14/2017	Saturday 7/15/2017	Sunday 7/16/2017	
LFG and Biogas Flow to the Engines (KSCF)		1,191	1,212	1,153	1,210	1,204	1,254	1,183	1,171	1,201	1,158	1,184	1,194	1,160	1,182	1,090	1,065	
LFG and Biogas Flow to the Engines (MMBTU HHV)		604	619	586	604	603	643	616	609	607	582	597	596	576	587	562	545	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,191	1,212	1,153	1,210	1,204	1,254	1,183	1,171	1,201	1,158	1,184	1,194	1,160	1,182	1,090	1,065	
LFG and Biogas Total Flow (MMBTU HHV)		604	619	586	604	603	643	616	609	607	582	597	596	576	587	562	545	
Average Methane Content (%)		50.1	50.5	50.6	49.3	49.5	50.7	51.4	51.3	50.0	49.7	49.8	49.3	49.0	49.1	50.9	50.5	
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	23	24	24	
Engine 2 Hours		24	24	23	24	24	24	22	21	24	20	24	24	22	24	17	16	
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 4 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 1 Power Output (kWhr)		16,656	17,204	16,528	16,208	16,992	17,752	17,940	17,424	16,204	16,968	17,784	16,212	16,484	16,704	16,408	16,532	
Generator 2 Power Output (kWhr)		16,668	16,178	14,924	16,168	16,180	16,178	14,656	13,658	15,592	12,434	15,598	15,596	14,094	13,164	10,878	10,514	
Generator 3 Power Output (kWhr)		16,756	16,300	16,148	15,020	15,652	16,756	17,540	18,552	17,084	17,884	16,156	16,184	16,836	18,252	17,792	17,416	
Generator 4 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gross Power Output (kWhr)		50,150	49,756	47,660	47,436	48,867	50,747	50,177	49,653	48,900	47,303	48,620	48,029	47,442	48,148	45,075	44,472	
Net Power Output (kWhr)		48,134	47,690	45,674	45,466	46,824	48,724	48,124	47,592	46,926	45,158	46,477	45,854	45,410	46,152	43,274	42,520	
Power Sold as metered by NStar, (kWhr)		47,965	47,524	45,522	45,318	46,666	48,548	47,991	47,413	46,766	45,021	46,338	45,701	45,260	46,017	43,175	42,440	
Offgrid RECs (kWhr)		2,016	2,066	1,986	1,970	2,043	2,023	2,052	2,061	1,975	2,146	2,144	2,175	2,032	1,995	1,802	1,951	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		694	717	689	675	708	740	748	726	675	707	741	676	687	726	684	689	
Generator 2		695	674	649	674	674	674	666	650	650	622	650	650	641	549	640	657	
Generator 3		698	679	673	626	652	698	731	773	712	745	673	674	702	761	741	726	
Generator 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Power output (kW average over 24-hrs)																		
Facility Gross		2,090	2,073	1,986	1,977	2,036	2,114	2,091	2,069	2,038	1,971	2,026	2,001	1,977	2,006	1,878	1,853	
Facility Net		2,006	1,987	1,903	1,894	1,951	2,030	2,005	1,983	1,955	1,882	1,937	1,911	1,892	1,923	1,803	1,772	
In-plant load		84	86	83	82	85	84	86	86	82	89	89	91	85	83	75	81	
Daily availability factor																		
Facility		75%	75%	74%	75%	75%	75%	73%	72%	75%	71%	75%	75%	73%	74%	68%	67%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	
Engine 2		100%	100%	96%	100%	100%	100%	92%	88%	100%	83%	100%	100%	92%	100%	71%	67%	
Engine 3		100%	100%	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%	0%	0%	
Daily capacity factor																		
Facility		63%	63%	60%	60%	62%	64%	63%	63%	62%	60%	61%	61%	60%	61%	57%	56%	
Engine 1		84%	87%	83%	82%	86%	90%	91%	88%	82%	86%	90%	82%	83%	88%	83%	83%	
Engine 2		84%	82%	79%	82%	82%	82%	81%	79%	79%	75%	79%	79%	78%	66%	78%	80%	
Engine 3		85%	82%	82%	76%	79%	85%	89%	94%	86%	90%	82%	82%	85%	92%	90%	88%	
Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	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	335	359	383	
Engine 2		24	48	71	95	119	143	165	186	210	230	254	278	300	324	341	357	
Engine 3		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engine operating run hours total from 0 hours																		
Engine 1		92,480	92,504	92,528	92,552	92,576	92,600	92,624	92,648	92,672	92,696	92,720	92,744	92,768	92,792	92,815	92,839	92,863
Engine 2		87,238	87,262	87,286	87,309	87,333	87,357	87,381	87,403	87,424	87,448	87,472	87,496	87,518	87,542	87,566	87,590	87,614
Engine 3		90,206	90,230	90,254	90,278	90,302	90,326	90,350	90,374	90,398	90,422	90,446	90,470	90,494	90,518	90,542	90,566	90,590
Engine 4		87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989	87,989
Cumulative availability, %	August 1, 2017 @ 00:00 hours																	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 2		100%	100%	99%	99%	99%	99%	97%	97%	97%	96%	96%	96%	96%	96%	95%	93%	
Engine 3		100%	100%	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%	0%	0%	
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		694	1,411	2,100	2,775	3,483	4,223	4,970	5,696	6,371	7,078	7,819	8,495	9,182	9,908	10,591	11,280	
Engine 2		695	1,369	2,017	2,691	3,365	4,039	4,706	5,356	6,006	6,627	7,277	7,927	8,568	9,116	9,756	10,413	
Engine 3		698	1,377	2,050	2,676	3,328	4,026	4,757	5,530	6,242	6,987	7,660	8,335	9,036	9,797	10,538	11,264	
Engine 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Cumulative capacity factor, %																		
Engine 1		84%	86%	85%	84%	84%	85%	86%	86%	86%	86%	86%	86%	86%	86%	86%	85%	
Engine 2		84%	83%	82%	82%	82%	81%	80%	81%	80%	80%	80%	80%	80%	79%	79%	79%	
Engine 3		85%	83%	83%	81%	81%	81%	82%	84%	84%	85%	84%	84%	84%	85%	85%	85%	
Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

		Saturday 7/1/2017	Sunday 7/2/2017	Monday 7/3/2017	Tuesday 7/4/2017	Wednesday 7/5/2017	Thursday 7/6/2017	Friday 7/7/2017	Saturday 7/8/2017	Sunday 7/9/2017	Monday 7/10/2017	Tuesday 7/11/2017	Wednesday 7/12/2017	Thursday 7/13/2017	Friday 7/14/2017	Saturday 7/15/2017	Sunday 7/16/2017
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	215	287	359	431	501	570	642	710	782	854	924	995	1,060	1,124
Cumulative Availability, %		75.0%	75.0%	74.7%	74.7%	74.8%	74.8%	74.6%	74.2%	74.3%	74.0%	74.1%	74.1%	74.0%	74.0%	73.0%	73.2%
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		50,150	99,906	147,566	195,002	243,869	294,616	344,793	394,446	443,346	490,649	539,269	587,298	634,740	682,888	727,963	772,435
Cumulative Capacity Factor		63.3%	63.1%	62.1%	61.6%	61.6%	62.0%	62.2%	62.3%	62.2%	62.0%	61.9%	61.8%	61.6%	61.6%	61.3%	61.0%
Cumulative fuel input, MMBtu HHV		604	1,223	1,809	2,413	3,016	3,659	4,275	4,884	5,491	6,073	6,670	7,266	7,842	8,429	8,991	9,535
Cumulative gross output, kWhr		50,150	99,906	147,566	195,002	243,869	294,616	344,793	394,446	443,346	490,649	539,269	587,298	634,740	682,888	727,963	772,435
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,836	11,206	11,066	11,455	11,115	11,413	11,046	11,034	11,182	11,081	11,048	11,173	10,924	10,973	11,218	11,022
Daily heat rate, Btu/kWe gross HHV		12,038	12,449	12,293	12,725	12,348	12,679	12,271	12,257	12,421	12,310	12,273	12,411	12,135	12,189	12,461	12,244
Cumulative heat rate, Btu/kWe gross LHV		10,836	11,021	11,035	11,137	11,133	11,181	11,162	11,145	11,149	11,143	11,134	11,137	11,121	11,111	11,118	11,112
Cumulative heat rate, Btu/kWe gross HHV		12,038	12,243	12,259	12,372	12,367	12,421	12,399	12,381	12,386	12,378	12,369	12,372	12,355	12,343	12,350	12,344
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		17,184	17,280	17,376	17,472	17,568	17,664	17,760	17,856	17,952	18,048	18,144	18,240	18,336	18,432	18,528	18,624
Actual cumulative engine run hours		13,067	13,139	13,210	13,282	13,354	13,426	13,496	13,565	13,637	13,705	13,777	13,849	13,919	13,990	14,055	14,119
Cumulative Availability, %		76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	76.0%	75.9%	75.9%	75.9%	75.9%	75.9%	75.9%	75.8%
Max cumulative gross output, kWhr		14,173,500	14,252,700	14,331,900	14,411,100	14,490,300	14,569,500	14,648,700	14,727,900	14,807,100	14,886,300	14,965,500	15,044,700	15,123,900	15,203,100	15,282,300	15,361,500
Actual cumulative gross output, kWhr		9,651,570	9,701,326	9,748,986	9,796,422	9,845,289	9,894,036	9,942,813	9,991,566	10,040,366	10,089,169	10,138,019	10,186,818	10,235,666	10,284,514	10,333,362	10,382,210
Cumulative Capacity Factor		68.1%	68.1%	68.0%	68.0%	67.9%	67.9%	67.9%	67.9%	67.8%	67.8%	67.8%	67.7%	67.7%	67.6%	67.6%	67.5%
Cumulative fuel input, MMBtu HHV		121,931	122,550	123,136	123,740	124,343	124,947	125,550	126,153	126,756	127,359	127,962	128,565	129,168	129,771	130,374	130,977
Cumulative gross output, kWhr		9,651,570	9,701,326	9,748,986	9,796,422	9,845,289	9,894,036	9,942,813	9,991,566	10,040,366	10,089,169	10,138,019	10,186,818	10,235,666	10,284,514	10,333,362	10,382,210
Cumulative heat rate, Btu/kWe gross LHV		11,372	11,372	11,370	11,371	11,369	11,369	11,368	11,366	11,365	11,364	11,362	11,362	11,360	11,358	11,357	11,356
Cumulative heat rate, Btu/kWe gross HHV		12,633	12,632	12,631	12,631	12,630	12,630	12,628	12,626	12,625	12,624	12,622	12,621	12,619	12,617	12,616	12,615
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		Saturday 7/1/2017	Sunday 7/2/2017	Monday 7/3/2017	Tuesday 7/4/2017	Wednesday 7/5/2017	Thursday 7/6/2017	Friday 7/7/2017	Saturday 7/8/2017	Sunday 7/9/2017	Monday 7/10/2017	Tuesday 7/11/2017	Wednesday 7/12/2017	Thursday 7/13/2017	Friday 7/14/2017	Saturday 7/15/2017	Sunday 7/16/2017
Date																	
Hour																	
1		2,060	1,960	1,964	1,914	1,890	2,039	2,036	1,469	2,014	1,915	1,909	1,913	1,908	1,753	1,918	1,966
2		2,060	1,961	1,964	1,890	1,889	2,038	2,035	1,472	2,013	1,913	1,908	1,914	1,908	1,950	1,918	1,965
3		2,061	1,962	1,964	1,890	1,890	2,039	2,035	1,528	2,013	1,913	1,909	1,914	1,907	1,966	1,918	1,966
4		2,061	1,963	1,964	1,887	1,890	2,039	2,035	1,912	2,013	1,912	1,947	1,915	1,907	1,969	1,460	1,967
5		2,060	1,962	1,964	1,888	1,890	2,033	2,036	2,096	2,013	1,595	1,957	1,914	1,907	1,969	1,385	1,946
6		2,060	1,900	1,965	1,892	1,891	2,037	2,037	2,101	2,008	1,474	1,911	1,916	1,908	1,969	1,387	1,896
7		1,990	1,892	1,963	1,892	1,892	1,997	2,037	2,102	2,007	1,481	1,910	1,916	1,908	1,969	1,387	1,895
8		1,986	1,890	1,960	1,890	1,888	1,964	2,038	2,102	2,011	1,481	1,909	1,914	1,907	1,966	1,387	1,893
9		1,985	1,889	1,898	1,886	1,878	1,954	1,856	2,097	2,010	1,472	1,904	1,905	1,906	1,816	1,385	1,890
10		1,983	1,882	1,885	1,885	1,877	1,984	1,972	2,104	1,936	1,979	1,975	1,893	1,906	1,754	1,750	1,884
11		1,981	1,953	1,881	1,883	1,876	2,019	1,999	2,061	1,911	2,085	1,998	1,895	1,903	1,996	1,453	1,878
12		1,979	2,003	1,881	1,882	1,876	2,019	2,001	2,008	1,933	2,085	1,997	1,892	1,905	1,973	1,928	1,875
13		1,981	2,025	1,881	1,884	1,878	2,019	2,001	2,005	1,901	1,991	1,996	1,890	1,906	1,973	2,007	1,877
14		1,980	2,024	1,880	1,886	1,919	2,025	2,047	2,039	1,899	1,989	1,906	1,890	1,907	1,817	2,006	1,876
15		1,981	2,024	1,880	1,884	1,955	2,025	2,101	2,097	1,900	1,989	1,993	1,892	1,908	1,564	2,005	1,876
16		1,982	2,025	1,881	1,882	2,022	2,028	1,843	2,045	1,907	1,988	1,926	1,892	1,909	2,038	2,010	1,875
17		1,983	2,024	1,502	1,882	2,023	2,034	2,146	2,002	1,908	1,990	1,904	1,897	1,910	2,002	2,010	1,477
18		1,984	2,026	1,469	1,886	2,027	2,036	2,146	2,003	1,910	1,991	1,907	1,901	1,927	1,954	2,010	1,367
19		1,985	2,027	1,972	1,887	2,032	2,036	2,146	2,006	1,911	1,995	1,910	1,905	1,892	1,960	2,011	1,371
20		1,983	2,028	2,004	1,888	2,035	2,036	2,105	2,008	1,914	2,000	1,910	1,905	1,526	1,963	1,980	1,425
21		1,960	2,033	1,982	1,890	2,038	2,037	2,054	2,010	1,915	2,002	1,912	1,907	1,562	1,946	1,965	1,569
22		1,960	2,034	1,939	1,891	2,036	2,037	2,054	2,012	1,916	1,965	1,913	1,907	2,041	1,916	1,965	1,569
23		1,960	2,033	1,939	1,890	2,036	2,036	1,758	2,013	1,916	1,907	1,913	1,907	1,955	1,916	1,965	1,568
24		1,960	2,004	1,940	1,889	2,038	2,037	1,473	2,013	1,917	1,909	1,914	1,907	1,937	1,918	1,965	1,569
TOTAL		47,965	47,524	45,522	45,318	46,666	48,548	47,991	47,413	46,766	45,021	46,338	45,701	45,260	46,017	43,175	42,440
Cumulative Output Sold, kWhr		47,965	95,489	141,011	186,329	232,995	281,543	329,534	376,947	423,713	468,734	515,072	560,773	606,033	652,050	695,225	737,665
Transformer and line efficiency		99.6%	99.7%	99.7%	99.7%	99.7%	99.6%	99.7%	99.6%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%
Hourly average		1,999	1,980	1,897	1,888	1,944	2,023	2,000	1,976	1,949	1,876	1,931	1,904	1,886	1,917	1,799	1,768

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	Monday 7/17/2017	Tuesday 7/18/2017	Wednesday 7/19/2017	Thursday 7/20/2017	Friday 7/21/2017	Saturday 7/22/2017	Sunday 7/23/2017	Monday 7/24/2017	Tuesday 7/25/2017	Wednesday 7/26/2017	Thursday 7/27/2017	Friday 7/28/2017	Saturday 7/29/2017	Sunday 7/30/2017	Monday 7/31/2017	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 h	1,187	1,259	1,330	1,402	1,473	1,545	1,617	1,689	1,761	1,833	1,905	1,976	2,048	2,116	2,119			
Cumulative Availability, %	72.7%	72.9%	72.9%	73.0%	73.1%	73.2%	73.2%	73.3%	73.4%	73.4%	73.5%	73.5%	73.6%	73.5%	73.6%			
Max cumulative gross output, kW	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	817,907	868,814	916,002	962,636	1,009,576	1,057,527	1,104,246	1,151,461	1,199,009	1,248,131	1,299,523	1,349,660	1,397,721	1,443,769	1,444,966			
Cumulative Capacity Factor	60.7%	60.9%	60.9%	60.8%	60.7%	60.7%	60.6%	60.6%	60.6%	60.6%	60.8%	60.9%	60.9%	60.8%	60.8%			
Cumulative fuel input, MMBtu	10,095	10,707	11,293	11,879	12,467	13,063	13,638	14,203	14,777	15,353	15,961	16,547	17,136	17,703	17,724			
Cumulative gross output, kWh	817,907	868,814	916,002	962,636	1,009,576	1,057,527	1,104,246	1,151,461	1,199,009	1,248,131	1,299,523	1,349,660	1,397,721	1,443,769	1,444,966			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,088	10,826	11,181	11,306	11,280	11,176	11,095	10,763	10,869	10,546	10,650	10,532	11,032	11,075	11,202			
Daily heat rate, Btu/kWe	12,317	12,026	12,421	12,560	12,531	12,415	12,325	11,956	12,074	11,716	11,831	11,700	12,255	12,302	12,444			
Cumulative heat rate, Btu/kWe	11,111	11,094	11,099	11,109	11,117	11,119	11,118	11,104	11,094	11,073	11,056	11,037	11,036	11,038	11,042			
Cumulative heat rate, Btu/kWe	12,343	12,324	12,329	12,340	12,349	12,352	12,351	12,335	12,324	12,300	12,282	12,260	12,260	12,261	12,266			
Cumulative by Facility starting C																		
Max cumulative available engine	18,720	18,816	18,912	19,008	19,104	19,200	19,296	19,392	19,488	19,584	19,680	19,776	19,872	19,968	19,968			
Actual cumulative engine run h	14,182	14,254	14,325	14,397	14,468	14,540	14,612	14,684	14,756	14,828	14,900	14,971	15,043	15,111	15,114			
Cumulative Availability, %	75.8%	75.8%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%			
Max cumulative gross output, kW	15,440,700	15,519,900	15,599,100	15,678,300	15,757,500	15,836,700	15,915,900	15,995,100	16,074,300	16,153,500	16,232,700	16,311,900	16,391,100	16,470,300	16,470,300			
Actual cumulative gross output, kWh	10,419,327	10,470,234	10,517,422	10,564,056	10,610,996	10,658,947	10,705,666	10,752,881	10,800,429	10,849,551	10,900,943	10,951,080	10,999,141	11,045,189	11,046,386			
Cumulative Capacity Factor	67.5%	67.5%	67.4%	67.4%	67.3%	67.3%	67.3%	67.2%	67.2%	67.2%	67.2%	67.1%	67.1%	67.1%	67.1%			
Cumulative fuel input, MMBtu	131,422	132,035	132,621	133,206	133,795	134,390	134,966	135,530	136,104	136,680	137,288	137,874	138,463	139,030	139,051			
Cumulative gross output, kWh	10,419,327	10,470,234	10,517,422	10,564,056	10,610,996	10,658,947	10,705,666	10,752,881	10,800,429	10,849,551	10,900,943	10,951,080	10,999,141	11,045,189	11,046,386			
Cumulative heat rate, Btu/kWe	11,354	11,352	11,351	11,351	11,351	11,350	11,349	11,346	11,344	11,340	11,337	11,334	11,331	11,331	11,332			
Cumulative heat rate, Btu/kWe	12,613	12,610	12,610	12,609	12,609	12,608	12,607	12,604	12,602	12,598	12,594	12,590	12,589	12,587	12,588			
Service																		
Engine 1																		
Engine 2						Oil change				District tuning wells								
Engine 3						Oil change												
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Monday 7/17/2017	Tuesday 7/18/2017	Wednesday 7/19/2017	Thursday 7/20/2017	Friday 7/21/2017	Saturday 7/22/2017	Sunday 7/23/2017	Monday 7/24/2017	Tuesday 7/25/2017	Wednesday 7/26/2017	Thursday 7/27/2017	Friday 7/28/2017	Saturday 7/29/2017	Sunday 7/30/2017	Monday 7/31/2017	TOTAL		
Hour																		
1	1,567	2,059	2,004	1,808	1,903	1,918	1,919	1,842	1,919	1,861	1,993	2,091	1,996	1,902	1,953			
2	1,567	2,060	2,004	1,807	1,905	1,919	1,919	1,841	1,919	1,861	1,993	2,090	1,996	1,554	1,950			
3	1,567	2,060	2,004	1,809	1,905	1,893	1,920	1,841	1,919	1,861	1,993	2,090	1,995	1,496	1,949			
4	1,567	2,062	2,004	1,809	1,905	1,920	1,920	1,841	1,919	1,861	1,993	2,089	1,995	2,007	1,949			
5	1,567	2,061	2,005	1,809	1,905	1,920	1,921	1,841	1,919	1,862	1,993	2,089	1,995	1,812	1,942			
6	1,567	2,061	2,005	1,810	1,906	1,921	1,866	1,842	1,919	1,862	1,994	2,004	1,995	2,015	1,947			
7	1,567	2,060	2,005	1,810	1,906	1,922	1,918	1,841	1,920	1,864	1,994	1,497	1,931	1,945	1,948			
8	1,567	2,058	2,003	1,807	1,887	1,919	1,847	1,840	1,921	1,865	2,009	1,719	1,900	1,946	1,947			
9	1,562	2,049	1,993	1,797	1,824	1,916	1,846	1,840	1,916	1,862	2,082	2,082	1,900	1,944	1,935			
10	1,568	2,047	1,987	1,791	1,821	1,914	1,836	1,841	1,913	1,860	2,079	2,080	1,900	1,864	1,932			
11	1,789	2,028	1,984	1,792	1,496	1,915	1,833	1,913	1,914	1,985	2,076	2,078	1,899	-	750			
12	1,984	1,995	1,903	1,792	1,430	1,913	1,838	1,915	1,912	2,074	2,075	2,076	1,900	1,357	1,141			
13	1,941	1,997	1,841	1,833	1,897	1,851	1,837	1,915	1,904	2,076	2,075	2,076	1,900	2,067	1,257			
14	1,942	1,996	1,842	1,856	1,898	1,892	1,836	1,915	1,904	2,073	2,075	2,076	1,900	2,065	2,058			
15	2,055	1,996	989	1,890	1,900	1,910	1,835	1,916	1,897	2,075	2,077	2,029	1,900	2,066	2,056			
16	1,782	1,997	1,410	1,891	1,902	1,911	1,836	1,916	1,856	2,073	2,078	1,982	1,900	2,067	2,056			
17	1,793	1,997	1,929	1,896	1,907	1,910	1,837	1,920	1,858	2,049	2,082	1,987	1,898	2,068	2,058			
18	2,027	1,998	1,917	1,897	1,908	1,912	1,837	1,920	1,858	1,985	2,089	1,988	1,898	2,068	2,067			
19	2,051	1,999	1,890	1,898	1,909	1,913	1,839	1,920	1,862	1,987	2,090	1,989	1,898	2,069	2,069			
20	2,056	1,999	1,855	1,897	1,911	1,914	1,840	1,919	1,864	1,989	2,090	1,988	1,899	2,070	2,069			
21	2,058	1,999	1,838	1,897	1,911	1,916	1,841	1,920	1,865	1,991	2,091	1,990	1,900	2,047	2,070			
22	2,059	2,003	1,805	1,898	1,914	1,918	1,841	1,919	1,864	1,992	2,090	1,994	1,900	1,953	2,070			
23	2,058	2,002	1,806	1,901	1,917	1,918	1,841	1,919	1,858	1,992	2,089	1,994	1,901	1,953	2,071			
24	2,059	2,003	1,807	1,903	1,918	1,919	1,841	1,919	1,862	1,993	2,089	1,994	1,901	1,954	2,070			
TOTAL	43,320	48,586	44,830	44,298	44,685	45,874	44,644	45,256	45,462	46,953	49,289	48,072	46,197	44,289	45,314			
Cumulative Output Sold, kW	780,985	829,571	874,401	918,699	963,384	1,009,258	1,053,902	1,099,158	1,144,620	1,191,573	1,240,862	1,288,934	1,335,131	1,379,420	1,424,734			
Transformer and line efficien	99.7%	99.7%	99.7%	99.8%	99.7%	99.8%	99.8%	99.9%	99.7%	99.7%	99.6%	99.7%	99.8%	99.8%	99.7%			
Hourly average	1,805	2,024	1,868	1,846	1,862	1,911	1,860	1,886	1,894	1,956	2,054	2,003	1,925	1,845	1,888			

AUGUST 2017																		
		Tuesday 8/1/2017	Wednesday 8/2/2017	Thursday 8/3/2017	Friday 8/4/2017	Saturday 8/5/2017	Sunday 8/6/2017	Monday 8/7/2017	Tuesday 8/8/2017	Wednesday 8/9/2017	Thursday 8/10/2017	Friday 8/11/2017	Saturday 8/12/2017	Sunday 8/13/2017	Monday 8/14/2017	Tuesday 8/15/2017	Wednesday 8/16/2017	
LFG and Biogas Flow to the Engines (KSCF)		1,233	1,157	1,231	1,247	1,245	1,214	1,192	1,253	1,219	1,225	1,236	1,241	1,215	1,231	1,244	1,230	
LFG and Biogas Flow to the Engines (MMBTU HHV)		601	577	612	606	644	626	625	640	602	606	625	635	612	610	621	628	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,233	1,157	1,231	1,247	1,245	1,214	1,192	1,253	1,219	1,225	1,236	1,241	1,215	1,231	1,244	1,230	
LFG and Biogas Total Flow (MMBTU HHV)		601	577	612	606	644	626	625	640	602	606	625	635	612	610	621	628	
Average Methane Content (%)		48.2	49.3	49.1	48.0	51.1	50.9	51.8	50.4	48.8	48.9	50.0	50.5	49.8	49.0	49.3	50.4	
Engine 1 Hours		24	23	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 2 Hours		24	24	9	-	-	13	9	-	-	-	-	-	-	-	-	-	
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 4 Hours		-	-	16	24	24	10	14	24	24	24	24	23	24	24	24	24	
Generator 1 Power Output (kWhr)		17,816	17,412	18,928	17,852	18,564	17,800	16,772	17,024	16,644	16,208	16,908	17,940	17,880	19,156	18,804	17,688	
Generator 2 Power Output (kWhr)		12,046	12,048	4,776	-	-	6,104	4,380	-	-	-	-	-	-	-	-	-	
Generator 3 Power Output (kWhr)		19,708	17,432	16,864	16,992	16,176	18,084	17,560	17,120	17,536	18,548	18,548	17,868	16,176	16,176	16,180	16,828	
Generator 4 Power Output (kWhr)		-	-	9,692	16,154	16,142	6,870	9,226	17,114	14,978	14,980	14,966	15,498	16,308	14,954	14,954	15,300	
Gross Power Output (kWhr)		49,638	46,945	50,303	51,038	50,931	48,896	47,969	51,277	49,187	49,760	50,444	51,334	50,403	50,330	49,975	49,832	
Net Power Output (kWhr)		47,700	45,076	48,450	49,188	49,178	47,150	46,198	49,454	47,378	47,924	48,632	49,594	48,632	48,476	48,126	47,990	
Power Sold as metered by NStar, (kWhr)		47,564	44,956	48,331	49,002	49,017	47,017	46,085	49,344	47,241	47,765	48,463	49,408	48,455	48,289	47,940	47,833	
Offgrid RECs (kWhr)		1,938	1,869	1,855	1,848	1,753	1,746	1,771	1,823	1,809	1,836	1,811	1,741	1,771	1,860	1,848	1,843	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		742	757	789	744	774	742	699	709	694	675	705	748	745	798	784	737	
Generator 2		502	502	531	-	-	470	487	-	-	-	-	-	-	-	-	-	
Generator 3		821	726	703	708	674	754	732	713	731	773	773	745	674	674	674	701	
Generator 4		-	-	606	673	673	687	659	713	624	624	624	674	680	623	623	638	
Power output (kW average over 24-hrs)																		
Facility Gross		2,068	1,956	2,096	2,127	2,122	2,037	1,999	2,137	2,049	2,073	2,102	2,139	2,100	2,097	2,082	2,076	
Facility Net		1,988	1,878	2,019	2,050	2,049	1,965	1,925	2,061	1,974	1,997	2,026	2,066	2,026	2,020	2,005	2,000	
In-plant load		81	78	77	77	73	73	74	76	75	77	76	73	74	78	77	77	
Daily availability factor																		
Facility		75%	74%	76%	75%	75%	74%	74%	75%	75%	75%	75%	74%	75%	75%	75%	75%	
Engine 1		100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		100%	100%	38%	0%	0%	54%	38%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		0%	0%	67%	100%	100%	42%	58%	100%	100%	100%	100%	96%	100%	100%	100%	100%	
Daily capacity factor																		
Facility		63%	59%	64%	64%	63%	62%	61%	65%	62%	63%	64%	65%	64%	64%	63%	63%	
Engine 1		90%	92%	96%	90%	94%	90%	85%	86%	84%	82%	85%	91%	90%	97%	95%	89%	
Engine 2		61%	61%	64%	0%	0%	57%	59%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 3		100%	88%	85%	86%	82%	91%	89%	86%	89%	94%	94%	90%	82%	82%	82%	85%	
Engine 4		0%	0%	73%	82%	82%	83%	80%	86%	76%	76%	76%	82%	82%	76%	76%	77%	
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	47	71	95	119	143	167	191	215	239	263	287	311	335	359	383	
Engine 2		24	48	57	57	57	70	79	79	79	79	79	79	79	79	79	79	
Engine 3		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 4		0	0	16	40	64	74	88	112	136	160	184	207	231	255	279	303	
Engine operating run hours total from 0 hours																		
Engine 1		93,222	93,245	93,269	93,293	93,317	93,341	93,365	93,389	93,413	93,437	93,461	93,485	93,509	93,533	93,557	93,581	
Engine 2		87,920	87,944	87,968	87,977	87,977	87,990	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	
Engine 3		90,925	90,949	90,973	90,997	91,021	91,045	91,069	91,093	91,117	91,141	91,165	91,189	91,213	91,237	91,261	91,285	
Engine 4		87,989	87,989	88,005	88,029	88,053	88,063	88,077	88,101	88,125	88,149	88,173	88,196	88,220	88,244	88,268	88,292	
Cumulative availability, %	July 1, 2017 @ 00:00 hours																	
Engine 1		100%	98%	99%	99%	99%	99%	99%	99%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		100%	100%	79%	59%	48%	37%	41%	41%	27%	30%	30%	27%	25%	24%	22%	21%	
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 4		0%	0%	22%	42%	53%	51%	52%	58%	63%	67%	70%	72%	74%	76%	78%	79%	
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		742	1,499	2,288	3,032	3,805	4,547	5,246	5,955	6,649	7,324	8,029	8,776	9,521	10,319	11,103	11,840	
Engine 2		502	1,004	1,535	2,066	2,597	3,128	3,659	4,190	4,721	5,252	5,783	6,314	6,845	7,376	7,907	8,438	
Engine 3		821	1,548	2,250	2,958	3,632	4,386	5,117	5,831	6,561	7,334	8,107	8,852	9,526	10,200	10,874	11,575	
Engine 4		-	-	606	1,279	1,951	2,638	3,297	4,011	4,635	5,259	5,882	6,556	7,236	7,859	8,482	9,119	
Cumulative capacity factor, %																		
Engine 1		90%	91%	92%	92%	92%	92%	91%	90%	90%	89%	88%	89%	89%	89%	90%	90%	
Engine 2		61%	61%	62%	47%	37%	30%	34%	30%	27%	30%	30%	25%	23%	22%	20%	19%	
Engine 3		100%	94%	91%	90%	88%	89%	89%	88%	88%	89%	89%	89%	89%	88%	88%	88%	
Engine 4		0%	0%	24%	39%	47%	53%	57%	61%	62%	64%	65%	66%	67%	68%	69%	69%	

		Tuesday 8/1/2017	Wednesday 8/2/2017	Thursday 8/3/2017	Friday 8/4/2017	Saturday 8/5/2017	Sunday 8/6/2017	Monday 8/7/2017	Tuesday 8/8/2017	Wednesday 8/9/2017	Thursday 8/10/2017	Friday 8/11/2017	Saturday 8/12/2017	Sunday 8/13/2017	Monday 8/14/2017	Tuesday 8/15/2017	Wednesday 8/16/2017
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	143	216	288	360	431	502	574	646	718	790	861	933	1,005	1,077	1,149
Cumulative Availability, %		75.0%	74.5%	75.0%	75.0%	75.0%	74.8%	74.7%	74.7%	74.8%	74.8%	74.8%	74.7%	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		49,638	96,583	146,886	197,924	248,855	297,751	345,720	396,997	446,184	495,944	546,388	597,722	648,125	698,455	748,430	798,262
Cumulative Capacity Factor		62.7%	61.0%	61.8%	62.5%	62.8%	62.7%	62.4%	62.7%	62.6%	62.6%	62.7%	62.9%	62.9%	63.0%	63.0%	63.0%
Cumulative fuel input, MMBtu HHV		601	1,178	1,790	2,396	3,040	3,666	4,291	4,930	5,533	6,138	6,764	7,398	8,010	8,620	9,241	9,869
Cumulative gross output, kWhr		49,638	96,583	146,886	197,924	248,855	297,751	345,720	396,997	446,184	495,944	546,388	597,722	648,125	698,455	748,430	798,262
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,899	11,068	10,954	10,690	11,379	11,521	11,721	11,230	11,023	10,958	11,157	11,132	10,932	10,910	11,181	11,339
Daily heat rate, Btu/kWe gross HHV		12,108	12,295	12,168	11,875	12,641	12,799	13,021	12,475	12,245	12,172	12,394	12,366	12,144	12,120	12,420	12,596
Cumulative heat rate, Btu/kWe gross LHV		10,899	10,981	10,972	10,899	10,997	11,084	11,172	11,180	11,162	11,142	11,143	11,142	11,126	11,110	11,115	11,129
Cumulative heat rate, Btu/kWe gross HHV		12,108	12,199	12,188	12,108	12,217	12,312	12,411	12,419	12,400	12,377	12,379	12,377	12,359	12,342	12,347	12,363
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		20,064	20,160	20,256	20,352	20,448	20,544	20,640	20,736	20,832	20,928	21,024	21,120	21,216	21,312	21,408	21,504
Actual cumulative engine run hours		15,186	15,257	15,330	15,402	15,474	15,545	15,616	15,688	15,760	15,832	15,904	15,975	16,047	16,119	16,191	16,263
Cumulative Availability, %		75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.7%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%
Max cumulative gross output, kWhr		16,549,500	16,628,700	16,707,900	16,787,100	16,866,300	16,945,500	17,024,700	17,103,900	17,183,100	17,262,300	17,341,500	17,420,700	17,499,900	17,579,100	17,658,300	17,737,500
Actual cumulative gross output, kWhr		11,096,024	11,142,969	11,193,272	11,244,310	11,295,241	11,344,137	11,392,106	11,443,383	11,492,570	11,542,330	11,592,774	11,644,108	11,694,511	11,744,841	11,794,816	11,844,648
Cumulative Capacity Factor		67.0%	67.0%	67.0%	67.0%	67.0%	66.9%	66.9%	66.9%	66.9%	66.9%	66.8%	66.8%	66.8%	66.8%	66.8%	66.8%
Cumulative fuel input, MMBtu HHV		139,652	140,230	140,842	141,448	142,092	142,717	143,342	143,982	144,584	145,190	145,815	146,450	147,062	147,672	148,292	148,920
Cumulative gross output, kWhr		11,096,024	11,142,969	11,193,272	11,244,310	11,295,241	11,344,137	11,392,106	11,443,383	11,492,570	11,542,330	11,592,774	11,644,108	11,694,511	11,744,841	11,794,816	11,844,648
Cumulative heat rate, Btu/kWe gross LHV		11,330	11,329	11,327	11,324	11,324	11,325	11,327	11,326	11,325	11,323	11,323	11,322	11,320	11,318	11,318	11,318
Cumulative heat rate, Btu/kWe gross HHV		12,586	12,585	12,583	12,579	12,580	12,581	12,583	12,582	12,581	12,579	12,578	12,577	12,575	12,573	12,573	12,573
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 8/1/2017	Wednesday 8/2/2017	Thursday 8/3/2017	Friday 8/4/2017	Saturday 8/5/2017	Sunday 8/6/2017	Monday 8/7/2017	Tuesday 8/8/2017	Wednesday 8/9/2017	Thursday 8/10/2017	Friday 8/11/2017	Saturday 8/12/2017	Sunday 8/13/2017	Monday 8/14/2017	Tuesday 8/15/2017	Wednesday 8/16/2017
Hour																	
1		2,069	1,945	1,849	2,139	2,042	2,044	1,972	2,120	1,903	1,997	1,999	2,041	2,039	2,019	2,017	2,018
2		2,068	1,945	1,847	2,138	2,042	2,002	1,972	2,119	1,902	1,997	1,998	2,115	2,039	2,019	2,016	2,017
3		2,070	1,946	1,849	2,138	2,042	1,973	1,972	2,120	1,903	1,997	1,999	2,115	2,039	2,019	2,016	2,018
4		2,071	1,946	1,849	2,138	2,043	1,974	1,973	2,120	1,904	1,998	1,999	2,114	2,039	2,020	2,017	2,018
5		2,070	1,945	1,849	2,138	2,042	1,974	1,973	2,120	1,903	1,997	1,999	2,114	2,039	2,019	2,016	2,017
6		2,070	1,946	1,850	2,138	2,042	1,974	1,973	2,120	1,905	1,998	1,999	2,114	2,039	2,020	2,016	2,018
7		2,068	1,945	1,850	2,138	2,044	1,974	1,973	2,120	1,906	1,998	2,001	2,116	2,040	2,020	2,018	2,019
8		2,062	1,942	1,843	2,136	2,043	1,973	1,965	2,118	1,987	1,999	2,116	2,039	2,009	2,016	2,015	
9		1,985	1,270	1,866	1,975	2,042	1,969	1,189	1,930	1,960	1,979	2,005	2,116	2,039	2,000	2,006	1,772
10		1,933	1,738	1,945	1,935	2,042	1,965	401	1,909	1,918	1,980	2,100	2,116	1,939	2,002	1,984	1,488
11		1,931	2,055	2,009	1,936	2,042	1,598	1,307	2,029	2,042	1,977	2,096	2,115	1,966	1,999	1,880	1,606
12		1,930	2,052	2,115	1,936	2,042	1,545	2,058	1,988	2,097	1,978	2,098	2,114	2,014	1,999	1,879	2,053
13		1,928	2,048	2,129	1,936	2,043	1,998	2,103	1,956	1,980	1,977	2,097	1,891	2,014	1,999	1,906	2,130
14		1,927	2,047	2,128	1,936	2,042	2,060	2,102	2,015	1,979	1,976	2,096	1,531	2,013	1,999	1,999	2,121
15		1,928	1,615	2,127	1,936	2,042	2,060	2,101	2,192	1,980	1,977	2,040	2,118	2,014	2,004	2,001	2,121
16		1,928	1,795	2,131	1,981	2,042	2,061	2,107	2,134	1,987	1,989	1,988	2,131	2,013	2,014	2,016	2,070
17		1,934	1,836	2,136	2,038	2,041	2,061	2,116	2,138	1,992	1,992	1,990	2,134	2,013	2,014	2,017	2,040
18		1,937	1,844	2,136	2,039	2,042	1,994	2,117	2,069	1,993	1,993	1,992	2,055	2,015	2,015	2,017	2,040
19		1,938	1,848	2,137	2,041	2,043	1,967	2,119	2,044	1,993	1,994	1,992	2,041	2,016	2,016	2,018	2,042
20		1,939	1,850	2,137	2,042	2,042	1,968	2,119	2,043	1,995	1,996	1,993	2,040	2,015	2,016	2,017	2,041
21		1,943	1,850	2,137	2,042	2,043	1,968	2,118	2,043	1,996	1,996	1,995	2,040	2,017	2,016	2,017	2,042
22		1,945	1,850	2,137	2,042	2,043	1,970	2,118	2,044	1,996	1,997	1,996	2,041	2,018	2,018	2,017	2,042
23		1,945	1,849	2,137	2,042	2,043	1,972	2,118	1,950	1,995	1,997	1,996	2,041	2,017	2,016	2,017	2,042
24		1,945	1,849	2,138	2,042	2,043	1,973	2,119	1,903	1,996	1,998	1,996	2,039	2,019	2,017	2,017	2,043
TOTAL		47,564	44,956	48,331	49,002	49,017	47,017	46,085	49,344	47,241	47,765	48,463	49,408	48,455	48,289	47,940	47,833
Cumulative Output Sold, kWhr		47,564	92,520	140,851	189,853	238,870	285,887	331,972	381,316	428,557	476,322	524,785	574,193	622,648	670,937	718,877	766,710
Transformer and line efficiency		99.7%	99.7%	99.8%	99.6%	99.7%	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%	99.6%	99.6%	99.6%	99.6%	99.7%
Hourly average		1,982	1,873	2,014	2,042	2,042	1,959	1,920	2,056	1,968	1,990	2,019	2,059	2,019	2,012	1,998	1,993

AUGUST 2017																		
	Thursday 8/17/2017	Friday 8/18/2017	Saturday 8/19/2017	Sunday 8/20/2017	Monday 8/21/2017	Tuesday 8/22/2017	Wednesday 8/23/2017	Thursday 8/24/2017	Friday 8/25/2017	Saturday 8/26/2017	Sunday 8/27/2017	Monday 8/28/2017	Tuesday 8/29/2017	Wednesday 8/30/2017	Thursday 8/31/2017	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,255	1,252	1,252	1,217	1,328	1,309	1,258	1,242	1,203	1,206	1,195	1,203	1,167	1,190	1,156	38,044	1,758	36,286
LFG and Biogas Flow to the Engine	621	645	656	635	683	639	603	587	551	548	550	562	574	601	576	18,900	1,246	17,654
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6%	93%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,255	1,252	1,252	1,217	1,328	1,309	1,258	1,242	1,203	1,206	1,195	1,203	1,167	1,190	1,156	38,044	-	-
LFG and Biogas Total Flow (MMBT	621	645	656	635	683	639	603	587	551	548	550	562	574	601	576	18,900	-	-
Average Methane Content (%)	48.9	50.9	51.7	51.6	50.8	48.3	47.4	46.7	45.3	44.9	45.4	46.2	48.6	49.9	49.2	49.1	-	-
Engine 1 Hours	24	24	24	24	24	24	24	22	24	24	24	24	24	24	24	741	-	-
Engine 2 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	79	-	-
Engine 3 Hours	24	24	24	22	24	24	24	24	24	24	24	24	24	24	24	742	-	-
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	663	-	-
Generator 1 Power Output (kWhr)	18,200	19,156	16,392	15,668	18,176	19,156	17,636	14,556	16,248	16,200	16,996	18,212	17,504	17,156	17,620	542,272	-	-
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	39,354	-	-
Generator 3 Power Output (kWhr)	16,172	17,764	17,644	16,000	17,624	18,548	18,552	18,120	17,564	18,328	16,184	16,176	16,880	16,824	17,596	537,772	-	-
Generator 4 Power Output (kWhr)	15,748	16,538	18,484	17,252	15,812	14,946	16,894	18,760	16,034	14,944	14,964	14,956	16,836	18,346	14,956	442,606	-	-
Gross Power Output (kWhr)	50,137	53,377	52,393	48,952	51,590	52,614	53,024	51,344	49,760	49,385	48,072	49,273	51,140	52,245	50,093	1,561,661	-	-
Net Power Output (kWhr)	48,304	51,432	50,218	46,906	49,602	50,598	51,052	49,404	47,886	47,536	46,258	47,396	49,244	50,376	48,122	1,503,474	-	-
Power Sold as metered by NStar, (	48,153	51,264	50,084	46,739	49,396	50,394	50,848	49,250	47,759	47,449	46,111	47,282	49,106	50,253	47,979	1,498,777	CRMCB inplant	-
Offgrid RECs (kWhr)	1,833	1,947	2,175	2,045	1,987	2,016	1,972	1,941	1,874	1,849	1,814	1,877	1,896	1,869	1,971	58,188	6,694	-
Calculated Performance Results																		
Daily																		
Power output (kW average whe																		12%
Generator 1	758	798	683	653	757	798	735	662	677	675	708	759	729	715	734			of total in-plant
Generator 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			power
Generator 3	674	740	735	727	734	773	773	755	732	764	674	674	703	701	733			
Generator 4	656	689	770	719	659	623	704	782	668	623	624	623	702	764	623			
Power output (kW average ove																		
Facility Gross	2,089	2,224	2,183	2,040	2,150	2,192	2,209	2,139	2,073	2,058	2,003	2,053	2,131	2,177	2,087			
Facility Net	2,013	2,143	2,092	1,954	2,067	2,108	2,127	2,059	1,995	1,981	1,927	1,975	2,052	2,099	2,005			
In-plant load	76	81	91	85	83	84	82	81	78	77	76	78	79	78	82			
Daily availability factor																		
Facility	75%	75%	75%	73%	75%	75%	75%	73%	75%	75%	75%	75%	75%	75%	75%			
Engine 1	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 3	100%	100%	100%	92%	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%			
Daily capacity factor																		
Facility	63%	67%	66%	62%	65%	66%	67%	65%	63%	62%	61%	62%	65%	66%	63%			
Engine 1	92%	97%	83%	79%	92%	97%	89%	80%	82%	82%	86%	92%	88%	87%	89%			
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 3	82%	90%	89%	86%	89%	94%	94%	92%	89%	93%	82%	82%	85%	85%	89%			
Engine 4	80%	84%	93%	87%	80%	75%	85%	95%	81%	75%	76%	76%	85%	93%	76%			
Cumulative by engine																		
Engine operating run hours in tl																		
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720			
Engine 1	407	431	455	479	503	527	551	573	597	621	645	669	693	717	717			
Engine 2	79	79	79	79	79	79	79	79	79	79	79	79	79	79	79			
Engine 3	408	432	456	478	502	526	550	574	598	622	646	670	694	718	718			
Engine 4	327	351	375	399	423	447	471	495	519	543	567	591	615	639	639			
Engine operating run hours tota																		
Engine 1	93,605	93,629	93,653	93,677	93,701	93,725	93,749	93,771	93,795	93,819	93,843	93,867	93,891	93,915	93,915			
Engine 2	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999			
Engine 3	91,333	91,357	91,381	91,403	91,427	91,451	91,475	91,499	91,523	91,547	91,571	91,595	91,619	91,643	91,643			
Engine 4	88,316	88,340	88,364	88,388	88,412	88,436	88,460	88,484	88,508	88,532	88,556	88,580	88,604	88,628	88,628			
Cumulative availability, %																		
Engine 1	100%	100%	100%	100%	100%	100%	100%	99%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	19%	18%	17%	16%	16%	15%	14%	14%	13%	13%	12%	12%	11%	11%	11%			
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4	80%	81%	82%	83%	84%	85%	85%	86%	87%	87%	88%	88%	88%	89%	89%			
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	12,598	13,396	14,079	14,732	15,489	16,288	17,022	17,684	18,361	19,036	19,744	20,503	21,232	21,947	21,967			
Engine 2	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491	2,491			
Engine 3	12,249	12,989	13,724	14,451	15,186	15,958	16,731	17,486	18,218	18,982	19,656	20,330	21,034	21,735	21,767			
Engine 4	9,775	10,465	11,235	11,954	12,612	13,235	13,939	14,721	15,389	16,011	16,635	17,258	17,960	18,724	18,583			
Cumulative capacity factor, %																		
Engine 1	90%	90%	90%	89%	89%	90%	90%	89%	89%	89%	89%	89%	89%	89%	89%			
Engine 2	16%	17%	16%	15%	14%	13%	13%	13%	12%	12%	11%	11%	10%	10%	10%			
Engine 3	87%	87%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%	88%			
Engine 4	70%	70%	72%	72%	73%	73%	73%	74%	75%	75%	75%	75%	75%	76%	75%			

	Thursday 8/17/2017	Friday 8/18/2017	Saturday 8/19/2017	Sunday 8/20/2017	Monday 8/21/2017	Tuesday 8/22/2017	Wednesday 8/23/2017	Thursday 8/24/2017	Friday 8/25/2017	Saturday 8/26/2017	Sunday 8/27/2017	Monday 8/28/2017	Tuesday 8/29/2017	Wednesday 8/30/2017	Thursday 8/31/2017	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 h	1,221	1,293	1,365	1,435	1,507	1,579	1,651	1,721	1,793	1,865	1,937	2,009	2,081	2,153	2,153			
Cumulative Availability, %	74.8%	74.8%	74.8%	74.7%	74.8%	74.8%	74.8%	74.7%	74.7%	74.7%	74.7%	74.7%	74.7%	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	2,376,000			
Actual cumulative gross output, kWh	848,399	901,776	954,169	1,003,121	1,054,711	1,107,325	1,160,349	1,211,693	1,261,453	1,310,838	1,358,910	1,408,183	1,459,323	1,511,568	1,509,416			
Cumulative Capacity Factor	63.0%	63.3%	63.4%	63.3%	63.4%	63.6%	63.7%	63.7%	63.7%	63.7%	63.5%	63.5%	63.5%	63.6%	63.5%			
Cumulative fuel input, MMBtu	10,490	11,135	11,790	12,425	13,109	13,748	14,351	14,938	15,489	16,037	16,587	17,149	17,723	18,324	18,299			
Cumulative gross output, kWh	848,399	901,776	954,169	1,003,121	1,054,711	1,107,325	1,160,349	1,211,693	1,261,453	1,310,838	1,358,910	1,408,183	1,459,323	1,511,568	1,509,416			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,152	10,873	11,263	11,681	11,923	10,933	10,244	10,290	9,975	9,991	10,290	10,266	10,106	10,359	10,346			
Daily heat rate, Btu/kWe net	12,388	12,078	12,511	12,976	13,245	12,145	11,380	11,431	11,081	11,099	11,431	11,404	11,226	11,507	11,493			
Cumulative heat rate, Btu/kWe	11,130	11,115	11,123	11,150	11,188	11,176	11,133	11,098	11,053	11,013	10,988	10,963	10,933	10,913	10,913			
Cumulative heat rate, Btu/kWe net	12,364	12,347	12,356	12,387	12,429	12,415	12,368	12,328	12,279	12,234	12,206	12,178	12,145	12,123	12,123			
Cumulative by Facility starting 8/1/2017																		
Max cumulative available engine	21,600	21,696	21,792	21,888	21,984	22,080	22,176	22,272	22,368	22,464	22,560	22,656	22,752	22,848	22,848			
Actual cumulative engine run h	16,335	16,407	16,479	16,549	16,621	16,693	16,765	16,835	16,907	16,979	17,051	17,123	17,195	17,267	17,267			
Cumulative Availability, %	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%			
Max cumulative gross output, kWh	17,816,700	17,895,900	17,975,100	18,054,300	18,133,500	18,212,700	18,291,900	18,371,100	18,450,300	18,529,500	18,608,700	18,687,900	18,767,100	18,846,300	18,846,300			
Actual cumulative gross output, kWh	11,894,785	11,948,162	12,000,555	12,049,507	12,101,097	12,153,711	12,206,735	12,258,079	12,307,839	12,357,224	12,405,296	12,454,569	12,505,709	12,557,954	12,555,802			
Cumulative Capacity Factor	66.8%	66.8%	66.8%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.7%	66.6%	66.6%	66.6%	66.6%			
Cumulative fuel input, MMBtu	149,541	150,186	150,841	151,477	152,160	152,799	153,402	153,989	154,541	155,089	155,638	156,200	156,774	157,375	157,350			
Cumulative gross output, kWh	11,894,785	11,948,162	12,000,555	12,049,507	12,101,097	12,153,711	12,206,735	12,258,079	12,307,839	12,357,224	12,405,296	12,454,569	12,505,709	12,557,954	12,555,802			
Cumulative heat rate, Btu/kWe	11,317	11,315	11,315	11,317	11,319	11,317	11,313	11,309	11,303	11,298	11,294	11,290	11,285	11,281	11,281			
Cumulative heat rate, Btu/kWe net	12,572	12,570	12,570	12,571	12,574	12,572	12,567	12,562	12,556	12,550	12,546	12,542	12,536	12,532	12,532			
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 8/17/2017	Friday 8/18/2017	Saturday 8/19/2017	Sunday 8/20/2017	Monday 8/21/2017	Tuesday 8/22/2017	Wednesday 8/23/2017	Thursday 8/24/2017	Friday 8/25/2017	Saturday 8/26/2017	Sunday 8/27/2017	Monday 8/28/2017	Tuesday 8/29/2017	Wednesday 8/30/2017	Thursday 8/31/2017	TOTAL		
Hour																		
1	2,044	2,019	2,246	2,012	2,033	2,104	2,104	2,132	2,036	1,988	1,893	1,988	1,990	2,134	1,891			
2	2,042	2,018	2,194	2,012	2,032	2,103	2,103	2,131	2,034	1,988	1,892	1,983	1,984	2,133	1,889			
3	2,045	2,019	2,125	2,012	2,033	2,103	2,104	2,131	2,034	1,988	1,886	1,982	1,987	2,133	1,883			
4	2,045	2,020	2,126	2,013	2,033	2,104	2,105	2,131	2,035	1,982	1,888	1,984	1,987	2,135	1,890			
5	2,045	2,018	2,125	2,012	2,033	2,104	2,105	2,131	2,034	1,984	1,887	1,983	1,986	2,135	1,889			
6	1,952	2,018	2,126	2,012	2,012	2,104	2,105	2,131	2,034	1,984	1,889	1,983	1,986	2,133	1,888			
7	1,904	2,019	2,127	2,014	1,892	2,105	2,107	2,088	2,035	1,985	1,891	1,958	1,987	2,101	1,889			
8	1,921	2,025	2,126	376	1,886	2,103	2,106	2,035	1,949	1,987	1,889	1,989	2,038	1,890				
9	2,008	2,101	2,125	776	1,998	2,089	2,095	2,027	1,884	1,986	1,892	1,884	1,983	2,032	1,881			
10	2,004	2,094	2,126	2,239	2,060	2,091	2,093	2,022	1,885	1,986	1,892	1,884	1,976	2,033	1,941			
11	2,002	2,094	2,123	2,243	2,094	2,090	2,119	1,707	2,012	1,984	1,888	1,953	1,975	2,098	2,066			
12	2,000	2,095	2,123	2,203	2,095	2,090	2,188	1,549	1,976	1,984	1,890	1,976	1,616	2,127	2,066			
13	2,000	2,095	2,105	2,126	2,095	2,090	2,114	1,896	1,976	1,985	1,891	1,979	2,209	2,126	2,066			
14	1,999	2,186	2,103	2,125	2,093	2,090	2,112	2,137	1,976	1,984	1,887	1,978	2,139	2,125	2,064			
15	2,000	2,233	2,096	2,125	2,094	2,098	2,125	2,136	1,979	1,985	1,889	1,980	2,124	2,124	2,065			
16	2,011	2,241	2,007	2,125	2,099	2,101	2,126	2,143	1,983	1,986	1,889	1,985	2,129	2,123	2,075			
17	2,013	2,246	2,007	2,093	2,099	2,101	2,128	2,135	1,985	1,984	1,971	1,987	2,132	2,125	2,079			
18	2,015	2,247	2,009	2,030	2,100	2,103	2,127	2,126	1,986	1,985	1,985	1,987	2,131	2,129	2,079			
19	2,016	2,247	2,011	2,032	2,102	2,104	2,129	2,128	1,987	1,986	1,986	1,990	2,133	2,130	2,081			
20	2,017	2,245	2,010	2,031	2,101	2,103	2,129	2,128	1,988	1,985	1,986	1,989	2,132	2,129	2,080			
21	2,017	2,246	2,010	2,031	2,102	2,103	2,131	2,102	1,987	1,985	1,986	1,989	2,132	2,034	2,081			
22	2,018	2,246	2,011	2,032	2,103	2,104	2,131	2,034	1,988	1,976	1,987	1,990	2,133	2,035	2,082			
23	2,017	2,245	2,011	2,032	2,103	2,103	2,131	2,035	1,988	1,891	1,987	1,990	2,133	2,033	2,082			
24	2,018	2,247	2,012	2,033	2,104	2,104	2,131	2,035	1,988	1,891	1,988	1,991	2,133	1,908	2,082			
TOTAL	48,153	51,264	50,084	46,739	49,396	50,394	50,848	49,250	47,759	47,449	46,111	47,282	49,106	50,253	47,979			
Cumulative Output Sold, kWh	814,863	866,127	916,211	962,950	1,012,346	1,062,740	1,113,588	1,162,838	1,210,597	1,258,046	1,304,157	1,351,439	1,400,545	1,450,798	1,498,777			
Transformer and line efficiency	99.7%	99.7%	99.7%	99.6%	99.6%	99.6%	99.6%	99.7%	99.7%	99.8%	99.7%	99.8%	99.7%	99.8%	99.7%			
Hourly average	2,006	2,136	2,087	1,947	2,058	2,100	2,119	2,052	1,990	1,977	1,921	1,970	2,046	2,094	1,999			

SEPTEMBER 2017																		
	Friday 9/1/2017	Saturday 9/2/2017	Sunday 9/3/2017	Monday 9/4/2017	Tuesday 9/5/2017	Wednesday 9/6/2017	Thursday 9/7/2017	Friday 9/8/2017	Saturday 9/9/2017	Sunday 9/10/2017	Monday 9/11/2017	Tuesday 9/12/2017	Wednesday 9/13/2017	Thursday 9/14/2017	Friday 9/15/2017	Saturday 9/16/2017		
LFG and Biogas Flow to the Engines (KSCF)	1,173	1,138	1,177	1,163	1,131	1,208	1,177	1,149	1,147	1,129	1,151	1,182	1,204	1,198	1,201	1,189		
LFG and Biogas Flow to the Engines (MMBTU HHV)	574	547	584	579	558	597	595	576	561	546	563	586	589	578	585	576		
LFG and Biogas Flow to the Flare (KSCF)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Flow to the Flare (MMBTU HHV)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Total Flow (KSCF)	1,173	1,138	1,177	1,163	1,131	1,208	1,177	1,149	1,147	1,129	1,151	1,182	1,204	1,198	1,201	1,189		
LFG and Biogas Total Flow (MMBTU HHV)	574	547	584	579	558	597	595	576	561	546	563	586	589	578	585	576		
Average Methane Content (%)	48.3	47.4	49.0	49.2	48.8	48.8	49.9	49.5	48.3	47.8	48.3	49.0	48.3	47.7	48.1	47.9		
Engine 1 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24		
Engine 2 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
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	24	24	24	24	24	24	24	24		
Generator 1 Power Output (kWhr)	16,908	16,716	17,868	16,420	17,728	18,560	18,016	16,576	16,208	16,208	16,424	17,692	16,992	16,784	16,208	17,608		
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 3 Power Output (kWhr)	18,548	17,068	16,172	16,172	16,172	16,168	18,388	18,548	17,900	16,172	16,228	17,628	18,548	16,596	16,172	16,172		
Generator 4 Power Output (kWhr)	14,956	14,956	16,570	18,078	14,956	14,956	14,956	14,956	14,954	14,952	16,830	16,098	16,360	18,480	18,478	18,482		
Gross Power Output (kWhr)	50,323	48,659	50,544	50,598	48,776	49,628	51,285	49,998	48,968	47,246	49,415	51,352	51,812	51,792	50,788	52,187		
Net Power Output (kWhr)	48,356	46,786	48,680	48,722	46,794	47,632	49,318	48,064	47,120	45,414	47,426	49,350	49,796	49,740	48,776	50,260		
Power Sold as metered by NStar, (kWhr)	48,239	46,683	48,549	48,584	46,667	47,484	49,170	47,920	47,013	45,319	47,280	49,191	49,641	49,578	48,623	50,103		
Offgrid RECs (kWhr)	1,968	1,872	1,864	1,876	1,983	1,996	1,967	1,934	1,847	1,833	1,989	2,002	2,016	2,052	2,012	1,927		
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1	705	697	745	684	739	773	751	691	675	675	684	737	708	699	675	734		
Generator 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 3	773	711	674	674	674	674	766	773	746	674	676	735	773	692	674	674		
Generator 4	623	623	690	753	623	623	623	623	623	623	701	671	682	770	770	770		
Power output (kW average over 24-hrs)																		
Facility Gross	2,097	2,027	2,106	2,108	2,032	2,068	2,137	2,083	2,040	1,969	2,059	2,140	2,159	2,158	2,116	2,174		
Facility Net	2,015	1,949	2,028	2,030	1,950	1,985	2,055	2,003	1,963	1,892	1,976	2,056	2,075	2,073	2,032	2,094		
In-plant load	82	78	78	78	83	83	82	81	77	76	83	83	84	86	84	80		
Daily availability factor																		
Facility	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	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%	0%	0%	0%	0%	0%	0%		
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%		
Daily capacity factor																		
Facility	64%	61%	64%	64%	62%	63%	65%	63%	62%	60%	62%	65%	65%	65%	64%	66%		
Engine 1	85%	84%	90%	83%	90%	94%	91%	84%	82%	82%	83%	89%	86%	85%	82%	89%		
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Engine 3	94%	86%	82%	82%	82%	82%	93%	94%	90%	82%	82%	89%	94%	84%	82%	82%		
Engine 4	76%	76%	84%	91%	76%	76%	76%	76%	76%	76%	85%	81%	83%	93%	93%	93%		
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	0	0	0	0	0	0		
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	216	240	264	288	312	336	360	384		
Engine operating run hours total from 0 hours																		
Engine 1	93,939	93,963	93,987	94,011	94,035	94,059	94,083	94,107	94,131	94,155	94,179	94,203	94,227	94,251	94,275	94,299		
Engine 2	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999	87,999		
Engine 3	91,643	91,667	91,691	91,715	91,739	91,763	91,787	91,811	91,835	91,859	91,883	91,907	91,931	91,955	91,979	92,003		
Engine 4	88,628	88,652	88,676	88,700	88,724	88,748	88,772	88,796	88,820	88,844	88,868	88,892	88,916	88,940	88,964	88,988		
Cumulative availability, %	Sept 1, 2017 @ 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%	0%	0%	0%		
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	705	1,401	2,146	2,830	3,568	4,342	5,092	5,783	6,458	7,134	7,818	8,555	9,263	9,963	10,638	11,372		
Engine 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Engine 3	773	1,484	2,158	2,832	3,506	4,179	4,945	5,718	6,464	7,138	7,814	8,549	9,321	10,013	10,687	11,361		
Engine 4	623	1,246	1,937	2,690	3,313	3,936	4,560	5,183	5,806	6,429	7,130	7,801	8,482	9,252	10,022	10,792		
Cumulative capacity factor, %																		
Engine 1	85%	85%	87%	86%	87%	88%	88%	88%	87%	86%	86%	86%	86%	86%	86%	86%		
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Engine 3	94%	90%	87%	86%	85%	84%	86%	87%	87%	87%	86%	86%	87%	87%	86%	86%		
Engine 4	76%	76%	78%	82%	80%	80%	79%	79%	78%	78%	79%	79%	79%	80%	81%	82%		

		Friday 9/1/2017	Saturday 9/2/2017	Sunday 9/3/2017	Monday 9/4/2017	Tuesday 9/5/2017	Wednesday 9/6/2017	Thursday 9/7/2017	Friday 9/8/2017	Saturday 9/9/2017	Sunday 9/10/2017	Monday 9/11/2017	Tuesday 9/12/2017	Wednesday 9/13/2017	Thursday 9/14/2017	Friday 9/15/2017	Saturday 9/16/2017
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	864	936	1,008	1,080	1,152
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%	75.0%
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		50,323	98,982	149,526	200,124	248,900	298,528	349,813	399,811	448,779	496,025	545,440	596,792	648,604	700,396	751,184	803,371
Cumulative Capacity Factor		63.5%	62.5%	62.9%	63.2%	62.9%	62.8%	63.1%	63.1%	63.0%	62.6%	62.6%	62.8%	63.0%	63.2%	63.2%	63.4%
Cumulative fuel input, MMBtu HHV		574	1,120	1,704	2,283	2,841	3,437	4,032	4,608	5,169	5,715	6,278	6,864	7,453	8,031	8,615	9,192
Cumulative gross output, kWhr		50,323	98,982	149,526	200,124	248,900	298,528	349,813	399,811	448,779	496,025	545,440	596,792	648,604	700,396	751,184	803,371
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,263	10,112	10,403	10,292	10,296	10,820	10,446	10,371	10,306	10,405	10,258	10,271	10,225	10,048	10,362	9,943
Daily heat rate, Btu/kWe gross HHV		11,400	11,233	11,556	11,433	11,438	12,019	11,604	11,520	11,448	11,559	11,395	11,409	11,358	11,162	11,511	11,045
Cumulative heat rate, Btu/kWe gross LHV		10,263	10,189	10,261	10,269	10,274	10,365	10,377	10,376	10,368	10,372	10,362	10,354	10,343	10,322	10,324	10,300
Cumulative heat rate, Btu/kWe gross HHV		11,400	11,318	11,399	11,407	11,413	11,514	11,527	11,526	11,518	11,522	11,510	11,502	11,490	11,466	11,469	11,441
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		22,944	23,040	23,136	23,232	23,328	23,424	23,520	23,616	23,712	23,808	23,904	24,000	24,096	24,192	24,288	24,384
Actual cumulative engine run hours		17,339	17,411	17,483	17,555	17,627	17,699	17,771	17,843	17,915	17,987	18,059	18,131	18,203	18,275	18,347	18,419
Cumulative Availability, %		75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.6%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
Max cumulative gross output, kWhr		18,925,500	19,004,700	19,083,900	19,163,100	19,242,300	19,321,500	19,400,700	19,479,900	19,559,100	19,638,300	19,717,500	19,796,700	19,875,900	19,955,100	20,034,300	20,113,500
Actual cumulative gross output, kWhr		12,606,125	12,654,784	12,705,328	12,755,926	12,804,702	12,854,330	12,905,615	12,955,613	13,004,581	13,051,827	13,101,242	13,152,594	13,204,406	13,256,198	13,306,986	13,359,173
Cumulative Capacity Factor		66.6%	66.6%	66.6%	66.6%	66.5%	66.5%	66.5%	66.5%	66.5%	66.5%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%
Cumulative fuel input, MMBtu HHV		157,924	158,470	159,054	159,633	160,191	160,787	161,382	161,958	162,519	163,065	163,628	164,214	164,803	165,381	165,965	166,542
Cumulative gross output, kWhr		12,606,125	12,654,784	12,705,328	12,755,926	12,804,702	12,854,330	12,905,615	12,955,613	13,004,581	13,051,827	13,101,242	13,152,594	13,204,406	13,256,198	13,306,986	13,359,173
Cumulative heat rate, Btu/kWe gross LHV		11,277	11,273	11,269	11,265	11,262	11,260	11,257	11,253	11,250	11,247	11,243	11,239	11,235	11,231	11,227	11,222
Cumulative heat rate, Btu/kWe gross HHV		12,528	12,523	12,519	12,514	12,510	12,508	12,505	12,501	12,497	12,494	12,490	12,485	12,481	12,476	12,472	12,466
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 9/1/2017	Saturday 9/2/2017	Sunday 9/3/2017	Monday 9/4/2017	Tuesday 9/5/2017	Wednesday 9/6/2017	Thursday 9/7/2017	Friday 9/8/2017	Saturday 9/9/2017	Sunday 9/10/2017	Monday 9/11/2017	Tuesday 9/12/2017	Wednesday 9/13/2017	Thursday 9/14/2017	Friday 9/15/2017	Saturday 9/16/2017
Date																	
Hour																	
1		2,083	1,983	1,891	2,035	1,985	1,984	1,985	1,988	1,988	1,886	1,885	2,035	2,059	2,126	2,031	2,032
2		2,082	1,983	1,890	2,034	1,984	1,983	2,018	1,988	1,987	1,885	1,886	2,031	1,987	2,126	2,030	2,033
3		1,997	1,982	1,944	2,034	1,950	1,982	2,081	1,988	1,980	1,887	1,887	2,028	1,987	2,125	2,030	2,039
4		1,983	1,983	1,987	2,035	1,889	1,983	2,081	1,988	1,988	1,887	1,887	2,031	1,988	2,126	2,031	2,129
5		1,984	1,982	1,981	2,034	1,889	1,983	2,082	1,981	1,984	1,887	1,886	2,030	1,987	2,063	2,031	2,128
6		1,983	1,980	1,982	2,028	1,889	1,983	2,082	1,985	1,983	1,887	1,885	2,030	1,984	2,030	2,030	2,128
7		1,985	1,981	1,984	2,032	1,890	1,984	2,084	1,987	1,984	1,887	1,885	2,032	1,983	2,031	2,032	2,130
8		1,986	1,983	1,983	2,033	1,888	1,983	2,083	1,988	1,988	1,887	1,884	2,006	1,985	2,030	2,031	2,129
9		1,976	1,985	1,983	2,033	1,873	1,971	2,077	1,976	1,986	1,889	1,900	1,889	1,973	2,024	2,026	2,127
10		1,973	1,899	1,982	2,033	1,873	1,968	2,069	1,971	1,986	1,890	1,922	2,034	1,970	2,014	2,015	2,127
11		1,971	1,888	1,988	2,031	1,871	1,967	2,068	1,970	1,984	1,888	1,969	2,065	2,016	2,014	2,014	2,126
12		1,972	1,889	1,988	2,031	1,953	1,967	2,066	1,970	1,984	1,888	2,071	2,064	2,065	2,014	2,013	2,125
13		1,973	1,889	1,989	2,032	1,967	1,967	2,066	1,970	1,985	1,888	2,016	2,065	2,062	2,073	2,014	2,125
14		1,994	1,889	2,124	2,030	1,965	1,968	2,065	1,967	1,984	1,888	2,014	2,064	2,058	2,108	2,012	2,124
15		2,069	1,889	2,131	2,030	1,966	1,970	2,066	2,015	1,984	1,887	2,015	2,064	2,139	2,108	2,014	2,123
16		2,081	1,908	2,130	2,030	1,979	1,979	2,077	2,080	1,984	1,889	2,028	2,075	2,218	2,116	2,026	2,125
17		2,081	1,985	2,130	2,030	1,980	1,982	2,079	2,080	1,984	1,889	2,029	2,079	2,221	2,123	2,028	2,123
18		2,080	1,984	2,130	2,031	1,982	1,982	2,079	2,080	1,936	1,889	2,030	2,080	2,201	2,123	2,029	2,045
19		2,060	1,985	2,130	2,031	1,983	1,984	2,034	2,014	1,891	1,890	2,033	2,082	2,126	2,055	2,030	2,030
20		1,987	1,985	2,067	2,031	1,982	1,983	1,985	1,986	1,889	1,891	2,033	2,081	2,126	2,030	2,031	2,031
21		1,987	1,981	2,033	2,032	1,982	1,983	1,985	1,987	1,889	1,890	2,033	2,081	2,126	2,029	2,030	2,029
22		1,987	1,890	2,034	1,944	1,982	1,983	1,986	1,987	1,890	1,890	2,034	2,082	2,128	2,030	2,032	2,032
23		1,986	1,890	2,034	1,985	1,982	1,982	1,986	1,987	1,890	1,890	2,034	2,081	2,126	2,030	2,031	2,032
24		1,979	1,890	2,034	1,985	1,983	1,983	1,986	1,987	1,890	1,890	2,034	2,082	2,126	2,030	2,032	2,031
TOTAL		48,239	46,683	48,549	48,584	46,667	47,484	49,170	47,920	47,013	45,319	47,280	49,191	49,641	49,578	48,623	50,103
Cumulative Output Sold, kWhr		48,239	94,922	143,471	192,055	238,722	286,206	335,376	383,296	430,309	475,628	522,908	572,099	621,740	671,318	719,941	770,044
Transformer and line efficiency		99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%
Hourly average		2,010	1,945	2,023	2,024	1,944	1,979	2,049	1,997	1,959	1,888	1,970	2,050	2,068	2,066	2,026	2,088

SEPTEMBER 2017																			
	Sunday 9/17/2017	Monday 9/18/2017	Tuesday 9/19/2017	Wednesday 9/20/2017	Thursday 9/21/2017	Friday 9/22/2017	Saturday 9/23/2017	Sunday 9/24/2017	Monday 9/25/2017	Tuesday 9/26/2017	Wednesday 9/27/2017	Thursday 9/28/2017	Friday 9/29/2017	Saturday 9/30/2017	TOTAL	Biogas	LFG		
LFG and Biogas Flow to the Engine	1,198	1,174	1,170	1,185	1,195	1,173	1,179	1,138	1,142	1,166	1,207	1,179	1,156	1,141	35,121	1,772	33,349		
LFG and Biogas Flow to the Engine	578	564	575	595	599	593	599	562	561	563	596	587	557	550	17,270	1,255	16,015		
LFG and Biogas Flow to the Flare (-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7.3%	93%		
LFG and BiogasFlow to the Flare (t	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Total Flow (KSCF)	1,198	1,174	1,170	1,185	1,195	1,173	1,179	1,138	1,142	1,166	1,207	1,179	1,156	1,141	35,121				
LFG and Biogas Total Flow (MMBT	578	564	575	595	599	593	599	562	561	563	596	587	557	550	17,270				
Average Methane Content (%)	47.7	47.4	48.6	49.6	49.5	49.9	50.2	48.8	48.5	47.7	48.8	49.2	47.6	47.6	48.6				
Engine 1 Hours	24	24	24	24	24	24	24	24	24	24	23	24	24	24	719				
Engine 2 Hours	-	-	-	-	-	1	-	-	-	12	14	-	14	24	65				
Engine 3 Hours	24	24	24	24	24	24	24	24	24	24	24	24	12	-	684				
Engine 4 Hours	24	24	24	24	24	24	24	24	24	13	13	24	24	24	698				
Generator 1 Power Output (kWhr)	16,204	18,284	17,184	16,580	17,516	16,212	16,204	16,208	17,004	17,164	16,108	16,224	16,304	16,090	506,202				
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	7,666	9,296	-	8,264	8,156	33,382				
Generator 3 Power Output (kWhr)	16,168	16,956	18,400	16,960	16,172	17,100	17,680	16,172	17,164	17,348	17,164	17,024	7,712	7,611	492,283				
Generator 4 Power Output (kWhr)	18,480	15,126	16,840	18,482	18,484	18,484	18,486	15,688	14,954	7,918	9,172	18,244	15,722	15,516	480,614				
Gross Power Output (kWhr)	50,775	50,296	52,339	51,946	52,102	51,713	52,288	48,054	49,165	50,200	51,919	51,970	48,152	47,521	1,511,811				
Net Power Output (kWhr)	48,854	48,304	50,322	49,940	50,078	49,784	50,410	46,184	47,234	48,120	49,878	50,018	46,254	45,647	1,453,261				
Power Sold as metered by NStar, (l	48,715	48,158	50,166	49,790	49,927	49,640	50,264	46,094	47,096	47,952	49,722	49,816	46,138	45,533	1,449,055	CRMCB Inplant			
Offgrid RECs (kWhr)	1,921	1,991	2,017	2,006	2,024	1,930	1,878	1,870	1,931	2,080	2,041	1,952	1,898	1,874	58,551	6,747			
Calculated Performance Results																			
Daily																	12%		
Power output (kW average whe																	of total in-plant power		
Generator 1	675	762	716	691	730	676	675	675	709	715	700	676	679	670					
Generator 2	-	-	-	-	-	-	-	-	-	639	664	-	590	340					
Generator 3	674	707	767	707	674	713	737	674	715	723	715	709	643	-					
Generator 4	770	630	702	770	770	770	770	654	623	609	706	760	655	647					
Power output (kW average ove																			
Facility Gross	2,116	2,096	2,181	2,164	2,171	2,155	2,179	2,002	2,049	2,092	2,163	2,165	2,006	1,980					
Facility Net	2,036	2,013	2,097	2,081	2,087	2,074	2,100	1,924	1,968	2,005	2,078	2,084	1,927	1,902					
In-plant load	80	83	84	84	84	80	78	78	80	87	85	81	79	78					
Daily availability factor																			
Facility	75%	75%	75%	75%	75%	76%	75%	75%	75%	76%	77%	75%	77%	75%					
Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%					
Engine 2	0%	0%	0%	0%	0%	4%	0%	0%	0%	50%	58%	0%	58%	100%					
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	0%					
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	54%	54%	100%	100%	100%					
Daily capacity factor																			
Facility	64%	64%	66%	66%	66%	65%	66%	61%	62%	63%	66%	66%	61%	60%					
Engine 1	82%	92%	87%	84%	88%	82%	82%	82%	86%	87%	85%	82%	82%	81%					
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	77%	80%	0%	72%	41%					
Engine 3	82%	86%	93%	86%	82%	86%	89%	82%	87%	88%	87%	86%	78%	0%					
Engine 4	93%	76%	85%	93%	93%	93%	93%	79%	76%	74%	86%	92%	79%	78%					
Cumulative by engine																			
Engine operating run hours in t																			
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720					
Engine 1	408	432	456	480	504	528	552	576	600	624	647	671	695	719					
Engine 2	0	0	0	0	0	1	1	1	1	13	27	27	41	65					
Engine 3	408	432	456	480	504	528	552	576	600	624	648	672	684	684					
Engine 4	408	432	456	480	504	528	552	576	600	613	626	650	674	698					
Engine operating run hours tota																			
Engine 1	94,323	94,347	94,371	94,395	94,419	94,443	94,467	94,491	94,515	94,539	94,562	94,586	94,610	94,634					
Engine 2	87,999	87,999	87,999	87,999	87,999	88,000	88,000	88,000	88,000	88,012	88,026	88,026	88,040	88,064					
Engine 3	92,051	92,075	92,099	92,123	92,147	92,171	92,195	92,219	92,243	92,267	92,291	92,315	92,327	92,327					
Engine 4	89,036	89,060	89,084	89,108	89,132	89,156	89,180	89,204	89,228	89,241	89,254	89,278	89,302	89,326					
Cumulative availability, %																			
Engine 1	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%	2%	4%	4%	6%	9%					
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	95%					
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	97%	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					
Engine 1	12,047	12,809	13,525	14,215	14,945	15,621	16,296	16,971	17,680	18,395	19,095	19,771	20,451	21,121					
Engine 2	-	-	-	-	-	-	-	-	-	639	1,303	1,303	1,893	2,233					
Engine 3	12,034	12,741	13,507	14,214	14,888	15,600	16,337	17,011	17,726	18,449	19,164	19,873	20,516	20,516					
Engine 4	11,562	12,193	12,894	13,664	14,435	15,205	15,975	16,629	17,252	17,861	18,566	19,327	19,982	20,628					
Cumulative capacity factor, %																			
Engine 1	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	85%	85%					
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	6%	6%	8%	9%					
Engine 3	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	83%					
Engine 4	82%	82%	82%	83%	83%	84%	84%	84%	84%	83%	83%	84%	84%	83%					

	Sunday 9/17/2017	Monday 9/18/2017	Tuesday 9/19/2017	Wednesday 9/20/2017	Thursday 9/21/2017	Friday 9/22/2017	Saturday 9/23/2017	Sunday 9/24/2017	Monday 9/25/2017	Tuesday 9/26/2017	Wednesday 9/27/2017	Thursday 9/28/2017	Friday 9/29/2017	Saturday 9/30/2017	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 h	1,224	1,296	1,368	1,440	1,512	1,585	1,657	1,729	1,801	1,874	1,948	2,020	2,094	2,166			
Cumulative Availability, %	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.1%	75.2%	75.1%	75.2%	75.2%			
Max cumulative gross output, kW	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	854,146	904,442	956,781	1,008,727	1,060,829	1,112,542	1,164,830	1,212,884	1,262,049	1,312,249	1,364,168	1,416,138	1,464,290	1,511,811			
Cumulative Capacity Factor	63.4%	63.4%	63.6%	63.7%	63.8%	63.9%	63.9%	63.8%	63.7%	63.7%	63.8%	63.9%	63.8%	63.6%			
Cumulative fuel input, MMBtu	9,769	10,333	10,908	11,504	12,102	12,695	13,293	13,856	14,416	14,980	15,575	16,162	16,720	17,270			
Cumulative gross output, kWh	854,146	904,442	956,781	1,008,727	1,060,829	1,112,542	1,164,830	1,212,884	1,262,049	1,312,249	1,364,168	1,416,138	1,464,290	1,511,811			
Heat Rate																	
Daily heat rate, Btu/kWe gross	10,242	10,087	9,895	10,316	10,341	10,316	10,304	10,534	10,268	10,099	10,329	10,171	10,419	10,419			
Daily heat rate, Btu/kWe	11,378	11,206	10,992	11,460	11,487	11,459	11,446	11,701	11,406	11,219	11,474	11,299	11,574	11,574			
Cumulative heat rate, Btu/kWe	10,296	10,285	10,263	10,266	10,270	10,272	10,273	10,283	10,283	10,276	10,278	10,274	10,279	10,283			
Cumulative heat rate, Btu/kWe	11,438	11,425	11,401	11,404	11,408	11,411	11,412	11,424	11,423	11,415	11,417	11,413	11,418	11,423			
Cumulative by Facility starting C																	
Max cumulative available engine	24,480	24,576	24,672	24,768	24,864	24,960	25,056	25,152	25,248	25,344	25,440	25,536	25,632	25,728			
Actual cumulative engine run h	18,491	18,563	18,635	18,707	18,779	18,852	18,924	18,996	19,068	19,141	19,215	19,287	19,361	19,433			
Cumulative Availability, %	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%			
Max cumulative gross output, kW	20,192,700	20,271,900	20,351,100	20,430,300	20,509,500	20,588,700	20,667,900	20,747,100	20,826,300	20,905,500	20,984,700	21,063,900	21,143,100	21,222,300			
Actual cumulative gross output, kWh	13,409,948	13,460,244	13,512,583	13,564,529	13,616,631	13,668,344	13,720,632	13,768,686	13,817,851	13,868,051	13,919,970	13,971,940	14,020,092	14,067,613			
Cumulative Capacity Factor	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%	66.4%	66.3%	66.3%	66.3%	66.3%	66.3%	66.3%			
Cumulative fuel input, MMBtu	167,119	167,683	168,258	168,854	169,452	170,045	170,643	171,205	171,766	172,329	172,925	173,512	174,070	174,620			
Cumulative gross output, kWh	13,409,948	13,460,244	13,512,583	13,564,529	13,616,631	13,668,344	13,720,632	13,768,686	13,817,851	13,868,051	13,919,970	13,971,940	14,020,092	14,067,613			
Cumulative heat rate, Btu/kWe	11,219	11,214	11,209	11,206	11,202	11,199	11,196	11,193	11,190	11,186	11,183	11,179	11,177	11,174			
Cumulative heat rate, Btu/kWe	12,462	12,458	12,452	12,448	12,444	12,441	12,437	12,434	12,431	12,426	12,423	12,419	12,416	12,413			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change			Jose Storm														
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	TOTAL		
Date	9/17/2017	9/18/2017	9/19/2017	9/20/2017	9/21/2017	9/22/2017	9/23/2017	9/24/2017	9/25/2017	9/26/2017	9/27/2017	9/28/2017	9/29/2017	9/30/2017			
Hour																	
1	2,032	2,030	2,081	2,128	2,127	2,033	2,130	2,033	1,890	1,990	2,038	2,144	1,912	1,898			
2	2,032	1,918	2,080	2,128	2,126	2,032	2,131	2,032	1,890	1,990	2,039	2,149	1,906	1,897			
3	2,031	1,901	2,081	2,127	2,126	2,033	2,130	2,032	1,889	1,989	2,038	2,154	1,896	1,898			
4	2,032	1,983	2,081	2,128	2,128	2,033	2,131	2,033	1,894	1,990	2,040	2,154	1,901	1,897			
5	2,032	1,984	2,081	2,128	2,128	2,033	2,131	2,034	1,896	1,989	2,039	2,154	1,902	1,896			
6	2,031	1,982	2,081	2,127	2,127	2,032	2,130	1,900	1,896	1,988	2,039	2,153	1,901	1,896			
7	2,032	1,984	2,082	2,128	2,128	2,033	2,131	1,889	1,897	1,990	2,040	2,155	1,903	1,897			
8	2,032	1,983	2,081	2,127	2,128	2,033	2,132	1,893	1,896	1,989	2,040	2,154	1,901	1,899			
9	2,030	1,971	2,073	2,019	2,115	2,026	2,132	1,895	1,889	1,984	2,034	2,094	1,900	1,899			
10	2,025	1,968	2,065	2,017	2,114	2,026	2,132	1,894	1,884	1,974	2,024	2,038	1,898	1,898			
11	2,030	1,969	1,748	2,018	2,112	2,025	2,130	1,891	1,884	1,975	2,024	2,037	1,897	1,898			
12	2,029	1,969	2,157	2,018	2,113	2,026	2,129	1,891	1,884	1,958	1,980	2,039	1,861	1,898			
13	2,030	1,970	2,112	2,019	2,113	2,029	2,129	1,892	1,968	1,939	1,997	2,041	1,976	1,899			
14	2,028	1,970	2,112	2,017	2,048	2,029	2,127	1,891	1,979	1,933	1,964	2,041	1,874	1,899			
15	2,027	1,971	2,112	2,018	2,016	2,057	2,126	1,890	2,074	1,970	2,132	2,045	2,078	1,899			
16	2,028	1,981	2,126	2,031	2,029	2,125	2,058	1,890	2,081	2,028	2,137	2,056	2,066	1,900			
17	2,029	2,066	2,127	2,033	2,032	2,130	2,031	1,890	2,081	2,029	2,137	2,056	2,038	1,899			
18	2,029	2,079	2,127	2,032	2,031	2,129	2,031	1,891	2,078	2,030	2,138	2,057	1,939	1,899			
19	2,030	2,080	2,127	2,032	2,032	2,130	2,032	1,892	2,083	2,033	2,139	2,058	1,899	1,899			
20	2,029	2,081	2,127	2,032	2,031	2,129	2,033	1,887	2,084	2,036	2,141	2,058	1,900	1,893			
21	2,029	2,079	2,125	2,103	2,030	2,129	2,032	1,888	2,010	2,035	2,140	2,058	1,899	1,893			
22	2,030	2,079	2,126	2,127	2,031	2,130	2,032	1,889	1,990	2,038	2,139	2,059	1,901	1,895			
23	2,029	2,080	2,127	2,126	2,031	2,129	2,032	1,889	1,989	2,038	2,141	1,947	1,896	1,895			
24	2,029	2,080	2,127	2,127	2,031	2,129	2,032	1,888	1,990	2,037	2,142	1,915	1,894	1,892			
TOTAL	48,715	48,158	50,166	49,790	49,927	49,640	50,264	46,094	47,096	47,952	49,722	49,816	46,138	45,533			
Cumulative Output Sold, kW	818,759	866,917	917,083	966,873	1,016,800	1,066,440	1,116,704	1,162,798	1,209,894	1,257,846	1,307,568	1,357,384	1,403,522	1,449,055			
Transformer and line efficien	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.6%	99.7%	99.8%			
Hourly average	2,030	2,007	2,090	2,075	2,080	2,068	2,094	1,921	1,962	1,998	2,072	2,076	1,922	1,897			

OCTOBER 2017																		
		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	
		10/1/2017	10/2/2017	10/3/2017	10/4/2017	10/5/2017	10/6/2017	10/7/2017	10/8/2017	10/9/2017	10/10/2017	10/11/2017	10/12/2017	10/13/2017	10/14/2017	10/15/2017	10/16/2017	
LFG and Biogas Flow to the Engines (KSCF)		1,106	1,110	1,189	1,190	1,143	1,150	1,152	1,138	1,159	1,155	1,123	1,161	1,080	1,082	1,124	1,127	
LFG and Biogas Flow to the Engines (MMBTU HHV)		565	576	605	606	599	600	595	585	593	592	591	604	567	576	599	607	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,106	1,110	1,189	1,190	1,143	1,150	1,152	1,138	1,159	1,155	1,123	1,161	1,080	1,082	1,124	1,127	
LFG and Biogas Total Flow (MMBTU HHV)		565	576	605	606	599	600	595	585	593	592	591	604	567	576	599	607	
Average Methane Content (%)		50.5	51.2	50.3	50.3	51.8	51.5	51.0	50.8	50.5	50.7	52.0	51.4	51.9	52.7	52.7	53.2	
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	10	-	17	24	
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	15	24	24	24	24	
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	3	-	-	
Generator 1 Power Output (kWhr)		16,419	16,488	17,200	16,532	17,160	17,372	17,368	17,368	17,220	16,884	17,360	17,172	16,216	17,216	17,372	17,376	
Generator 2 Power Output (kWhr)		16,121	16,188	16,186	16,188	16,190	16,188	16,186	16,192	16,200	16,198	16,170	6,874	-	10,984	16,182	16,192	
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	9,364	15,856	16,580	16,748	17,432	
Generator 4 Power Output (kWhr)		14,902	14,964	16,602	17,706	14,970	14,954	14,954	14,952	15,700	16,034	14,946	16,422	18,486	2,550	-	-	
Gross Power Output (kWhr)		47,532	47,731	50,075	50,496	48,422	48,583	48,533	48,579	49,198	49,203	48,523	50,023	50,949	47,885	50,999	51,715	
Net Power Output (kWhr)		45,582	45,772	48,086	48,430	46,460	46,572	46,496	46,496	47,074	47,156	46,598	48,124	49,100	48,124	49,106	49,788	
Power Sold as metered by NStar, (kWhr)		45,489	45,679	47,970	48,325	46,304	46,481	46,449	46,352	46,909	46,992	46,490	47,954	48,926	45,990	48,927	49,623	
Offgrid RECs (kWhr)		1,952	1,962	1,989	2,066	1,962	1,942	1,962	2,083	2,124	2,047	1,926	1,879	1,849	1,761	1,893	1,928	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		684	687	717	689	715	724	724	724	718	704	723	716	676	717	724	724	
Generator 2		672	675	674	675	675	675	674	675	675	675	674	687	-	646	674	675	
Generator 3		-	-	-	-	-	-	-	-	-	-	-	624	661	691	698	726	
Generator 4		621	624	692	738	624	623	623	623	654	668	623	684	770	850	-	-	
Power output (kW average over 24-hrs)																		
Facility Gross		1,981	1,989	2,086	2,104	2,018	2,024	2,022	2,024	2,050	2,050	2,022	2,084	2,123	1,995	2,125	2,155	
Facility Net		1,899	1,907	2,004	2,018	1,936	1,943	1,941	1,937	1,961	1,965	1,942	2,006	2,046	1,922	2,046	2,075	
In-plant load		81	82	83	86	82	81	82	87	88	85	80	78	77	73	79	80	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	76%	75%	71%	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%	42%	0%	71%	100%	100%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	13%	0%	0%	
Daily capacity factor																		
Facility		60%	60%	63%	64%	61%	61%	61%	61%	62%	62%	61%	63%	64%	60%	64%	65%	
Engine 1		83%	83%	87%	83%	87%	88%	88%	88%	87%	85%	88%	87%	82%	87%	88%	88%	
Engine 2		81%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	83%	0%	78%	82%	82%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	76%	80%	84%	85%	88%	
Engine 4		75%	76%	84%	89%	76%	76%	76%	76%	79%	81%	75%	83%	93%	103%	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	274	291	315	315	339	
Engine 3		0	0	0	0	0	0	0	0	0	-	-	15	39	63	87	111	
Engine 4		24	48	72	96	120	144	168	192	216	240	264	288	312	315	315	315	
Engine operating run hours total from 0 hours																		
Engine 1		94,765	94,789	94,813	94,837	94,861	94,885	94,909	94,933	94,957	94,981	95,005	95,029	95,053	95,077	95,101	95,125	
Engine 2		88,149	88,173	88,197	88,221	88,245	88,269	88,293	88,317	88,341	88,365	88,389	88,413	88,423	88,440	88,464	88,488	
Engine 3		92,441	92,441	92,441	92,441	92,441	92,441	92,441	92,441	92,441	92,441	92,441	92,456	92,480	92,504	92,528	92,552	
Engine 4		89,429	89,453	89,477	89,501	89,525	89,549	89,573	89,597	89,621	89,645	89,669	89,693	89,717	89,741	89,744	89,744	
Cumulative availability, %	Oct 1, 2017 @ 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%	95%	88%	88%	88%	88%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	13%	19%	24%	29%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	94%	88%	82%	
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		684	1,371	2,088	2,777	3,492	4,215	4,939	5,663	6,380	7,084	7,807	8,523	9,198	9,916	10,639	11,363	
Engine 2		672	1,346	2,021	2,695	3,370	4,044	4,719	5,393	6,068	6,743	7,417	8,104	8,750	9,425	10,099		
Engine 3		-	-	-	-	-	-	-	-	-	-	-	624	1,285	1,976	2,674	3,400	
Engine 4		621	1,244	1,936	2,674	3,298	3,921	4,544	5,167	5,821	6,489	7,112	7,796	8,568	9,416	9,416	9,416	
Cumulative capacity factor, %																		
Engine 1		83%	83%	84%	84%	85%	85%	86%	86%	86%	86%	86%	86%	86%	86%	86%	86%	
Engine 2		81%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	82%	76%	76%	76%	77%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	6%	12%	17%	22%	26%	
Engine 4		75%	75%	78%	81%	80%	79%	79%	78%	78%	79%	78%	79%	80%	82%	76%	71%	

		Sunday 10/1/2017	Monday 10/2/2017	Tuesday 10/3/2017	Wednesday 10/4/2017	Thursday 10/5/2017	Friday 10/6/2017	Saturday 10/7/2017	Sunday 10/8/2017	Monday 10/9/2017	Tuesday 10/10/2017	Wednesday 10/11/2017	Thursday 10/12/2017	Friday 10/13/2017	Saturday 10/14/2017	Sunday 10/15/2017	Monday 10/16/2017
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	864	936	1,008	1,072	1,144
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.1%	75.1%	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		47,532	95,263	145,338	195,834	244,256	292,839	341,372	389,951	439,149	488,352	536,875	586,898	637,847	685,732	736,731	788,446
Cumulative Capacity Factor		60.0%	60.1%	61.2%	61.8%	61.7%	61.6%	61.6%	61.5%	61.6%	61.7%	61.6%	61.8%	62.0%	61.8%	62.0%	62.2%
Cumulative fuel input, MMBtu HHV		565	1,141	1,746	2,352	2,951	3,551	4,146	4,731	5,324	5,916	6,507	7,111	7,678	8,254	8,853	9,460
Cumulative gross output, kWhr		47,532	95,263	145,338	195,834	244,256	292,839	341,372	389,951	439,149	488,352	536,875	586,898	637,847	685,732	736,731	788,446
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,704	10,854	10,883	10,803	11,136	11,110	11,036	10,844	10,845	10,836	10,961	10,873	10,018	10,836	10,573	10,568
Daily heat rate, Btu/kWe gross HHV		11,891	12,057	12,090	12,001	12,370	12,342	12,260	12,046	12,047	12,038	12,176	12,078	11,129	12,037	11,745	11,739
Cumulative heat rate, Btu/kWe gross LHV		10,704	10,779	10,815	10,812	10,876	10,915	10,932	10,921	10,913	10,905	10,910	10,907	10,836	10,836	10,818	10,801
Cumulative heat rate, Btu/kWe gross HHV		11,891	11,974	12,014	12,011	12,082	12,125	12,144	12,132	12,123	12,114	12,120	12,116	12,037	12,037	12,017	11,999
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	25,824	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	19,505	19,505	19,577	19,649	19,721	19,793	19,865	19,937	20,009	20,081	20,153	20,225	20,297	20,370	20,442	20,514	20,586
Cumulative Availability, %	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%
Max cumulative gross output, kWhr	21,301,500	21,301,500	21,380,700	21,459,900	21,539,100	21,618,300	21,697,500	21,776,700	21,855,900	21,935,100	22,014,300	22,093,500	22,172,700	22,251,900	22,331,100	22,410,300	22,489,500
Actual cumulative gross output, kWhr	14,115,145	14,115,145	14,162,876	14,212,951	14,263,447	14,311,869	14,360,452	14,408,985	14,457,564	14,506,762	14,555,965	14,604,488	14,654,511	14,705,460	14,753,345	14,804,344	14,856,059
Cumulative Capacity Factor	66.3%	66.3%	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%
Cumulative fuel input, MMBtu HHV	175,185	175,185	175,760	176,366	176,972	177,571	178,170	178,765	179,351	179,943	180,536	181,126	181,731	182,298	182,874	183,473	184,080
Cumulative gross output, kWhr	14,115,145	14,115,145	14,162,876	14,212,951	14,263,447	14,311,869	14,360,452	14,408,985	14,457,564	14,506,762	14,555,965	14,604,488	14,654,511	14,705,460	14,753,345	14,804,344	14,856,059
Cumulative heat rate, Btu/kWe gross LHV	11,172	11,172	11,171	11,170	11,169	11,169	11,169	11,168	11,167	11,166	11,165	11,164	11,163	11,159	11,158	11,156	11,154
Cumulative heat rate, Btu/kWe gross HHV	12,411	12,411	12,410	12,409	12,407	12,407	12,407	12,407	12,405	12,404	12,403	12,402	12,401	12,397	12,395	12,393	12,391
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	Top-End Overhaul
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Sunday 10/1/2017	Monday 10/2/2017	Tuesday 10/3/2017	Wednesday 10/4/2017	Thursday 10/5/2017	Friday 10/6/2017	Saturday 10/7/2017	Sunday 10/8/2017	Monday 10/9/2017	Tuesday 10/10/2017	Wednesday 10/11/2017	Thursday 10/12/2017	Friday 10/13/2017	Saturday 10/14/2017	Sunday 10/15/2017	Monday 10/16/2017
Date																	
Hour																	
1		1.894	1.894	1.942	2.040	1.897	1.941	1.940	1.933	1.933	2.028	1.943	1.942	2.078	2.028	2.040	2.041
2		1.891	1.896	1.944	2.039	1.896	1.939	1.939	1.932	1.933	2.027	1.943	1.939	2.075	2.027	2.040	2.040
3		1.891	1.894	1.943	2.040	1.896	1.939	1.933	1.930	1.931	2.027	1.942	1.938	2.074	2.026	2.039	2.040
4		1.892	1.895	1.943	2.038	1.897	1.940	1.939	1.931	1.933	2.028	1.941	1.939	2.075	1.598	2.040	2.041
5		1.892	1.894	1.943	2.040	1.926	1.941	1.937	1.932	1.933	2.029	1.941	1.939	2.075	1.370	2.040	2.041
6		1.891	1.893	1.942	2.039	1.944	1.940	1.937	1.930	1.931	2.028	1.940	1.938	2.080	1.378	2.040	2.041
7		1.892	1.895	1.943	2.040	1.946	1.944	1.940	1.931	1.933	2.030	1.942	1.939	2.035	1.386	2.041	2.043
8		1.891	1.894	1.944	2.040	1.946	1.944	1.940	1.931	1.933	1.950	1.942	1.940	2.033	1.543	2.041	2.042
9		1.896	1.887	1.940	1.956	1.938	1.939	1.939	1.928	1.927	1.882	1.930	1.935	2.028	2.038	2.039	2.034
10		1.898	1.892	1.939	1.883	1.932	1.931	1.939	1.922	1.927	1.884	1.925	1.832	2.018	2.040	2.034	2.037
11		1.897	1.888	1.938	1.913	1.933	1.931	1.938	1.929	1.926	1.925	1.921	1.861	2.019	2.041	2.038	2.070
12		1.897	1.883	1.932	1.917	1.932	1.928	1.937	1.931	1.924	1.923	1.928	1.943	2.020	2.039	2.037	2.085
13		1.897	1.885	1.928	1.921	1.931	1.926	1.935	1.934	1.926	1.924	1.931	1.945	2.024	2.040	2.039	2.086
14		1.897	1.884	2.068	1.961	1.931	1.926	1.936	1.934	1.927	1.923	1.931	1.948	2.024	2.039	2.038	2.088
15		1.897	1.883	2.071	2.069	1.925	1.927	1.933	1.932	1.926	1.927	1.929	2.019	2.024	2.039	2.037	2.087
16		1.899	1.888	2.078	2.077	1.932	1.931	1.932	1.933	1.935	1.936	1.932	2.117	2.027	2.040	2.038	2.088
17		1.899	1.893	2.086	2.076	1.934	1.934	1.931	1.933	1.933	1.938	1.939	2.118	2.029	2.039	2.039	2.092
18		1.899	1.895	2.088	2.033	1.936	1.937	1.932	1.932	1.933	1.938	1.940	2.123	2.030	2.040	2.038	2.090
19		1.901	1.933	2.090	2.035	1.939	1.940	1.933	1.933	1.939	1.940	1.941	2.127	2.029	2.040	2.035	2.091
20		1.901	1.944	2.090	2.035	1.938	1.941	1.933	1.933	2.075	1.940	1.941	2.127	2.021	2.041	2.039	2.092
21		1.895	1.943	2.062	2.033	1.938	1.940	1.931	1.932	2.073	1.940	1.940	2.116	2.027	2.039	2.037	2.089
22		1.894	1.942	2.037	2.037	1.939	1.942	1.932	1.932	2.027	1.942	1.941	2.077	2.028	2.040	2.039	2.088
23		1.894	1.942	2.039	2.039	1.940	1.940	1.932	1.932	2.027	1.942	1.941	2.077	2.027	2.040	2.040	2.088
24		1.894	1.942	2.040	2.024	1.938	1.939	1.931	1.932	2.026	1.942	1.942	2.075	2.026	2.039	2.039	2.089
TOTAL		45,489	45,679	47,970	48,325	46,304	46,481	46,449	46,352	46,909	46,992	46,490	47,954	48,926	45,990	48,927	49,623
Cumulative Output Sold, kWhr		45,489	91,168	139,138	187,463	233,767	280,248	326,697	373,049	419,958	466,950	513,440	561,394	610,320	656,310	705,237	754,860
Transformer and line efficiency		99.8%	99.8%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.6%	99.7%	99.8%	99.6%	99.6%	99.7%	99.6%	99.7%
Hourly average		1.895	1.903	1.999	2.014	1.929	1.937	1.935	1.931	1.955	1.958	1.937	1.998	2.039	1.916	2.039	2.068

OCTOBER 2017																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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	Tuesday 10/17/2017	Wednesday 10/18/2017	Thursday 10/19/2017	Friday 10/20/2017	Saturday 10/21/2017	Sunday 10/22/2017	Monday 10/23/2017	Tuesday 10/24/2017	Wednesday 10/25/2017	Thursday 10/26/2017	Friday 10/27/2017	Saturday 10/28/2017	Sunday 10/29/2017	Monday 10/30/2017	Tuesday 10/31/2017	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 h	1,221	1,293	1,364	1,438	1,510	1,582	1,654	1,726	1,798	1,869	1,940	2,012	2,084	2,156	2,153			
Cumulative Availability, %	74.8%	74.8%	74.8%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.8%	74.9%	74.7%	74.7%	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	2,376,000			
Actual cumulative gross output, kWh	839,867	891,911	944,670	998,264	1,051,220	1,101,654	1,153,785	1,207,980	1,262,733	1,315,994	1,367,427	1,418,627	1,468,761	1,521,606	1,522,353			
Cumulative Capacity Factor	62.4%	62.6%	62.8%	63.0%	63.2%	63.2%	63.3%	63.6%	63.8%	63.9%	63.9%	64.0%	63.9%	64.0%	64.1%			
Cumulative fuel input, MMBtu	10,082	10,696	11,283	11,898	12,517	13,113	13,707	14,338	14,957	15,580	16,185	16,784	17,359	17,987	17,990			
Cumulative gross output, kWh	839,867	891,911	944,670	998,264	1,051,220	1,101,654	1,153,785	1,207,980	1,262,733	1,315,994	1,367,427	1,418,627	1,468,761	1,521,606	1,522,353			
Heat Rate																		
Daily heat rate, Btu/kWe gross	10,889	10,619	10,004	10,337	10,529	10,636	10,249	10,488	10,169	10,528	10,592	10,530	10,335	10,688	10,592			
Daily heat rate, Btu/kWe	12,096	11,796	11,113	11,483	11,697	11,815	11,385	11,651	11,296	11,695	11,767	11,697	11,481	11,872	11,767			
Cumulative heat rate, Btu/kWe	10,807	10,796	10,751	10,729	10,719	10,715	10,694	10,685	10,663	10,657	10,655	10,650	10,639	10,641	10,638			
Cumulative heat rate, Btu/kWe	12,005	11,993	11,943	11,919	11,907	11,903	11,880	11,870	11,845	11,839	11,836	11,831	11,819	11,821	11,817			
Cumulative by Facility starting C																		
Max cumulative available engine	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 h	20,654	20,726	20,797	20,871	20,943	21,015	21,087	21,159	21,231	21,302	21,373	21,445	21,514	21,584	21,586			
Cumulative Availability, %	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.5%	75.4%	75.5%			
Max cumulative gross output, kWh	22,568,700	22,647,900	22,727,100	22,806,300	22,885,500	22,964,700	23,043,900	23,123,100	23,202,300	23,281,500	23,360,700	23,439,900	23,519,100	23,598,300	23,598,300			
Actual cumulative gross output, kWh	14,907,480	14,959,524	15,012,283	15,065,877	15,118,833	15,169,267	15,221,398	15,275,593	15,330,346	15,383,607	15,435,040	15,486,240	15,536,374	15,589,219	15,589,966			
Cumulative Capacity Factor	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%			
Cumulative fuel input, MMBtu	184,702	185,316	185,902	186,518	187,137	187,733	188,326	188,958	189,576	190,199	190,804	191,403	191,979	192,606	192,610			
Cumulative gross output, kWh	14,907,480	14,959,524	15,012,283	15,065,877	15,118,833	15,169,267	15,221,398	15,275,593	15,330,346	15,383,607	15,435,040	15,486,240	15,536,374	15,589,219	15,589,966			
Cumulative heat rate, Btu/kWe	11,153	11,151	11,147	11,145	11,142	11,141	11,138	11,135	11,132	11,130	11,128	11,126	11,124	11,122	11,122			
Cumulative heat rate, Btu/kWe	12,390	12,388	12,383	12,380	12,378	12,376	12,372	12,370	12,366	12,364	12,362	12,360	12,357	12,355	12,355			
Service																		
Engine 1		District connects																
Engine 2		to 2 Leachate Lines	Top-End Overhaul	Top-End Overhaul														
Engine 3		Under positive.																
Engine 4	Top-End Overhaul																	
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Tuesday 10/17/2017	Wednesday 10/18/2017	Thursday 10/19/2017	Friday 10/20/2017	Saturday 10/21/2017	Sunday 10/22/2017	Monday 10/23/2017	Tuesday 10/24/2017	Wednesday 10/25/2017	Thursday 10/26/2017	Friday 10/27/2017	Saturday 10/28/2017	Sunday 10/29/2017	Monday 10/30/2017	Tuesday 10/31/2017	TOTAL		
Hour																		
1	2,089	2,099	2,117	2,168	2,211	2,018	2,018	2,110	2,206	2,154	2,091	2,046	2,046	340	2,166			
2	2,089	2,099	2,033	2,168	2,211	2,016	2,016	2,109	2,206	2,155	2,052	2,046	2,047	1,517	2,165			
3	2,088	2,097	1,458	2,167	2,209	2,016	2,017	2,109	2,121	2,153	2,050	2,044	2,045	2,166	2,164			
4	2,051	2,097	1,829	2,168	2,211	2,017	2,019	2,109	2,111	2,155	2,051	2,046	2,047	2,211	2,165			
5	2,039	2,098	2,183	2,169	2,210	2,017	2,018	2,110	2,111	2,155	2,052	2,046	2,047	2,239	2,165			
6	2,038	2,097	2,161	2,168	2,208	2,016	2,017	2,110	2,110	2,153	2,050	2,044	2,045	2,236	2,164			
7	2,039	2,098	2,110	2,169	2,209	2,016	2,019	2,110	2,113	2,156	2,052	2,046	2,047	2,237	2,163			
8	2,038	2,096	2,112	2,167	2,209	2,018	2,019	2,112	2,169	2,156	2,051	2,047	2,047	2,236	2,162			
9	1,970	2,084	2,115	2,066	2,156	2,015	2,012	2,107	2,206	2,151	2,048	2,045	2,047	2,231	2,125			
10	1,935	1,851	2,086	2,069	2,114	2,016	2,011	2,165	2,203	2,151	2,045	2,047	2,048	2,231	2,077			
11	1,952	1,710	2,042	2,027	2,115	2,011	2,105	2,202	2,202	2,151	2,091	2,047	2,132	2,241	2,154			
12	1,989	2,078	2,072	2,037	2,111	2,015	2,181	2,200	2,202	2,149	2,113	2,046	2,216	2,262	2,154			
13	2,020	2,149	2,117	2,022	2,113	2,016	2,200	2,201	2,204	1,551	2,116	2,048	2,215	2,267	2,155			
14	2,075	2,175	2,008	2,070	2,113	2,016	2,203	2,200	2,224	1,961	2,116	2,048	2,217	2,266	2,155			
15	2,073	2,175	2,200	2,153	2,111	2,015	2,166	2,200	2,250	2,219	1,868	2,046	2,214	2,223	2,159			
16	2,083	1,677	2,266	2,207	2,112	2,016	2,106	2,205	2,256	2,221	1,572	2,048	2,216	2,162	2,166			
17	2,096	2,135	2,266	2,211	2,112	2,018	2,108	2,207	2,260	2,223	2,218	2,046	2,215	2,268	2,167			
18	2,098	2,178	2,265	2,211	2,064	2,017	2,109	2,207	2,260	2,221	2,185	2,045	2,213	2,271	2,165			
19	2,099	2,190	2,264	2,211	2,016	2,018	2,110	2,208	2,261	2,220	2,142	2,046	2,214	2,272	2,166			
20	2,098	2,189	2,265	2,212	2,017	2,018	2,110	2,208	2,260	2,151	2,142	2,047	2,169	2,230	2,166			
21	2,097	2,189	2,264	2,211	2,015	2,017	2,108	2,206	2,197	2,146	2,113	2,046	2,141	2,164	2,164			
22	2,098	2,187	2,264	2,211	2,017	2,017	2,108	2,208	2,154	2,147	2,045	2,047	2,144	2,165	2,165			
23	2,098	2,116	2,170	2,211	2,016	2,018	2,108	2,206	2,154	2,146	2,046	2,047	1,459	2,165	2,165			
24	2,097	2,117	2,167	2,210	2,015	2,017	2,108	2,206	2,153	2,145	2,044	2,045	-	2,164	2,076			
TOTAL	49,349	49,981	50,834	51,683	50,895	48,394	49,998	52,015	52,593	51,190	49,353	49,109	48,231	50,764	51,693			
Cumulative Output Sold, kWh	804,209	854,190	905,024	956,707	1,007,602	1,055,996	1,105,994	1,158,009	1,210,602	1,261,792	1,311,145	1,360,254	1,408,485	1,459,249	1,510,942			
Transformer and line efficiency	99.7%	99.7%	99.7%	99.9%	99.7%	99.7%	99.6%	99.6%	99.6%	99.7%	99.8%	99.6%	99.7%	99.5%	99.9%			
Hourly average	2,056	2,083	2,118	2,153	2,121	2,016	2,083	2,167	2,191	2,133	2,056	2,046	2,010	2,115	2,154			

NOVEMBER 2017						Daylight Savings														
		Wednesday 11/1/2017	Thursday 11/2/2017	Friday 11/3/2017	Saturday 11/4/2017	Sunday 11/5/2017	Monday 11/6/2017	Tuesday 11/7/2017	Wednesday 11/8/2017	Thursday 11/9/2017	Friday 11/10/2017	Saturday 11/11/2017	Sunday 11/12/2017	Monday 11/13/2017	Tuesday 11/14/2017	Wednesday 11/15/2017	Thursday 11/16/2017			
LFG and Biogas Flow to the Engines (KSCF)		1,141	1,189	1,206	1,203	1,252	1,221	1,178	1,171	1,217	1,181	1,223	1,260	1,214	1,174	1,173	1,175			
LFG and Biogas Flow to the Engines (MMBTU HHV)		617	631	642	623	650	640	622	622	639	619	629	652	633	614	615	631			
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)		1,141	1,189	1,206	1,203	1,252	1,221	1,178	1,171	1,217	1,181	1,223	1,260	1,214	1,174	1,173	1,175			
LFG and Biogas Total Flow (MMBTU HHV)		617	631	642	623	650	640	622	622	639	619	629	652	633	614	615	631			
Average Methane Content (%)		53.4	52.4	52.6	51.2	51.3	51.8	52.2	52.5	51.9	51.8	50.8	51.1	51.5	51.7	51.8	53.1			
Engine 1 Hours		23	24	24	24	25	24	24	24	24	24	24	24	24	24	24	24			
Engine 2 Hours		24	24	24	24	25	24	24	24	24	24	24	24	24	24	24	24			
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 4 Hours		24	24	24	24	25	24	24	24	24	24	24	24	24	24	24	24			
Generator 1 Power Output (kWhr)		15,272	17,592	17,064	16,212	18,080	17,384	16,728	16,476	17,624	16,584	16,788	17,900	18,768	17,956	16,896	17,952			
Generator 2 Power Output (kWhr)		17,614	17,588	18,784	16,770	16,868	16,200	16,232	15,810	16,208	14,842	16,222	16,200	16,200	17,664	16,702	16,200			
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 4 Power Output (kWhr)		18,732	18,724	18,724	18,736	19,520	18,728	18,580	17,756	18,736	16,476	16,672	16,136	16,132	16,136	17,740	18,716			
Gross Power Output (kWhr)		51,686	53,990	54,651	51,808	54,571	52,405	51,633	50,174	52,656	48,031	49,808	50,366	51,223	51,866	51,430	52,975			
Net Power Output (kWhr)		49,848	52,126	52,754	49,892	52,572	50,448	49,668	48,124	50,688	46,300	48,148	48,628	49,404	50,080	49,640	51,204			
Power Sold as metered by NStar, (kWhr)		49,769	51,979	52,601	49,768	52,418	50,303	49,528	48,018	50,555	46,173	48,081	48,542	49,278	49,931	49,492	51,038			
Offgrid RECs (kWhr)		1,838	1,863	1,897	1,917	1,999	1,957	1,964	2,051	1,967	1,731	1,660	1,738	1,818	1,786	1,791	1,771			
Calculated Performance Results																				
Daily																				
Power output (kW average when running)																				
Generator 1		664	733	711	676	723	724	697	687	734	691	700	746	782	748	704	748			
Generator 2		734	733	783	699	675	675	676	659	675	645	676	675	675	736	696	675			
Generator 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 4		781	780	780	781	781	780	774	740	781	687	695	672	672	739	780	780			
Power output (kW average over 24-hrs)																				
Facility Gross		2,154	2,250	2,277	2,159	2,183	2,184	2,151	2,091	2,194	2,001	2,075	2,099	2,134	2,161	2,143	2,207			
Facility Net		2,077	2,172	2,198	2,079	2,103	2,102	2,070	2,005	2,112	1,929	2,006	2,026	2,059	2,087	2,068	2,134			
In-plant load		77	78	79	80	80	82	82	85	82	72	69	72	76	74	75	74			
Daily availability factor																				
Facility		74%	75%	75%	75%	78%	75%	75%	75%	75%	74%	75%	75%	75%	75%	75%	75%			
Engine 1		96%	100%	100%	100%	104%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2		100%	100%	100%	100%	104%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%			
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4		100%	100%	100%	100%	104%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Daily capacity factor																				
Facility		65%	68%	69%	65%	66%	66%	65%	63%	66%	61%	63%	64%	65%	65%	65%	67%			
Engine 1		80%	89%	86%	82%	88%	88%	84%	83%	89%	84%	85%	90%	95%	91%	85%	91%			
Engine 2		89%	89%	95%	85%	82%	82%	82%	80%	82%	78%	82%	82%	82%	89%	84%	82%			
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4		95%	95%	95%	95%	95%	95%	94%	90%	95%	83%	84%	81%	81%	81%	90%	95%			
Cumulative by engine																				
Engine operating run hours in the month																				
Max Cumulative Available, hours		24	48	72	96	121	145	169	193	217	241	265	289	313	337	361	385			
Engine 1		23	47	71	95	120	144	168	192	216	240	264	288	312	336	360	384			
Engine 2		24	48	72	96	121	145	169	193	217	240	264	288	312	336	360	384			
Engine 3		0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-			
Engine 4		24	48	72	96	121	145	169	193	217	241	265	289	313	337	361	385			
Engine operating run hours total from 0 hours																				
Engine 1		95,520	95,543	95,567	95,591	95,615	95,640	95,664	95,688	95,712	95,736	95,760	95,784	95,808	95,832	95,856	95,880	95,904		
Engine 2		88,809	88,833	88,857	88,881	88,905	88,930	88,954	88,978	89,002	89,026	89,049	89,073	89,097	89,121	89,145	89,169	89,193		
Engine 3		92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636		
Engine 4		90,081	90,105	90,129	90,153	90,177	90,202	90,226	90,250	90,274	90,298	90,322	90,346	90,370	90,394	90,418	90,442	90,466		
Cumulative availability, %		Nov 1, 2017 @ 00:00 hours																		
Engine 1		96%	98%	99%	99%	99%	99%	99%	99%	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%	100%		
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Engine 4		100%	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		664	1,397	2,108	2,784	3,507	4,231	4,928	5,615	6,349	7,040	7,739	8,485	9,267	10,015	10,719	11,467			
Engine 2		734	1,467	2,249	2,948	3,623	4,298	4,974	5,633	6,308	6,954	7,630	8,305	8,980	9,716	10,411	11,086			
Engine 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 4		781	1,561	2,341	3,122	3,902	4,683	5,457	6,197	6,977	7,664	8,358	9,031	9,703	10,375	11,114	11,894			
Cumulative capacity factor, %																				
Engine 1		80%	85%	85%	84%	85%	85%	85%	85%	86%	85%	86%	85%	86%	86%	87%	87%	87%		
Engine 2		89%	89%	91%	88%	84%	87%	86%	85%	86%	84%	84%	84%	84%	84%	84%	84%	84%		
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%		
Engine 4		95%	95%	95%	95%	95%	95%	94%	94%	94%	93%	92%	91%	90%	90%	90%	90%	90%		

		Wednesday 11/1/2017	Thursday 11/2/2017	Friday 11/3/2017	Saturday 11/4/2017	Sunday 11/5/2017	Monday 11/6/2017	Tuesday 11/7/2017	Wednesday 11/8/2017	Thursday 11/9/2017	Friday 11/10/2017	Saturday 11/11/2017	Sunday 11/12/2017	Monday 11/13/2017	Tuesday 11/14/2017	Wednesday 11/15/2017	Thursday 11/16/2017
Cumulative by Facility in month																	
Max cumulative available engine run hours		96	192	288	384	484	580	676	772	868	964	1,060	1,156	1,252	1,348	1,444	1,540
Actual cumulative engine run hours		71	143	215	287	362	434	506	578	650	721	793	865	937	1,009	1,081	1,153
Cumulative Availability, %		74.0%	74.5%	74.7%	74.7%	74.8%	74.8%	74.9%	74.9%	74.9%	74.8%	74.8%	74.8%	74.8%	74.9%	74.9%	74.9%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	399,300	478,500	557,700	636,900	716,100	795,300	874,500	953,700	1,032,900	1,112,100	1,191,300	1,270,500
Actual cumulative gross output, kWhr		51,686	105,676	160,327	212,135	266,706	319,111	370,744	420,918	473,574	521,605	571,413	621,779	673,002	724,868	776,298	829,273
Cumulative Capacity Factor		65.3%	66.7%	67.5%	67.0%	66.8%	66.7%	66.5%	66.1%	66.1%	65.6%	65.3%	65.2%	65.2%	65.2%	65.2%	65.3%
Cumulative fuel input, MMBtu HHV		617	1,248	1,890	2,513	3,163	3,804	4,426	5,048	5,687	6,306	6,935	7,587	8,219	8,834	9,448	10,079
Cumulative gross output, kWhr		51,686	105,676	160,327	212,135	266,706	319,111	370,744	420,918	473,574	521,605	571,413	621,779	673,002	724,868	776,298	829,273
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,739	10,524	10,575	10,829	10,724	11,001	10,850	11,163	10,928	11,598	11,368	11,646	11,117	10,664	10,758	10,721
Daily heat rate, Btu/kWe gross HHV		11,930	11,691	11,747	12,029	11,913	12,220	12,052	12,401	12,139	12,883	12,628	12,937	12,350	11,846	11,950	11,909
Cumulative heat rate, Btu/kWe gross LHV		10,739	10,629	10,611	10,664	10,676	10,730	10,746	10,796	10,811	10,883	10,925	10,984	10,994	10,970	10,956	10,941
Cumulative heat rate, Btu/kWe gross HHV		11,930	11,808	11,787	11,846	11,860	11,919	11,938	11,993	12,009	12,090	12,137	12,201	12,213	12,187	12,171	12,154
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		28,704	28,800	28,896	28,992	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		21,657	21,729	21,801	21,873	21,948	22,020	22,092	22,164	22,236	22,307	22,379	22,451	22,523	22,595	22,667	22,739
Cumulative Availability, %		75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%
Max cumulative gross output, kWhr		23,677,500	23,756,700	23,835,900	23,915,100	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		15,641,652	15,695,642	15,750,293	15,802,101	15,856,672	15,909,077	15,960,710	16,010,884	16,063,540	16,111,571	16,161,379	16,211,745	16,262,968	16,314,834	16,366,264	16,419,239
Cumulative Capacity Factor		66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.1%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%
Cumulative fuel input, MMBtu HHV		193,226	193,857	194,499	195,123	195,773	196,431	197,035	197,658	198,297	198,916	199,545	200,196	200,829	201,443	202,058	202,689
Cumulative gross output, kWhr		15,641,652	15,695,642	15,750,293	15,802,101	15,856,672	15,909,077	15,960,710	16,010,884	16,063,540	16,111,571	16,161,379	16,211,745	16,262,968	16,314,834	16,366,264	16,419,239
Cumulative heat rate, Btu/kWe gross LHV		11,120	11,118	11,116	11,116	11,114	11,114	11,113	11,113	11,113	11,114	11,115	11,116	11,116	11,115	11,114	11,113
Cumulative heat rate, Btu/kWe gross HHV		12,353	12,351	12,349	12,348	12,346	12,346	12,345	12,345	12,345	12,346	12,347	12,349	12,349	12,347	12,346	12,345
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		Wednesday 11/1/2017	Thursday 11/2/2017	Friday 11/3/2017	Saturday 11/4/2017	Sunday 11/5/2017	Monday 11/6/2017	Tuesday 11/7/2017	Wednesday 11/8/2017	Thursday 11/9/2017	Friday 11/10/2017	Saturday 11/11/2017	Sunday 11/12/2017	Monday 11/13/2017	Tuesday 11/14/2017	Wednesday 11/15/2017	Thursday 11/16/2017
Date																	
Hour																	
1		2,058	2,161	2,161	2,155	2,050	2,155	2,050	2,070	2,151	2,161	2,111	1,977	2,056	2,057	2,079	2,079
2		2,059	2,161	2,162	2,155	2,050	2,154	2,050	2,069	2,149	2,159	2,085	1,977	2,054	2,054	2,078	2,077
3		2,057	2,159	2,160	2,153	2,047	2,155	2,051	2,070	2,136	2,162	2,085	1,978	2,055	2,055	2,078	2,079
4		2,057	2,160	2,160	2,154	2,048	2,155	2,049	2,071	2,068	2,162	2,085	1,979	2,056	2,055	2,079	2,080
5		2,058	2,160	2,161	2,155	2,050	2,154	2,048	2,070	2,066	2,161	2,079	1,977	2,054	2,055	2,077	2,078
6		2,057	2,159	2,159	2,088	2,047	2,155	2,050	2,070	2,068	2,094	1,977	1,978	2,057	2,054	2,079	2,081
7		2,056	2,085	2,160	2,049	2,050	2,130	2,050	2,070	2,069	2,080	1,979	1,979	2,057	2,055	2,077	2,080
8		2,055	2,056	2,162	2,050	2,050	2,048	2,048	2,071	2,067	2,077	1,979	1,979	2,056	2,001	2,076	2,080
9		2,051	2,082	2,158	2,050	2,049	2,043	2,046	2,063	2,066	2,076	1,980	1,980	2,049	1,970	2,076	2,076
10		2,048	2,150	2,153	2,050	2,051	2,039	2,044	2,099	2,066	2,069	1,983	1,976	2,052	2,034	1,587	2,077
11		1,917	2,153	2,155	2,051	2,051	2,044	2,043	2,142	2,066	1,976	1,983	1,999	2,051	2,111	2,189	2,151
12		1,490	2,150	2,154	2,050	2,050	2,149	2,045	2,143	2,071	1,968	1,985	2,061	2,024	2,159	2,081	2,159
13		1,996	2,152	2,230	2,053	2,051	2,152	2,046	2,146	2,072	2,025	1,986	2,063	2,051	2,080	2,078	2,160
14		2,211	2,152	2,261	2,053	2,056	2,151	1,973	952	2,071	2,050	1,986	2,062	2,077	2,076	2,076	2,160
15		2,154	2,154	2,259	2,052	2,156	2,152	2,067	715	2,077	2,053	1,987	2,063	2,055	2,078	2,079	2,160
16		2,158	2,160	2,261	2,053	2,157	2,061	2,153	2,260	2,082	2,060	1,981	2,063	2,056	2,084	2,080	2,165
17		2,162	2,163	2,262	2,051	2,157	2,051	2,154	2,241	2,088	2,006	1,981	2,060	2,054	2,081	2,081	2,164
18		2,160	2,225	2,260	2,050	2,155	2,051	2,136	2,270	2,164	1,971	1,981	2,056	2,056	2,079	2,077	2,164
19		2,162	2,267	2,261	2,051	2,157	2,051	2,072	2,143	2,160	1,970	1,978	2,057	2,056	2,080	2,078	2,165
20		2,162	2,266	2,260	2,050	2,156	2,050	2,071	2,068	2,159	1,156	1,979	2,056	2,053	2,102	2,077	2,161
21		2,160	2,265	2,176	2,048	2,155	2,051	2,071	2,070	2,160		1,979	2,056	2,056	2,162	2,078	2,159
22		2,161	2,219	2,156	2,050	2,157	2,051	2,071	2,070	2,160	1,236	1,978	2,056	2,056	2,162	2,077	2,162
23		2,161	2,161	2,156	2,049	2,157	2,050	2,070	2,067	2,159	2,276	1,978	2,055	2,054	2,160	2,078	2,160
24		2,159	2,159	2,154	2,048	2,155	2,051	2,070	2,101	2,160	2,225	1,978	2,055	2,056	2,126	2,077	2,161
TOTAL		49,769	51,979	52,601	49,768	52,418	50,303	49,528	48,018	50,555	46,173	48,081	48,542	49,278	49,931	49,492	51,038
Cumulative Output Sold, kWhr		49,769	101,748	154,349	204,117	256,535	306,838	356,366	404,384	454,939	501,112	549,193	597,735	647,013	696,944	746,436	797,474
Transformer and line efficiency		99.8%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.8%	99.7%	99.7%	99.9%	99.8%	99.7%	99.7%	99.7%	99.7%
Hourly average		2,074	2,166	2,192	2,074	2,184	2,096	2,064	2,001	2,106	1,924	2,003	2,023	2,053	2,080	2,062	2,127

NOVEMBER 2017																	
	Friday 11/17/2017	Saturday 11/18/2017	Sunday 11/19/2017	Monday 11/20/2017	Tuesday 11/21/2017	Wednesday 11/22/2017	Thursday 11/23/2017	Friday 11/24/2017	Saturday 11/25/2017	Sunday 11/26/2017	Monday 11/27/2017	Tuesday 11/28/2017	Wednesday 11/29/2017	Thursday 11/30/2017	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,150	1,150	1,164	1,156	1,163	1,180	1,175	1,212	1,193	1,183	1,192	1,201	1,201	1,150	35,645	1,512	34,133
LFG and Biogas Flow to the Engine	614	619	632	611	618	642	637	647	638	623	624	620	626	599	18,828	1,071	17,757
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7%	94%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Total Flow (KSCF)	1,150	1,150	1,164	1,156	1,163	1,180	1,175	1,212	1,193	1,183	1,192	1,201	1,201	1,150	35,645		
LFG and Biogas Total Flow (MMBT	614	619	632	611	618	642	637	647	638	623	624	620	626	599	18,828		
Average Methane Content (%)	52.7	53.2	53.7	52.2	52.5	53.7	53.6	52.7	52.8	52.1	51.7	51.0	51.5	51.5	52.2		
Engine 1 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	23	719		
Engine 2 Hours	24	22	24	24	24	24	24	24	24	24	24	24	24	24	718		
Engine 3 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	23	24	24	24	720		
Generator 1 Power Output (kWhr)	18,240	17,600	17,140	18,412	17,848	18,552	18,004	19,360	18,060	16,784	17,276	18,036	17,160	16,644	524,392		
Generator 2 Power Output (kWhr)	16,200	14,842	16,742	16,194	17,612	18,786	18,792	18,788	18,790	16,820	17,024	17,744	18,046	16,438	508,922		
Generator 3 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 4 Power Output (kWhr)	18,724	18,848	18,748	16,148	16,144	16,148	16,148	16,148	16,152	16,144	16,708	16,900	16,136	17,104	522,444		
Gross Power Output (kWhr)	53,261	51,372	52,739	50,861	51,721	53,603	53,057	54,412	53,110	49,876	51,128	52,800	51,453	50,247	1,558,913		
Net Power Output (kWhr)	51,456	49,656	51,024	49,084	49,980	51,888	51,336	52,644	51,408	48,208	49,364	50,956	49,736	48,480	1,504,744		
Power Sold as metered by NStar, (	51,299	49,515	50,869	48,958	49,832	51,736	51,217	52,525	51,268	48,091	49,232	50,806	49,568	48,353	1,500,743	CRMBCB Inplant	
Offgrid RECs (kWhr)	1,806	1,715	1,715	1,777	1,740	1,716	1,722	1,767	1,702	1,668	1,764	1,844	1,717	1,767	54,168	9,864	
Calculated Performance Results																	
Daily																	18%
Power output (kW average whe																	of total in-plant power
Generator 1	760	733	714	767	744	773	750	807	753	699	720	752	715	724			
Generator 2	675	675	698	675	734	783	783	783	783	701	709	739	752	685			
Generator 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 4	780	785	781	673	673	673	673	673	673	673	726	704	672	713			
Power output (kW average ove																	
Facility Gross	2,219	2,141	2,197	2,119	2,155	2,233	2,211	2,267	2,213	2,078	2,130	2,200	2,144	2,094			
Facility Net	2,144	2,069	2,126	2,045	2,083	2,162	2,139	2,194	2,142	2,009	2,057	2,123	2,072	2,020			
In-plant load	75	72	71	74	73	71	72	74	71	69	74	77	72	74			
Daily availability factor																	
Facility	75%	73%	75%	75%	75%	75%	75%	75%	75%	75%	74%	75%	75%	74%			
Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%			
Engine 2	100%	92%	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%	0%	0%	0%			
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%			
Daily capacity factor																	
Facility	67%	65%	67%	64%	65%	68%	67%	69%	67%	63%	67%	67%	65%	63%			
Engine 1	92%	89%	87%	93%	90%	94%	91%	98%	91%	85%	87%	91%	87%	88%			
Engine 2	82%	82%	85%	82%	89%	95%	95%	95%	95%	85%	86%	90%	91%	83%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	95%	95%	95%	82%	82%	82%	82%	82%	82%	82%	88%	85%	81%	86%			
Cumulative by engine																	
Engine operating run hours in tl																	
Max Cumulative Available,	409	433	457	481	505	529	553	577	601	625	649	673	697	721			
Engine 1	408	432	456	480	504	528	552	576	600	624	648	672	696	719			
Engine 2	408	430	454	478	502	526	550	574	598	622	646	670	694	718			
Engine 3	-	0	0	0	0	0	0	0	0	0	0	0	0	0			
Engine 4	409	433	457	481	505	529	553	577	601	625	648	672	696	720			
Engine operating run hours tota																	
Engine 1	95,928	95,952	95,976	96,000	96,024	96,048	96,072	96,096	96,120	96,144	96,168	96,192	96,216	96,239			
Engine 2	89,217	89,239	89,263	89,287	89,311	89,335	89,359	89,383	89,407	89,431	89,455	89,479	89,503	89,527			
Engine 3	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636			
Engine 4	90,490	90,514	90,538	90,562	90,586	90,610	90,634	90,658	90,682	90,706	90,729	90,753	90,777	90,801			
Cumulative availability, %																	
Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
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	12,227	12,961	13,675	14,442	15,186	15,959	16,709	17,516	18,268	18,967	19,687	20,439	21,154	21,877			
Engine 2	11,761	12,436	13,134	13,808	14,542	15,325	16,108	16,891	17,674	18,375	19,084	19,823	20,575	21,260			
Engine 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 4	12,674	13,460	14,241	14,914	15,586	16,259	16,932	17,605	18,278	18,951	19,677	20,381	21,054	21,766			
Cumulative capacity factor, %																	
Engine 1	87%	87%	87%	88%	88%	88%	88%	88%	89%	88%	88%	88%	88%	88%			
Engine 2	84%	84%	84%	84%	84%	84%	85%	85%	86%	86%	86%	86%	86%	86%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	90%	91%	91%	90%	90%	90%	89%	89%	89%	88%	88%	88%	88%	88%			

	Friday 11/17/2017	Saturday 11/18/2017	Sunday 11/19/2017	Monday 11/20/2017	Tuesday 11/21/2017	Wednesday 11/22/2017	Thursday 11/23/2017	Friday 11/24/2017	Saturday 11/25/2017	Sunday 11/26/2017	Monday 11/27/2017	Tuesday 11/28/2017	Wednesday 11/29/2017	Thursday 11/30/2017	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 h	1,225	1,295	1,367	1,439	1,511	1,583	1,655	1,727	1,799	1,871	1,942	2,014	2,086	2,157			
Cumulative Availability, %	74.9%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%	74.8%			
Max cumulative gross output, kW	1,349,700	1,428,900	1,508,100	1,587,300	1,666,500	1,745,700	1,824,900	1,904,100	1,983,300	2,062,500	2,141,700	2,220,900	2,300,100	2,379,300			
Actual cumulative gross output, kWh	882,534	933,906	986,645	1,037,506	1,089,227	1,142,830	1,195,887	1,250,299	1,303,409	1,353,285	1,404,413	1,457,213	1,508,666	1,558,913			
Cumulative Capacity Factor	65.4%	65.4%	65.4%	65.4%	65.4%	65.5%	65.5%	65.7%	65.7%	65.6%	65.6%	65.6%	65.6%	65.5%			
Cumulative fuel input, MMBtu	10,693	11,311	11,943	12,555	13,172	13,814	14,451	15,098	15,735	16,359	16,983	17,602	18,228	18,828			
Cumulative gross output, kWh	882,534	933,906	986,645	1,037,506	1,089,227	1,142,830	1,195,887	1,250,299	1,303,409	1,353,285	1,404,413	1,457,213	1,508,666	1,558,913			
Heat Rate																	
Daily heat rate, Btu/kWe gross	10,369	10,840	10,791	10,818	10,749	10,773	10,813	10,699	10,805	11,252	10,985	10,565	10,956	10,739			
Daily heat rate, Btu/kWe	11,519	12,042	11,987	12,017	11,941	11,968	12,012	11,885	12,003	12,499	12,203	11,737	12,170	11,929			
Cumulative heat rate, Btu/kWe	10,907	10,903	10,897	10,893	10,886	10,881	10,878	10,870	10,868	10,882	10,885	10,874	10,877	10,872			
Cumulative heat rate, Btu/kWe	12,116	12,112	12,105	12,101	12,093	12,087	12,084	12,075	12,072	12,088	12,092	12,079	12,082	12,078			
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 h	22,811	22,881	22,953	23,025	23,097	23,169	23,241	23,313	23,385	23,457	23,528	23,600	23,672	23,743			
Cumulative Availability, %	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%			
Max cumulative gross output, kW	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	16,472,500	16,523,872	16,576,611	16,627,472	16,679,193	16,732,796	16,785,853	16,840,265	16,893,375	16,943,251	16,994,379	17,047,179	17,098,632	17,148,879			
Cumulative Capacity Factor	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%	66.0%			
Cumulative fuel input, MMBtu	203,302	203,921	204,553	205,164	205,782	206,423	207,061	207,707	208,345	208,968	209,592	210,212	210,838	211,437			
Cumulative gross output, kWh	16,472,500	16,523,872	16,576,611	16,627,472	16,679,193	16,732,796	16,785,853	16,840,265	16,893,375	16,943,251	16,994,379	17,047,179	17,098,632	17,148,879			
Cumulative heat rate, Btu/kWe	11,110	11,109	11,108	11,107	11,106	11,105	11,104	11,103	11,102	11,103	11,102	11,100	11,100	11,099			
Cumulative heat rate, Btu/kWe	12,342	12,341	12,340	12,339	12,338	12,336	12,335	12,334	12,333	12,333	12,333	12,331	12,331	12,330			
Service																	
Engine 1																	
Engine 2		EIS Failed															
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	TOTAL		
Date	11/17/2017	11/18/2017	11/19/2017	11/20/2017	11/21/2017	11/22/2017	11/23/2017	11/24/2017	11/25/2017	11/26/2017	11/27/2017	11/28/2017	11/29/2017	11/30/2017			
Hour																	
1	2,161	2,102	2,227	1,972	1,976	2,086	2,204	2,203	2,203	2,084	1,977	2,069	2,202	1,972			
2	2,161	2,076	2,225	1,972	1,974	2,085	2,203	2,202	2,202	2,082	1,976	2,067	2,200	1,972			
3	2,160	2,077	2,226	1,973	1,976	2,085	2,149	2,201	2,202	2,085	1,976	2,068	2,123	1,971			
4	2,117	2,078	2,225	1,972	2,028	2,085	2,084	2,202	2,203	2,084	1,977	2,069	2,160	1,973			
5	2,078	2,076	2,223	1,973	2,094	2,084	2,082	2,202	2,201	2,080	1,975	2,067	2,092	1,972			
6	2,079	2,077	2,183	1,971	2,095	2,085	2,082	2,201	2,203	2,063	1,976	2,067	2,083	1,971			
7	2,079	2,077	2,154	1,971	1,976	2,087	2,082	2,126	2,090	1,977	1,976	2,068	2,083	1,973			
8	2,078	2,078	2,119	1,971	1,976	2,085	2,083	2,082	2,082	1,978	1,975	2,047	2,082	1,972			
9	2,076	2,080	2,121	1,968	1,993	2,078	2,085	2,079	2,086	1,978	1,973	1,966	2,079	1,968			
10	2,072	2,082	2,121	1,968	2,090	2,123	2,087	2,154	2,087	1,980	2,043	2,046	2,073	1,970			
11	2,146	2,083	2,122	2,005	2,094	2,195	2,088	2,205	2,085	1,981	2,201	2,192	2,077	2,042			
12	2,159	2,081	2,123	2,093	2,195	2,196	2,089	2,208	2,155	1,980	1,762	2,196	2,078	2,088			
13	2,162	2,084	2,123	2,093	2,200	2,203	2,088	2,209	2,207	1,982	2,137	2,196	2,078	2,089			
14	2,160	2,083	2,122	2,094	2,200	2,201	2,172	2,207	2,205	1,981	2,230	2,196	2,078	2,088			
15	2,161	2,156	2,124	2,096	2,201	2,204	2,209	2,208	2,206	1,981	2,176	2,199	2,078	1,540			
16	2,168	2,165	2,124	2,100	2,086	2,208	2,208	2,208	2,177	1,982	2,177	2,205	2,082	2,216			
17	2,163	2,164	2,121	2,099	2,085	2,207	2,202	2,206	2,085	1,979	2,178	2,125	2,082	2,101			
18	2,160	2,163	2,082	2,095	2,085	2,208	2,112	2,205	2,085	1,976	2,132	2,199	1,993	2,072			
19	2,161	1,895	1,973	2,095	2,086	2,208	2,082	2,202	2,085	1,977	2,069	2,128	1,977	2,066			
20	2,159	1,514	2,046	2,096	2,084	2,207	2,082	2,202	2,083	1,976	2,070	2,199	1,976	2,067			
21	2,161	1,580	2,093	2,096	2,085	2,203	2,135	2,204	2,085	1,977	2,069	2,095	1,972	2,067			
22	2,159	2,204	2,048	2,096	2,084	2,205	2,204	2,203	2,084	1,976	2,070	2,082	1,974	2,069			
23	2,160	2,313	1,971	2,095	2,084	2,203	2,203	2,203	2,083	1,976	2,068	2,080	1,972	2,066			
24	2,159	2,227	1,973	2,094	2,085	2,205	2,202	2,203	2,084	1,976	2,069	2,180	1,974	2,068			
TOTAL	51,299	49,515	50,869	48,958	49,832	51,736	51,217	52,525	51,268	48,091	49,232	50,806	49,568	48,353			
Cumulative Output Sold, kW	848,773	898,288	949,157	998,115	1,047,947	1,099,683	1,150,900	1,203,425	1,254,693	1,302,784	1,352,016	1,402,822	1,452,390	1,500,743			
Transformer and line efficien	99.7%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%			
Hourly average	2,137	2,063	2,120	2,040	2,076	2,156	2,134	2,189	2,136	2,004	2,051	2,117	2,065	2,015			

DECEMBER 2017																		
		Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	
		12/1/2017	12/2/2017	12/3/2017	12/4/2017	12/5/2017	12/6/2017	12/7/2017	12/8/2017	12/9/2017	12/10/2017	12/11/2017	12/12/2017	12/13/2017	12/14/2017	12/15/2017	12/16/2017	
LFG and Biogas Flow to the Engines (KSCF)		1,214	1,166	1,195	1,196	1,164	1,144	1,159	1,155	1,145	1,149	1,169	1,191	1,157	1,188	1,189	1,184	
LFG and Biogas Flow to the Engines (MMBTU HHV)		641	602	609	592	594	608	607	597	595	589	577	612	599	589	588	591	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,214	1,166	1,195	1,196	1,164	1,144	1,159	1,155	1,145	1,149	1,169	1,191	1,157	1,188	1,189	1,184	
LFG and Biogas Total Flow (MMBTU HHV)		641	602	609	592	594	608	607	597	595	589	577	612	599	589	588	591	
Average Methane Content (%)		52.2	51.0	50.4	48.9	50.4	52.5	51.8	51.1	51.4	50.6	48.8	50.8	51.2	49.0	48.8	49.4	
Engine 1 Hours		24	24	24	24	24	24	24	24	21	-	-	-	-	-	-	-	
Engine 2 Hours		24	24	24	24	24	24	24	24	24	24	22	24	24	24	24	24	
Engine 3 Hours		-	-	-	-	-	-	-	-	1	24	23	24	24	24	24	24	
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	23	24	24	24	24	24	
Generator 1 Power Output (kWhr)		17,128	16,772	16,784	15,860	15,608	15,612	15,612	16,044	13,852	-	-	-	-	-	-	-	
Generator 2 Power Output (kWhr)		16,196	16,182	16,194	15,154	14,444	14,440	14,438	15,500	16,434	16,442	15,524	17,338	16,686	15,926	15,324	16,212	
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	400	16,416	16,200	17,176	16,740	16,064	15,940	16,408	
Generator 4 Power Output (kWhr)		16,724	16,120	16,132	16,128	17,464	18,480	18,484	16,692	16,376	16,372	16,184	17,168	16,728	16,028	16,808	15,468	
Gross Power Output (kWhr)		50,060	49,078	49,106	47,097	47,512	48,602	48,607	48,317	47,122	49,256	47,928	51,697	50,154	47,978	48,009	48,056	
Net Power Output (kWhr)		48,348	47,328	47,308	45,264	45,756	46,904	46,856	46,520	45,364	47,508	46,112	49,664	47,760	45,436	45,544	45,544	
Power Sold as metered by NStar, (kWhr)		48,240	47,267	47,223	45,234	45,669	46,762	46,733	46,406	45,280	47,382	46,047	49,620	47,709	45,344	45,393	45,481	
Offgrid RECs (kWhr)		1,713	1,752	1,800	1,832	1,755	1,699	1,750	1,798	1,758	1,749	1,816	2,033	2,396	2,578	2,574	2,511	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		714	699	699	661	650	651	651	669	660	-	-	-	-	-	-	-	
Generator 2		675	674	675	631	602	602	602	646	685	685	706	722	695	664	639	676	
Generator 3		-	-	-	-	-	-	-	-	400	684	704	716	698	669	664	684	
Generator 4		697	672	672	672	728	770	770	696	682	682	704	715	697	668	700	645	
Power output (kW average over 24-hrs)																		
Facility Gross		2,086	2,045	2,046	1,962	1,980	2,025	2,025	2,013	1,963	2,052	1,997	2,154	2,090	1,999	2,000	2,002	
Facility Net		2,015	1,972	1,971	1,886	1,907	1,954	1,952	1,938	1,890	1,980	1,921	2,069	1,990	1,892	1,893	1,898	
In-plant load		71	73	75	76	73	71	73	75	73	73	76	85	100	107	107	105	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	75%	75%	75%	73%	75%	71%	75%	75%	75%	75%	75%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	88%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	4%	100%	96%	100%	100%	100%	100%	100%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	
Daily capacity factor																		
Facility		63%	62%	62%	59%	59%	60%	61%	61%	59%	62%	61%	65%	63%	61%	61%	61%	
Engine 1		87%	85%	85%	80%	79%	79%	79%	81%	80%	0%	0%	0%	0%	0%	0%	0%	
Engine 2		82%	82%	82%	77%	73%	73%	73%	78%	83%	83%	86%	88%	84%	80%	77%	82%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	48%	83%	85%	87%	85%	81%	81%	83%	
Engine 4		84%	81%	81%	81%	88%	93%	93%	84%	83%	83%	85%	87%	84%	81%	85%	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		24	48	72	96	120	144	168	192	213	213	213	213	213	213	213	213	
Engine 2		24	48	72	96	120	144	168	192	216	240	262	286	310	334	358	382	
Engine 3		0	0	0	0	0	0	0	0	1	25	48	72	96	120	144	168	
Engine 4		24	48	72	96	120	144	168	192	216	240	263	287	311	335	359	383	
Engine operating run hours total from 0 hours																		
Engine 1		96,239	96,263	96,287	96,311	96,335	96,359	96,383	96,407	96,431	96,452	96,452	96,452	96,452	96,452	96,452	96,452	
Engine 2		89,527	89,551	89,575	89,599	89,623	89,647	89,671	89,695	89,719	89,743	89,767	89,789	89,813	89,837	89,861	89,885	
Engine 3		92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,636	92,661	92,684	92,708	92,732	92,756	92,780	92,804	
Engine 4		90,801	90,825	90,849	90,873	90,897	90,921	90,945	90,969	90,993	91,017	91,041	91,064	91,088	91,112	91,136	91,160	
Cumulative availability, %	Dec 1, 2017 @ 00:00 hours																	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	99%	89%	81%	74%	68%	63%	59%	55%	
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	10%	18%	25%	31%	36%	40%	44%	
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		714	1,413	2,112	2,773	3,423	4,074	4,724	5,393	6,052	6,052	6,052	6,052	6,052	6,052	6,052	6,052	
Engine 2		675	1,349	2,024	2,655	3,257	3,859	4,460	5,106	5,791	6,476	7,162	7,848	8,534	9,220	9,906	10,592	
Engine 3		-	-	-	-	-	-	-	-	400	1,084	1,788	2,504	3,202	3,871	4,535	5,219	
Engine 4		697	1,369	2,041	2,713	3,440	4,210	4,981	5,676	6,358	7,041	7,744	8,459	9,156	9,824	10,525	11,169	
Cumulative capacity factor, %																		
Engine 1		87%	86%	85%	84%	83%	82%	82%	82%	82%	73%	67%	61%	56%	52%	49%	46%	
Engine 2		82%	82%	82%	80%	79%	78%	77%	77%	78%	78%	79%	80%	80%	80%	80%	80%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	5%	13%	20%	25%	30%	34%	37%	40%	
Engine 4		84%	83%	82%	82%	83%	85%	86%	86%	86%	85%	85%	85%	85%	85%	85%	85%	

		Friday 12/1/2017	Saturday 12/2/2017	Sunday 12/3/2017	Monday 12/4/2017	Tuesday 12/5/2017	Wednesday 12/6/2017	Thursday 12/7/2017	Friday 12/8/2017	Saturday 12/9/2017	Sunday 12/10/2017	Monday 12/11/2017	Tuesday 12/12/2017	Wednesday 12/13/2017	Thursday 12/14/2017	Friday 12/15/2017	Saturday 12/16/2017
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	646	718	786	858	930	1,002	1,074	1,146
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.8%	74.8%	74.4%	74.5%	74.5%	74.6%	74.6%	74.6%
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		50,060	99,138	148,244	195,341	242,853	291,455	340,062	388,379	435,501	484,757	532,685	584,382	634,536	682,514	730,523	778,579
Cumulative Capacity Factor		63.2%	62.6%	62.4%	61.7%	61.3%	61.3%	61.3%	61.3%	61.1%	61.2%	61.1%	61.5%	61.6%	61.6%	61.5%	61.4%
Cumulative fuel input, MMBtu HHV		641	1,243	1,852	2,444	3,038	3,646	4,254	4,851	5,446	6,035	6,612	7,224	7,824	8,412	9,000	9,591
Cumulative gross output, kWhr		50,060	99,138	148,244	195,341	242,853	291,455	340,062	388,379	435,501	484,757	532,685	584,382	634,536	682,514	730,523	778,579
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,530	11,040	11,160	11,317	11,260	11,263	11,247	11,128	11,370	10,755	10,841	10,664	10,755	11,044	11,018	11,076
Daily heat rate, Btu/kWe gross HHV		12,809	12,264	12,398	12,572	12,508	12,512	12,494	12,362	12,631	11,948	12,043	11,846	11,947	12,268	12,239	12,304
Cumulative heat rate, Btu/kWe gross LHV		11,530	11,288	11,245	11,263	11,262	11,262	11,260	11,244	11,258	11,206	11,174	11,129	11,099	11,095	11,090	11,089
Cumulative heat rate, Btu/kWe gross HHV		12,809	12,539	12,492	12,511	12,511	12,511	12,509	12,490	12,506	12,449	12,412	12,362	12,329	12,325	12,320	12,319
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	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	33,124
Actual cumulative engine run hours	23,815	23,887	23,959	24,031	24,103	24,175	24,247	24,319	24,391	24,463	24,535	24,607	24,679	24,751	24,823	24,895	24,967
Cumulative Availability, %	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%
Max cumulative gross output, kWhr	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	27,324,000
Actual cumulative gross output, kWhr	17,198,939	17,248,017	17,297,123	17,346,220	17,395,317	17,444,414	17,493,511	17,542,608	17,591,705	17,640,802	17,689,899	17,738,996	17,788,093	17,837,190	17,886,287	17,935,384	17,984,481
Cumulative Capacity Factor	66.0%	66.0%	66.0%	66.0%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%	65.9%	65.8%	65.8%	65.8%	65.8%
Cumulative fuel input, MMBtu HHV	212,079	212,680	213,289	213,888	214,487	215,086	215,685	216,284	216,883	217,482	218,081	218,680	219,279	219,878	220,477	221,076	221,675
Cumulative gross output, kWhr	17,198,939	17,248,017	17,297,123	17,346,220	17,395,317	17,444,414	17,493,511	17,542,608	17,591,705	17,640,802	17,689,899	17,738,996	17,788,093	17,837,190	17,886,287	17,935,384	17,984,481
Cumulative heat rate, Btu/kWe gross LHV	11,100	11,100	11,100	11,101	11,101	11,102	11,102	11,102	11,102	11,103	11,102	11,101	11,100	11,099	11,099	11,099	11,099
Cumulative heat rate, Btu/kWe gross HHV	12,331	12,331	12,331	12,332	12,332	12,333	12,333	12,333	12,333	12,334	12,333	12,332	12,331	12,330	12,329	12,329	12,329
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 12/1/2017	Saturday 12/2/2017	Sunday 12/3/2017	Monday 12/4/2017	Tuesday 12/5/2017	Wednesday 12/6/2017	Thursday 12/7/2017	Friday 12/8/2017	Saturday 12/9/2017	Sunday 12/10/2017	Monday 12/11/2017	Tuesday 12/12/2017	Wednesday 12/13/2017	Thursday 12/14/2017	Friday 12/15/2017	Saturday 12/16/2017
Date																	
Hour																	
1		2,068	1,969	1,968	1,966	1,844	1,951	1,946	1,947	1,978	1,978	1,972	2,109	2,059	1,934	1,838	2,033
2		2,069	1,969	1,966	1,964	1,844	1,950	1,945	1,945	1,977	1,975	1,971	2,110	2,058	1,935	1,838	1,920
3		2,070	1,967	1,968	1,965	1,843	1,950	1,946	1,946	1,977	1,975	1,972	2,110	2,059	1,934	1,837	1,922
4		2,070	1,969	1,967	1,965	1,845	1,950	1,947	1,946	1,978	1,975	1,973	2,112	2,059	1,936	1,838	1,921
5		2,070	1,967	1,967	1,963	1,844	1,951	1,945	1,903	1,976	1,974	1,972	2,111	2,058	1,935	1,837	1,920
6		2,069	1,968	1,966	1,963	1,845	1,951	1,947	1,850	1,977	1,973	1,972	2,110	2,006	1,935	1,838	1,921
7		1,982	1,968	1,966	1,963	1,847	1,952	1,946	1,850	1,977	1,974	1,175	2,112	1,963	1,935	1,839	1,922
8		1,972	1,969	1,966	1,962	1,847	1,952	1,945	1,850	1,976	1,974	-	2,110	1,961	1,934	1,838	1,869
9		1,967	1,971	1,967	1,963	1,849	1,953	1,945	1,852	1,978	1,975	1,286	2,068	1,954	1,933	1,835	1,775
10		1,967	1,972	1,968	1,919	1,844	1,945	1,946	1,842	1,978	1,974	2,018	1,951	1,981	1,920	1,758	1,781
11		1,967	1,972	1,969	1,794	1,901	1,946	1,946	1,845	1,977	1,975	2,153	1,965	2,026	1,830	1,810	1,925
12		1,966	1,973	1,972	1,795	1,942	1,943	1,949	1,937	1,977	1,977	2,153	2,050	2,030	1,853	1,915	1,925
13		1,976	1,973	1,972	1,798	1,943	1,945	1,953	1,947	1,978	1,977	2,159	2,058	2,033	1,904	1,923	1,927
14		2,088	1,972	1,971	1,800	1,941	1,943	1,954	1,972	1,976	1,978	2,151	2,057	2,029	1,934	1,610	1,927
15		2,094	1,973	1,971	1,843	1,945	1,946	1,949	1,974	1,976	1,977	2,114	2,055	2,023	1,932	2,066	1,925
16		2,065	1,971	1,969	1,852	1,949	1,950	1,952	1,979	1,976	1,975	2,117	2,056	1,935	1,847	2,067	1,925
17		1,976	1,970	1,967	1,847	1,949	1,951	1,951	1,977	1,976	1,974	2,113	2,060	1,938	1,843	1,987	1,923
18		1,977	1,969	1,967	1,846	1,951	1,949	1,946	1,979	1,977	1,972	2,113	2,061	1,937	1,843	2,069	1,923
19		1,971	1,970	1,967	1,845	1,950	1,948	1,947	1,979	1,976	1,973	2,112	2,059	1,933	1,840	1,993	1,861
20		1,973	1,967	1,965	1,844	1,949	1,948	1,945	1,978	1,975	1,970	2,110	2,058	1,934	1,837	1,921	1,847
21		1,972	1,970	1,966	1,846	1,950	1,947	1,945	1,978	1,973	1,972	2,111	2,061	1,934	1,837	1,971	1,842
22		1,971	1,967	1,967	1,845	1,949	1,948	1,946	1,978	1,973	1,971	2,111	2,060	1,933	1,838	1,922	1,864
23		1,969	1,966	1,965	1,843	1,950	1,946	1,946	1,976	1,973	1,972	2,109	2,058	1,932	1,837	1,921	1,813
24		1,971	1,965	1,966	1,843	1,948	1,947	1,946	1,976	1,968	1,972	2,110	2,059	1,934	1,838	1,922	1,870
TOTAL		48,240	47,267	47,223	45,234	45,669	46,762	46,733	46,406	45,280	47,382	46,047	49,620	47,709	45,344	45,393	45,481
Cumulative Output Sold, kWhr		48,240	95,507	142,730	187,964	233,633	280,395	327,128	373,534	418,814	466,196	512,243	561,863	609,572	654,916	700,309	745,790
Transformer and line efficiency		99.8%	99.9%	99.8%	99.9%	99.8%	99.7%	99.7%	99.8%	99.8%	99.7%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%
Hourly average		2,010	1,969	1,968	1,885	1,903	1,948	1,947	1,934	1,887	1,974	1,919	2,068	1,988	1,889	1,891	1,895

DECEMBER 2017																		
	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	TOTAL	Biogas	LFG
	12/17/2017	12/18/2017	12/19/2017	12/20/2017	12/21/2017	12/22/2017	12/23/2017	12/24/2017	12/25/2017	12/26/2017	12/27/2017	12/28/2017	12/29/2017	12/30/2017	12/31/2017			
LFG and Biogas Flow to the Engine	1,186	1,134	1,199	1,161	1,210	1,233	1,237	1,226	1,187	1,249	1,235	1,131	1,249	1,277	1,219	36,897	1,515	35,382
LFG and Biogas Flow to the Engine	580	565	612	584	600	617	632	606	611	623	612	593	632	653	621	18,731	1,073	17,658
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.7%	94%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,186	1,134	1,199	1,161	1,210	1,233	1,237	1,226	1,187	1,249	1,235	1,131	1,249	1,277	1,219	36,897		
LFG and Biogas Total Flow (MMBT	580	565	612	584	600	617	632	606	611	623	612	593	632	653	621	18,731		
Average Methane Content (%)	48.3	49.3	50.4	49.7	49.0	49.4	50.5	48.8	50.9	49.3	49.0	51.9	50.0	50.5	50.3	50.2		
Engine 1 Hours	-	1	-	-	4	-	-	-	10	24	24	24	24	24	24	372		
Engine 2 Hours	24	24	24	24	24	24	24	24	23	24	23	24	24	24	24	740		
Engine 3 Hours	24	24	24	24	24	24	24	24	22	24	24	15	24	24	24	517		
Engine 4 Hours	24	24	24	24	21	24	24	24	11	-	-	-	-	-	-	583		
Generator 1 Power Output (kWhr)	-	-	-	-	2,008	-	-	-	5,948	14,428	15,160	17,176	17,968	17,968	17,372	251,300		
Generator 2 Power Output (kWhr)	16,420	17,494	17,634	15,674	16,770	18,554	18,558	16,820	17,896	19,500	17,090	17,688	17,576	18,836	17,146	516,090		
Generator 3 Power Output (kWhr)	16,404	15,540	15,512	16,412	17,104	18,544	18,544	18,544	16,968	17,944	17,516	11,704	17,248	16,752	16,752	366,832		
Generator 4 Power Output (kWhr)	14,360	16,232	17,912	17,912	14,868	17,916	17,908	17,912	8,688	-	-	-	-	-	-	411,064		
Gross Power Output (kWhr)	47,140	49,256	51,056	49,974	50,746	54,993	55,004	53,257	49,581	51,922	49,729	46,582	52,876	53,653	51,363	1,545,711		
Net Power Output (kWhr)	44,604	47,024	49,260	48,120	48,812	53,040	53,096	51,340	47,552	49,576	47,488	44,460	50,496	51,300	49,068	1,482,308		
Power Sold as metered by NStar, (	44,558	46,914	49,110	48,007	48,701	52,919	52,931	51,194	47,461	49,525	47,506	44,475	50,486	51,263	49,057	1,479,897	CRMCB inplant	
Offgrid RECs (kWhr)	2,536	2,230	1,795	1,855	1,934	1,953	1,907	1,918	2,029	2,346	2,241	2,122	2,380	2,353	2,295	63,408	13,243	
Calculated Performance Results																		
Daily																		
Power output (kW average whe																		21%
Generator 1	-	-	-	-	502	-	-	-	595	601	632	716	749	749	724			of total in-plant
Generator 2	684	729	735	653	699	773	773	701	778	813	743	737	732	785	714			power
Generator 3	684	648	646	684	713	773	773	773	771	748	730	780	719	698	698			
Generator 4	598	676	746	746	708	747	746	746	790	-	-	-	-	-	-			
Power output (kW average ove																		
Facility Gross	1,964	2,052	2,127	2,082	2,114	2,291	2,292	2,219	2,066	2,163	2,072	1,941	2,203	2,236	2,140			
Facility Net	1,859	1,959	2,053	2,005	2,034	2,210	2,212	2,139	1,981	2,066	1,979	1,853	2,104	2,138	2,045			
In-plant load	106	93	75	77	81	81	80	80	85	98	93	88	99	98	96			
Daily availability factor																		
Facility	75%	76%	75%	75%	76%	75%	75%	75%	69%	75%	74%	66%	75%	75%	75%			
Engine 1	0%	4%	0%	0%	17%	0%	0%	0%	42%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%			
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	63%	100%	100%	100%			
Engine 4	100%	100%	100%	100%	88%	100%	100%	100%	46%	0%	0%	0%	0%	0%	0%			
Daily capacity factor																		
Facility	60%	62%	64%	63%	64%	69%	69%	67%	63%	66%	63%	59%	67%	68%	65%			
Engine 1	0%	0%	0%	0%	61%	0%	0%	0%	72%	73%	77%	87%	91%	91%	88%			
Engine 2	83%	88%	89%	79%	85%	94%	94%	85%	94%	98%	90%	89%	89%	95%	87%			
Engine 3	83%	78%	78%	83%	86%	94%	94%	94%	93%	91%	88%	95%	87%	85%	85%			
Engine 4	73%	82%	90%	90%	86%	90%	90%	90%	96%	0%	0%	0%	0%	0%	0%			
Cumulative by engine																		
Engine operating run hours in tl																		
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720			
Engine 1	213	214	214	214	218	218	218	218	228	252	276	300	324	348	348			
Engine 2	406	430	454	478	502	526	550	574	597	621	644	668	692	716	716			
Engine 3	192	216	240	264	288	312	336	360	382	406	430	445	469	493	493			
Engine 4	407	431	455	479	500	524	548	572	583	583	583	583	583	583	583			
Engine operating run hours tota																		
Engine 1	96,452	96,453	96,453	96,453	96,457	96,457	96,457	96,457	96,467	96,491	96,515	96,539	96,563	96,587	96,587			
Engine 2	89,933	89,957	89,981	90,005	90,029	90,053	90,077	90,101	90,124	90,148	90,171	90,195	90,219	90,243	90,243			
Engine 3	92,828	92,852	92,876	92,900	92,924	92,948	92,972	92,996	93,018	93,042	93,066	93,081	93,105	93,129	93,129			
Engine 4	91,208	91,232	91,256	91,280	91,301	91,325	91,349	91,373	91,384	91,384	91,384	91,384	91,384	91,384	91,384			
Cumulative availability, %																		
Engine 1	52%	50%	47%	45%	43%	41%	39%	38%	38%	40%	43%	45%	47%	48%	48%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%			
Engine 3	47%	50%	53%	55%	57%	59%	61%	63%	64%	65%	66%	66%	67%	68%	68%			
Engine 4	100%	100%	100%	100%	99%	99%	99%	99%	97%	93%	90%	87%	84%	81%	81%			
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	6,052	6,052	6,052	6,052	6,554	6,554	6,554	6,554	7,149	7,750	8,382	9,097	9,846	10,595	10,570			
Engine 2	11,261	11,990	12,725	13,378	14,077	14,850	15,623	16,324	17,102	17,914	18,657	19,394	20,127	20,912	20,841			
Engine 3	5,902	6,550	7,196	7,880	8,593	9,365	10,138	10,911	11,682	12,429	13,159	13,940	14,658	15,356	15,356			
Engine 4	11,767	12,444	13,190	13,936	14,644	15,391	16,137	16,883	17,673	17,673	17,673	17,673	17,673	17,673	17,673			
Cumulative capacity factor, %																		
Engine 1	43%	41%	39%	37%	38%	36%	35%	33%	35%	36%	38%	39%	41%	43%	43%			
Engine 2	81%	81%	81%	81%	81%	82%	83%	84%	84%	84%	84%	84%	84%	84%	84%			
Engine 3	42%	44%	46%	48%	50%	52%	53%	55%	57%	58%	59%	60%	61%	62%	62%			
Engine 4	84%	84%	84%	84%	85%	85%	85%	85%	86%	82%	79%	77%	74%	71%	71%			

	Sunday 12/17/2017	Monday 12/18/2017	Tuesday 12/19/2017	Wednesday 12/20/2017	Thursday 12/21/2017	Friday 12/22/2017	Saturday 12/23/2017	Sunday 12/24/2017	Monday 12/25/2017	Tuesday 12/26/2017	Wednesday 12/27/2017	Thursday 12/28/2017	Friday 12/29/2017	Saturday 12/30/2017	Sunday 12/31/2017	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 h	1,218	1,291	1,363	1,435	1,508	1,580	1,652	1,724	1,790	1,862	1,933	2,006	2,068	2,140	2,140			
Cumulative Availability, %	74.6%	74.7%	74.7%	74.7%	74.8%	74.8%	74.8%	74.8%	74.6%	74.6%	74.6%	74.3%	74.3%	74.3%	74.3%			
Max cumulative gross output, kW	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, kW	825,719	874,975	926,031	976,005	1,026,751	1,081,744	1,136,748	1,190,005	1,239,586	1,291,508	1,341,237	1,387,819	1,440,695	1,494,348	1,492,058			
Cumulative Capacity Factor	61.3%	61.4%	61.5%	61.6%	61.7%	62.1%	62.4%	62.6%	62.6%	62.7%	62.7%	62.6%	62.7%	62.9%	62.8%			
Cumulative fuel input, MMBtu	10,171	10,736	11,347	11,931	12,531	13,148	13,780	14,386	14,997	15,620	16,232	16,826	17,458	18,110	18,078			
Cumulative gross output, kWh	825,719	874,975	926,031	976,005	1,026,751	1,081,744	1,136,748	1,190,005	1,239,586	1,291,508	1,341,237	1,387,819	1,440,695	1,494,348	1,492,058			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,066	10,331	10,783	10,516	10,645	10,095	10,345	10,240	11,099	10,801	11,080	11,467	10,760	10,948	10,875			
Daily heat rate, Btu/kWe net	12,293	11,477	11,979	11,682	11,826	11,214	11,492	11,375	12,329	11,999	12,309	12,739	11,952	12,161	12,081			
Cumulative heat rate, Btu/kWe gross	11,088	11,045	11,031	11,004	10,987	10,941	10,913	10,882	10,891	10,887	10,895	10,914	10,908	10,910	10,907			
Cumulative heat rate, Btu/kWe net	12,317	12,270	12,254	12,225	12,205	12,154	12,122	12,089	12,099	12,095	12,102	12,124	12,118	12,119	12,116			
Cumulative by Facility starting C																		
Max cumulative available engine	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 h	24,961	25,034	25,106	25,178	25,251	25,323	25,395	25,467	25,533	25,605	25,676	25,739	25,811	25,883	25,883			
Cumulative Availability, %	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.4%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%	75.3%			
Max cumulative gross output, kW	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	17,974,598	18,023,854	18,074,910	18,124,884	18,175,630	18,230,623	18,285,627	18,338,884	18,388,465	18,440,387	18,490,116	18,536,698	18,589,574	18,643,227	18,640,937			
Cumulative Capacity Factor	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.8%	65.7%	65.7%	65.8%	65.7%			
Cumulative fuel input, MMBtu	221,608	222,173	222,785	223,369	223,969	224,585	225,217	225,823	226,435	227,058	227,670	228,263	228,895	229,548	229,516			
Cumulative gross output, kWh	17,974,598	18,023,854	18,074,910	18,124,884	18,175,630	18,230,623	18,285,627	18,338,884	18,388,465	18,440,387	18,490,116	18,536,698	18,589,574	18,643,227	18,640,937			
Cumulative heat rate, Btu/kWe gross	11,098	11,096	11,096	11,094	11,093	11,090	11,087	11,085	11,085	11,084	11,084	11,085	11,084	11,084	11,084			
Cumulative heat rate, Btu/kWe net	12,329	12,327	12,326	12,324	12,322	12,319	12,317	12,314	12,314	12,313	12,313	12,314	12,313	12,313	12,312			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4											trip							
Oil - oil and filter change																		
Service - plugs, air filter, valve insp										Eversource Outage								
Precipitation										Snow storm								
NSTAR Power Reports	Sunday 12/17/2017	Monday 12/18/2017	Tuesday 12/19/2017	Wednesday 12/20/2017	Thursday 12/21/2017	Friday 12/22/2017	Saturday 12/23/2017	Sunday 12/24/2017	Monday 12/25/2017	Tuesday 12/26/2017	Wednesday 12/27/2017	Thursday 12/28/2017	Friday 12/29/2017	Saturday 12/30/2017	Sunday 12/31/2017	TOTAL		
Hour																		
1	1,848	1,864	2,014	2,076	1,947	2,204	2,207	2,207	2,204	2,070	2,077	1,307	2,081	2,051	2,150			
2	1,824	1,864	2,012	1,954	1,947	2,202	2,205	2,204	2,203	2,069	2,061	1,306	2,081	2,050	2,125			
3	1,829	1,863	2,013	1,955	1,946	2,203	2,203	2,202	2,204	2,069	1,982	1,307	2,080	2,055	2,097			
4	1,836	1,921	2,014	2,007	1,947	2,204	2,205	2,149	2,205	2,069	1,982	1,307	2,078	2,147	2,074			
5	1,784	1,868	2,012	1,973	1,947	2,203	2,202	2,149	2,205	2,068	1,983	1,307	2,077	2,147	2,056			
6	1,817	1,922	1,997	1,952	1,947	2,203	2,203	2,152	2,205	2,067	1,982	1,307	2,080	2,147	2,055			
7	1,775	1,865	1,945	1,953	1,892	2,202	2,204	2,136	2,206	2,068	1,983	1,308	2,081	2,151	2,056			
8	1,797	1,920	1,927	1,953	1,865	2,203	2,203	2,084	2,206	2,067	1,982	1,308	2,081	2,152	2,056			
9	1,775	1,869	1,921	1,950	1,861	2,204	2,202	2,084	2,207	1,987	1,981	1,363	2,071	2,152	2,055			
10	1,772	1,895	1,930	2,067	1,783	2,205	2,205	2,086	2,206	1,969	1,973	1,996	2,067	2,109	2,054			
11	1,869	1,899	2,041	2,093	1,651	2,204	2,194	2,085	2,205	2,010	2,049	2,097	2,084	2,144	2,053			
12	1,868	1,985	2,093	2,094	1,959	2,207	2,203	2,088	1,519	2,071	2,070	2,247	2,130	2,153	2,056			
13	1,926	2,046	2,097	2,094	2,127	2,206	2,206	2,093	-	2,075	2,064	2,248	2,150	2,153	2,056			
14	1,924	1,999	2,098	2,096	1,845	2,206	2,205	2,128	1,234	2,077	2,072	2,249	2,167	2,152	2,053			
15	1,924	1,998	2,101	2,059	2,180	2,208	2,207	2,086	1,818	2,077	2,132	2,250	2,250	2,152	2,052			
16	1,923	2,017	2,100	2,071	2,215	2,205	2,206	2,086	2,062	2,081	2,144	2,250	2,189	2,152	2,048			
17	1,921	2,017	2,100	2,023	2,211	2,206	2,207	2,083	2,075	2,080	2,140	2,247	2,195	2,149	2,020			
18	1,922	2,016	2,099	1,949	2,208	2,207	2,207	2,139	2,073	2,080	2,141	2,246	2,153	2,151	2,009			
19	1,850	2,016	2,099	1,950	2,207	2,206	2,213	2,136	2,072	2,079	2,141	2,188	2,137	2,148	2,006			
20	1,865	2,014	2,098	1,947	2,203	2,206	2,209	2,083	2,071	2,078	2,140	2,174	2,050	2,149	2,002			
21	1,868	2,015	2,100	1,949	2,203	2,207	2,210	2,168	2,071	2,078	1,676	2,173	2,050	2,147	1,985			
22	1,920	2,014	2,100	1,949	2,204	2,206	2,210	2,160	2,071	2,079	1,342	2,130	2,055	2,149	1,983			
23	1,858	2,013	2,099	1,947	2,202	2,206	2,209	2,203	2,070	2,078	1,761	2,079	2,050	2,151	1,980			
24	1,863	2,014	2,100	1,946	2,204	2,206	2,206	2,203	2,069	2,079	1,648	2,081	2,049	2,152	1,976			
TOTAL	44,558	46,914	49,110	48,007	48,701	52,919	52,931	51,194	47,461	49,525	47,506	44,475	50,486	51,263	49,057			
Cumulative Output Sold, kW	790,348	837,262	886,372	934,379	983,080	1,035,999	1,088,930	1,140,124	1,187,585	1,237,110	1,284,616	1,329,091	1,379,577	1,430,840	1,479,897			
Transformer and line efficiency	99.9%	99.8%	99.7%	99.8%	99.8%	99.8%	99.7%	99.7%	99.8%	99.9%	100.0%	100.0%	100.0%	99.9%	100.0%			
Hourly average	1,857	1,955	2,046	2,000	2,029	2,205	2,205	2,133	1,978	2,064	1,979	1,853	2,104	2,136	2,044			

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 and										
	Engine 1, kW	750	720	720	800	773	650	670	650	
	Engine 2, kW	-	735	710	-	-	680	670	600	
	Engine 3, kW	680	700	700	660	674	-	-	-	
	Engine 4, kW	790	-	-	630	623	740	790	800	
	Gross, kW	2,220	2,155	2,130	2,090	2,070	2,070	2,130	2,050	
MEASURING INSTRUMENT:	Pitot Tube:	166	166	166	166	166	166	167	167	
	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	
DATE OF MEASUREMENT:		12-May-17	28-Jun-17	26-Jul-17	14-Aug-17	6-Sep-17	4-Oct-17	7-Nov-17	7-Dec-17	
TIME OF MEASUREMENT:		12:00	13:00	13:00	11:30	11:00	14:00	14:00	11:30	
PARAMETERS	UNITS	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	85.49	85.49	85.49	85.49	85.49	85.49	85.49	85.49	
Cp	Pitot tube coefficient	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
dP	Average velocity pressure of stack gas	0.177	0.146	0.150	0.151	0.140	0.146	0.158	0.146	
Blower Inlet										
Ts	Stack temperature	Degrees Fahrenheit	75	77	80	85	83	78	70	
		Degrees Rankine	535	537	540	545	543	538	530	
Pg	Stack static pressure	inch H2O	-63	-62	-65	-66	-64	-59	-58	
		inch Hg	(4.63)	(4.56)	(4.78)	(4.85)	(4.71)	(4.34)	(4.27)	
Ps	Absolute stack gas pressure	inch Hg	25.40	25.45	25.05	25.16	25.17	26.03	25.64	
Blower Outlet										
Ts	Stack temperature	Degrees Fahrenheit	120	119	118	120	120	119	120	
		Degrees Rankine	580	579	578	580	580	579	580	
Pg	Stack static pressure	inch H2O	52.6	60.9	60.9	60.9	60.9	60.9	60.9	
		inch Hg	3.87	4.48	4.48	4.48	4.48	4.48	4.48	
		psig	1.90	2.20	2.20	2.20	2.20	2.20	2.20	
Pbar	Barometric pressure	inch Hg	30.03	30.01	29.83	30.01	29.88	30.37	29.93	
Ps	Absolute stack gas pressure	inch Hg	33.90	34.49	34.31	34.49	34.36	34.85	34.39	
Ms	Molecular weight of stack gas, wet	lb/lb-mole	27.50	27.80	27.93	27.85	27.85	27.85	27.92	
Vs	Average stack gas velocity	feet per second	31.5	28.4	29.1	29.3	28.2	28.1	29.2	
Qact	Volumetric Flow	actual cubic feet per minute	1,118	1,010	1,033	1,041	1,000	998	1,038	
Qstd	Volumetric Flow at actual methane content	standard cubic feet per minute *	936	844	846	848	818	852	886	
Qstd corr	Volumetric Flow at 50% methane	standard cubic feet per minute **	962	843	826	831	802	835	913	
Ht HHV	Heat input	MMBtu per hour HHV	29.22	25.58	25.07	25.24	24.35	25.36	27.72	
Ht LHV	Heat input	MMBtu per hour LHV	26.30	23.03	22.57	22.72	21.92	22.83	24.95	
	Methane Content	%, vol/vol wet	51.40%	49.90%	48.80%	49.00%	49.00%	49.00%	51.50%	
Diff. between pitot tube and orifice reading:			1.0%	0.1%	-1.1%	0.7%	-0.6%	1.0%	2.5%	
dP	Delta pressure across orifice plate	inches H2O	6.40	5.20	5.40	5.20	5.00	5.10	5.50	
Qact	Volumetric Flow	acfm	899	802	817	803	787	795	826	
Qstd	Volumetric Flow at actual methane content	standard cubic feet per minute *	927	843	856	843	823	844	864	
Qstd	Volumetric Flow at 50% methane	standard cubic feet per minute **	953	842	835	826	807	827	890	
Ht HHV	Heat input	MMBtu per hour HHV	28.93	25.55	25.35	25.07	24.49	25.11	27.02	
Ht LHV	Heat input	MMBtu per hour LHV	26.05	23.00	22.82	22.57	22.05	22.60	24.32	
			11,733	10,672	10,716	10,798	10,650	10,919	11,420	
* Standard conditions are corrected to 68 degrees F and 29.92 in Hg at actual methane content.										
** Standard conditions corrected to 50 % methane content.										
Input values are in blue or bold.										
Calculated output values are in black or not bold.										
Calculation Formulas:										
Vs = Kp*Cp*(sqrt dP) * sqrt (Ts/(Ps*Ms))										
Qact = Vs * A * 60										
Qstd = Qact * Tstd/ Ts * Ps/Pstd										
Flow , ACFM = 96.3221*SQRT(dP)*SQRT((460+Temperature))/(2.703*(Pressure +14.7)))										
Conversions and constants										
13.5958 in H2O/in Hg										
1 PSI = 2.036 in HG										
1 PSI = 27.68 in WG										
Tstd = 528 degrees R										
Pstd = 29.92 in Hg										
Methane heat content = 1,012 BTU per scf HHV										
Methane heat content = 911 BTU per scf LHV										

Landfill Gas Flow Measurements								
Crapo Hill Landfill, New Bedford/Dart								
Measurements by	TY/RB	TY/RB	TY/RB	TY/RB	TY/RB	TY/RB	TY/RB	TY/RB
Date	12-May-17	28-Jun-17	26-Jul-17	14-Aug-17	6-Sep-17	4-Oct-17	7-Nov-17	7-Dec-17
Time	12:00	13:00	13:00	11:30	11:00	14:00	14:00	11:30
Flow valve								
Pipe inside diameter, inches	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42
Orifice measurement, cfm	NA	NA	NA	NA	NA	NA	NA	NA
Ambient Temperature, F	49	66	73	70	70	55	65	40
Barometric Pressure, In Hg	30.03	30.01	29.83	30.01	29.88	30.37	29.91	29.93
Blower Inlet Temperature, F	75	77	80	85	83	78	70	70
Outlet Temperature, F	120	119	118	120	120	119	120	120
Blower Inlet Pressure (SP), In H2O	-63	-62	-65	-66	-64	-59	-58	-62
Blower Outlet Pressure, PSIG	1.9	2.2	2.2	2.2	2.2	2.2	2.2	2.2
Blower Outlet Pressure, In H2O	52.59	60.90	60.90	60.90	60.90	60.90	60.90	60.90
Measurement								
Manometer								
Pitot Tube								
Velocity Pressure (dP)								
Point								
1	0.17	0.14	0.14	0.14	0.13	0.13	0.14	0.13
2	0.17	0.14	0.14	0.15	0.14	0.14	0.15	0.14
3	0.18	0.14	0.15	0.15	0.14	0.15	0.15	0.14
4	0.18	0.15	0.15	0.15	0.14	0.15	0.16	0.14
5	0.18	0.15	0.16	0.16	0.15	0.15	0.16	0.14
6	0.18	0.15	0.16	0.16	0.14	0.15	0.16	0.15
7	0.18	0.15	0.16	0.16	0.14	0.15	0.17	0.15
8	0.18	0.15	0.15	0.15	0.14	0.15	0.17	0.16
9	0.17	0.14	0.14	0.14	0.14	0.14	0.16	0.16
Average	0.177	0.146	0.150	0.151	0.140	0.146	0.158	0.146
Gas Composition								
Compound, %v/v								
Methane (CH4)	51.4%	49.9%	48.8%	49.0%	49.0%	49.0%	51.5%	52.0%
Carbon dioxide (CO2)	37.0%	38.0%	38.1%	38.1%	38.1%	38.1%	39.6%	39.4%
Oxygen (O2)	0.90%	0.85%	1.10%	1.10%	1.10%	1.10%	0.40%	0.60%
Balance gas	10.70%	11.20%	12.00%	11.80%	11.80%	11.80%	8.50%	8.00%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Moisture (H2O) (included in balance gas)	2.9%	3.1%	3.5%	4.1%	4.1%	4.1%	2.5%	2.4%
Molecular weight, lb/lb-mole wet	27.50	27.80	27.93	27.85	27.85	27.85	27.92	27.85

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: May 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
4/30/17	5/5/17	76 Deg F	55%	54.40%	51.12%	0.12%	54.75%	51.25%
5/7/17	5/11/17	74 Deg F	55%	54.44%	52.89%	0.23%	54.89%	51.79%
5/14/17	5/17/17	77 Deg F	55%	54.38%	49.50%	0.53%	54.36%	50.11%
5/21/17	5/25/17	77 Deg F	55%	54.38%	52.12%	0.22%	54.92%	52.19%
5/28/17	5/31/17	78 Deg F	55%	54.36%	49.55%	0.32%	54.15%	49.59%

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‘California Analytical’ Analyzer Calibration Results

Month: June 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
6/4/17	6/7/17	77 Deg F	55%	54.38%	52.84%	0.07%	54.38%	50.18%
6/11/17	6/14/17	86 Deg F	55%	54.20%	50.49%	1.44%	54.77%	50.55%
6/18/17	6/23/17	86 Deg F	55%	54.20%	49.88%	0.26%	54.39%	49.01%
6/25/17	6/30/17	84 Deg F	55%	54.24%	48.26%	-1.25%	54.78%	49.67%

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‘California Analytical’ Analyzer Calibration Results

Month: July 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
7/2/17	7/7/17	85 Deg F	55%	58.22%	51.75%	0.66%	54.20%	51.04%
7/9/17	7/12/17	87 Deg F	55%	54.17%	48.87%	0.52%	54.25%	48.79%
7/16/17	7/21/17	89 Deg F	55%	54.12%	49.89%	0.99%	53.73%	48.96%
7/23/17	7/28/17	88 Deg F	55%	54.15%	48.82%	0.18%	53.78%	49.19%

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‘California Analytical’ Analyzer Calibration Results

Month: August 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
7/30/17	8/4/17	90 Deg F	55%	54.10%	48.65%	1.10%	54.47%	49.13%
8/6/17	8/7/17	88 Deg F	55%	54.15%	48.82%	0.18%	53.78%	49.19%
8/13/17	8/18/17	90 Deg F	55%	54.10%	51.97%	-1.76%	54.21%	52.63%
8/20/17	8/22/17	90 Deg F	55%	54.10%	51.67%	1.30%	54.04%	51.68%

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‘California Analytical’ Analyzer Calibration Results

Month: September 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
8/27/17	9/1/17	91 Deg F	55%	54.07%	45.94%	0.20%	53.29%	46.85%
9/3/17	9/7/17	89 Deg F	55%	54.12%	45.85%	-1.28%	53.52%	46.62%
9/10/17	9/14/17	89 Deg F	55%	54.12%	46.19%	-1.23%	53.47%	46.54%
9/17/17	9/22/17	86 Deg F	55%	54.20%	48.76%	0.02%	53.50%	48.25%
9/24/17	9/29/17	88Deg F	55%	54.15%	48.46%	0.06%	53.63%	47.55%

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‘California Analytical’ Analyzer Calibration Results

Month: October 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
10/1/17	10/2/17	86 Deg F	55%	54.20%	43.92%	-0.65%	54.34%	44.85%
10/8/17	10/12/17	84 Deg F	55%	54.24%	50.85%	0.01%	54.45%	50.75%
10/15/17	10/18/17	82 Deg F	55%	54.28%	51.23%	0.02%	54.50%	51.28%
10/22/17	10/27/17	82 Deg F	55%	54.28%	51.30%	1.69%	54.54%	51.42%

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‘California Analytical’ Analyzer Calibration Results

Month: November 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
10/29/17	11/2/17	81 Deg F	55%	54.30%	51.10%	0.02%	55.43%	51.18%
11/5/17	11/6/17	81 Deg F	55%	54.30%	50.06%	-0.45%	55.42%	50.94%
11/12/17	11/15/17	76 Deg F	55%	54.40%	51.12%	0.01%	55.42%	51.16%
11/19/17	11/22/17	74 Deg F	55%	54.44%	50.25%	-0.03%	54.75%	50.22%
11/26/17	11/29/17	73 Deg F	55%	54.46%	50.75%	-0.04%	55.13%	50.78%

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'California Analytical' Analyzer Calibration Results

Month: December 2017		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
12/3/17	12/5/17	71 Deg F	55%	54.49%	50.32%	1.75%	53.51%	49.93%
12/10/17	12/14/17	67 Deg F	55%	54.55%	48.60%	1.25%	53.42%	48.69%
12/17/17	12/20/17	67 Deg F	55%	54.55%	48.25%	1.34%	53.35%	48.28%
12/24/17	12/26/17	66 Deg F	55%	54.56%	46.67%	-1.49%	53.93%	47.96%

Biogas Flow Measurements									
Q =sqrt(dP/[Ss *(T + 460)/(K ² *D ⁴ * P * 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
May-17	12-May-17	42	0.4	41	1.6%	42	-35	13.43	85
Jun-17	28-Jun-17	41	0.4	41	-0.8%	42	-35	13.43	85
Jul-17	26-Jul-17	36	0.3	36	0.6%	36	-35	13.43	85
Aug-17	14-Aug-17	26	0.15	25	2.7%	26	-35	13.43	85
Sep-17	6-Sep-17	42	0.4	41	1.6%	42	-35	13.43	85
Oct-17	4-Oct-17	40	0.37	40	0.6%	40	-35	13.43	85
Nov-17	7-Nov-17	38	0.36	39	-3.9%	38	-30	13.61	85
Dec-17	7-Dec-17	30	0.2	29	2.0%	29	-30	13.61	86

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, %
May-17	12-May-17	72.0%	55.0%	55.2%	-0.4%	72.0%
Jun-17	28-Jun-17	70.0%	55.0%	54.9%	0.2%	70.0%
Jul-17	26-Jul-17	70.0%	55.0%	55.0%	0.0%	70.0%
Aug-17	14-Aug-17	70.0%	55.0%	55.0%	0.0%	70.0%
Sep-17	6-Sep-17	70.0%	55.0%	54.9%	0.2%	70.0%
Oct-17	4-Oct-17	70.0%	55.0%	55.1%	-0.2%	70.0%
Nov-17	7-Nov-17	70.0%	55.0%	55.1%	-0.2%	70.0%
Dec-17	7-Dec-17	70.0%	55.0%	54.0%	1.8%	70.0%

CERTIFICATION OF CALIBRATION

ISSUED BY: QED Environmental Systems, Inc. Services Facility

Date Of Calibration: November 15, 2017

Certificate Number: GM10457_10/33184



No. 66916

Page 1 of 2

Approved By Signatory

[Signature]
Dan McCarty
Laboratory Inspection



QED Environmental Systems, Inc. Services Facility,
2355 Bishop Circle West, Dexter, MI 48130
www.qedenv.com

Customer: Greater New Bedford Refuse

300 Samuel Barnet Blvd.
New Bedford, MA 02745
USA

Description: Gas Analyser

Model: GEM2000

Serial Number: GM10457

Accredited Results:

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	5.0	0.41
15.0	14.9	0.65
50.0	49.3	1.05

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.8	0.43
15.0	14.8	0.71
50.0	50.3	1.20

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
20.7	20.7	0.25

Gas cylinders are traceable and details can be provided if requested.

CH₄, CO₂ readings recorded at: 32.2 °C/89.9 °F

Barometric Pressure: 28.72 "Hg

O₂ readings recorded at: 23.6 °C/74.4 °F

Method of Test: The analyzer is calibrated in a temperature controlled chamber using reference gases. All analyzers are calibrated in accordance with our procedure ISP-17 using high purity grade gas.

All calibrations are performed in accordance with ISO 17025 at LANDTEC, an ISO 17025:2005 – accredited service facility through PJLA.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

LP015LNANIST-1.1

QED Instrument Services Facility - 2355 Bishop Circle West, Dexter, MI. 48130

CERTIFICATION OF CALIBRATION

ISSUED BY: QED Environmental Systems, Inc. Services Facility

Date Of Calibration: November 15, 2017

Certificate Number: G502529_10/33183



No. 66916

Page 1 of 2

Approved By Signatory

[Signature]
Dan McCarty
Laboratory Inspection



QED Environmental Systems, Inc. Services Facility,
2355 Bishop Circle West, Dexter, MI 48130
www.qedenv.com

Customer: Greater New Bedford Refuse

300 Samuel Barnet Blvd.
New Bedford, MA 02745
USA

Description: Gas Analyser

Model: GEM5000

Serial Number: G502529

Accredited Results:

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.42
15.0	14.9	0.66
50.0	49.5	1.03

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.43
15.0	14.9	0.71
50.0	50.5	1.19

Oxygen (O ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
20.7	20.7	0.25

Gas cylinders are traceable and details can be provided if requested.

CH₄, CO₂ readings recorded at: 32.2 °C/90.0 °F

Barometric Pressure: 28.75 "Hg

O₂ readings recorded at: 22.3 °C/72.1 °F

Method of Test: The analyzer is calibrated in a temperature controlled chamber using reference gases. All analyzers are calibrated in accordance with our procedure ISP-17 using high purity grade gas.

All calibrations are performed in accordance with ISO 17025 at LANDTEC, an ISO 17025:2005 – accredited service facility through PJLA.

The reported expanded uncertainty is based on a standard uncertainty multiplied by a coverage factor of k=2, providing a level of confidence of approximately 95%. The uncertainty evaluation has been carried out in accordance with NIST requirements.

The calibration results published in this certificate were obtained using equipment capable of producing results that are traceable through NIST to the International System of Units (SI). Certification only applies to results shown. This certificate may not be reproduced other than in full, except with the prior written approval of the issuing laboratory.

Exhibit 7

Attestation Statement

Attestation Statement

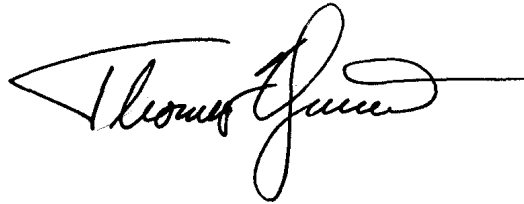
As an officer of Commonwealth New Bedford Energy LLC (CNBE) I hereby certify that the verified carbon units (VCUs) verified under the verified carbon standard (VCS) for the period May 1, 2017 through December 31, 2017 from the Project Activity will be registered on the Markit Environmental Registry (formerly 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: January 16, 2018