

MONITORING REPORT #2018
FOR THE GREATER NEW BEDFORD LFG
UTILIZATION PROJECT
DARTMOUTH, MASSACHUSETTS

FOR VERIFICATION PERIOD
JANUARY 1, 2018 THROUGH DECEMBER 31, 2018

MARCH 25, 2019



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For it's wholly-owned subsidiary
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Project Title	Greater New Bedford LFG Utilization Project
Version	4
Report ID	138
Date of Issue	25-March-2019
Project ID	138
Monitoring Period	01-January-2018 to 31-December-2018
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1 PROJECT DETAILS

1.1 Summary Description of the Implementation Status of the Project

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

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

The Project was implemented according to the description provided in the revalidated PD. The Project became operational in January 2002 with the expansion of an existing active LFG collection and destruction system. Emission reductions from the current verification period were claimed for LFG collected from the expanded active LFG collection system and 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 76,930 metric tons of CO₂e for the verification period January 1, 2018 through December 31, 2018.

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

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1.4 Other Entities Involved in the Project

None

1.5 Project Start Date

January 1, 2002

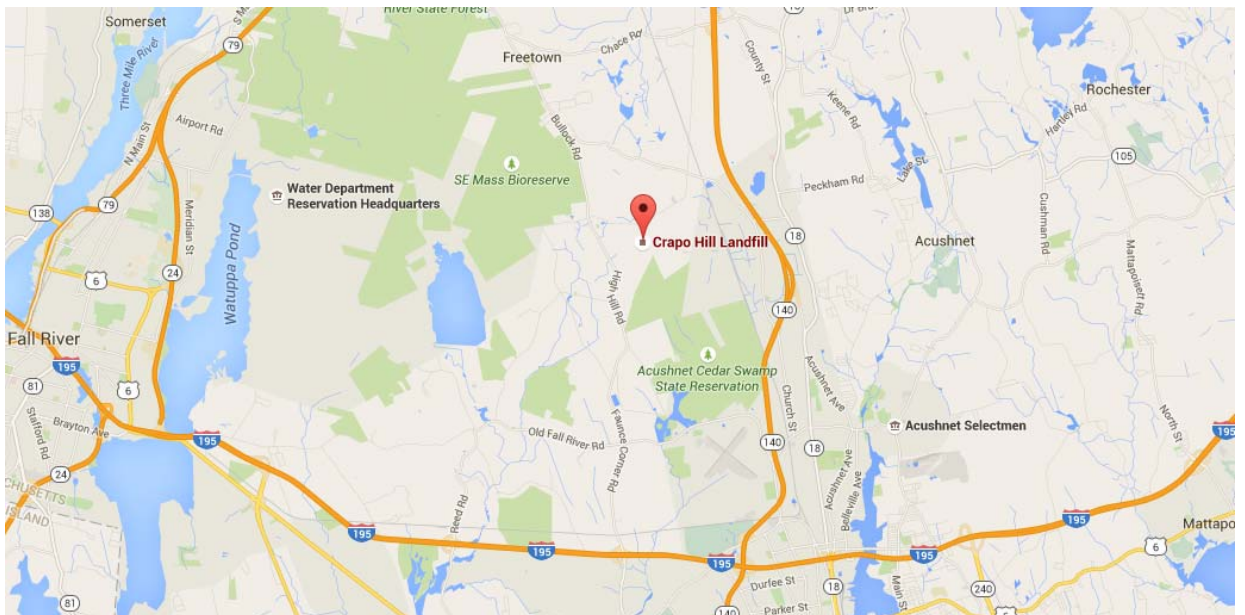
1.6 Project Crediting Period

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

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

1.7 Project Location

The Project is at the Crapo Hill Landfill located west of Samuel 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

None.

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

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 $\frac{3}{4}$ 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
Value monitored:	Methane concentration, %
Monitoring equipment:	California Analytical 602P, Serial # S07002

Data Unit / Parameter:	Methane content of gas (LFG and biogas)
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:	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:	Infrared detection.
Frequency of monitoring/recording:	Daily from May 11, 2018 through June 28, 2018 only during servicing and calibration of California Analytical 602P, Serial # S07002
Value monitored:	Methane concentration, %
Monitoring equipment:	Landtech GEM 2000, Serial # GM12256
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 measured using the same instrument.

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

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

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

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

Data Unit / Parameter:	Methane content of biogas
Data unit:	Percent methane content of biogas
Description:	Methane content of biogas

Data Unit / Parameter:	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

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

Data / Parameter	Fraction of total LFG collected attributable to District Initial System
Data unit	Percentage
Description	Amount of LFG collected from the District Initial System that would have been destroyed in the baseline scenario
Source of data	Well-head measurements
Description of measurement methods and procedures to be applied	Measurements at each well-head using a hand-held instrument
Frequency of monitoring/recording	Twice a month (approximately every two weeks)
Value applied:	5% was used in the ex-ante calculation based on data June 2013 through December 2018
Monitoring equipment	Landtec GEM 2000 and GEM 5000
QA/QC procedures to be applied	Calibrations are conducted prior to each set of measurements and documented.
Purpose of data	Calculation of the baseline emissions
Calculation method	LFG flows from District Initial System/Total LFG flow from all wells
Comments	None

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

Data Unit / Parameter	TDL _{Grid,y}
Data unit	--
Description	Average technical transmission and distribution losses for grid in year y
Source of data	Energy Information Administration (EIA) Department of Energy (DOE) Annual Energy Review 2011: Chapter 2 Energy Consumption by Sector. P. 66
Description of measurement methods and procedures to be applied	None
Frequency of monitoring/recording	This data will be reviewed each year to ensure that the most current value is used.
Value applied	0.07
Monitoring equipment	None
QA/QC procedures to be applied	None
Purpose of data	Calculation of project emissions
Calculation method	None
Any comment	None

Data Unit / Parameter	EC _{Grid,y}
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Data unit	MWh
Description	Amount of grid electricity consumed by the project
Source of data	Bills
Description of measurement methods and procedures to be applied	CNBE staff will compile the data.
Frequency of monitoring/recording	Data will be compiled annually.
Value applied	Ex Ante Calculation: 0 MWh/year based on 2018 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 2018 usage, the engine ran for 147.1 hours. Using a conservative assumption that the engine operated at ¾ 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)
2018 (January 1 - Dec 31)	76,930	0	0	76,930
Total	76,930	0	0	76,930

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 January 1, 2018 through December 31, 2018.
2. Exhibit 2 provides gas totalizer readings, and methane content readings for the period January 1, 2018 through December 31, 2018, 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 January 1, 2018 through December 31, 2018, 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 January 1, 2018 through December 31, 2018.

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	<u>VCS</u>
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-Jan-18
End date		31-Dec-18
Methane delivered	scf	186,624,081
Emission Reductions	metric tons CO2e	87,934
Flaring		
Start date		1-Jan-18
End date		31-Dec-18
Methane delivered	scf	-
Emission Reductions	metric tons CO2e	-
Subtotal		
Methane delivered	scf	186,624,081
Emission Reductions	metric tons CO2e	87,934
Deductions		
Oxidation potential	metric tons CO2e	8,793
District Initial System	metric tons CO2e	2,198
Electricity use utility and diesel backup	metric tons CO2e	13
Total		
Emission Reductions eligible under VCS program	metric tons CO2e	76,930

Exhibit 2

Gas totalizer readings, and methane content readings for the period from January 1, 2018 through December 31, 2018, and calculations using the verification protocols under the VCS to obtain emission reductions from methane oxidation during energy generation.

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

Physical constants:	
Methane, molecular weight (lb per lb-mole)	16
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

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-Jan-18													
1-Jan-18	31-Jan-18	17,500	-	17,500	17,292,421	17,292,421	326	326	100.0%	326	326	25	8,148	8,148
1-Feb-18	28-Feb-18	32,547	17,500	15,047	14,868,577	32,160,998	280	606	100.0%	280	606	25	7,006	15,154
1-Mar-18	31-Mar-18	48,421	32,547	15,875	15,686,299	47,847,297	296	902	100.0%	296	902	25	7,391	22,545
1-Apr-18	30-Apr-18	63,731	48,421	15,310	15,127,995	62,975,291	285	1,187	100.0%	285	1,187	25	7,128	29,673
1-May-18	31-May-18	77,745	63,731	14,014	13,847,487	76,822,778	261	1,448	100.0%	261	1,448	25	6,525	36,198
1-Jun-18	30-Jun-18	91,920	77,745	14,175	14,006,832	90,829,611	264	1,712	100.0%	264	1,712	25	6,600	42,797
1-Jul-18	31-Jul-18	107,474	91,920	15,555	15,370,291	106,199,902	290	2,002	100.0%	290	2,002	25	7,242	50,040
1-Aug-18	31-Aug-18	123,745	107,474	16,271	16,078,192	122,278,093	303	2,305	100.0%	303	2,305	25	7,576	57,615
1-Sep-18	30-Sep-18	138,333	123,745	14,588	14,414,753	136,692,846	272	2,576	100.0%	272	2,576	25	6,792	64,408
1-Oct-18	31-Oct-18	155,294	138,333	16,961	16,759,775	153,452,621	316	2,892	100.0%	316	2,892	25	7,897	72,304
1-Nov-18	30-Nov-18	172,353	155,294	17,059	16,856,967	170,309,589	318	3,210	100.0%	318	3,210	25	7,943	80,247
1-Dec-18	31-Dec-18	188,864	172,353	16,510	16,314,492	186,624,081	307	3,517	100.0%	307	3,517	25	7,687	87,934

Exhibit 3

LFG totalizer readings, and methane content readings for the periods from January 1, 2018 through December 31, 2018, 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								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	50%	-	-	25	-	-	-	-								
0	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
$ER_y = BE_y - PE_y$				
76,930	BE_y	see below	tCO2e/period	
	PE_y	12.64	tCO2e/period	See Electricity Tab + Emergency Generator Tab
$BE_y = BE_{CH4,y}$				
76,943	$BE_{CH4,y}$	see below	tCO2e/period	
$BE_{CH4,y} = ((1 - OX_{top_layer}) \times F_{CH4,PJ,y} - F_{CH,BL,y}) \times GWP_{CH4}$				
76,943	OX_{top_layer}	0.1		ACM001 Methodology value
	GWP_{CH4}	25	tCO2e / tCH4	IPCC Value - 4th assessment report
	$F_{CH4,PJ,y}$	see below	t CH4/period	
	$F_{CH,BL,y}$	see below	t CH4/period	
$F_{CH4,PJ,y} = F_{CH4,flared,y} + F_{CH4,EL,y}$				
3,517	$F_{CH4,flared,y}$	0	t CH4/period	See Exhibit 3 tab
	$F_{CH4,EL,y}$	3517	t CH ₄ /period	See Exhibit 2 tab
$F_{CH4,BL,y} = F_{CH4,BL,sys,y}$				
$F_{CH4,BL,sys,y} = \%DistrictInitialSystem \times F_{CH4,PJ,y}$				
88	%DistrictInitialSystem	5		See DistrictInitialSystemTab
	$F_{CH4,PJ,y}$	see above	t CH4/period	
		50%	Methane oxidation efficiency for flare	

Supporting Information for Exhibit 4

Electricity Consumption Project Emissions

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

0.00 tCO2

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

USAGE HISTORY

Select an Account :

27461920012(CNBE)

300 SAMUEL-BARNET BLV CGN, NEW BEDFRD MA 02745

Meter Number: 5120378

View Data From :

13 months

Usage Graph

Usage Data

Read Date	Usage (kWh)	Number of Days	Usage Per Day	Cost Per Day	Total Charge	Average Temp(°F)
01/17/2019	0	31	0	\$0.19	\$5.88	35.0
12/17/2018	0	31	0	\$0.18	\$5.70	36.0
11/16/2018	0	30	0	\$0.19	\$5.70	48.0
10/17/2018	0	30	0	\$0.19	\$5.70	62.0
09/17/2018	0	32	0	\$0.18	\$5.71	72.0
08/16/2018	0	29	0	\$0.20	\$5.71	76.0
07/18/2018	0	30	0	\$0.19	\$5.71	72.0
06/18/2018	0	32	0	\$0.18	\$5.88	63.0
05/17/2018	0	29	0	\$0.20	\$5.88	54.0
04/18/2018	0	30	0	\$0.19	\$5.71	40.0
03/19/2018	0	32	0	\$0.18	\$5.71	38.0
02/15/2018	0	28	0	\$0.20	\$5.51	35.0
01/18/2018	0	34	0	\$0.16	\$5.27	26.0

EVERSOURCE

Account Number: 2746 192 0012
 Customer name key: COMM
 COMMONWEALTH NIB ENERGY LLC
 300 SAMUEL-BARNET BLV CGN
 NEW BEDFRD MA 02745

Billing Cycle: 12
 Service from 11/16/18 - 12/17/18 31 Days
 Next read date on or about: Jan 17, 2019

Meter Number	Current Read	Previous Read	Current Usage	Reading Type
5120378	0	0	0	Actual

Current Demand = 42.0 KW

0 x Meter Constant of 2700 = 0 Billed Usage for 31 Days

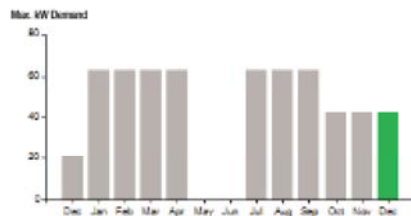
Monthly kWh Use

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



Total Amount Due
by 01/13/19

\$153.23

Electric Account Summary

Amount Due On 12/14/18	\$153.23
Last Payment Received On 11/28/18	-\$153.23
Balance Forward	\$0.00
Current Charges/Credits	
Electric Supply Services	\$0.00
Delivery Services	\$153.23
Total Current Charges	\$153.23
Total Amount Due	\$153.23

Total Charges for Electricity

Supplier(PUBLIC POWER LLC)

Generation Service Charge	0 kWh X .10430	\$0.00
Subtotal Supplier Services		\$0.00

Delivery(Rate 33-GENERAL - ANNUAL)

Customer Charge		\$6.00
Distribution Demand Charge		
1st 10	No Charge	\$0.00
Over 10	32.0 KW X 4.85	\$155.20
Primary Metering Discount		-\$3.13
Subtotal Delivery Services		\$153.23
Total Cost of Electricity		\$153.23

Total Current Charges

\$153.23

BL18011107

Eversource is required to comply with Department of Public Utilities' billing and termination regulations. If you have a dispute please see the bill insert for more information.
 Visit the "Monthly Customer Communications" page under "My Account" then "Billing & Payment" on Eversource.com for an electronic version of this insert.
 Eversource offers Payment Plans for customers with overdue bills. Budget Billing is also available to pay a more consistent bill each month.
 Please see the Customer Rights Supplement for more information.

Supporting Information for Exhibit 4

Fossil Fuel Project Emissions

Emergency Generator - Diesel Use

Gallons of Diesel Consumed (1 year Actual)

$$1236 \quad FC_{\text{Diesel}} = \text{Number of hours run} * \text{Gallons used/hour}$$

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

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

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

$$PE_{\text{FC}, 2010} \quad \boxed{12.64} \text{ tonnes CO}_2$$

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)

During 2018, the generator ran 147.1 hours (see log sheet)

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

$$147.1 \text{ hours} * 8.4 \text{ gallons/hour}$$

$$1235.64 \text{ gallons}$$

CommonWealth New Bedford Energy LLC

[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%
Jan-18	45	1,009	4%
Feb-18	45	963	5%
Mar-18	45	915	5%
Apr-18	45	912	5%
May-18	45	808	6%
Jun-18	45	845	5%
Jul-18	45	897	5%
Aug-18	45	938	5%
Sep-18	45	893	5%
Oct-18	45	989	5%
Nov-18	45	1,017	4%
<u>Dec-18</u>	<u>45</u>	<u>961</u>	<u>5%</u>
Average			5%

Note: During 2018, the Initial District System consists of 9 remaining active wells measuring less than 5 cfm lower detection limit of each well. Assume worst conservative case of 5 cfm from each remaining well.

Exhibit 5

A compilation of the field data logs recording the total gas volumes and methane content readings for the identified reporting period, the use of emergency backup generator, and use of utility electricity.

JANUARY 2018																			
			Monday 1/1/2018	Tuesday 1/2/2018	Wednesday 1/3/2018	Thursday 1/4/2018	Friday 1/5/2018	Saturday 1/6/2018	Sunday 1/7/2018	Monday 1/8/2018	Tuesday 1/9/2018	Wednesday 1/10/2018	Thursday 1/11/2018	Friday 1/12/2018	Saturday 1/13/2018	Sunday 1/14/2018	Monday 1/15/2018	Tuesday 1/16/2018	
LFG and Biogas Flow to the Engines (KSCF)			1,241	1,202	1,177	1,208	1,266	1,266	1,266	1,228	1,233	1,214	1,173	1,174	1,138	1,150	1,175	1,139	
LFG and Biogas Flow to the Engines (MMBTU HHV)			611	588	586	627	588	588	588	590	594	578	573	589	583	549	562	560	
LFG and Biogas Flow to the Flare (KSCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and BiogasFlow to the Flare (MMBTU HHV)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)			1,241	1,202	1,177	1,208	1,266	1,266	1,266	1,228	1,233	1,214	1,173	1,174	1,138	1,150	1,171	1,139	
LFG and Biogas Total Flow (MMBTU HHV)			611	588	586	627	588	588	588	590	594	578	573	589	583	549	562	560	
Average Methane Content (%)			48.6	48.3	49.2	51.3	45.9	45.9	45.9	47.4	47.6	47.0	48.3	49.6	50.6	47.2	47.5	48.5	
Engine 1 Hours			24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 2 Hours			24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 3 Hours			24	24	24	24	24	24	24	23	24	24	24	24	24	24	24	24	
Engine 4 Hours			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 1 Power Output (kWhr)			16,200	15,736	16,328	17,704	16,200	16,200	16,200	17,220	16,316	15,348	14,072	15,612	15,372	13,220	13,220	14,144	
Generator 2 Power Output (kWhr)			16,810	16,112	16,324	17,028	16,232	16,232	16,152	16,344	16,344	15,632	16,884	16,808	16,472	15,620	15,624	16,324	
Generator 3 Power Output (kWhr)			16,752	16,368	15,968	17,688	14,388	14,388	14,388	13,764	14,388	14,384	14,388	14,384	14,380	14,372	14,384	14,380	
Generator 4 Power Output (kWhr)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gross Power Output (kWhr)			49,847	48,274	48,678	52,477	48,537	46,868	46,868	46,996	47,103	45,406	45,185	46,851	46,279	43,191	43,180	44,848	
Net Power Output (kWhr)			47,440	45,540	45,832	49,644	45,573	43,904	43,904	44,716	44,960	43,232	43,144	44,900	44,424	41,164	41,083	42,830	
Power Sold as metered by NStar, (kWhr)			47,431	45,549	45,795	49,585	45,528	44,009	43,919	44,658	44,921	43,218	43,061	44,781	44,336	41,172	41,106	41,779	
Offgrid RECs (kWhr)			2,407	2,735	2,845	2,834	2,964	2,964	2,964	2,280	2,143	2,174	2,042	1,950	1,855	2,028	2,097	2,018	
Calculated Performance Results																			
Daily																			
	Power output (kW average when running)																		
	Generator 1		675	656	680	738	675	675	675	718	680	640	586	651	641	551	551	589	
	Generator 2		700	671	680	710	676	676	676	673	681	651	695	700	686	651	651	680	
	Generator 3		698	682	665	737	600	600	600	598	600	599	600	599	599	599	599	599	
	Generator 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Power output (kW average over 24-hrs)																		
	Facility Gross		2,077	2,011	2,028	2,187	2,022	1,953	1,953	1,958	1,963	1,892	1,883	1,952	1,928	1,800	1,799	1,869	
	Facility Net		1,977	1,898	1,910	2,069	1,899	1,829	1,829	1,863	1,873	1,801	1,798	1,871	1,851	1,715	1,712	1,785	
	In-plant load		100	114	119	118	124	124	124	95	89	91	85	81	77	84	87	84	
	Daily availability factor																		
	Facility		75%	75%	75%	75%	75%	75%	75%	74%	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		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
	Daily capacity factor																		
	Facility		63%	61%	61%	66%	61%	59%	59%	59%	59%	57%	57%	59%	58%	55%	55%	57%	
	Engine 1		82%	79%	82%	89%	82%	82%	82%	87%	82%	78%	71%	79%	78%	67%	67%	71%	
	Engine 2		85%	81%	82%	86%	82%	82%	82%	82%	83%	84%	85%	83%	83%	79%	79%	82%	
	Engine 3		85%	83%	81%	89%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	
	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	336	360	384	
	Engine 2		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
	Engine 3		24	48	72	96	120	144	168	191	215	239	263	287	311	335	359	383	
	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	96,587	96,611	96,635	96,659	96,683	96,707	96,731	96,755	96,779	96,803	96,827	96,851	96,875	96,899	96,923	96,947	96,971	
	Engine 2	90,243	90,267	90,291	90,315	90,339	90,363	90,387	90,411	90,435	90,459	90,483	90,507	90,531	90,555	90,579	90,603	90,627	
	Engine 3	93,129	93,153	93,177	93,201	93,225	93,249	93,273	93,297	93,321	93,344	93,368	93,392	93,416	93,440	93,464	93,488	93,512	
	Engine 4	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	91,384	
	Cumulative availability, %	Jan 1, 2018 @ 00:00 hours																	
	Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
	Engine 3		100%	100%	100%	100%	100%	100%	100%	99%	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		675	1,331	2,011	2,749	3,424	4,099	4,774	5,491	6,171	6,811	7,397	8,047	8,688	9,239	9,790	10,379	
	Engine 2		700	1,372	2,052	2,761	3,438	4,114	4,790	5,463	6,144	6,796	7,491	8,191	8,878	9,528	10,179	10,860	
	Engine 3		698	1,380	2,045	2,782	3,382	3,981	4,581	5,179	5,779	6,378	6,978	7,577	8,176	8,775	9,374	9,973	
	Engine 4		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	Cumulative capacity factor, %																		
	Engine 1		82%	81%	81%	83%	83%	83%	83%	83%	83%	83%	82%	81%	81%	80%	79%	79%	
	Engine 2		85%	83%	83%	84%	83%	83%	83%	83%	83%	83%	83%	83%	83%	82%	82%	82%	
	Engine 3		85%	84%	83%	82%	82%	80%	79%	78%	78%	77%	77%	77%	76%	76%	76%	76%	
	Engine 4		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	

		Monday 1/1/2018	Tuesday 1/2/2018	Wednesday 1/3/2018	Thursday 1/4/2018	Friday 1/5/2018	Saturday 1/6/2018	Sunday 1/7/2018	Monday 1/8/2018	Tuesday 1/9/2018	Wednesday 1/10/2018	Thursday 1/11/2018	Friday 1/12/2018	Saturday 1/13/2018	Sunday 1/14/2018	Monday 1/15/2018	Tuesday 1/16/2018
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	575	647	719	791	863	935	1,007	1,079	1,151
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		49,847	98,121	146,799	199,276	247,813	294,681	341,549	388,545	435,648	481,054	526,239	573,090	619,369	662,560	705,740	750,588
Cumulative Capacity Factor		62.9%	61.9%	61.8%	62.9%	62.6%	62.0%	61.6%	61.3%	61.1%	60.7%	60.4%	60.3%	60.2%	59.8%	59.4%	59.2%
Cumulative fuel input, MMBtu HHV		611	1,199	1,785	2,412	3,001	3,589	4,177	4,767	5,361	5,939	6,512	7,101	7,684	8,233	8,795	9,355
Cumulative gross output, kWhr		49,847	98,121	146,799	199,276	247,813	294,681	341,549	388,545	435,648	481,054	526,239	573,090	619,369	662,560	705,740	750,588
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,034	10,967	10,842	10,756	10,911	11,300	11,300	11,297	11,350	11,451	11,416	11,317	11,338	11,449	11,725	11,234
Daily heat rate, Btu/kWe gross HHV		12,258	12,183	12,044	11,948	12,121	12,552	12,552	12,550	12,609	12,721	12,681	12,572	12,595	12,718	13,025	12,480
Cumulative heat rate, Btu/kWe gross LHV		11,034	11,001	10,948	10,898	10,900	10,964	11,010	11,045	11,078	11,113	11,139	11,153	11,167	11,186	11,219	11,220
Cumulative heat rate, Btu/kWe gross HHV		12,258	12,221	12,162	12,106	12,109	12,179	12,230	12,269	12,306	12,345	12,374	12,390	12,405	12,426	12,462	12,463
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		96	192	288	384	480	576	672	768	864	960	1,056	1,152	1,248	1,344	1,440	1,536
Actual cumulative engine run hours		72	144	216	288	360	432	504	575	647	719	791	863	935	1,007	1,079	1,151
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		49,847	98,121	146,799	199,276	247,813	294,681	341,549	388,545	435,648	481,054	526,239	573,090	619,369	662,560	705,740	750,588
Cumulative Capacity Factor		62.9%	61.9%	61.8%	62.9%	62.6%	62.0%	61.6%	61.3%	61.1%	60.7%	60.4%	60.3%	60.2%	59.8%	59.4%	59.2%
Cumulative fuel input, MMBtu HHV		611	1,199	1,785	2,412	3,001	3,589	4,177	4,767	5,361	5,939	6,512	7,101	7,684	8,233	8,795	9,355
Cumulative gross output, kWhr		49,847	98,121	146,799	199,276	247,813	294,681	341,549	388,545	435,648	481,054	526,239	573,090	619,369	662,560	705,740	750,588
Cumulative heat rate, Btu/kWe gross LHV		11,034	11,001	10,948	10,898	10,900	10,964	11,010	11,045	11,078	11,113	11,139	11,153	11,167	11,186	11,219	11,220
Cumulative heat rate, Btu/kWe gross HHV		12,258	12,221	12,162	12,106	12,109	12,179	12,230	12,269	12,306	12,345	12,374	12,390	12,405	12,426	12,462	12,463
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change							No-Easter Storm	Arcic temperature < 10 F									
Service - plugs, air filter, valve inspection and adjustment							1 foot snow and high winds										
Precipitation																	
Digester Overload																	
NSSTAR Power Reports		Monday 1/1/2018	Tuesday 1/2/2018	Wednesday 1/3/2018	Thursday 1/4/2018	Friday 1/5/2018	Saturday 1/6/2018	Sunday 1/7/2018	Monday 1/8/2018	Tuesday 1/9/2018	Wednesday 1/10/2018	Thursday 1/11/2018	Friday 1/12/2018	Saturday 1/13/2018	Sunday 1/14/2018	Monday 1/15/2018	Tuesday 1/16/2018
Date																	
Hour																	
1		1,971	1,973	1,818	2,053	1,982	1,836	1,832	1,830	1,913	1,812	1,766	1,860	1,866	1,721	1,709	1,717
2		1,968	1,971	1,789	2,053	1,982	1,836	1,831	1,829	1,913	1,811	1,764	1,863	1,867	1,721	1,708	1,718
3		1,977	1,971	1,781	2,052	1,982	1,834	1,829	1,830	1,912	1,814	1,764	1,860	1,870	1,718	1,709	1,716
4		1,981	1,973	1,782	2,053	1,982	1,834	1,827	1,834	1,913	1,813	1,762	1,867	1,875	1,719	1,711	1,718
5		1,976	1,974	1,777	2,054	1,955	1,832	1,826	1,832	1,912	1,812	1,760	1,865	1,873	1,719	1,711	1,714
6		1,974	1,973	1,756	2,053	1,947	1,832	1,829	1,833	1,913	1,812	1,762	1,865	1,873	1,717	1,714	1,712
7		1,979	1,974	1,755	2,054	1,878	1,832	1,830	1,833	1,911	1,815	1,765	1,867	1,874	1,718	1,713	1,715
8		1,976	1,973	1,738	2,055	1,879	1,833	1,829	1,834	1,838	1,814	1,761	1,867	1,873	1,718	1,712	1,713
9		1,976	1,971	1,732	2,055	1,869	1,835	1,828	1,832	1,862	1,807	1,737	1,865	1,873	1,717	1,711	1,719
10		1,977	1,752	1,763	2,057	1,875	1,837	1,828	1,821	1,812	1,808	1,713	1,863	1,874	1,715	1,708	1,715
11		1,976	1,710	1,860	2,079	1,858	1,836	1,828	1,682	1,827	1,809	1,717	1,865	1,872	1,718	1,708	1,713
12		1,977	1,824	1,930	2,126	1,915	1,836	1,831	1,658	1,907	1,808	1,763	1,864	1,871	1,716	1,708	1,714
13		1,979	1,829	1,933	2,127	1,876	1,837	1,833	1,993	1,909	1,811	1,767	1,865	1,872	1,720	1,715	1,755
14		1,980	1,830	1,932	2,128	1,901	1,835	1,831	1,904	1,908	1,811	1,766	1,864	1,873	1,715	1,711	1,764
15		1,979	1,830	2,025	2,128	1,906	1,835	1,831	1,907	1,908	1,813	1,765	1,863	1,872	1,714	1,714	1,763
16		1,979	1,885	2,057	2,128	1,911	1,836	1,833	1,913	1,911	1,813	1,819	1,869	1,874	1,715	1,715	1,769
17		1,979	1,933	2,053	2,128	1,909	1,834	1,831	1,912	1,890	1,810	1,867	1,869	1,870	1,713	1,714	1,770
18		1,979	1,931	2,052	2,127	1,906	1,832	1,830	1,912	1,839	1,811	1,861	1,870	1,832	1,712	1,715	1,768
19		1,980	1,932	2,053	2,115	1,837	1,833	1,831	1,912	1,860	1,812	1,863	1,870	1,817	1,713	1,717	1,770
20		1,973	1,906	2,050	2,031	1,836	1,830	1,830	1,911	1,811	1,811	1,864	1,867	1,819	1,711	1,717	1,768
21		1,973	1,914	2,050	1,982	1,834	1,831	1,831	1,911	1,811	1,814	1,864	1,866	1,819	1,712	1,718	1,766
22		1,975	1,855	2,051	1,982	1,836	1,832	1,831	1,911	1,813	1,727	1,864	1,868	1,792	1,711	1,717	1,766
23		1,975	1,832	2,051	1,983	1,837	1,831	1,830	1,911	1,815	1,688	1,864	1,871	1,718	1,711	1,714	1,768
24		1,972	1,833	2,007	1,982	1,835	1,830	1,829	1,913	1,813	1,762	1,863	1,868	1,717	1,708	1,717	1,768
TOTAL		47,431	45,549	45,795	49,585	45,528	44,009	43,919	44,658	44,921	43,218	43,061	44,781	44,336	41,172	41,106	41,779
Cumulative Output Sold, kWhr		47,431	92,980	138,775	188,360	233,888	277,897	321,816	366,474	411,395	454,613	497,674	542,455	586,791	627,963	669,069	710,848
Transformer and line efficiency		100.0%	100.0%	99.9%	99.9%	99.9%	100.2%	100.0%	99.9%	99.9%	100.0%	99.8%	99.7%	99.8%	100.0%	100.1%	97.5%
Hourly average		1,976	1,898	1,908	2,066	1,897	1,834	1,830	1,861	1,872	1,801	1,794	1,866	1,847	1,716	1,713	1,741

JANUARY 2018																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																					
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	Wednesday 1/17/2018	Thursday 1/18/2018	Friday 1/19/2018	Saturday 1/20/2018	Sunday 1/21/2018	Monday 1/22/2018	Tuesday 1/23/2018	Wednesday 1/24/2018	Thursday 1/25/2018	Friday 1/26/2018	Saturday 1/27/2018	Sunday 1/28/2018	Monday 1/29/2018	Tuesday 1/30/2018	Wednesday 1/31/2018	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	1,222	1,294	1,365	1,437	1,509	1,581	1,653	1,725	1,797	1,869	1,937	2,005	2,074	2,146	2,146			
Cumulative Availability, %	74.9%	74.9%	74.8%	74.8%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.7%	74.6%	74.5%	74.5%	74.5%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	795,474	840,841	885,321	930,950	975,129	1,020,232	1,067,383	1,113,679	1,157,736	1,200,428	1,244,078	1,287,728	1,332,942	1,379,896	1,378,234			
Cumulative Capacity Factor	59.1%	59.0%	58.8%	58.8%	58.6%	58.6%	58.6%	58.6%	58.5%	58.3%	58.2%	58.1%	58.0%	58.1%	58.0%			
Cumulative fuel input, MMBtu	9,915	10,485	11,051	11,598	12,145	12,713	13,287	13,874	14,436	14,983	15,542	16,100	16,683	17,279	17,246			
Cumulative gross output, kWh	795,474	840,841	885,321	930,950	975,129	1,020,232	1,067,383	1,113,679	1,157,736	1,200,428	1,244,078	1,287,728	1,332,942	1,379,896	1,378,234			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,225	11,324	11,439	10,792	11,146	11,355	10,945	11,418	11,477	11,549	11,512	11,512	11,617	11,423	11,182			
Daily heat rate, Btu/kWe net	12,469	12,580	12,707	11,988	12,381	12,613	12,159	12,684	12,749	12,829	12,788	12,788	12,905	12,689	12,422			
Cumulative heat rate, Btu/kWe gross	11,220	11,225	11,236	11,214	11,211	11,218	11,206	11,214	11,224	11,236	11,246	11,255	11,267	11,272	11,264			
Cumulative heat rate, Btu/kWe net	12,464	12,470	12,482	12,458	12,454	12,461	12,448	12,458	12,469	12,482	12,492	12,502	12,516	12,522	12,513			
Cumulative by Facility starting C																		
Max cumulative available engine	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run h	1,222	1,294	1,365	1,437	1,509	1,581	1,653	1,725	1,797	1,869	1,937	2,005	2,074	2,146	2,146			
Cumulative Availability, %	74.9%	74.9%	74.8%	74.8%	74.9%	74.9%	74.9%	74.9%	74.9%	74.9%	74.7%	74.6%	74.5%	74.5%	74.5%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	795,474	840,841	885,321	930,950	975,129	1,020,232	1,067,383	1,113,679	1,157,736	1,200,428	1,244,078	1,287,728	1,332,942	1,379,896	1,378,234			
Cumulative Capacity Factor	59.1%	59.0%	58.8%	58.8%	58.6%	58.6%	58.6%	58.6%	58.5%	58.3%	58.2%	58.1%	58.0%	58.1%	58.0%			
Cumulative fuel input, MMBtu	9,915	10,485	11,051	11,598	12,145	12,713	13,287	13,874	14,436	14,983	15,542	16,100	16,683	17,279	17,246			
Cumulative gross output, kWh	795,474	840,841	885,321	930,950	975,129	1,020,232	1,067,383	1,113,679	1,157,736	1,200,428	1,244,078	1,287,728	1,332,942	1,379,896	1,378,234			
Cumulative heat rate, Btu/kWe gross	11,220	11,225	11,236	11,214	11,211	11,218	11,206	11,214	11,224	11,236	11,246	11,255	11,267	11,272	11,264			
Cumulative heat rate, Btu/kWe net	12,464	12,470	12,482	12,458	12,454	12,461	12,448	12,458	12,469	12,482	12,492	12,502	12,516	12,522	12,513			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change	repaired																	
Service - plugs, air filter, valve insp																		
Precipitation							Digesterate from Clinton WWTP fed				Digesterate from Clinton WWTP fed					WeCare load		
NSTAR Power Reports	Wednesday 1/17/2018	Thursday 1/18/2018	Friday 1/19/2018	Saturday 1/20/2018	Sunday 1/21/2018	Monday 1/22/2018	Tuesday 1/23/2018	Wednesday 1/24/2018	Thursday 1/25/2018	Friday 1/26/2018	Saturday 1/27/2018	Sunday 1/28/2018	Monday 1/29/2018	Tuesday 1/30/2018	Wednesday 1/31/2018	TOTAL		
Date																		
Hour																		
1	1,769	1,770	1,767	1,818	1,814	1,770	1,818	1,912	1,767	1,718	1,767	1,864	1,277	1,943	1,840			
2	1,768	1,769	1,768	1,815	1,818	1,769	1,818	1,913	1,766	1,719	1,767	1,864	1,281	1,943	1,838			
3	1,767	1,770	1,767	1,817	1,816	1,769	1,817	1,912	1,765	1,717	1,765	1,862	1,278	1,942	1,740			
4	1,768	1,770	1,766	1,820	1,760	1,770	1,817	1,913	1,767	1,715	1,767	1,864	1,479	1,942	1,742			
5	1,768	1,770	1,764	1,820	1,717	1,770	1,817	1,914	1,766	1,716	1,767	1,864	1,676	1,942	1,741			
6	1,767	1,841	1,764	1,819	1,718	1,769	1,819	1,913	1,763	1,718	1,766	1,795	1,693	1,941	1,741			
7	1,769	1,867	1,765	1,819	1,718	1,770	1,820	1,915	1,765	1,715	1,767	1,769	1,868	1,941	1,743			
8	1,769	1,865	1,764	1,819	1,720	1,769	1,820	1,888	1,765	1,716	1,767	1,768	1,865	1,864	1,743			
9	1,768	1,859	1,765	1,819	1,721	1,765	1,830	1,821	1,760	1,705	1,767	1,768	1,868	1,839	1,743			
10	1,758	1,773	1,756	1,820	1,724	1,761	1,906	1,815	1,759	1,663	1,771	1,769	1,865	1,840	1,740			
11	1,762	1,765	1,754	1,819	1,722	1,646	1,906	1,813	1,761	1,667	1,770	1,772	1,866	1,839	1,741			
12	1,764	1,765	1,269	1,819	1,722	1,901	1,905	1,815	1,762	1,669	1,769	1,769	1,875	1,838	1,780			
13	1,765	1,796	1,611	1,821	1,749	1,818	1,906	1,816	1,762	1,671	1,771	1,834	1,939	1,837	1,839			
14	1,472	1,862	1,865	1,819	1,771	1,813	1,907	1,815	1,763	1,671	1,808	1,867	1,938	1,838	1,838			
15	1,730	1,861	1,864	1,820	1,770	1,811	1,909	1,814	1,707	1,671	1,866	1,865	1,941	1,835	1,838			
16	1,867	1,864	1,868	1,820	1,771	1,814	1,917	1,815	1,807	1,674	1,866	1,867	1,942	1,839	1,841			
17	1,870	1,865	1,826	1,819	1,770	1,813	1,916	1,821	1,719	1,674	1,867	1,866	1,943	1,841	1,842			
18	1,870	1,864	1,819	1,818	1,769	1,816	1,916	1,817	1,719	1,669	1,864	1,847	1,940	1,839	1,841			
19	1,867	1,769	1,820	1,818	1,770	1,818	1,917	1,815	1,719	1,670	1,784	1,768	1,938	1,840	1,841			
20	1,869	1,768	1,818	1,818	1,769	1,812	1,915	1,816	1,719	1,671	1,769	1,768	1,940	1,838	1,840			
21	1,870	1,767	1,817	1,816	1,769	1,815	1,916	1,814	1,718	1,666	1,768	1,476	1,942	1,840	1,839			
22	1,867	1,768	1,818	1,817	1,770	1,816	1,915	1,809	1,717	1,667	1,808	1,276	1,942	1,841	1,840			
23	1,868	1,767	1,819	1,817	1,769	1,817	1,915	1,766	1,717	1,742	1,864	1,281	1,942	1,840	1,840			
24	1,770	1,766	1,818	1,816	1,768	1,816	1,915	1,766	1,716	1,766	1,863	1,277	1,941	1,838	1,839			
TOTAL	42,882	43,301	42,432	43,643	42,185	43,008	45,057	44,228	41,949	40,650	43,108	41,720	43,179	44,880	43,210			
Cumulative Output Sold, kWh	753,730	797,031	839,463	883,106	925,291	968,299	1,013,356	1,057,584	1,099,533	1,140,183	1,183,291	1,225,011	1,268,190	1,313,070	1,356,280			
Transformer and line efficiency	100.0%	99.9%	100.0%	99.9%	99.9%	99.9%	99.8%	99.8%	99.9%	100.0%	103.2%	99.9%	99.9%	99.9%	99.9%	0.0%		
Hourly average	1,787	1,804	1,768	1,818	1,758	1,792	1,877	1,843	1,748	1,694	1,796	1,738	1,799	1,870	1,800	1,823		

FEBRUARY 2018																		
			Thursday 2/1/2018	Friday 2/2/2018	Saturday 2/3/2018	Sunday 2/4/2018	Monday 2/5/2018	Tuesday 2/6/2018	Wednesday 2/7/2018	Thursday 2/8/2018	Friday 2/9/2018	Saturday 2/10/2018	Sunday 2/11/2018	Monday 2/12/2018	Tuesday 2/13/2018	Wednesday 2/14/2018	Thursday 2/15/2018	Friday 2/16/2018
LFG and Biogas Flow to the Engines (KSCF)			1,174	1,168	1,145	1,145	1,180	1,164	1,167	1,167	1,155	1,172	1,172	1,096	1,066	1,128	1,108	1,122
LFG and Biogas Flow to the Engines (MMBTU HHV)			599	584	553	553	549	565	559	559	538	589	589	536	516	573	568	572
LFG and Biogas Flow to the Flare (KSCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Flow to the Flare (MMBTU HHV)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)			1,174	1,168	1,145	1,145	1,180	1,164	1,167	1,167	1,155	1,172	1,172	1,096	1,066	1,128	1,108	1,122
LFG and Biogas Total Flow (MMBTU HHV)			599	584	553	553	549	565	559	559	538	589	589	536	516	573	568	572
Average Methane Content (%)			50.5	49.4	47.7	47.7	45.9	48.0	47.3	47.3	46.0	49.7	49.7	48.4	47.8	50.2	50.6	50.4
Engine 1 Hours			24	24	24	24	24	22	24	24	24	24	24	24	23	24	24	12
Engine 2 Hours			24	24	24	24	24	24	24	24	24	24	24	24	23	17	24	14
Engine 3 Hours			24	24	24	24	24	24	24	24	23	23	23	23	22	24	23	24
Engine 4 Hours			-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	24
Generator 1 Power Output (kWhr)			15,604	15,608	15,604	15,604	15,604	14,216	15,036	15,036	15,388	16,200	16,200	16,080	14,552	17,204	17,468	8,288
Generator 2 Power Output (kWhr)			14,880	15,252	16,204	16,204	13,844	15,340	14,536	14,536	14,792	15,172	15,172	12,644	8,044	12,084	6,848	8,232
Generator 3 Power Output (kWhr)			16,756	16,400	15,304	15,304	14,384	15,788	15,864	15,864	13,984	16,172	16,172	15,536	14,688	17,180	16,992	16,084
Generator 4 Power Output (kWhr)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,232	15,312
Gross Power Output (kWhr)			47,287	47,312	47,181	47,181	43,862	45,372	45,478	45,478	44,190	47,623	47,623	44,304	37,416	46,532	47,607	48,004
Net Power Output (kWhr)			45,268	45,264	45,180	45,180	41,820	43,372	43,476	43,476	42,160	45,676	45,676	42,160	35,292	44,440	45,524	46,072
Power Sold as metered by NStar, (kWhr)			45,168	45,212	42,425	45,087	44,583	41,787	43,331	43,445	42,135	44,067	45,566	42,096	35,283	44,364	45,426	45,965
Offgrid RECs (kWhr)			2,018	2,049	2,001	2,001	2,042	2,000	2,002	2,000	2,030	1,947	1,949	2,145	2,124	2,091	2,083	1,931
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1			650	650	650	650	650	646	627	627	641	675	675	670	633	717	728	691
Generator 2			620	636	675	675	577	639	606	606	616	632	632	550	473	504	489	686
Generator 3			698	683	638	638	599	658	661	661	608	703	703	675	668	716	739	670
Generator 4			-	-	-	-	-	-	-	-	-	-	-	-	-	-	567	638
Power output (kW average over 24-hrs)																		
Facility Gross			1,970	1,971	1,966	1,966	1,828	1,891	1,895	1,895	1,841	1,984	1,984	1,846	1,559	1,939	1,984	2,000
Facility Net			1,886	1,886	1,883	1,883	1,743	1,807	1,812	1,812	1,757	1,903	1,903	1,757	1,471	1,852	1,897	1,920
In-plant load			84	85	83	83	85	83	83	83	85	81	81	89	89	87	87	81
Daily availability factor																		
Facility			75%	75%	75%	75%	75%	73%	75%	75%	74%	74%	74%	73%	65%	75%	75%	75%
Engine 1			100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	96%	100%	100%	50%
Engine 2			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	58%	50%
Engine 3			100%	100%	100%	100%	100%	100%	100%	100%	96%	96%	96%	96%	92%	100%	96%	100%
Engine 4			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	100%
Daily capacity factor																		
Facility			60%	60%	60%	60%	55%	57%	57%	57%	56%	60%	60%	56%	47%	59%	60%	61%
Engine 1			79%	79%	79%	79%	79%	78%	76%	76%	78%	82%	82%	81%	77%	87%	88%	84%
Engine 2			75%	77%	82%	82%	70%	77%	73%	73%	75%	77%	77%	67%	57%	61%	59%	83%
Engine 3			85%	83%	77%	77%	73%	80%	80%	80%	74%	85%	85%	82%	81%	87%	90%	81%
Engine 4			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	69%	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	48	72	96	120	142	166	190	214	238	262	286	309	333	357	369
Engine 2			24	48	72	96	120	144	168	192	216	240	264	287	304	328	342	354
Engine 3			24	48	72	96	120	144	168	192	215	238	261	284	306	330	353	377
Engine 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	35
Engine operating run hours total from 0 hours																		
Engine 1			97,373	97,397	97,421	97,445	97,469	97,491	97,515	97,539	97,563	97,587	97,611	97,635	97,658	97,682	97,706	97,718
Engine 2			91,034	91,058	91,082	91,106	91,130	91,154	91,178	91,202	91,226	91,250	91,274	91,297	91,314	91,338	91,352	91,364
Engine 3			93,919	93,943	93,967	93,991	94,015	94,039	94,063	94,087	94,110	94,133	94,156	94,179	94,201	94,225	94,248	94,272
Engine 4			91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,359	91,370	91,394
Cumulative availability, %																		
Engine 1			100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	99%	99%	96%
Engine 2			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	98%	95%	92%
Engine 3			100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	98%	98%	98%	98%
Engine 4			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	9%
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			650	1,301	1,951	2,601	3,251	3,897	4,524	5,150	5,791	6,466	7,141	7,811	8,444	9,161	9,889	10,579
Engine 2			620	1,256	1,931	2,606	3,183	3,822	4,428	5,033	5,650	6,282	6,914	7,464	7,937	8,440	8,929	9,615
Engine 3			698	1,382	2,019	2,657	3,256	3,914	4,575	5,236	5,844	6,547	7,250	7,926	8,593	9,309	10,048	10,718
Engine 4			-	-	-	-	-	-	-	-	-	-	-	-	-	-	567	1,205
Cumulative capacity factor, %																		
Engine 1			79%	79%	79%	79%	79%	79%	78%	78%	78%	78%	79%	79%	79%	79%	80%	80%
Engine 2			75%	76%	78%	79%	77%	76%	77%	76%	76%	76%	75%	74%	73%	72%	72%	73%
Engine 3			85%	84%	82%	81%	79%	79%	79%	79%	79%	79%	80%	80%	80%	81%	81%	81%
Engine 4			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	9%

		Thursday 2/1/2018	Friday 2/2/2018	Saturday 2/3/2018	Sunday 2/4/2018	Monday 2/5/2018	Tuesday 2/6/2018	Wednesday 2/7/2018	Thursday 2/8/2018	Friday 2/9/2018	Saturday 2/10/2018	Sunday 2/11/2018	Monday 2/12/2018	Tuesday 2/13/2018	Wednesday 2/14/2018	Thursday 2/15/2018	Friday 2/16/2018
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	502	574	645	716	787	857	919	991	1,063	1,135
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	74.7%	74.7%	74.7%	74.7%	74.6%	74.5%	74.4%	73.6%	73.7%	73.8%	73.9%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		47,287	94,599	141,780	188,961	232,823	278,195	323,673	369,151	413,341	460,964	508,587	552,891	590,307	636,839	684,446	732,450
Cumulative Capacity Factor		59.7%	59.7%	59.7%	59.6%	58.8%	58.5%	58.4%	58.3%	58.0%	58.2%	58.4%	58.2%	57.3%	57.4%	57.6%	57.8%
Cumulative fuel input, MMBtu HHV		599	1,184	1,737	2,290	2,838	3,403	3,962	4,521	5,059	5,648	6,237	6,773	7,289	7,862	8,430	9,002
Cumulative gross output, kWhr		47,287	94,599	141,780	188,961	232,823	278,195	323,673	369,151	413,341	460,964	508,587	552,891	590,307	636,839	684,446	732,450
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,411	11,119	10,549	10,549	11,259	11,208	11,059	11,059	10,964	11,137	11,137	10,897	12,410	11,077	10,735	10,730
Daily heat rate, Btu/kWe gross HHV		12,676	12,352	11,719	11,719	12,507	12,450	12,285	12,285	12,179	12,372	12,372	12,105	13,786	12,306	11,925	11,920
Cumulative heat rate, Btu/kWe gross LHV		11,411	11,265	11,027	10,908	10,974	11,012	11,019	11,024	11,017	11,030	11,040	11,028	11,116	11,113	11,087	11,063
Cumulative heat rate, Btu/kWe gross HHV		12,676	12,514	12,249	12,117	12,190	12,233	12,240	12,246	12,239	12,252	12,264	12,251	12,348	12,345	12,316	12,290
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	2,976		3,072	3,168	3,264	3,360	3,456	3,552	3,648	3,744	3,840	3,936	4,032	4,128	4,224	4,320	4,416
Actual cumulative engine run hours	2,218		2,290	2,362	2,434	2,506	2,576	2,648	2,720	2,791	2,862	2,933	3,003	3,065	3,137	3,209	3,281
Cumulative Availability, %	74.5%		74.5%	74.6%	74.6%	74.6%	74.5%	74.5%	74.6%	74.5%	74.5%	74.5%	74.5%	74.2%	74.3%	74.3%	74.3%
Max cumulative gross output, kWhr	2,455,200		2,534,400	2,613,600	2,692,800	2,772,000	2,851,200	2,930,400	3,009,600	3,088,800	3,168,000	3,247,200	3,326,400	3,405,600	3,484,800	3,564,000	3,643,200
Actual cumulative gross output, kWhr	1,425,521		1,472,833	1,520,014	1,567,195	1,611,057	1,656,429	1,701,907	1,747,385	1,791,575	1,839,198	1,886,821	1,931,125	1,968,541	2,015,073	2,062,680	2,110,684
Cumulative Capacity Factor	58.1%		58.1%	58.2%	58.2%	58.1%	58.1%	58.1%	58.1%	58.0%	58.1%	58.1%	58.1%	57.8%	57.8%	57.8%	57.9%
Cumulative fuel input, MMBtu HHV	599		1,184	1,737	2,290	2,838	3,403	3,962	4,521	5,059	5,648	6,237	6,773	7,289	7,862	8,430	9,002
Cumulative gross output, kWhr	47,287		94,599	141,780	188,961	232,823	278,195	323,673	369,151	413,341	460,964	508,587	552,891	590,307	636,839	684,446	732,450
Cumulative heat rate, Btu/kWe gross LHV	11,411		11,265	11,027	10,908	10,974	11,012	11,019	11,024	11,017	11,030	11,040	11,028	11,116	11,113	11,087	11,063
Cumulative heat rate, Btu/kWe gross HHV	12,676		12,514	12,249	12,117	12,190	12,233	12,240	12,246	12,239	12,252	12,264	12,251	12,348	12,345	12,316	12,290
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		Thursday 2/1/2018	Friday 2/2/2018	Saturday 2/3/2018	Sunday 2/4/2018	Monday 2/5/2018	Tuesday 2/6/2018	Wednesday 2/7/2018	Thursday 2/8/2018	Friday 2/9/2018	Saturday 2/10/2018	Sunday 2/11/2018	Monday 2/12/2018	Tuesday 2/13/2018	Wednesday 2/14/2018	Thursday 2/15/2018	Friday 2/16/2018
Date																	
Hour																	
1		1,840	1,940	1,739	1,839	1,943	1,739	1,741	1,964	1,767	1,794	1,942	1,869	1,728	1,768	1,909	1,912
2		1,839	1,940	1,741	1,838	1,941	1,740	1,743	1,902	1,766	1,794	1,941	1,868	1,731	1,768	1,910	1,916
3		1,838	1,939	1,742	1,837	1,939	1,742	1,740	1,893	1,763	1,794	1,939	1,868	1,728	1,768	1,907	1,915
4		1,838	1,941	1,742	1,838	1,940	1,743	1,740	1,893	1,766	1,796	1,940	1,868	1,729	1,769	1,906	1,917
5		1,838	1,941	1,741	1,839	1,943	1,744	1,739	1,892	1,767	1,795	1,940	1,866	1,729	1,768	1,909	1,917
6		1,839	1,937	1,740	1,839	1,941	1,742	1,740	1,891	1,765	1,794	1,938	1,866	1,727	1,768	1,912	1,915
7		1,841	1,938	1,741	1,840	1,943	1,744	1,743	1,848	1,767	1,796	1,896	1,869	1,728	1,769	1,912	1,916
8		1,842	1,940	1,741	1,840	1,941	1,743	1,743	1,844	1,765	1,797	1,865	1,817	1,727	1,768	1,912	1,917
9		1,839	1,939	1,741	1,841	1,937	1,739	1,744	1,785	1,764	1,795	1,867	1,795	1,724	1,769	1,906	1,913
10		1,833	1,935	1,743	1,838	1,934	1,739	1,750	1,767	1,748	1,799	1,869	1,790	1,481	1,770	1,907	1,910
11		1,837	1,935	1,747	1,843	1,885	1,738	1,836	1,770	1,719	1,796	1,869	1,482	1,511	1,844	1,908	2,000
12		1,837	1,934	1,745	1,844	1,841	1,738	1,381	1,769	1,719	1,836	1,869	1,895	1,915	1,906	1,906	1,972
13		1,837	1,936	1,783	1,844	1,842	1,740	1,413	1,770	1,721	1,869	1,872	1,788	524	1,908	1,902	1,840
14		1,886	1,937	1,845	1,842	1,841	1,740	1,624	1,769	1,426	1,869	1,895	1,801	59	1,910	1,863	1,956
15		1,932	1,871	1,842	1,873	1,838	1,742	1,963	1,768	1,557	1,868	1,942	1,798	123	1,910	1,894	1,964
16		1,938	1,839	1,841	1,939	1,846	1,943	1,924	1,869	1,924	1,869	1,943	1,800	1,034	1,914	1,555	1,970
17		1,942	1,841	1,840	1,937	1,847	1,745	1,962	1,769	1,864	1,869	1,942	1,808	1,772	1,917	1,916	1,972
18		1,940	1,841	1,838	1,939	1,783	1,743	1,969	1,768	1,804	1,866	1,889	1,807	1,768	1,913	1,914	1,933
19		1,937	1,841	1,789	1,940	1,746	1,743	1,966	1,771	1,794	1,869	1,867	1,772	1,408	1,906	1,914	1,915
20		1,941	1,839	1,742	1,939	1,744	1,742	1,968	1,770	1,795	1,867	1,867	1,734	1,470	1,911	1,915	1,914
21		1,937	1,790	1,741	1,939	1,739	1,740	1,966	1,767	1,794	1,865	1,868	1,731	1,764	1,910	1,913	1,854
22		1,940	1,743	1,743	1,939	1,745	1,741	1,967	1,768	1,794	1,864	1,870	1,731	1,770	1,910	1,914	1,841
23		1,939	1,738	1,742	1,941	1,744	1,741	1,968	1,767	1,793	1,867	1,869	1,728	1,769	1,911	1,913	1,844
24		1,938	1,737	1,776	1,939	1,740	1,739	1,963	1,767	1,793	1,939	1,867	1,725	1,766	1,909	1,909	1,842
TOTAL		45,168	45,212	42,425	45,087	44,583	41,787	43,331	43,445	42,135	44,067	45,566	42,096	35,283	44,364	45,426	45,965
Cumulative Output Sold, kWhr		45,168	90,380	132,805	177,892	222,475	264,262	307,593	351,038	393,173	437,240	482,806	524,902	560,185	604,549	649,975	695,940
Transformer and line efficiency		99.8%	99.9%	99.9%	99.8%	106.6%	96.3%	99.7%	99.9%	99.9%	96.5%	99.8%	99.8%	100.0%	99.8%	99.8%	99.8%
Hourly average		1,882	1,884	1,768	1,879	1,858	1,741	1,805	1,810	1,756	1,836	1,899	1,754	1,470	1,849	1,893	1,915

FEBRUARY 2018															
	Saturday 2/17/2018	Sunday 2/18/2018	Monday 2/19/2018	Tuesday 2/20/2018	Wednesday 2/21/2018	Thursday 2/22/2018	Friday 2/23/2018	Saturday 2/24/2018	Sunday 2/25/2018	Monday 2/26/2018	Tuesday 2/27/2018	Wednesday 2/28/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,127	1,127	1,127	1,130	1,104	1,096	1,095	1,071	1,043	1,067	1,085	1,087	31,489	828	30,661
LFG and Biogas Flow to the Engine	541	541	541	553	544	530	545	559	549	560	554	573	15,590	543	15,047
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	3.5%	97%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Total Flow (KSCF)	1,127	1,127	1,127	1,130	1,104	1,096	1,095	1,071	1,043	1,067	1,085	1,087	31,489		
LFG and Biogas Total Flow (MMBT	541	541	541	553	544	530	545	559	549	560	554	573	15,590		
Average Methane Content (%)	47.4	47.4	47.4	48.3	48.7	47.8	49.2	51.6	52.0	51.9	50.5	52.0	48.9		
Engine 1 Hours	-	-	-	-	-	-	-	-	-	-	-	-	369		
Engine 2 Hours	24	24	24	24	24	24	24	24	24	24	24	24	642		
Engine 3 Hours	24	24	24	24	24	24	24	24	24	24	24	24	665		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	323		
Generator 1 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	243,692		
Generator 2 Power Output (kWhr)	15,620	15,620	15,620	16,700	16,176	15,356	15,776	16,208	15,672	15,624	15,244	15,100	402,500		
Generator 3 Power Output (kWhr)	14,376	14,376	14,376	14,376	14,376	14,268	14,528	14,484	15,568	14,804	14,608	15,568	428,180		
Generator 4 Power Output (kWhr)	14,360	14,360	14,360	14,352	14,356	14,176	14,360	14,564	15,528	15,528	15,208	16,144	198,840		
Gross Power Output (kWhr)	44,327	44,327	44,327	45,442	44,901	43,775	44,658	45,255	46,748	45,923	45,046	46,890	1,274,069		
Net Power Output (kWhr)	42,544	42,544	42,544	43,646	43,164	41,936	42,848	43,572	44,928	44,136	43,304	45,156	1,220,358		
Power Sold as metered by NStar, (l	43,048	44,694	42,501	43,587	43,076	41,898	42,789	43,470	44,844	44,064	43,228	45,048	1,218,187	CRMCB Inplant	
Offgrid RECs (kWhr)	1,783	1,783	1,783	1,796	1,737	1,839	1,810	1,683	1,820	1,787	1,742	1,734	53,710	10,021	
Calculated Performance Results														19%	
Daily														of total in-plant power	
Power output (kW average whe															
Generator 1	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 2	651	651	651	696	674	640	657	675	653	651	635	629			
Generator 3	599	599	599	599	599	595	605	604	649	617	609	649			
Generator 4	598	598	598	598	598	591	598	607	647	647	634	673			
Power output (kW average ove															
Facility Gross	1,847	1,847	1,847	1,893	1,871	1,824	1,861	1,886	1,948	1,913	1,877	1,954			
Facility Net	1,773	1,773	1,773	1,819	1,799	1,747	1,785	1,816	1,872	1,839	1,804	1,882			
In-plant load	74	74	74	75	72	77	75	70	76	74	73	72			
Daily availability factor															
Facility	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%			
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	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%			
Daily capacity factor															
Facility	56%	56%	56%	57%	57%	55%	56%	57%	59%	58%	57%	59%			
Engine 1	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 2	79%	79%	79%	84%	82%	78%	80%	82%	79%	79%	77%	76%			
Engine 3	73%	73%	73%	73%	73%	72%	73%	73%	79%	75%	74%	79%			
Engine 4	73%	73%	73%	72%	73%	72%	73%	74%	78%	78%	77%	82%			
Cumulative by engine															
Engine operating run hours in ti															
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672			
Engine 1	369	369	369	369	369	369	369	369	369	369	369	369			
Engine 2	378	402	426	450	474	498	522	546	570	594	618	642			
Engine 3	401	425	449	473	497	521	545	569	593	617	641	665			
Engine 4	59	83	107	131	155	179	203	227	251	275	299	323			
Engine operating run hours tota															
Engine 1	97,718	97,718	97,718	97,718	97,718	97,718	97,718	97,718	97,718	97,718	97,718	97,718			
Engine 2	91,388	91,412	91,436	91,460	91,484	91,508	91,532	91,556	91,580	91,604	91,628	91,652			
Engine 3	94,296	94,320	94,344	94,368	94,392	94,416	94,440	94,464	94,488	94,512	94,536	94,560			
Engine 4	91,418	91,442	91,466	91,490	91,514	91,538	91,562	91,586	91,610	91,634	91,658	91,682			
Cumulative availability, %															
Engine 1	90%	85%	81%	77%	73%	70%	67%	64%	62%	59%	57%	55%			
Engine 2	93%	93%	93%	94%	94%	94%	95%	95%	95%	95%	95%	96%			
Engine 3	98%	98%	98%	99%	99%	99%	99%	99%	99%	99%	99%	99%			
Engine 4	14%	19%	23%	27%	31%	34%	37%	39%	42%	44%	46%	48%			
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			
Engine 1	10,579	10,579	10,579	10,579	10,579	10,579	10,579	10,579	10,579	10,579	10,579	10,579			
Engine 2	10,266	10,917	11,568	12,264	12,938	13,578	14,235	14,910	15,563	16,214	16,849	17,479			
Engine 3	11,317	11,916	12,515	13,114	13,713	14,308	14,913	15,516	16,165	16,782	17,391	18,039			
Engine 4	1,803	2,401	3,000	3,598	4,196	4,786	5,385	5,992	6,639	7,286	7,919	8,592			
Cumulative capacity factor, %															
Engine 1	75%	71%	67%	64%	61%	58%	56%	53%	51%	49%	47%	46%			
Engine 2	73%	74%	74%	74%	75%	75%	75%	75%	75%	76%	76%	76%			
Engine 3	81%	80%	80%	79%	79%	79%	79%	78%	78%	78%	78%	78%			
Engine 4	13%	16%	19%	22%	24%	26%	28%	30%	32%	34%	36%	37%			

	Saturday 2/17/2018	Sunday 2/18/2018	Monday 2/19/2018	Tuesday 2/20/2018	Wednesday 2/21/2018	Thursday 2/22/2018	Friday 2/23/2018	Saturday 2/24/2018	Sunday 2/25/2018	Monday 2/26/2018	Tuesday 2/27/2018	Wednesday 2/28/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month															
Max cumulative available engine run time, hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688			
Actual cumulative engine run time, hours	1,207	1,279	1,351	1,423	1,495	1,567	1,639	1,711	1,783	1,855	1,927	1,999			
Cumulative Availability, %	74.0%	74.0%	74.1%	74.1%	74.2%	74.2%	74.2%	74.3%	74.3%	74.3%	74.3%	74.4%			
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			
Actual cumulative gross output, kWh	776,777	821,104	865,431	910,873	955,774	999,549	1,044,207	1,089,462	1,136,210	1,182,133	1,227,179	1,274,069			
Cumulative Capacity Factor	57.7%	57.6%	57.5%	57.5%	57.5%	57.4%	57.3%	57.3%	57.4%	57.4%	57.4%	57.5%			
Cumulative fuel input, MMBtu	9,542	10,083	10,624	11,177	11,721	12,250	12,795	13,354	13,903	14,463	15,017	15,590			
Cumulative gross output, kWh	776,777	821,104	865,431	910,873	955,774	999,549	1,044,207	1,089,462	1,136,210	1,182,133	1,227,179	1,274,069			
Heat Rate															
Daily heat rate, Btu/kWe gross	10,981	10,981	10,981	10,953	10,906	10,893	10,978	11,119	10,570	10,981	11,075	10,993			
Daily heat rate, Btu/kWe net	12,198	12,198	12,198	12,167	12,116	12,101	12,195	12,352	11,742	12,199	12,303	12,212			
Cumulative heat rate, Btu/kWe gross	11,059	11,054	11,051	11,046	11,039	11,033	11,030	11,034	11,015	11,014	11,016	11,015			
Cumulative heat rate, Btu/kWe net	12,285	12,280	12,276	12,270	12,263	12,256	12,253	12,257	12,236	12,235	12,237	12,236			
Cumulative by Facility starting 2/1/2018															
Max cumulative available engine run time, hours	4,512	4,608	4,704	4,800	4,896	4,992	5,088	5,184	5,280	5,376	5,472	5,568			
Actual cumulative engine run time, hours	3,353	3,425	3,497	3,569	3,641	3,713	3,785	3,857	3,929	4,001	4,073	4,145			
Cumulative Availability, %	74.3%	74.3%	74.3%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%	74.4%			
Max cumulative gross output, kWh	3,722,400	3,801,600	3,880,800	3,960,000	4,039,200	4,118,400	4,197,600	4,276,800	4,356,000	4,435,200	4,514,400	4,593,600			
Actual cumulative gross output, kWh	2,155,011	2,199,338	2,243,665	2,289,107	2,334,008	2,377,783	2,422,441	2,467,696	2,514,444	2,560,367	2,605,413	2,652,303			
Cumulative Capacity Factor	57.9%	57.9%	57.8%	57.8%	57.8%	57.7%	57.7%	57.7%	57.7%	57.7%	57.7%	57.7%			
Cumulative fuel input, MMBtu	9,542	10,083	10,624	11,177	11,721	12,250	12,795	13,354	13,903	14,463	15,017	15,590			
Cumulative gross output, kWh	776,777	821,104	865,431	910,873	955,774	999,549	1,044,207	1,089,462	1,136,210	1,182,133	1,227,179	1,274,069			
Cumulative heat rate, Btu/kWe	11,059	11,054	11,051	11,046	11,039	11,033	11,030	11,034	11,015	11,014	11,016	11,015			
Cumulative heat rate, Btu/kWe net	12,285	12,280	12,276	12,270	12,263	12,256	12,253	12,257	12,236	12,235	12,237	12,236			
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 2/17/2018	Sunday 2/18/2018	Monday 2/19/2018	Tuesday 2/20/2018	Wednesday 2/21/2018	Thursday 2/22/2018	Friday 2/23/2018	Saturday 2/24/2018	Sunday 2/25/2018	Monday 2/26/2018	Tuesday 2/27/2018	Wednesday 2/28/2018	TOTAL		
Date															
Hour															
1	1,795	1,896	1,764	1,773	1,818	1,770	1,769	1,847	1,889	1,867	1,820	1,848			
2	1,773	1,936	1,767	1,773	1,820	1,770	1,769	1,848	1,889	1,869	1,819	1,848			
3	1,770	1,966	1,768	1,821	1,819	1,769	1,768	1,846	1,867	1,866	1,817	1,847			
4	1,772	1,967	1,769	1,818	1,824	1,770	1,768	1,847	1,865	1,867	1,790	1,850			
5	1,771	1,967	1,768	1,821	1,823	1,769	1,769	1,847	1,864	1,867	1,771	1,849			
6	1,768	1,965	1,767	1,821	1,822	1,766	1,767	1,846	1,863	1,865	1,770	1,847			
7	1,769	1,965	1,767	1,821	1,824	1,767	1,767	1,847	1,863	1,866	1,771	1,851			
8	1,769	1,941	1,769	1,821	1,824	1,766	1,767	1,848	1,866	1,867	1,769	1,853			
9	1,770	1,915	1,769	1,817	1,819	1,767	1,767	1,847	1,863	1,846	1,769	1,847			
10	1,775	1,845	1,770	1,816	1,818	1,222	1,767	1,850	1,864	1,816	1,769	1,848			
11	1,776	1,844	1,773	1,817	1,817	1,773	1,768	1,851	1,864	1,818	1,771	1,847			
12	1,776	1,844	1,773	1,816	1,786	1,769	1,767	1,850	1,868	1,818	1,288	1,849			
13	1,779	1,849	1,775	1,818	1,770	1,770	1,770	1,850	1,869	1,819	1,792	1,851			
14	1,779	1,849	1,774	1,820	1,771	1,768	1,771	1,850	1,869	1,821	1,823	1,852			
15	1,777	1,847	1,774	1,825	1,769	1,766	1,765	1,849	1,868	1,816	1,823	1,865			
16	1,774	1,847	1,776	1,825	1,773	1,769	1,772	1,849	1,870	1,824	1,907	1,925			
17	1,778	1,846	1,775	1,825	1,775	1,772	1,776	1,849	1,870	1,822	1,923	1,927			
18	1,815	1,802	1,768	1,822	1,773	1,769	1,785	1,847	1,868	1,819	1,921	1,927			
19	1,818	1,769	1,774	1,822	1,775	1,769	1,799	1,845	1,869	1,821	1,884	1,927			
20	1,820	1,770	1,770	1,822	1,774	1,767	1,799	1,694	1,868	1,820	1,845	1,924			
21	1,821	1,767	1,772	1,820	1,771	1,765	1,799	1,260	1,867	1,818	1,847	1,922			
22	1,822	1,767	1,774	1,821	1,771	1,767	1,846	1,623	1,868	1,817	1,848	1,925			
23	1,888	1,765	1,773	1,816	1,770	1,770	1,848	1,892	1,868	1,817	1,845	1,925			
24	1,893	1,765	1,772	1,816	1,770	1,768	1,846	1,888	1,865	1,818	1,846	1,894			
TOTAL	43,048	44,694	42,501	43,587	43,076	41,898	42,789	43,470	44,844	44,064	43,228	45,048			
Cumulative Output Sold, kWh	738,988	783,682	826,183	869,770	912,846	954,744	997,533	1,041,003	1,085,847	1,129,911	1,173,139	1,218,187			
Transformer and line efficiency	101.2%	105.1%	99.9%	99.9%	99.8%	99.9%	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	0.0%		
Hourly average	1,794	1,862	1,771	1,816	1,795	1,746	1,783	1,811	1,869	1,836	1,801	1,877	1,813		

MARCH 2018													DLST					
			Thursday 3/1/2018	Friday 3/2/2018	Saturday 3/3/2018	Sunday 3/4/2018	Monday 3/5/2018	Tuesday 3/6/2018	Wednesday 3/7/2018	Thursday 3/8/2018	Friday 3/9/2018	Saturday 3/10/2018	Sunday 3/11/2018	Monday 3/12/2018	Tuesday 3/13/2018	Wednesday 3/14/2018	Thursday 3/15/2018	Friday 3/16/2018
LFG and Biogas Flow to the Engines (KSCF)			1,076	712	441	1,083	1,062	1,059	1,095	1,082	1,070	1,070	1,070	1,115	778	886	1,077	1,129
LFG and Biogas Flow to the Engines (MMBTU HHV)			570	412	235	591	580	568	580	569	545	519	519	550	421	483	581	592
LFG and Biogas Flow to the Flare (KSCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)			1,076	712	441	1,083	1,062	1,059	1,095	1,082	1,070	1,070	1,070	1,115	778	886	1,077	1,129
LFG and Biogas Total Flow (MMBTU HHV)			570	412	235	591	580	568	580	569	545	519	519	550	421	483	581	592
Average Methane Content (%)			52.4	57.1	52.7	53.9	54.0	53.0	52.3	51.9	50.3	48.0	48.0	48.7	53.5	53.9	53.2	51.8
Engine 1 Hours			-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	24
Engine 2 Hours			24	16	10	24	24	24	24	24	24	24	23	24	8	14	24	24
Engine 3 Hours			24	16	10	24	24	24	24	24	24	24	23	24	7	13	13	-
Engine 4 Hours			24	16	10	24	24	24	24	24	24	24	23	24	8	15	24	24
Generator 1 Power Output (kWhr)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,356	14,428
Generator 2 Power Output (kWhr)			14,892	10,632	6,020	14,440	14,444	14,652	14,456	14,664	15,384	13,856	13,856	14,336	3,792	9,048	15,960	15,096
Generator 3 Power Output (kWhr)			15,568	10,256	6,248	14,392	14,380	14,808	15,252	14,760	14,392	13,788	13,788	14,332	3,648	7,260	6,632	-
Generator 4 Power Output (kWhr)			16,148	10,236	6,244	15,204	14,384	14,776	14,928	14,920	14,360	13,764	13,764	14,392	3,644	9,476	16,636	15,536
Gross Power Output (kWhr)			46,702	31,177	18,545	44,096	43,203	44,138	44,574	44,259	44,053	41,354	41,354	43,013	11,175	25,796	45,649	45,158
Net Power Output (kWhr)			44,992	30,040	17,848	42,508	41,576	42,460	42,868	42,580	42,388	39,756	39,756	41,264	10,627	24,803	43,885	43,188
Power Sold as metered by NStar, (kWhr)			44,870	30,067	17,749	42,498	41,568	42,466	42,861	42,569	42,377	41,686	39,743	41,267	41,266	24,710	43,837	43,136
Offgrid RECs (kWhr)			1,710	1,137	696	1,588	1,626	1,679	1,705	1,680	1,665	1,598	1,598	1,749	548	993	1,764	1,970
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1			-	-	-	-	-	-	-	-	-	-	-	-	-	-	578	601
Generator 2			621	665	602	602	602	611	602	611	641	577	602	597	474	646	665	629
Generator 3			649	641	625	600	599	617	636	615	600	575	599	597	521	558	510	-
Generator 4			673	640	624	634	599	616	622	622	598	574	598	600	456	632	693	647
Power output (kW average over 24-hrs)																		
Facility Gross			1,946	1,299	773	1,837	1,800	1,839	1,857	1,844	1,836	1,723	1,798	1,792	466	1,075	1,902	1,882
Facility Net			1,875	1,252	744	1,771	1,732	1,769	1,786	1,774	1,766	1,657	1,728.52	1,719	443	1,033	1,829	1,800
In-plant load			71	47	29	66	68	70	71	70	69	67	69	73	23	41	74	82
Daily availability factor																		
Facility			75%	50%	31%	75%	75%	75%	75%	75%	75%	75%	75%	75%	24%	44%	75%	75%
Engine 1			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	100%
Engine 2			100%	67%	42%	100%	100%	100%	100%	100%	100%	100%	100%	100%	33%	58%	100%	100%
Engine 3			100%	67%	42%	100%	100%	100%	100%	100%	100%	100%	100%	100%	29%	54%	54%	0%
Engine 4			100%	67%	42%	100%	100%	100%	100%	100%	100%	100%	100%	100%	33%	63%	100%	100%
Daily capacity factor																		
Facility			59%	39%	23%	56%	55%	56%	56%	56%	56%	52%	54%	54%	14%	33%	58%	57%
Engine 1			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	70%	73%
Engine 2			75%	81%	73%	73%	73%	74%	73%	74%	78%	70%	73%	72%	57%	78%	81%	76%
Engine 3			79%	78%	76%	73%	73%	75%	77%	75%	73%	70%	73%	72%	63%	68%	62%	0%
Engine 4			82%	78%	76%	77%	73%	75%	75%	75%	73%	70%	73%	73%	55%	77%	84%	78%
Cumulative by engine																		
Engine operating run hours in the month																		
Max Cumulative Available, hours			24	48	72	96	120	144	168	192	216	240	263	287	311	335	359	383
Engine 1			0	0	0	0	0	0	0	0	0	0	0	0	0	0	11	35
Engine 2			24	40	50	74	98	122	146	170	194	218	241	265	273	287	311	335
Engine 3			24	40	50	74	98	122	146	170	194	218	241	265	272	285	298	298
Engine 4			24	40	50	74	98	122	146	170	194	218	241	265	273	288	312	336
Engine operating run hours total from 0 hours																		
Engine 1			97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,714	97,725	97,749
Engine 2			91,652	91,676	91,692	91,702	91,726	91,750	91,774	91,798	91,822	91,846	91,870	91,893	91,917	91,925	91,963	91,987
Engine 3			94,561	94,585	94,601	94,611	94,635	94,659	94,683	94,707	94,731	94,755	94,779	94,802	94,826	94,833	94,846	94,859
Engine 4			91,685	91,709	91,725	91,735	91,759	91,783	91,807	91,831	91,855	91,879	91,903	91,926	91,950	91,958	91,973	92,021
Cumulative availability, %			March 1, 2018 @ 00:00 hours															
Engine 1			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%	9%
Engine 2			100%	83%	69%	77%	82%	85%	87%	89%	90%	91%	92%	92%	88%	86%	87%	87%
Engine 3			100%	83%	69%	77%	82%	85%	87%	89%	90%	91%	92%	92%	87%	85%	83%	78%
Engine 4			100%	83%	69%	77%	82%	85%	87%	89%	90%	91%	92%	92%	88%	86%	87%	88%
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			-	-	-	-	-	-	-	-	-	-	-	-	-	-	578	1,179
Engine 2			621	1,285	1,887	2,489	3,091	3,701	4,303	4,914	5,555	6,133	6,735	7,332	7,806	8,453	9,118	9,747
Engine 3			649	1,290	1,914	2,514	3,113	3,730	4,366	4,981	5,580	6,155	6,754	7,352	7,873	8,431	8,941	9,441
Engine 4			673	1,313	1,937	2,570	3,170	3,785	4,407	5,029	5,627	6,201	6,799	7,399	7,855	8,486	9,179	9,827
Cumulative capacity factor, %																		
Engine 1			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	5%	9%
Engine 2			75%	78%	76%	75%	75%	75%	75%	74%	75%	74%	74%	74%	73%	73%	74%	74%
Engine 3			79%	78%	77%	76%	75%	75%	76%	75%	75%	75%	74%	74%	73%	73%	72%	68%
Engine 4			82%	80%	78%	78%	77%	76%	76%	76%	75%	75%	75%	75%	73%	73%	74%	74%

	Thursday 3/1/2018	Friday 3/2/2018	Saturday 3/3/2018	Sunday 3/4/2018	Monday 3/5/2018	Tuesday 3/6/2018	Wednesday 3/7/2018	Thursday 3/8/2018	Friday 3/9/2018	Saturday 3/10/2018	Sunday 3/11/2018	Monday 3/12/2018	Tuesday 3/13/2018	Wednesday 3/14/2018	Thursday 3/15/2018	Friday 3/16/2018
Cumulative by Facility in month																
Max cumulative available engine run hours	96	192	288	384	480	576	672	768	864	960	1,052	1,148	1,244	1,340	1,436	1,532
Actual cumulative engine run hours	72	120	150	222	294	366	438	510	582	654	723	795	818	860	932	1,004
Cumulative Availability, %	75.0%	62.5%	52.1%	57.8%	61.3%	63.5%	65.2%	66.4%	67.4%	68.1%	68.7%	69.3%	65.8%	64.2%	64.9%	65.5%
Max cumulative gross output, kWhr	79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr	46,702	77,879	96,424	140,520	183,723	227,861	272,435	316,694	360,747	402,101	443,455	486,468	497,643	523,439	569,088	614,246
Cumulative Capacity Factor	59.0%	49.2%	40.6%	44.4%	46.4%	48.0%	49.1%	50.0%	50.6%	50.8%	50.9%	51.2%	48.3%	47.2%	47.9%	48.5%
Cumulative fuel input, MMBtu HHV	570	982	1,217	1,808	2,388	2,956	3,536	4,104	4,649	5,168	5,687	6,237	6,658	7,142	7,722	8,314
Cumulative gross output, kWhr	46,702	77,879	96,424	140,520	183,723	227,861	272,435	316,694	360,747	402,101	443,455	486,468	497,643	523,439	569,088	614,246
Heat Rate																
Daily heat rate, Btu/kWe gross LHV	10,989	11,882	11,417	12,065	12,091	11,578	11,707	11,565	11,127	11,306	11,306	11,502	33,938	16,862	11,449	11,797
Daily heat rate, Btu/kWe gross HHV	12,207	13,199	12,663	13,403	13,432	12,862	13,005	12,847	12,360	12,560	12,560	12,778	37,700	18,732	12,719	13,105
Cumulative heat rate, Btu/kWe gross LHV	10,989	11,346	11,360	11,581	11,701	11,677	11,682	11,666	11,600	11,570	11,545	11,541	12,044	12,282	12,215	12,184
Cumulative heat rate, Btu/kWe gross HHV	12,207	12,604	12,619	12,865	12,998	12,972	12,977	12,959	12,886	12,852	12,825	12,821	13,380	13,643	13,569	13,535
Cumulative by Facility starting Calendar Year																
Max cumulative available engine run hours	5,664	5,760	5,856	5,952	6,048	6,144	6,240	6,336	6,432	6,528	6,620	6,716	6,812	6,908	7,004	7,100
Actual cumulative engine run hours	4,217	4,265	4,295	4,367	4,439	4,511	4,583	4,655	4,727	4,799	4,868	4,940	4,963	5,005	5,077	5,149
Cumulative Availability, %	74.5%	74.0%	73.3%	73.4%	73.4%	73.4%	73.4%	73.5%	73.5%	73.5%	73.5%	73.6%	72.9%	72.5%	72.5%	72.5%
Max cumulative gross output, kWhr	4,672,800	4,752,000	4,831,200	4,910,400	4,989,600	5,068,800	5,148,000	5,227,200	5,306,400	5,385,600	5,464,800	5,544,000	5,623,200	5,702,400	5,781,600	5,860,800
Actual cumulative gross output, kWhr	2,699,005	2,730,182	2,748,727	2,792,823	2,836,026	2,880,164	2,924,738	2,968,997	3,013,050	3,054,404	3,095,758	3,138,771	3,149,946	3,175,742	3,221,391	3,266,549
Cumulative Capacity Factor	57.8%	57.5%	56.9%	56.9%	56.8%	56.8%	56.8%	56.8%	56.8%	56.7%	56.6%	56.6%	56.0%	55.7%	55.7%	55.7%
Cumulative fuel input, MMBtu HHV	16,160	16,572	16,807	17,398	17,978	18,546	19,125	19,694	20,239	20,758	21,277	21,827	22,248	22,731	23,312	23,904
Cumulative gross output, kWhr	1,320,771	1,351,948	1,370,493	1,414,589	1,457,792	1,501,930	1,546,504	1,590,763	1,634,816	1,676,170	1,717,524	1,760,537	1,771,712	1,797,508	1,843,137	1,888,315
Cumulative heat rate, Btu/kWe gross LHV	11,014	11,034	11,039	11,071	11,102	11,116	11,133	11,145	11,144	11,148	11,152	11,161	11,304	11,384	11,386	11,395
Cumulative heat rate, Btu/kWe gross HHV	12,235	12,257	12,263	12,299	12,332	12,348	12,367	12,380	12,380	12,384	12,388	12,398	12,557	12,646	12,648	12,659
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	Thursday 3/1/2018	Friday 3/2/2018	Saturday 3/3/2018	Sunday 3/4/2018	Monday 3/5/2018	Tuesday 3/6/2018	Wednesday 3/7/2018	Thursday 3/8/2018	Friday 3/9/2018	Saturday 3/10/2018	Sunday 3/11/2018	Monday 3/12/2018	Tuesday 3/13/2018	Wednesday 3/14/2018	Thursday 3/15/2018	Friday 3/16/2018
Date																
Hour																
1	1,853	1,856	-	1,801	1,739	1,759	1,772	1,827	1,785	1,802	1,725	1,722	1,726	-	1,782	1,841
2	1,853	1,918	-	1,785	1,740	1,778	1,779	1,771	1,768	1,752	1,729	1,726	1,721	-	1,781	1,848
3	1,852	1,922	-	1,784	1,738	1,775	1,778	1,802	1,802	1,730	1,728	1,729	1,729	-	1,779	1,827
4	1,851	1,888	-	1,785	1,738	1,776	1,778	1,782	1,755	1,731	1,730	1,728	1,728	-	1,785	1,826
5	1,853	1,929	-	1,784	1,737	1,740	1,745	1,732	1,800	1,731	1,730	1,728	1,728	-	1,785	1,826
6	1,851	1,878	-	1,784	1,739	1,729	1,729	1,730	1,762	1,801	1,728	1,729	1,729	-	1,785	1,826
7	1,852	1,928	-	1,783	1,738	1,730	1,730	1,731	1,771	1,735	1,726	1,727	1,727	-	1,782	1,826
8	1,853	1,901	-	1,784	1,737	1,731	1,730	1,779	1,801	1,730	1,730	1,729	1,729	-	1,786	1,826
9	1,852	1,896	-	1,785	1,736	1,723	1,724	1,731	1,732	1,731	1,728	1,723	1,723	-	1,784	1,824
10	1,847	1,924	-	1,786	1,727	1,723	1,717	1,725	1,792	1,732	1,728	1,718	1,718	57	1,807	1,817
11	1,850	1,416	-	1,785	1,723	1,722	1,763	1,378	1,772	1,732	1,729	1,718	1,718	1,425	1,895	1,819
12	1,847	1,902	-	1,784	1,726	1,720	1,767	1,580	1,773	1,730	1,729	1,722	1,722	1,934	1,896	1,797
13	1,894	1,945	-	1,787	1,730	1,725	1,800	1,872	1,798	1,733	1,730	1,720	1,720	1,822	1,892	1,772
14	1,919	1,937	-	1,786	1,727	1,725	1,820	1,889	1,732	1,731	1,731	1,383	1,383	1,644	1,737	1,772
15	1,919	1,903	1,118	1,785	1,728	1,813	1,826	1,940	1,796	1,730	1,729	1,699	1,699	1,572	1,904	1,765
16	1,926	1,744	1,878	1,786	1,731	1,822	1,827	1,887	1,775	1,731	1,729	1,861	1,861	1,951	1,896	1,773
17	1,926	-	1,876	1,760	1,730	1,828	1,824	1,875	1,778	1,730	1,727	1,802	1,802	1,953	1,899	1,771
18	1,925	-	1,872	1,735	1,729	1,826	1,824	1,772	1,801	1,729	1,727	1,733	1,733	1,949	1,851	1,771
19	1,880	5	1,850	1,738	1,729	1,827	1,826	1,801	1,727	1,728	1,729	1,726	1,726	1,908	1,856	1,769
20	1,854	175	1,829	1,738	1,728	1,826	1,827	1,790	1,727	1,728	1,726	1,729	1,729	1,881	1,861	1,768
21	1,851	-	1,828	1,737	1,729	1,825	1,826	1,780	1,729	1,725	1,726	1,730	1,730	1,885	1,828	1,767
22	1,853	-	1,832	1,739	1,730	1,827	1,826	1,869	1,732	1,728	1,724	1,727	1,727	1,368	1,822	1,767
23	1,854	-	1,834	1,739	1,731	1,787	1,826	1,729	1,731	1,727	1,725	1,728	1,728	1,577	1,821	1,769
24	1,855	-	1,832	1,738	1,728	1,729	1,797	1,797	1,738	1,729	-	1,730	1,730	1,784	1,823	1,769
TOTAL	44,870	30,067	17,749	42,498	41,568	42,466	42,861	42,569	42,377	41,686	39,743	41,267	41,266	24,710	43,837	43,136
Cumulative Output Sold, kWhr	44,870	74,937	92,686	135,184	176,752	219,218	262,079	304,648	347,025	388,711	428,454	469,721	510,987	535,697	579,534	622,670
Transformer and line efficiency	99.7%	100.1%	99.4%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	104.9%	100.0%	100.0%	388.3%	99.6%	99.9%	99.9%
Hourly average	1,870	1,253	740	1,771	1,732	1,769	1,786	1,774	1,766	1,737	1,656	1,719	1,719	1,030	1,827	1,797

MARCH 2018																		
	Saturday 3/17/2018	Sunday 3/18/2018	Monday 3/19/2018	Tuesday 3/20/2018	Wednesday 3/21/2018	Thursday 3/22/2018	Friday 3/23/2018	Saturday 3/24/2018	Sunday 3/25/2018	Monday 3/26/2018	Tuesday 3/27/2018	Wednesday 3/28/2018	Thursday 3/29/2018	Friday 3/30/2018	Saturday 3/31/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,160	1,160	1,141	1,121	1,103	1,079	1,128	1,104	1,104	1,127	1,063	1,151	1,097	1,065	1,067	32,477	1,359	31,118
LFG and Biogas Flow to the Engine	582	582	573	574	582	563	570	557	557	554	547	621	579	569	568	16,890	1,016	15,875
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0%	94%
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,160	1,160	1,141	1,121	1,103	1,079	1,128	1,104	1,104	1,127	1,063	1,151	1,097	1,065	1,067	32,477	-	-
LFG and Biogas Total Flow (MMBT	582	582	573	574	582	563	570	557	557	554	547	621	579	569	568	16,890	-	-
Average Methane Content (%)	49.6	49.6	49.6	50.6	52.1	51.6	50.0	49.8	49.8	48.6	50.8	53.3	52.2	52.8	52.6	51.4	-	-
Engine 1 Hours	24	24	24	24	24	14	-	-	-	-	24	24	24	24	24	289	-	-
Engine 2 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	695	-	-
Engine 3 Hours	-	-	-	-	-	7	24	24	24	24	-	-	-	-	-	401	-	-
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	22	22	24	692	-	-
Generator 1 Power Output (kWhr)	14,424	14,424	14,264	14,852	15,020	8,912	14,260	13,828	13,828	13,832	14,244	14,592	14,340	14,936	14,648	231,188	-	-
Generator 2 Power Output (kWhr)	15,060	15,060	14,188	14,356	15,048	15,032	14,828	14,284	14,284	14,108	14,664	14,108	14,176	14,584	13,824	423,132	-	-
Generator 3 Power Output (kWhr)	-	-	-	-	-	3,884	-	-	-	-	-	-	-	-	-	183,388	-	-
Generator 4 Power Output (kWhr)	14,972	14,972	14,120	13,792	13,792	14,404	14,904	14,972	14,972	14,472	14,508	16,148	14,252	14,040	13,824	428,556	-	-
Gross Power Output (kWhr)	44,556	44,556	42,572	43,046	43,914	42,207	44,029	43,165	43,165	42,461	43,499	44,962	42,841	43,633	42,462	1,265,314	-	-
Net Power Output (kWhr)	42,384	42,384	40,523	40,952	41,844	40,188	42,036	41,240	41,240	40,480	41,528	43,032	40,880	41,584	40,456	1,211,290	-	-
Power Sold as metered by NStar, (	42,464	42,356	40,462	40,951	41,823	40,200	42,003	41,213	40,746	40,482	41,517	42,946	40,830	41,525	40,664	1,242,852	CRMCB Inplant	10,760
Offgrid RECs (kWhr)	2,172	2,172	2,049	2,093	2,070	2,019	1,993	1,925	1,925	1,981	1,971	1,930	1,961	2,049	2,006	54,022	-	-
Calculated Performance Results																		
Daily																		
Power output (kW average whe																		
Generator 1	601	601	594	619	626	637	-	-	-	-	594	608	598	622	610			
Generator 2	628	628	591	598	627	626	618	595	595	588	611	588	591	608	576			
Generator 3	-	-	-	-	-	555	-	-	-	-	-	-	-	-	-			
Generator 4	624	624	588	575	575	600	621	624	624	603	605	673	648	638	576			
Power output (kW average ove																		
Facility Gross	1,857	1,857	1,774	1,794	1,830	1,759	1,835	1,799	1,799	1,769	1,812	1,873	1,785	1,818	1,769			
Facility Net	1,766	1,766	1,688	1,706	1,744	1,675	1,752	1,718	1,718	1,687	1,730	1,793	1,703	1,733	1,686			
In-plant load	91	91	85	87	86	84	83	80	80	83	82	80	82	85	84			
Daily availability factor																		
Facility	75%	75%	75%	75%	75%	72%	75%	75%	75%	75%	75%	75%	73%	73%	75%			
Engine 1	100%	100%	100%	100%	100%	58%	0%	0%	0%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	0%	0%	0%	0%	0%	29%	100%	100%	100%	100%	0%	0%	0%	0%	0%			
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	92%	100%			
Daily capacity factor																		
Facility	56%	56%	54%	54%	55%	53%	56%	55%	55%	54%	55%	57%	54%	55%	54%			
Engine 1	73%	73%	72%	75%	76%	77%	0%	0%	0%	72%	74%	72%	75%	74%				
Engine 2	76%	76%	72%	73%	76%	75%	72%	72%	71%	74%	71%	72%	74%	70%				
Engine 3	0%	0%	0%	0%	0%	67%	0%	0%	0%	0%	0%	0%	0%	0%				
Engine 4	76%	76%	71%	70%	70%	73%	75%	76%	76%	73%	73%	82%	79%	77%	70%			
Cumulative by engine																		
Engine operating run hours in tl																		
Max Cumulative Available,	407	431	455	479	503	527	551	575	599	623	647	671	695	719	719			
Engine 1	59	83	107	131	155	169	169	169	169	193	217	241	265	265				
Engine 2	359	383	407	431	455	479	503	527	551	575	599	623	647	671				
Engine 3	298	298	298	298	298	305	329	353	377	401	401	401	401	401				
Engine 4	360	384	408	432	456	480	504	528	552	576	600	624	646	668				
Engine operating run hours tota																		
Engine 1	97,773	97,797	97,821	97,845	97,869	97,883	97,883	97,883	97,883	97,883	97,907	97,931	97,955	97,979	97,979			
Engine 2	92,011	92,035	92,059	92,083	92,107	92,131	92,155	92,179	92,203	92,227	92,251	92,275	92,299	92,323	92,323			
Engine 3	94,859	94,859	94,859	94,859	94,859	94,866	94,890	94,914	94,938	94,962	94,962	94,962	94,962	94,962	94,962			
Engine 4	92,045	92,069	92,093	92,117	92,141	92,165	92,189	92,213	92,237	92,261	92,285	92,309	92,331	92,353	92,355			
Cumulative availability, %																		
Engine 1	14%	19%	24%	27%	31%	32%	31%	29%	28%	27%	30%	32%	35%	37%	37%			
Engine 2	88%	89%	89%	90%	91%	91%	92%	92%	92%	93%	93%	93%	93%	93%	93%			
Engine 3	73%	69%	65%	62%	59%	58%	60%	61%	63%	64%	62%	60%	58%	56%	56%			
Engine 4	88%	89%	90%	90%	91%	91%	91%	92%	92%	93%	93%	93%	93%	93%	93%			
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	1,780	2,381	2,975	3,594	4,220	4,857	4,857	4,857	4,857	4,857	5,450	6,058	6,656	7,278	7,266			
Engine 2	10,374	11,002	11,593	12,191	12,818	13,444	14,062	14,657	15,253	15,840	16,451	17,039	17,630	18,238	18,206			
Engine 3	8,941	8,941	8,941	8,941	8,941	9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496	9,496			
Engine 4	10,451	11,074	11,663	12,237	12,812	13,412	14,033	14,657	15,281	15,884	16,488	17,161	17,809	18,447	18,385			
Cumulative capacity factor, %																		
Engine 1	13%	16%	19%	22%	24%	27%	26%	25%	24%	23%	24%	26%	28%	29%	29%			
Engine 2	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%			
Engine 3	64%	60%	57%	54%	52%	52%	50%	48%	46%	44%	43%	41%	40%	38%	38%			
Engine 4	75%	75%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	74%	75%	74%			

	Saturday 3/17/2018	Sunday 3/18/2018	Monday 3/19/2018	Tuesday 3/20/2018	Wednesday 3/21/2018	Thursday 3/22/2018	Friday 3/23/2018	Saturday 3/24/2018	Sunday 3/25/2018	Monday 3/26/2018	Tuesday 3/27/2018	Wednesday 3/28/2018	Thursday 3/29/2018	Friday 3/30/2018	Saturday 3/31/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine	1,628	1,724	1,820	1,916	2,012	2,108	2,204	2,300	2,396	2,492	2,588	2,684	2,780	2,876	2,876			
Actual cumulative engine run h	1,076	1,148	1,220	1,292	1,364	1,433	1,505	1,577	1,649	1,721	1,793	1,865	1,935	2,005	2,007			
Cumulative Availability, %	66.1%	66.6%	67.0%	67.4%	67.8%	68.0%	68.3%	68.6%	68.8%	69.1%	69.3%	69.5%	69.6%	69.7%	69.8%			
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	658,802	703,358	745,930	788,976	832,890	875,097	919,126	962,291	1,005,456	1,047,917	1,091,416	1,136,378	1,179,219	1,222,852	1,221,681			
Cumulative Capacity Factor	48.9%	49.3%	49.6%	49.8%	50.1%	50.2%	50.5%	50.6%	50.8%	50.9%	51.0%	51.2%	51.3%	51.5%	51.4%			
Cumulative fuel input, MMBtu	8,896	9,477	10,050	10,624	11,206	11,769	12,339	12,896	13,453	14,007	14,553	15,174	15,754	16,322	16,322			
Cumulative gross output, kWh	658,802	703,358	745,930	788,976	832,890	875,097	919,126	962,291	1,005,456	1,047,917	1,091,416	1,136,378	1,179,219	1,222,852	1,221,681			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,753	11,753	12,118	11,993	11,926	12,010	11,656	11,614	11,614	11,741	11,310	12,435	12,175	11,731	12,046			
Daily heat rate, Btu/kWe	13,055	13,055	13,462	13,323	13,249	13,341	12,948	12,902	12,902	13,043	12,564	13,814	13,524	13,031	13,381			
Cumulative heat rate, Btu/kWe	12,155	12,130	12,129	12,122	12,111	12,106	12,085	12,064	12,044	12,032	12,003	12,020	12,026	12,015	12,027			
Cumulative heat rate, Btu/kWe	13,503	13,474	13,474	13,465	13,454	13,449	13,425	13,401	13,380	13,366	13,334	13,353	13,359	13,348	13,360			
Cumulative by Facility starting C																		
Max cumulative available engine	7,196	7,292	7,388	7,484	7,580	7,676	7,772	7,868	7,964	8,060	8,156	8,252	8,348	8,444	8,444			
Actual cumulative engine run h	5,221	5,293	5,365	5,437	5,509	5,578	5,650	5,722	5,794	5,866	5,938	6,010	6,080	6,150	6,152			
Cumulative Availability, %	72.6%	72.6%	72.6%	72.6%	72.7%	72.7%	72.7%	72.7%	72.8%	72.8%	72.8%	72.8%	72.8%	72.8%	72.9%			
Max cumulative gross output, kWh	5,940,000	6,019,200	6,098,400	6,177,600	6,256,800	6,336,000	6,415,200	6,494,400	6,573,600	6,652,800	6,732,000	6,811,200	6,890,400	6,969,600	6,969,600			
Actual cumulative gross output, kWh	3,311,105	3,355,661	3,398,233	3,441,279	3,485,193	3,527,400	3,571,429	3,614,594	3,657,759	3,700,220	3,743,719	3,788,681	3,831,522	3,875,155	3,873,984			
Cumulative Capacity Factor	55.7%	55.7%	55.7%	55.7%	55.7%	55.7%	55.7%	55.7%	55.6%	55.6%	55.6%	55.6%	55.6%	55.6%	55.6%			
Cumulative fuel input, MMBtu	24,486	25,067	25,640	26,214	26,796	27,359	27,929	28,486	29,043	29,596	30,143	30,764	31,343	31,912	31,912			
Cumulative gross output, kWh	1,932,871	1,977,427	2,019,999	2,063,045	2,106,959	2,149,166	2,193,195	2,236,360	2,279,525	2,321,986	2,365,485	2,410,447	2,453,288	2,496,921	2,495,750			
Cumulative heat rate, Btu/kWe	11,404	11,412	11,426	11,438	11,448	11,459	11,463	11,466	11,469	11,474	11,471	11,489	11,501	11,505	11,510			
Cumulative heat rate, Btu/kWe	12,668	12,677	12,693	12,706	12,718	12,730	12,734	12,738	12,741	12,746	12,743	12,763	12,776	12,781	12,786			
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 3/17/2018	Sunday 3/18/2018	Monday 3/19/2018	Tuesday 3/20/2018	Wednesday 3/21/2018	Thursday 3/22/2018	Friday 3/23/2018	Saturday 3/24/2018	Sunday 3/25/2018	Monday 3/26/2018	Tuesday 3/27/2018	Wednesday 3/28/2018	Thursday 3/29/2018	Friday 3/30/2018	Saturday 3/31/2018	TOTAL		
Hour																		
1	1,769	1,765	1,762	1,690	1,742	1,743	1,793	1,747	1,698	1,698	1,701	1,873	1,746	1,743	1,746			
2	1,769	1,766	1,762	1,693	1,744	1,743	1,793	1,746	1,699	1,699	1,702	1,873	1,747	1,744	1,747			
3	1,770	1,763	1,762	1,689	1,743	1,743	1,793	1,747	1,698	1,697	1,702	1,873	1,745	1,744	1,747			
4	1,767	1,763	1,760	1,689	1,739	1,743	1,793	1,746	1,697	1,693	1,701	1,873	1,747	1,742	1,723			
5	1,768	1,763	1,762	1,693	1,744	1,742	1,793	1,745	1,698	1,697	1,702	1,872	1,749	1,743	1,651			
6	1,768	1,764	1,761	1,694	1,743	1,745	1,780	1,745	1,699	1,699	1,701	1,850	1,703	1,743	1,652			
7	1,767	1,766	1,759	1,693	1,743	1,742	1,743	1,744	1,696	1,697	1,700	1,823	1,652	1,742	1,651			
8	1,770	1,765	1,758	1,693	1,745	1,746	1,745	1,749	1,698	1,699	1,702	1,824	1,652	1,743	1,652			
9	1,769	1,765	1,728	1,690	1,742	1,740	1,716	1,738	1,698	1,697	1,699	1,820	1,650	1,740	1,650			
10	1,769	1,764	1,663	1,641	1,738	1,738	1,641	1,700	1,694	1,690	1,693	1,811	1,642	1,735	1,650			
11	1,771	1,765	1,642	1,644	1,736	1,703	1,728	1,701	1,698	1,691	1,593	1,764	1,644	1,486	1,650			
12	1,772	1,767	1,483	1,643	1,739	1,706	1,741	1,702	1,698	1,693	1,427	1,743	1,646	1,508	1,651			
13	1,771	1,767	1,140	1,670	1,741	1,732	1,740	1,702	1,699	1,693	1,420	1,741	1,645	1,504	1,651			
14	1,773	1,768	1,738	1,698	1,743	1,734	1,742	1,702	1,698	1,690	1,538	1,745	1,620	1,829	1,655			
15	1,773	1,769	1,788	1,739	1,742	1,734	1,742	1,703	1,698	1,644	1,747	1,743	1,516	1,836	1,748			
16	1,771	1,768	1,748	1,742	1,743	1,735	1,741	1,702	1,696	1,651	1,814	1,746	1,645	1,840	1,748			
17	1,771	1,767	1,644	1,747	1,743	1,738	1,745	1,702	1,700	1,654	1,873	1,748	1,839	1,840	1,749			
18	1,770	1,765	1,654	1,747	1,746	1,497	1,749	1,702	1,700	1,652	1,873	1,747	1,778	1,795	1,749			
19	1,769	1,764	1,693	1,741	1,747	1,178	1,749	1,701	1,699	1,659	1,872	1,747	1,743	1,742	1,748			
20	1,769	1,763	1,689	1,744	1,745	1,183	1,750	1,696	1,698	1,696	1,868	1,746	1,745	1,742	1,748			
21	1,768	1,763	1,694	1,743	1,745	1,448	1,746	1,699	1,697	1,697	1,870	1,746	1,744	1,745	1,709			
22	1,767	1,761	1,691	1,742	1,743	1,796	1,746	1,698	1,697	1,698	1,870	1,745	1,743	1,746	1,650			
23	1,766	1,762	1,691	1,743	1,796	1,747	1,796	1,698	1,696	1,696	1,874	1,745	1,744	1,746	1,651			
24	1,767	1,763	1,690	1,743	1,744	1,795	1,747	1,698	1,697	1,702	1,875	1,748	1,745	1,747	1,688			
TOTAL	42,464	42,356	40,462	40,951	41,823	40,200	42,003	41,213	40,746	40,482	41,517	42,946	40,830	41,525	40,664			
Cumulative Output Sold, kWh	665,134	707,490	747,952	788,903	830,726	870,926	912,929	954,142	994,888	1,035,370	1,076,887	1,119,833	1,160,663	1,202,188	1,242,852			
Transformer and line efficiency	100.2%	99.9%	99.8%	100.0%	99.9%	100.0%	99.9%	99.9%	98.8%	100.0%	100.0%	99.8%	99.9%	99.9%	100.5%			
Hourly average	1,769	1,765	1,686	1,706	1,743	1,675	1,750	1,717	1,698	1,687	1,730	1,789	1,701	1,730	1,694	1,671		

APRIL 2018																		
		Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	
		4/1/2018	4/2/2018	4/3/2018	4/4/2018	4/5/2018	4/6/2018	4/7/2018	4/8/2018	4/9/2018	4/10/2018	4/11/2018	4/12/2018	4/13/2018	4/14/2018	4/15/2018	4/16/2018	
LFG and Biogas Flow to the Engines (KSCF)		1,067	998	1,048	1,061	1,061	1,047	985	925	933	1,018	1,064	1,060	1,026	1,076	1,082	1,070	
LFG and Biogas Flow to the Engines (MMBTU HHV)		568	537	548	566	537	534	516	497	504	544	549	541	535	568	568	581	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,067	998	1,048	1,061	1,061	1,047	985	925	933	1,018	1,064	1,060	1,026	1,076	1,082	1,070	
LFG and Biogas Total Flow (MMBTU HHV)		568	537	548	566	537	534	516	497	504	544	549	541	535	568	568	581	
Average Methane Content (%)		52.6	53.2	51.7	52.7	52.0	50.4	51.8	53.1	53.3	52.8	51.0	50.4	51.5	52.1	51.8	53.7	
Engine 1 Hours		24	23	24	24	24	24	5	-	24	24	24	24	24	24	24	24	
Engine 2 Hours		24	23	24	24	19	23	24	24	-	8	24	24	8	8	8	24	
Engine 3 Hours		-	9	24	24	24	24	24	24	24	24	23	23	24	24	24	24	
Engine 4 Hours		24	10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 1 Power Output (kWhr)		14,648	14,368	16,124	16,112	14,680	13,768	3,684	-	17,960	17,816	13,616	14,040	14,916	15,016	15,016	15,016	
Generator 2 Power Output (kWhr)		13,824	14,596	15,904	15,320	11,428	11,696	17,864	18,896	-	6,456	14,680	14,688	12,432	13,244	13,240	13,832	
Generator 3 Power Output (kWhr)		-	4,248	11,684	12,312	13,744	13,768	17,400	19,124	19,416	18,176	13,920	12,492	14,428	13,776	13,212	13,720	
Generator 4 Power Output (kWhr)		13,824	5,928	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Gross Power Output (kWhr)		42,454	39,264	43,774	43,790	39,839	39,210	38,789	37,783	37,262	42,409	42,243	41,236	41,781	42,065	41,487	42,601	
Net Power Output (kWhr)		40,456	37,381	41,912	41,904	38,028	37,428	36,596	35,846	40,844	40,520	39,524	40,084	40,396	39,840	40,892	40,892	
Power Sold as metered by NStar, (kWhr)		40,412	37,334	41,848	41,837	38,015	37,435	37,438	36,686	35,821	40,815	40,465	39,482	40,012	40,332	39,819	40,828	
Offgrid RECs (kWhr)		1,998	1,883	1,863	1,886	1,810	1,782	1,377	1,187	1,414	1,565	1,723	1,712	1,697	1,669	1,647	1,709	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		610	625	672	671	612	574	737	-	748	742	567	585	622	626	626	626	
Generator 2		576	635	663	638	601	509	744	787	-	807	612	1,554	1,656	1,655	1,655	576	
Generator 3		-	472	487	513	573	574	725	797	809	757	605	543	601	574	551	572	
Generator 4		576	593	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Power output (kW average over 24-hrs)																		
Facility Gross		1,769	1,636	1,824	1,825	1,660	1,634	1,616	1,574	1,553	1,767	1,760	1,718	1,741	1,753	1,729	1,775	
Facility Net		1,686	1,558	1,746	1,746	1,585	1,560	1,559	1,525	1,494	1,702	1,688	1,647	1,670	1,683	1,660	1,704	
In-plant load		83	78	78	79	75	74	57	49	59	65	72	71	71	70	69	71	
Daily availability factor																		
Facility		75%	68%	75%	75%	70%	74%	55%	50%	50%	58%	74%	74%	58%	58%	58%	75%	
Engine 1		100%	96%	100%	100%	100%	100%	21%	0%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		100%	96%	100%	100%	79%	96%	100%	0%	33%	100%	100%	100%	33%	33%	33%	100%	
Engine 3		0%	38%	100%	100%	100%	100%	100%	100%	100%	96%	96%	100%	100%	100%	100%	100%	
Engine 4		100%	42%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Daily capacity factor																		
Facility		54%	50%	55%	55%	50%	49%	48%	47%	54%	53%	52%	53%	53%	52%	52%	54%	
Engine 1		74%	76%	81%	81%	74%	70%	89%	0%	91%	90%	69%	71%	75%	76%	76%	76%	
Engine 2		70%	77%	80%	77%	73%	62%	90%	95%	0%	98%	74%	74%	188%	201%	201%	70%	
Engine 3		0%	57%	59%	62%	70%	88%	97%	98%	92%	73%	66%	73%	70%	67%	69%	69%	
Engine 4		70%	72%	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	47	71	95	119	143	148	148	172	196	220	244	268	292	316	340	
Engine 2		24	47	71	95	114	137	161	185	185	193	217	241	249	257	265	289	
Engine 3		0	9	33	57	81	105	129	153	177	201	224	247	271	295	319	343	
Engine 4		24	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34	
Engine operating run hours total from 0 hours																		
Engine 1		98,075	98,099	98,122	98,146	98,170	98,194	98,218	98,223	98,247	98,271	98,295	98,319	98,343	98,367	98,391	98,415	
Engine 2		92,324	92,348	92,371	92,395	92,419	92,438	92,461	92,485	92,509	92,517	92,541	92,565	92,573	92,581	92,589	92,613	
Engine 3		94,866	94,866	94,875	94,899	94,923	94,947	94,971	94,995	95,019	95,043	95,067	95,090	95,113	95,137	95,161	95,209	
Engine 4		92,352	92,376	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	
Cumulative availability, %	April 1, 2018 @ 00:00 hours																	
Engine 1		100%	98%	99%	99%	99%	99%	88%	77%	80%	82%	83%	85%	86%	87%	88%	89%	
Engine 2		100%	98%	99%	99%	95%	82%	86%	82%	84%	86%	84%	86%	87%	87%	87%	89%	
Engine 3		0%	19%	46%	59%	68%	73%	77%	80%	82%	84%	85%	86%	87%	88%	89%	89%	
Engine 4		100%	71%	47%	35%	28%	24%	20%	18%	16%	14%	13%	12%	11%	10%	9%	9%	
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		610	1,235	1,907	2,578	3,190	3,764	4,500	5,249	5,991	6,558	7,143	7,665	8,390	9,016	9,642	10,268	
Engine 2		576	1,211	1,873	2,512	3,113	3,622	4,366	5,153	5,960	6,572	7,184	7,738	8,393	9,048	9,703	10,358	
Engine 3		-	472	959	1,472	2,045	2,618	3,343	4,140	4,949	5,706	6,312	6,855	7,456	8,030	8,580	9,152	
Engine 4		576	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	
Cumulative capacity factor, %																		
Engine 1		74%	75%	77%	78%	77%	76%	78%	68%	71%	73%	72%	72%	72%	73%	73%	73%	
Engine 2		70%	73%	76%	76%	75%	72%	73%	78%	79%	79%	79%	79%	81%	81%	81%	81%	
Engine 3		0%	29%	39%	45%	50%	53%	58%	63%	67%	69%	70%	69%	70%	70%	69%	69%	
Engine 4		70%	71%	47%	35%	28%	24%	20%	18%	16%	14%	13%	12%	11%	10%	9%	9%	

		Sunday 4/1/2018	Monday 4/2/2018	Tuesday 4/3/2018	Wednesday 4/4/2018	Thursday 4/5/2018	Friday 4/6/2018	Saturday 4/7/2018	Sunday 4/8/2018	Monday 4/9/2018	Tuesday 4/10/2018	Wednesday 4/11/2018	Thursday 4/12/2018	Friday 4/13/2018	Saturday 4/14/2018	Sunday 4/15/2018	Monday 4/16/2018
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	137	209	281	348	419	472	520	568	624	695	766	822	878	934	1,006
Cumulative Availability, %		75.0%	71.4%	72.6%	73.2%	72.5%	72.7%	70.2%	67.7%	65.7%	65.0%	65.8%	66.5%	65.9%	65.3%	64.9%	65.5%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		42,454	81,718	125,492	169,282	209,121	248,331	287,120	324,903	362,165	404,574	446,817	488,053	529,834	571,899	613,386	655,987
Cumulative Capacity Factor		53.6%	51.6%	52.8%	53.4%	52.8%	52.3%	51.8%	51.3%	50.8%	51.1%	51.3%	51.4%	51.5%	51.6%	51.6%	51.8%
Cumulative fuel input, MMBtu HHV		568	1,105	1,654	2,220	2,757	3,290	3,807	4,304	4,807	5,351	5,900	6,441	6,975	7,543	8,111	8,692
Cumulative gross output, kWhr		42,454	81,718	125,492	169,282	209,121	248,331	287,120	324,903	362,165	404,574	446,817	488,053	529,834	571,899	613,386	655,987
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		12,048	12,314	11,276	11,637	12,136	12,251	11,982	11,839	12,164	11,549	11,689	11,808	11,518	12,151	12,320	12,281
Daily heat rate, Btu/kWe gross HHV		13,384	13,679	12,526	12,928	13,482	13,609	13,310	13,151	13,512	12,830	12,984	13,117	12,795	13,498	13,686	13,643
Cumulative heat rate, Btu/kWe gross LHV		12,048	12,176	11,862	11,804	11,867	11,928	11,935	11,924	11,949	11,907	11,886	11,879	11,851	11,873	11,903	11,928
Cumulative heat rate, Btu/kWe gross HHV		13,384	13,526	13,177	13,112	13,183	13,250	13,258	13,246	13,273	13,227	13,204	13,197	13,165	13,189	13,223	13,250
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		8,540	8,636	8,732	8,828	8,924	9,020	9,116	9,212	9,308	9,404	9,500	9,596	9,692	9,788	9,884	9,980
Actual cumulative engine run hours		6,224	6,289	6,361	6,433	6,500	6,571	6,624	6,672	6,720	6,776	6,847	6,918	6,974	7,030	7,086	7,158
Cumulative Availability, %		72.9%	72.8%	72.8%	72.9%	72.8%	72.8%	72.7%	72.4%	72.2%	72.1%	72.1%	72.1%	72.0%	71.8%	71.7%	71.7%
Max cumulative gross output, kWhr		7,048,800	7,128,000	7,207,200	7,286,400	7,365,600	7,444,800	7,524,000	7,603,200	7,682,400	7,761,600	7,840,800	7,920,000	7,999,200	8,078,400	8,157,600	8,236,800
Actual cumulative gross output, kWhr		3,916,438	3,955,702	3,999,476	4,043,266	4,083,105	4,122,315	4,161,104	4,198,887	4,236,149	4,278,558	4,320,801	4,362,037	4,403,818	4,445,883	4,487,370	4,529,971
Cumulative Capacity Factor		55.6%	55.5%	55.5%	55.5%	55.4%	55.4%	55.3%	55.2%	55.1%	55.1%	55.1%	55.1%	55.1%	55.0%	55.0%	55.0%
Cumulative fuel input, MMBtu HHV		32,480	33,017	33,565	34,131	34,668	35,202	35,718	36,215	36,719	37,263	37,811	38,352	38,887	39,455	40,022	40,604
Cumulative gross output, kWhr		2,538,204	2,577,468	2,621,242	2,665,032	2,704,871	2,744,081	2,782,870	2,820,653	2,857,915	2,900,324	2,942,567	2,983,803	3,025,584	3,067,649	3,109,136	3,151,737
Cumulative heat rate, Btu/kWe gross LHV		11,519	11,531	11,527	11,529	11,538	11,548	11,554	11,558	11,566	11,566	11,567	11,571	11,570	11,578	11,588	11,597
Cumulative heat rate, Btu/kWe gross HHV		12,796	12,810	12,805	12,807	12,817	12,828	12,835	12,839	12,848	12,848	12,850	12,853	12,853	12,862	12,873	12,883
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change				Blown Fuse Switchgear													
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Sunday 4/1/2018	Monday 4/2/2018	Tuesday 4/3/2018	Wednesday 4/4/2018	Thursday 4/5/2018	Friday 4/6/2018	Saturday 4/7/2018	Sunday 4/8/2018	Monday 4/9/2018	Tuesday 4/10/2018	Wednesday 4/11/2018	Thursday 4/12/2018	Friday 4/13/2018	Saturday 4/14/2018	Sunday 4/15/2018	Monday 4/16/2018
Date																	
Hour																	
1		1,747	1,650	1,823	1,824	1,694	1,581	1,576	1,558	745	1,581	1,730	1,730	1,632	1,726	1,656	1,658
2		1,745	1,651	1,827	1,823	1,694	1,578	1,577	1,560	847	1,582	1,733	1,730	1,634	1,730	1,657	1,661
3		1,748	1,649	1,823	1,824	1,694	1,580	1,577	1,562	1,532	1,583	1,734	1,730	1,634	1,730	1,657	1,662
4		1,744	1,648	1,823	1,823	1,698	1,576	1,575	1,561	1,529	1,582	1,733	1,728	1,632	1,729	1,657	1,661
5		1,748	1,643	1,824	1,824	1,697	1,579	1,578	1,561	1,531	1,582	1,733	1,728	1,632	1,729	1,655	1,661
6		1,748	1,647	1,823	1,824	1,694	1,582	1,578	1,561	1,529	1,583	1,732	1,727	1,635	1,728	1,660	1,660
7		1,747	1,649	1,820	1,820	1,692	1,580	1,465	1,560	1,532	1,582	1,729	1,726	1,630	1,726	1,659	1,656
8		1,748	1,649	1,820	1,824	1,692	1,578	1,524	1,562	1,535	1,584	1,730	1,726	1,631	1,699	1,658	1,656
9		1,691	1,646	1,823	1,799	1,611	1,579	1,557	1,562	1,535	1,583	1,728	1,724	1,627	1,659	1,659	1,657
10		1,651	1,644	1,767	1,744	1,204	1,072	1,556	1,563	1,529	1,577	1,719	1,667	1,623	1,658	1,658	1,651
11		1,651	1,507	1,744	1,745	1,298	1,149	1,557	1,563	1,531	1,574	1,581	1,332	1,511	1,658	1,659	1,653
12		1,651	1,316	1,745	1,738	1,328	1,448	1,561	1,565	1,532	1,575	1,309	1,332	1,405	1,660	1,657	1,732
13		1,650	1,065	1,523	1,337	1,330	1,678	1,564	1,565	1,530	1,727	1,111	1,639	1,755	1,659	1,658	1,773
14		1,650	-	565	1,827	1,477	1,673	1,564	1,565	1,572	1,923	1,732	1,629	1,727	1,660	1,660	1,774
15		1,649	836	1,670	1,768	1,676	1,679	1,565	1,565	1,578	1,924	1,811	1,629	1,729	1,660	1,661	1,774
16		1,649	1,543	1,828	1,701	1,657	1,658	1,564	1,564	1,576	1,890	1,773	1,635	1,731	1,660	1,661	1,778
17		1,649	1,825	1,827	1,704	1,631	1,648	1,564	1,565	1,581	1,880	1,738	1,636	1,732	1,659	1,661	1,779
18		1,649	1,827	1,827	1,703	1,630	1,646	1,565	1,565	1,583	1,818	1,729	1,636	1,733	1,659	1,662	1,775
19		1,648	1,825	1,825	1,701	1,629	1,628	1,564	1,564	1,581	1,806	1,728	1,635	1,731	1,658	1,661	1,691
20		1,649	1,824	1,822	1,700	1,629	1,607	1,563	1,563	1,582	1,805	1,732	1,634	1,730	1,658	1,660	1,707
21		1,650	1,822	1,823	1,698	1,608	1,596	1,563	1,558	1,583	1,804	1,732	1,633	1,731	1,657	1,659	1,706
22		1,649	1,823	1,826	1,696	1,584	1,582	1,561	1,556	1,582	1,803	1,730	1,632	1,729	1,656	1,661	1,705
23		1,650	1,823	1,825	1,695	1,584	1,580	1,559	1,558	1,583	1,734	1,729	1,633	1,730	1,656	1,661	1,704
24		1,651	1,822	1,825	1,695	1,584	1,578	1,561	1,561	1,583	1,733	1,729	1,631	1,728	1,658	1,662	1,694
TOTAL		40,412	37,334	41,848	41,837	38,015	37,435	37,438	36,686	35,821	40,815	40,465	39,482	40,012	40,332	39,819	40,828
Cumulative Output Sold, kWhr		40,412	77,746	119,594	161,431	199,446	236,881	274,319	311,005	346,826	387,641	428,106	467,588	507,600	547,932	587,751	628,579
Transformer and line efficiency		99.9%	99.9%	99.8%	99.8%	100.0%	100.0%	100.1%	100.2%	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%	99.9%	99.8%
Hourly average		1.684	1.556	1.744	1.743	1.584	1.560	1.560	1.529	1.493	1.701	1.686	1.645	1.667	1.681	1.659	1.701

APRIL 2018																	
	Tuesday 4/17/2018	Wednesday 4/18/2018	Thursday 4/19/2018	Friday 4/20/2018	Saturday 4/21/2018	Sunday 4/22/2018	Monday 4/23/2018	Tuesday 4/24/2018	Wednesday 4/25/2018	Thursday 4/26/2018	Friday 4/27/2018	Saturday 4/28/2018	Sunday 4/29/2018	Monday 4/30/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,040	1,053	1,059	1,042	1,064	1,066	1,114	1,117	1,118	1,103	1,044	1,084	1,045	1,035	31,507	1,453	30,054
LFG and Biogas Flow to the Engine	576	580	567	529	532	530	553	548	562	559	523	543	523	525	16,342	1,032	15,310
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.3%	94%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,040	1,053	1,059	1,042	1,064	1,066	1,114	1,117	1,118	1,103	1,044	1,084	1,045	1,035	31,507		
LFG and Biogas Total Flow (MMBT	576	580	567	529	532	530	553	548	562	559	523	543	523	525	16,342		
Average Methane Content (%)	54.7	54.4	52.9	50.2	49.4	49.1	49.0	48.5	49.6	50.1	49.5	49.5	49.5	50.1	51.3		
Engine 1 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	676		
Engine 2 Hours	24	24	24	8	8	8	24	24	24	24	24	24	24	24	577		
Engine 3 Hours	24	24	24	24	24	24	24	24	24	24	18	-	-	-	601		
Engine 4 Hours	-	-	-	-	-	-	-	-	-	-	1	24	24	24	107		
Generator 1 Power Output (kWhr)	14,752	14,512	14,564	14,808	13,580	14,196	14,740	14,720	14,852	14,232	14,296	13,348	12,861	15,976	418,217		
Generator 2 Power Output (kWhr)	14,008	13,280	13,352	12,772	13,248	13,240	14,132	14,396	14,268	14,024	14,268	13,092	12,615	8,628	393,423		
Generator 3 Power Output (kWhr)	13,856	13,196	13,216	13,204	13,216	13,216	13,440	13,208	13,516	13,984	10,296	-	-	-	355,768		
Generator 4 Power Output (kWhr)	-	-	-	-	-	-	-	-	12	-	164	12,672	12,210	14,332	59,142		
Gross Power Output (kWhr)	42,643	41,003	41,146	40,782	40,053	40,688	42,315	42,351	42,665	42,267	39,004	39,154	37,727	38,947	1,226,712		
Net Power Output (kWhr)	40,916	39,316	39,420	39,080	38,412	39,016	40,584	40,560	40,844	37,268	37,268	37,504	36,137	37,248	1,175,910		
Power Sold as metered by NStar, (l	40,845	39,300	39,357	39,037	38,360	38,965	40,512	40,480	40,759	40,460	37,242	38,904	37,487	37,244	1,177,531	CRMCB Inplant	
Offgrid RECs (kWhr)	1,727	1,688	1,725	1,702	1,641	1,652	1,731	1,791	1,821	1,727	1,736	1,650	1,590	1,699	50,802	9,166	
Calculated Performance Results																	
Daily																	
Power output (kW average whe																	18%
Generator 1	615	605	607	617	566	592	614	613	619	593	596	556	536	666			of total in-plant power
Generator 2	584	553	556	1,597	1,656	1,655	589	600	595	584	595	546	526	360			
Generator 3	577	550	551	550	551	551	560	550	563	583	572	-	-	-			
Generator 4	-	-	-	-	-	-	-	-	-	-	164	528	509	597			
Power output (kW average ove																	
Facility Gross	1,777	1,708	1,714	1,699	1,669	1,695	1,763	1,765	1,778	1,761	1,625	1,631	1,572	1,623			
Facility Net	1,705	1,638	1,643	1,628	1,601	1,626	1,691	1,690	1,702	1,689	1,553	1,563	1,506	1,552			
In-plant load	72	70	72	71	68	69	72	75	76	72	72	69	66	71			
Daily availability factor																	
Facility	75%	75%	75%	58%	58%	58%	75%	75%	75%	75%	70%	75%	75%	75%			
Engine 1	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	100%	100%	33%	33%	33%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	75%	0%	0%	0%			
Engine 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%	100%	100%	100%			
Daily capacity factor																	
Facility	54%	52%	52%	51%	51%	51%	53%	53%	54%	53%	49%	49%	48%	49%			
Engine 1	75%	73%	74%	75%	69%	72%	74%	74%	75%	72%	72%	67%	65%	81%			
Engine 2	71%	67%	67%	194%	201%	201%	71%	73%	72%	71%	72%	66%	64%	44%			
Engine 3	70%	67%	67%	67%	67%	67%	68%	67%	68%	71%	69%	0%	0%	0%			
Engine 4	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	20%	64%	62%	72%			
Cumulative by engine																	
Engine operating run hours in th																	
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine 1	364	388	412	436	460	484	508	532	556	580	604	628	652	676			
Engine 2	313	337	361	369	377	385	409	433	457	481	505	529	553	577			
Engine 3	367	391	415	439	463	487	511	535	559	583	601	601	601	601			
Engine 4	34	34	34	34	34	34	34	34	34	34	35	59	83	107			
Engine operating run hours tota																	
Engine 1	98,439	98,463	98,487	98,511	98,535	98,559	98,583	98,607	98,631	98,655	98,679	98,703	98,727	98,751			
Engine 2	92,637	92,661	92,685	92,693	92,701	92,709	92,733	92,757	92,781	92,805	92,829	92,853	92,877	92,901			
Engine 3	95,233	95,257	95,281	95,305	95,329	95,353	95,377	95,401	95,425	95,449	95,467	95,467	95,467	95,467			
Engine 4	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,386	92,387	92,411	92,435	92,459			
Cumulative availability, %																	
Engine 1	89%	90%	90%	91%	91%	92%	92%	92%	93%	93%	93%	93%	94%	94%			
Engine 2	77%	78%	79%	77%	75%	73%	74%	75%	76%	77%	79%	79%	79%	80%			
Engine 3	90%	91%	91%	91%	92%	92%	93%	93%	93%	93%	93%	89%	86%	83%			
Engine 4	8%	8%	7%	7%	7%	6%	6%	6%	6%	5%	5%	9%	12%	15%			
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	10,266	10,861	11,468	12,085	12,651	13,242	13,856	14,470	15,089	15,682	16,277	16,833	17,369	18,035			
Engine 2	13,208	13,762	14,318	15,915	17,571	19,226	19,814	20,414	21,009	21,593	22,188	22,733	23,259	23,618			
Engine 3	9,729	10,279	10,830	11,380	11,931	12,481	13,041	13,592	14,155	14,738	15,310	15,310	15,310	15,310			
Engine 4	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,169	1,333	1,861	2,370	2,967			
Cumulative capacity factor, %																	
Engine 1	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%			
Engine 2	94%	93%	91%	96%	101%	106%	104%	103%	102%	101%	100%	98%	97%	95%			
Engine 3	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	69%	66%	64%	62%			
Engine 4	8%	8%	7%	7%	7%	6%	6%	6%	6%	5%	6%	8%	10%	12%			

	Tuesday 4/17/2018	Wednesday 4/18/2018	Thursday 4/19/2018	Friday 4/20/2018	Saturday 4/21/2018	Sunday 4/22/2018	Monday 4/23/2018	Tuesday 4/24/2018	Wednesday 4/25/2018	Thursday 4/26/2018	Friday 4/27/2018	Saturday 4/28/2018	Sunday 4/29/2018	Monday 4/30/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine run time, hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880			
Actual cumulative engine run time, hours	1,078	1,150	1,222	1,278	1,334	1,390	1,462	1,534	1,606	1,678	1,745	1,817	1,889	1,961			
Cumulative Availability, %	66.1%	66.6%	67.0%	66.6%	66.2%	65.8%	66.2%	66.6%	66.9%	67.2%	67.3%	67.6%	67.9%	68.1%			
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	698,630	739,633	780,779	821,561	861,614	902,282	944,597	986,948	1,029,613	1,071,880	1,110,884	1,150,038	1,187,765	1,226,712			
Cumulative Capacity Factor	51.9%	51.9%	51.9%	51.9%	51.8%	51.8%	51.9%	51.9%	52.0%	52.1%	51.9%	51.9%	51.7%	51.6%			
Cumulative fuel input, MMBtu	9,268	9,848	10,415	10,945	11,477	12,006	12,559	13,107	13,669	14,228	14,751	15,294	15,817	16,342			
Cumulative gross output, kWh	698,630	739,633	780,779	821,561	861,614	902,282	944,597	986,948	1,029,613	1,071,880	1,110,884	1,150,038	1,187,765	1,226,712			
Heat Rate																	
Daily heat rate, Btu/kWe gross	12,149	12,742	12,411	11,686	11,955	11,727	11,760	11,646	11,851	11,912	12,064	12,482	12,482	12,137			
Daily heat rate, Btu/kWe net	13,496	14,155	13,787	12,981	13,280	13,027	13,064	12,937	13,165	13,233	13,401	13,866	13,865	13,482			
Cumulative heat rate, Btu/kWe gross	11,941	11,986	12,008	11,992	11,990	11,979	11,969	11,955	11,951	11,949	11,953	11,971	11,987	11,992			
Cumulative heat rate, Btu/kWe net	13,265	13,315	13,339	13,322	13,320	13,307	13,296	13,280	13,276	13,274	13,278	13,298	13,316	13,322			
Cumulative by Facility starting 4/1/2018																	
Max cumulative available engine run time, hours	10,076	10,172	10,268	10,364	10,460	10,556	10,652	10,748	10,844	10,940	11,036	11,132	11,228	11,324			
Actual cumulative engine run time, hours	7,230	7,302	7,374	7,430	7,486	7,542	7,614	7,686	7,758	7,830	7,897	7,969	8,041	8,113			
Cumulative Availability, %	71.8%	71.8%	71.8%	71.7%	71.6%	71.4%	71.5%	71.5%	71.5%	71.6%	71.6%	71.6%	71.6%	71.6%			
Max cumulative gross output, kWh	8,316,000	8,395,200	8,474,400	8,553,600	8,632,800	8,712,000	8,791,200	8,870,400	8,949,600	9,028,800	9,108,000	9,187,200	9,266,400	9,345,600			
Actual cumulative gross output, kWh	4,572,614	4,613,617	4,654,763	4,695,545	4,735,598	4,776,266	4,818,581	4,860,932	4,903,597	4,945,864	4,984,868	5,024,022	5,061,749	5,100,696			
Cumulative Capacity Factor	55.0%	55.0%	54.9%	54.9%	54.9%	54.8%	54.8%	54.8%	54.8%	54.8%	54.7%	54.7%	54.6%	54.6%			
Cumulative fuel input, MMBtu	41,179	41,760	42,327	42,856	43,388	43,918	44,471	45,019	45,580	46,140	46,662	47,205	47,728	48,253			
Cumulative gross output, kWh	3,194,380	3,235,383	3,276,529	3,317,311	3,357,364	3,398,032	3,440,347	3,482,698	3,525,363	3,567,630	3,606,634	3,645,788	3,683,515	3,722,462			
Cumulative heat rate, Btu/kWe gross	11,605	11,619	11,629	11,630	11,633	11,635	11,636	11,636	11,639	11,642	11,647	11,656	11,664	11,669			
Cumulative heat rate, Btu/kWe net	12,891	12,907	12,918	12,919	12,923	12,925	12,926	12,926	12,929	12,933	12,938	12,948	12,957	12,963			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports																	
Date	4/17/2018	4/18/2018	4/19/2018	4/20/2018	4/21/2018	4/22/2018	4/23/2018	4/24/2018	4/25/2018	4/26/2018	4/27/2018	4/28/2018	4/29/2018	4/30/2018	TOTAL		
Hour																	
1	1,659	1,714	1,601	1,624	1,580	1,580	1,629	1,720	1,694	1,801	1,652	1,652	1,447	1,582			
2	1,658	1,629	1,659	1,653	1,582	1,608	1,655	1,680	1,648	1,703	1,647	1,653	1,611	1,488			
3	1,658	1,613	1,659	1,616	1,579	1,656	1,653	1,733	1,718	1,695	1,649	1,652	1,656	1,523			
4	1,674	1,659	1,609	1,619	1,584	1,624	1,656	1,731	1,707	1,804	1,651	1,651	1,513	1,587			
5	1,707	1,658	1,612	1,656	1,580	1,581	1,593	1,731	1,647	1,674	1,648	1,653	1,599	1,522			
6	1,678	1,624	1,659	1,652	1,583	1,651	1,658	1,640	1,709	1,697	1,649	1,656	1,656	1,497			
7	1,670	1,661	1,620	1,651	1,581	1,657	1,652	1,700	1,716	1,805	1,652	1,656	1,528	1,588			
8	1,758	1,659	1,581	1,582	1,583	1,586	1,581	1,727	1,589	1,670	1,649	1,656	1,525	1,483			
9	1,709	1,594	1,677	1,578	1,583	1,583	1,576	1,719	1,679	1,675	1,647	1,655	1,660	1,231			
10	1,578	1,614	1,719	1,577	1,582	1,578	1,627	1,689	1,702	1,797	1,649	1,625	1,547	1,444			
11	1,736	1,652	1,608	1,538	1,584	1,594	1,746	1,579	1,583	1,629	1,632	1,586	1,486	1,654			
12	1,771	1,653	1,607	1,266	1,586	1,638	1,797	1,642	1,647	1,578	1,430	1,575	1,590	1,650			
13	1,770	1,576	1,650	1,492	1,584	1,601	1,792	1,643	1,718	1,591	1,331	1,589	1,584	1,598			
14	1,760	1,645	1,652	1,634	1,610	1,659	1,737	1,621	1,644	1,793	1,332	1,644	1,467	1,632			
15	1,654	1,650	1,616	1,799	1,660	1,660	1,672	1,652	1,696	1,667	1,329	1,609	1,590	1,648			
16	1,689	1,658	1,651	1,761	1,659	1,603	1,723	1,724	1,740	1,650	1,561	1,520	1,587	1,520			
17	1,801	1,585	1,655	1,731	1,614	1,638	1,732	1,730	1,710	1,653	1,654	1,649	1,460	1,577			
18	1,796	1,659	1,658	1,712	1,627	1,660	1,731	1,679	1,746	1,653	1,660	1,638	1,663	1,575			
19	1,648	1,658	1,658	1,658	1,658	1,658	1,732	1,665	1,806	1,653	1,658	1,512	1,595	1,575			
20	1,711	1,626	1,657	1,657	1,629	1,588	1,687	1,727	1,727	1,651	1,658	1,654	1,459	1,576			
21	1,733	1,590	1,604	1,657	1,582	1,646	1,700	1,725	1,725	1,655	1,658	1,648	1,660	1,572			
22	1,675	1,656	1,633	1,656	1,582	1,656	1,727	1,599	1,802	1,657	1,534	1,483	1,603	1,573			
23	1,621	1,654	1,655	1,656	1,584	1,657	1,727	1,702	1,710	1,654	1,092	1,631	1,440	1,573			
24	1,731	1,613	1,657	1,612	1,584	1,603	1,729	1,722	1,696	1,655	1,220	1,657	1,561	1,576			
TOTAL	40,845	39,300	39,357	39,037	38,360	38,965	40,512	40,480	40,759	40,460	37,242	38,904	37,487	37,244			
Cumulative Output Sold, kWh	669,424	708,724	748,081	787,118	825,478	864,443	904,955	945,435	986,194	1,026,654	1,063,896	1,102,800	1,140,287	1,177,531			
Transformer and line efficiency	99.8%	100.0%	99.8%	99.9%	99.9%	99.9%	99.8%	99.8%	99.8%	99.8%	99.9%	103.7%	103.7%	100.0%	0.0%		
Hourly average	1,702	1,638	1,640	1,627	1,598	1,624	1,688	1,687	1,698	1,686	1,552	1,621	1,562	1,552	1,635		

MAY 2018																		
		Tuesday 5/1/2018	Wednesday 5/2/2018	Thursday 5/3/2018	Friday 5/4/2018	Saturday 5/5/2018	Sunday 5/6/2018	Monday 5/7/2018	Tuesday 5/8/2018	Wednesday 5/9/2018	Thursday 5/10/2018	Friday 5/11/2018	Saturday 5/12/2018	Sunday 5/13/2018	Monday 5/14/2018	Tuesday 5/15/2018	Wednesday 5/16/2018	
LFG and Biogas Flow to the Engines (KSCF)		1,025	1,152	1,118	1,117	1,108	1,108	1,092	1,115	1,092	1,091	1,021	988	1,014	1,014	1,010	996	
LFG and Biogas Flow to the Engines (MMBTU HHV)		524	568	546	539	534	534	527	538	527	527	485	470	482	470	479	474	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,025	1,152	1,118	1,117	1,108	1,108	1,092	1,115	1,092	1,091	1,021	988	1,014	1,014	1,010	996	
LFG and Biogas Total Flow (MMBTU HHV)		524	568	546	539	534	534	527	538	527	527	485	470	482	470	479	474	
Average Methane Content (%)		50.5	48.7	48.3	47.7	47.7	47.7	47.7	47.7	47.7	47.7	47.0	47.0	47.0	45.8	46.9	47.0	
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Engine 2 Hours		8	24	15	24	24	24	24	24	24	24	-	-	-	-	-	-	
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	
Generator 1 Power Output (kW/hr)		17,928	14,420	16,312	13,276	13,216	13,216	13,027	13,298	13,020	13,009	19,728	19,724	19,724	19,724	19,728	19,720	
Generator 2 Power Output (kW/hr)		5,340	14,700	8,712	13,388	13,456	13,456	13,264	13,539	13,256	13,245	-	-	-	-	-	-	
Generator 3 Power Output (kW/hr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4 Power Output (kW/hr)		17,964	14,388	16,276	13,296	13,288	13,288	13,098	13,370	13,091	13,080	19,696	19,696	19,688	19,688	19,684	19,680	
Gross Power Output (kW/hr)		41,248	43,543	41,300	39,974	39,985	39,985	39,415	40,234	39,394	39,362	39,269	39,272	39,267	39,267	39,274	39,234	
Net Power Output (kW/hr)		39,612	41,656	39,352	38,212	38,244	38,244	37,698	38,481	37,677	37,646	37,623	37,612	37,620	37,620	37,712	37,732	
Power Sold as metered by NStar, (kW/hr)		39,541	41,556	39,408	38,784	38,170	38,202	37,657	38,439	37,636	37,605	37,666	37,627	37,621	37,649	37,691	37,721	
Offgrid RECs (kW/hr)		1,636	1,887	1,948	1,761	1,741	1,741	1,717	1,753	1,717	1,716	1,446	1,660	1,647	1,647	1,562	1,502	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		747	601	680	553	551	551	543	554	543	542	822	822	822	822	822	822	
Generator 2		668	613	581	558	561	561	553	564	552	552	-	-	-	-	-	-	
Generator 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4		749	600	678	554	554	554	546	557	545	545	821	821	820	820	820	820	
Power output (kW average over 24-hrs)																		
Facility Gross		1,719	1,814	1,721	1,666	1,666	1,666	1,642	1,676	1,641	1,640	1,636	1,636	1,636	1,636	1,636	1,635	
Facility Net		1,651	1,736	1,640	1,592	1,594	1,594	1,571	1,603	1,570	1,569	1,576	1,567	1,568	1,568	1,571	1,572	
In-plant load		68	79	81	73	73	73	72	73	72	72	60	69	69	69	65	63	
Daily availability factor																		
Facility		58%	75%	66%	75%	75%	75%	75%	75%	75%	75%	50%	50%	50%	50%	50%	50%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		33%	100%	63%	100%	100%	100%	100%	100%	100%	100%	0%	0%	0%	0%	0%	0%	
Engine 3		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%	
Daily capacity factor																		
Facility		52%	55%	50%	50%	50%	50%	51%	50%	50%	50%	50%	50%	50%	50%	50%	50%	
Engine 1		91%	73%	82%	67%	67%	67%	66%	67%	66%	66%	100%	100%	100%	100%	100%	100%	
Engine 2		81%	74%	70%	68%	68%	68%	67%	68%	67%	67%	0%	0%	0%	0%	0%	0%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		91%	73%	82%	67%	67%	67%	66%	68%	66%	66%	99%	99%	99%	99%	99%	99%	
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		8	32	47	71	95	119	143	167	191	215	215	215	215	215	215	215	
Engine 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
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		98,751	98,775	98,799	98,823	98,847	98,871	98,895	98,919	98,943	98,967	98,991	99,015	99,039	99,063	99,087	99,111	
Engine 2		92,973	92,981	93,005	93,020	93,044	93,068	93,092	93,116	93,140	93,164	93,188	93,188	93,188	93,188	93,188	93,188	
Engine 3		95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	
Engine 4		92,435	92,459	92,483	92,507	92,531	92,555	92,579	92,603	92,627	92,651	92,675	92,699	92,723	92,747	92,771	92,795	
Cumulative availability, %	May, 2018 @ 00:00 hours																	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		33%	67%	65%	74%	79%	83%	81%	87%	88%	87%	81%	75%	64%	69%	60%	56%	
Engine 3		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%	
Engine cumulative gross output, kW/hr																		
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		747	1,348	2,028	2,581	3,131	3,682	4,225	4,779	5,321	5,863	6,405	6,947	7,489	8,031	8,573	9,115	
Engine 2		668	1,280	1,861	2,419	2,979	3,540	4,093	4,657	5,209	5,761	6,313	6,865	7,417	7,969	8,521	9,073	
Engine 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4		749	1,348	2,026	2,580	3,134	3,688	4,233	4,790	5,336	5,881	6,401	6,922	7,442	7,962	8,482	9,002	
Cumulative capacity factor, %																		
Engine 1		91%	82%	82%	78%	76%	74%	73%	72%	72%	71%	74%	76%	78%	79%	81%	82%	
Engine 2		81%	78%	75%	73%	72%	70%	71%	71%	70%	70%	63%	58%	54%	50%	47%	44%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		91%	82%	82%	78%	76%	74%	73%	73%	72%	71%	74%	76%	78%	79%	81%	82%	

		Tuesday 5/1/2018	Wednesday 5/2/2018	Thursday 5/3/2018	Friday 5/4/2018	Saturday 5/5/2018	Sunday 5/6/2018	Monday 5/7/2018	Tuesday 5/8/2018	Wednesday 5/9/2018	Thursday 5/10/2018	Friday 5/11/2018	Saturday 5/12/2018	Sunday 5/13/2018	Monday 5/14/2018	Tuesday 5/15/2018	Wednesday 5/16/2018
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		56	128	191	263	335	407	479	551	623	695	743	807	839	887	935	983
Cumulative Availability, %		58.3%	66.7%	66.3%	68.5%	69.8%	70.7%	71.3%	71.7%	72.1%	72.4%	70.4%	68.7%	67.2%	66.0%	64.9%	64.0%
Max cumulative gross output, kWh		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, kWh		41,248	84,791	126,091	166,065	206,050	246,035	285,450	325,684	365,078	404,440	443,709	482,981	522,248	561,515	600,789	640,023
Cumulative Capacity Factor		52.1%	53.5%	53.1%	52.4%	52.0%	51.8%	51.5%	51.4%	51.2%	51.1%	50.9%	50.8%	50.7%	50.6%	50.6%	50.5%
Cumulative fuel input, MMBtu HHV		524	1,092	1,638	2,177	2,711	3,245	3,772	4,310	4,837	5,364	5,850	6,320	6,802	7,271	7,751	8,224
Cumulative gross output, kWh		41,248	84,791	126,091	166,065	206,050	246,035	285,450	325,684	365,078	404,440	443,709	482,981	522,248	561,515	600,789	640,023
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,429	11,741	11,899	12,143	12,027	12,027	12,036	12,037	12,043	12,052	11,127	10,773	11,052	10,770	10,981	10,869
Daily heat rate, Btu/kWe gross HHV		12,696	13,042	13,218	13,489	13,360	13,360	13,371	13,372	13,378	13,389	12,361	11,968	12,277	11,964	12,199	12,074
Cumulative heat rate, Btu/kWe gross LHV		11,429	11,589	11,691	11,799	11,843	11,873	11,896	11,913	11,927	11,939	11,867	11,779	11,724	11,657	11,613	11,567
Cumulative heat rate, Btu/kWe gross HHV		12,696	12,874	12,987	13,108	13,157	13,190	13,215	13,234	13,249	13,263	13,183	13,084	13,024	12,950	12,901	12,850
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		11,420	11,516	11,612	11,708	11,804	11,900	11,996	12,092	12,188	12,284	12,380	12,476	12,572	12,668	12,764	12,860
Actual cumulative engine run hours		8,169	8,241	8,304	8,376	8,448	8,520	8,592	8,664	8,736	8,808	8,856	8,904	8,952	9,000	9,048	9,096
Cumulative Availability, %		71.5%	71.6%	71.5%	71.5%	71.6%	71.6%	71.6%	71.7%	71.7%	71.7%	71.5%	71.4%	71.2%	71.0%	70.9%	70.7%
Max cumulative gross output, kWh		9,424,800	9,504,000	9,583,200	9,662,400	9,741,600	9,820,800	9,900,000	9,979,200	10,058,400	10,137,600	10,216,800	10,296,000	10,375,200	10,454,400	10,533,600	10,612,800
Actual cumulative gross output, kWh		5,141,944	5,185,487	5,226,787	5,266,761	5,306,746	5,346,731	5,386,716	5,426,700	5,466,774	5,506,758	5,546,743	5,586,727	5,626,712	5,666,697	5,706,682	5,746,667
Cumulative Capacity Factor		54.6%	54.6%	54.5%	54.5%	54.5%	54.4%	54.4%	54.4%	54.3%	54.3%	54.3%	54.2%	54.2%	54.2%	54.1%	54.1%
Cumulative fuel input, MMBtu HHV		48,777	49,345	49,891	50,430	50,964	51,499	52,026	52,564	53,091	53,618	54,103	54,573	55,055	55,525	56,004	56,478
Cumulative gross output, kWh		3,763,710	3,807,253	3,848,553	3,888,527	3,928,512	3,968,497	4,007,912	4,046,846	4,085,750	4,124,664	4,163,547	4,202,443	4,241,312	4,280,177	4,319,042	4,357,912
Cumulative heat rate, Btu/kWe gross LHV		11,666	11,667	11,670	11,675	11,678	11,682	11,685	11,689	11,692	11,696	11,690	11,682	11,676	11,667	11,661	11,654
Cumulative heat rate, Btu/kWe gross HHV		12,960	12,961	12,964	12,969	12,973	12,977	12,981	12,985	12,988	12,992	12,986	12,977	12,970	12,961	12,954	12,946
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 5/1/2018	Wednesday 5/2/2018	Thursday 5/3/2018	Friday 5/4/2018	Saturday 5/5/2018	Sunday 5/6/2018	Monday 5/7/2018	Tuesday 5/8/2018	Wednesday 5/9/2018	Thursday 5/10/2018	Friday 5/11/2018	Saturday 5/12/2018	Sunday 5/13/2018	Monday 5/14/2018	Tuesday 5/15/2018	Wednesday 5/16/2018
Hour																	
1		1,577	1,747	1,727	1,575	1,578	1,578	1,574	1,575	1,646	1,579	1,573	1,567	1,567	1,566	1,574	1,572
2		1,575	1,727	1,722	1,575	1,741	1,580	1,608	1,575	1,581	1,579	1,572	1,567	1,565	1,565	1,574	1,574
3		1,576	1,767	1,727	1,573	1,589	1,578	1,574	1,571	1,593	1,580	1,573	1,567	1,564	1,566	1,574	1,575
4		1,576	1,727	1,724	1,574	1,577	1,579	1,573	1,572	1,646	1,579	1,572	1,567	1,566	1,567	1,574	1,573
5		1,574	1,728	1,723	1,577	1,624	1,581	1,577	1,573	1,587	1,579	1,572	1,567	1,565	1,565	1,572	1,575
6		1,576	1,731	1,727	1,577	1,622	1,578	1,573	1,572	1,587	1,580	1,573	1,567	1,563	1,566	1,576	1,572
7		1,576	1,726	1,722	1,578	1,579	1,581	1,573	1,573	1,589	1,580	1,572	1,567	1,564	1,570	1,573	1,573
8		1,575	1,729	1,725	1,576	1,594	1,581	1,577	1,573	1,580	1,576	1,571	1,568	1,569	1,569	1,575	1,572
9		1,577	1,724	1,717	1,681	1,617	1,580	1,564	1,545	1,568	1,564	1,564	1,568	1,567	1,560	1,575	1,568
10		1,575	1,720	1,665	1,670	1,577	1,572	1,567	1,326	1,570	1,434	1,561	1,568	1,572	1,565	1,567	1,567
11		1,576	1,712	1,627	1,698	1,579	1,571	1,629	1,320	1,562	1,568	1,560	1,570	1,566	1,565	1,567	1,567
12		1,573	1,706	1,588	1,428	1,571	1,579	1,544	1,560	1,564	1,566	1,560	1,572	1,568	1,568	1,566	1,569
13		1,572	1,734	1,566	1,689	1,568	1,618	1,434	1,562	1,566	1,560	1,563	1,564	1,571	1,566	1,562	1,568
14		1,573	1,762	1,732	1,621	1,574	1,612	1,564	1,691	1,238	1,560	1,563	1,569	1,572	1,568	1,562	1,567
15		1,576	1,708	1,560	1,562	1,576	1,581	1,565	1,791	1,564	1,565	1,561	1,571	1,570	1,565	1,563	1,568
16		1,714	1,767	1,564	1,730	1,574	1,602	1,565	1,792	1,566	1,568	1,566	1,566	1,570	1,568	1,563	1,569
17		1,812	1,744	1,572	1,654	1,578	1,648	1,572	1,797	1,575	1,572	1,575	1,567	1,567	1,574	1,563	1,574
18		1,799	1,721	1,573	1,577	1,578	1,581	1,578	1,737	1,578	1,573	1,574	1,572	1,573	1,574	1,569	1,575
19		1,815	1,758	1,571	1,669	1,578	1,581	1,577	1,653	1,580	1,576	1,573	1,568	1,566	1,573	1,574	1,574
20		1,728	1,723	1,574	1,692	1,581	1,672	1,577	1,580	1,579	1,573	1,573	1,566	1,566	1,575	1,573	1,575
21		1,781	1,722	1,576	1,579	1,577	1,582	1,574	1,655	1,579	1,575	1,574	1,568	1,568	1,574	1,573	1,574
22		1,764	1,727	1,577	1,626	1,578	1,583	1,573	1,645	1,579	1,573	1,575	1,570	1,565	1,574	1,575	1,573
23		1,728	1,720	1,575	1,724	1,582	1,620	1,575	1,582	1,579	1,572	1,575	1,565	1,565	1,573	1,573	1,572
24		1,773	1,726	1,574	1,579	1,578	1,584	1,570	1,619	1,580	1,574	1,571	1,566	1,568	1,573	1,574	1,575
TOTAL		39,541	41,556	39,408	38,784	38,170	38,202	37,657	38,439	37,636	37,605	37,666	37,627	37,621	37,649	37,691	37,721
Cumulative Output Sold, kWh		39,541	81,097	120,505	159,289	197,459	235,661	273,318	311,757	349,393	386,998	424,664	462,291	499,912	537,561	575,252	612,973
Transformer and line efficiency		99.8%	99.8%	100.1%	101.5%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.6%	100.0%	100.0%	100.1%	99.9%	100.0%
Hourly average		1,648	1,732	1,642	1,616	1,590	1,592	1,569	1,602	1,568	1,567	1,569	1,568	1,568	1,569	1,570	1,572

MAY 2018																		
	Thursday 5/17/2018	Friday 5/18/2018	Saturday 5/19/2018	Sunday 5/20/2018	Monday 5/21/2018	Tuesday 5/22/2018	Wednesday 5/23/2018	Thursday 5/24/2018	Friday 5/25/2018	Saturday 5/26/2018	Sunday 5/27/2018	Monday 5/28/2018	Tuesday 5/29/2018	Wednesday 5/30/2018	Thursday 5/31/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,003	1,003	994	1,003	999	978	1,014	1,007	971	450	450	650	930	948	953	30,413	1,429	28,984
LFG and Biogas Flow to the Engine	483	487	483	487	482	483	531	479	489	237	241	355	522	521	520	15,026	1,012	14,014
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7%	93%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,003	1,003	994	1,003	999	978	1,014	1,007	971	450	450	650	930	948	953	30,413	-	-
LFG and Biogas Total Flow (MMBT	483	487	483	487	482	483	531	479	489	237	241	355	522	521	520	15,026	-	-
Average Methane Content (%)	47.6	48.0	48.0	48.0	47.7	48.8	51.7	47.0	49.8	52.0	53.0	54.0	55.5	54.3	53.9	48.8	-	-
Engine 1 Hours	24	11	-	-	-	-	13	14	22	-	-	11	24	24	24	551	-	-
Engine 2 Hours	-	14	24	24	24	24	24	16	-	-	-	2	-	-	-	367	-	-
Engine 3 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	744	-	-
Generator 1 Power Output (kWhr)	19,724	9,100	-	-	-	-	6,616	9,016	18,344	-	-	7,728	19,160	19,428	19,732	387,918	-	-
Generator 2 Power Output (kWhr)	-	10,628	19,504	19,504	19,500	19,500	16,728	11,180	-	-	-	236	-	-	-	239,136	-	-
Generator 3 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Generator 4 Power Output (kWhr)	19,684	19,044	19,700	19,700	19,688	19,696	16,632	17,300	19,688	19,684	19,660	19,700	19,688	19,692	19,692	548,519	-	-
Gross Power Output (kWhr)	39,272	38,717	39,240	39,219	39,111	39,146	39,979	37,434	37,932	19,500	19,436	27,556	38,813	39,103	39,410	1,173,891	-	-
Net Power Output (kWhr)	37,704	37,280	37,996	37,940	37,776	37,884	38,496	36,000	36,552	18,588	18,608	26,592	37,568	37,840	38,152	1,127,917	-	-
Power Sold as metered by NStar, (	37,689	37,272	37,978	37,902	37,730	37,858	38,437	35,981	36,569	18,609	18,644	26,574	37,541	37,804	38,120	1,127,681	CRMCB inplant	-
Offgrid RECs (kWhr)	1,568	1,436	1,245	1,279	1,334	1,261	1,483	1,435	1,380	912	828	964	1,245	1,263	1,258	45,972	7,647	-
Calculated Performance Results																		17%
Daily																		of total in-plant power
Power output (kW average whe																		
Generator 1	822	827	-	-	-	-	509	644	834	-	-	703	798	810	822			
Generator 2	-	759	813	813	813	813	697	699	-	-	-	118	-	-	-			
Generator 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 4	820	794	821	821	820	821	693	721	820	820	819	821	820	821	821			
Power output (kW average ove																		
Facility Gross	1,636	1,613	1,635	1,634	1,630	1,631	1,666	1,560	1,581	813	810	1,148	1,617	1,629	1,642			
Facility Net	1,571	1,553	1,583	1,581	1,574	1,579	1,604	1,500	1,523	775	775	1,108	1,565	1,577	1,590			
In-plant load	65	60	52	53	56	53	62	60	58	38	35	40	52	53	52			
Daily availability factor																		
Facility	50%	51%	50%	50%	50%	50%	64%	56%	48%	25%	25%	39%	50%	50%	50%			
Engine 1	100%	46%	0%	0%	0%	0%	54%	58%	92%	0%	0%	46%	100%	100%	100%			
Engine 2	0%	58%	100%	100%	100%	100%	100%	67%	0%	0%	0%	8%	0%	0%	0%			
Engine 3	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%			
Daily capacity factor																		
Facility	50%	49%	50%	50%	49%	49%	50%	47%	48%	25%	25%	35%	49%	49%	50%			
Engine 1	100%	100%	0%	0%	0%	0%	62%	78%	101%	0%	0%	85%	97%	98%	100%			
Engine 2	0%	92%	99%	99%	98%	98%	84%	85%	0%	0%	0%	14%	0%	0%	0%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	99%	96%	99%	99%	99%	99%	84%	87%	99%	99%	99%	99%	99%	99%	99%			
Cumulative by engine																		
Engine operating run hours in ti																		
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720			
Engine 1	408	419	419	419	419	419	432	446	468	468	468	479	503	527	527			
Engine 2	215	229	253	277	301	325	349	365	365	365	365	367	367	367	367			
Engine 3	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0			
Engine 4	408	432	456	480	504	528	552	576	600	624	648	672	696	720	720			
Engine operating run hours tota																		
Engine 1	99,135	99,146	99,146	99,146	99,146	99,146	99,159	99,173	99,195	99,195	99,195	99,206	99,230	99,254	99,254			
Engine 2	93,188	93,202	93,226	93,250	93,274	93,298	93,322	93,338	93,338	93,338	93,338	93,340	93,340	93,340	93,340			
Engine 3	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465			
Engine 4	92,843	92,867	92,891	92,915	92,939	92,963	92,987	93,011	93,035	93,059	93,083	93,107	93,131	93,155	93,155			
Cumulative availability, %																		
Engine 1	100%	97%	92%	87%	83%	79%	78%	77%	78%	75%	72%	71%	72%	73%	73%			
Engine 2	53%	53%	55%	58%	60%	62%	63%	63%	61%	58%	56%	55%	53%	51%	51%			
Engine 3	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%			
Engine cumulative gross output																		
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750	24,750			
Engine 1	11,616	12,444	12,444	12,444	12,444	12,444	12,953	13,597	14,430	14,430	14,430	15,133	15,931	16,741	16,753			
Engine 2	5,761	6,520	7,333	8,145	8,958	9,770	10,467	11,166	11,166	11,166	11,166	11,284	11,284	11,284	11,284			
Engine 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 4	11,623	12,417	13,237	14,058	14,879	15,699	16,392	17,113	17,933	18,754	19,573	20,394	21,214	22,034	22,034			
Cumulative capacity factor, %																		
Engine 1	83%	84%	79%	75%	72%	69%	68%	69%	70%	67%	65%	66%	67%	68%	68%			
Engine 2	41%	44%	47%	49%	52%	54%	55%	56%	54%	52%	50%	49%	47%	46%	46%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	83%	84%	84%	85%	86%	86%	86%	86%	87%	87%	88%	88%	89%	89%	89%			

	Thursday 5/17/2018	Friday 5/18/2018	Saturday 5/19/2018	Sunday 5/20/2018	Monday 5/21/2018	Tuesday 5/22/2018	Wednesday 5/23/2018	Thursday 5/24/2018	Friday 5/25/2018	Saturday 5/26/2018	Sunday 5/27/2018	Monday 5/28/2018	Tuesday 5/29/2018	Wednesday 5/30/2018	Thursday 5/31/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine run time, hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run time, hours	1,031	1,080	1,128	1,176	1,224	1,272	1,333	1,387	1,433	1,481	1,518	1,566	1,614	1,614	1,614			
Cumulative Availability, %	63.2%	62.5%	61.8%	61.3%	60.7%	60.2%	60.4%	60.2%	59.7%	58.4%	57.1%	56.5%	56.3%	56.0%	56.0%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	679,295	718,012	757,252	796,471	835,582	874,728	914,707	952,141	990,073	1,009,573	1,029,009	1,056,565	1,095,378	1,134,481	1,134,788			
Cumulative Capacity Factor	50.5%	50.4%	50.3%	50.3%	50.2%	50.2%	50.2%	50.1%	50.0%	49.0%	48.1%	47.6%	47.7%	47.7%	47.8%			
Cumulative fuel input, MMBtu	8,708	9,195	9,678	10,165	10,647	11,130	11,661	12,140	12,630	12,866	13,108	13,463	13,985	14,506	14,505			
Cumulative gross output, kWh	679,295	718,012	757,252	796,471	835,582	874,728	914,707	952,141	990,073	1,009,573	1,029,009	1,056,565	1,095,378	1,134,481	1,134,788			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,081	11,332	11,083	11,180	11,089	11,114	11,950	11,521	11,614	10,932	11,181	11,604	12,116	11,989	11,869			
Daily heat rate, Btu/kWe gross	12,309	12,589	12,311	12,420	12,319	12,346	13,274	12,799	12,902	12,144	12,420	12,890	13,459	13,319	13,184			
Cumulative heat rate, Btu/kWe	11,539	11,528	11,505	11,489	11,470	11,454	11,476	11,478	11,483	11,472	11,467	11,470	11,493	11,510	11,506			
Cumulative heat rate, Btu/kWe	12,819	12,806	12,781	12,763	12,742	12,724	12,748	12,750	12,756	12,744	12,738	12,742	12,768	12,787	12,782			
Cumulative by Facility starting C																		
Max cumulative available engine run time, hours	12,956	13,052	13,148	13,244	13,340	13,436	13,532	13,628	13,724	13,820	13,916	14,012	14,108	14,204	14,204			
Actual cumulative engine run time, hours	9,144	9,193	9,241	9,289	9,337	9,385	9,446	9,500	9,546	9,570	9,594	9,631	9,679	9,727	9,727			
Cumulative Availability, %	70.6%	70.4%	70.3%	70.1%	70.0%	69.8%	69.8%	69.7%	69.6%	69.2%	68.9%	68.7%	68.6%	68.5%	68.5%			
Max cumulative gross output, kWh	10,692,000	10,771,200	10,850,400	10,929,600	11,008,800	11,088,000	11,167,200	11,246,400	11,325,600	11,404,800	11,484,000	11,563,200	11,642,400	11,721,600	11,721,600			
Actual cumulative gross output, kWh	5,779,991	5,818,708	5,857,948	5,897,167	5,936,278	5,975,424	6,015,403	6,052,837	6,090,769	6,110,269	6,129,705	6,157,261	6,196,074	6,235,177	6,235,484			
Cumulative Capacity Factor	54.1%	54.0%	54.0%	54.0%	53.9%	53.9%	53.9%	53.8%	53.8%	53.6%	53.4%	53.2%	53.2%	53.2%	53.2%			
Cumulative fuel input, MMBtu	56,961	57,448	57,932	58,419	58,900	59,384	59,914	60,394	60,883	61,120	61,361	61,716	62,239	62,760	62,758			
Cumulative gross output, kWh	4,401,757	4,440,474	4,479,714	4,518,933	4,558,044	4,597,190	4,637,169	4,674,603	4,712,535	4,732,035	4,751,471	4,779,027	4,817,840	4,856,943	4,857,250			
Cumulative heat rate, Btu/kWe	11,649	11,646	11,641	11,637	11,633	11,628	11,631	11,630	11,630	11,627	11,625	11,625	11,629	11,632	11,631			
Cumulative heat rate, Btu/kWe	12,941	12,937	12,932	12,928	12,922	12,917	12,920	12,919	12,919	12,916	12,914	12,914	12,918	12,922	12,921			
Service																		
Engine 1									Contact on breaker. Detached. No call out.									
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Thursday 5/17/2018	Friday 5/18/2018	Saturday 5/19/2018	Sunday 5/20/2018	Monday 5/21/2018	Tuesday 5/22/2018	Wednesday 5/23/2018	Thursday 5/24/2018	Friday 5/25/2018	Saturday 5/26/2018	Sunday 5/27/2018	Monday 5/28/2018	Tuesday 5/29/2018	Wednesday 5/30/2018	Thursday 5/31/2018	TOTAL		
Hour																		
1	1,574	1,572	1,579	1,581	1,576	1,580	1,584	1,584	1,583	777	779	781	1,572	1,572	1,593			
2	1,573	1,573	1,581	1,580	1,576	1,579	1,583	1,586	1,581	778	778	780	1,572	1,573	1,597			
3	1,574	1,572	1,583	1,581	1,577	1,580	1,584	1,587	1,582	777	779	781	1,573	1,574	1,598			
4	1,574	1,571	1,583	1,581	1,577	1,579	1,583	1,587	1,582	779	776	781	1,572	1,574	1,597			
5	1,573	1,572	1,581	1,580	1,576	1,580	1,582	1,586	1,581	777	773	780	1,572	1,573	1,596			
6	1,574	1,572	1,582	1,580	1,578	1,578	1,583	1,587	1,582	780	774	782	1,572	1,575	1,598			
7	1,574	1,572	1,582	1,580	1,578	1,581	1,583	1,587	1,581	778	776	782	1,572	1,574	1,595			
8	1,575	1,572	1,584	1,581	1,574	1,577	1,578	1,576	1,576	777	775	782	1,569	1,569	1,592			
9	1,572	1,564	1,584	1,581	1,569	1,570	1,573	1,462	1,573	777	776	783	1,564	1,557	1,586			
10	1,567	1,565	1,584	1,577	1,568	1,566	1,574	1,534	1,574	776	776	782	1,559	1,554	1,582			
11	1,568	1,403	1,583	1,575	1,560	1,567	1,572	1,529	1,569	772	777	775	1,554	1,552	1,578			
12	1,566	1,244	1,584	1,582	1,561	1,572	1,572	1,527	1,569	772	777	776	1,555	1,554	1,578			
13	1,567	1,543	1,583	1,581	1,560	1,572	1,746	1,524	1,568	771	779	776	1,554	1,555	1,576			
14	1,566	1,573	1,582	1,580	1,557	1,572	1,754	1,526	1,569	769	776	820	1,551	1,578	1,577			
15	1,566	1,576	1,583	1,580	1,564	1,574	1,571	1,528	1,572	772	778	1,423	1,553	1,579	1,579			
16	1,566	1,577	1,583	1,580	1,568	1,577	1,633	1,529	1,578	773	778	1,611	1,554	1,580	1,580			
17	1,562	1,582	1,582	1,579	1,573	1,581	1,643	1,153	1,577	772	777	1,573	1,560	1,584	1,586			
18	1,570	1,582	1,583	1,580	1,572	1,582	1,591	755	1,581	773	777	1,573	1,562	1,586	1,587			
19	1,572	1,583	1,583	1,580	1,577	1,582	1,581	1,385	1,583	776	777	1,572	1,562	1,586	1,588			
20	1,571	1,582	1,582	1,578	1,575	1,581	1,593	1,581	1,582	775	775	1,572	1,562	1,588	1,589			
21	1,572	1,583	1,583	1,578	1,576	1,580	1,618	1,579	1,582	776	776	1,572	1,563	1,591	1,592			
22	1,572	1,579	1,582	1,576	1,578	1,582	1,586	1,578	1,589	776	777	1,573	1,570	1,593	1,593			
23	1,569	1,579	1,581	1,575	1,580	1,582	1,583	1,578	1,077	776	776	1,571	1,572	1,591	1,590			
24	1,572	1,581	1,581	1,578	1,580	1,584	1,587	1,583	778	780	782	1,573	1,572	1,592	1,593			
TOTAL	37,689	37,272	37,978	37,902	37,730	37,858	38,437	35,981	36,569	18,609	18,644	26,574	37,541	37,804	38,120			
Cumulative Output Sold, kWh	650,662	687,934	725,912	763,814	801,544	839,402	877,839	913,820	950,389	968,998	987,642	1,014,216	1,051,757	1,089,561	1,127,681			
Transformer and line efficiency	100.0%	100.0%	100.0%	99.9%	99.9%	99.9%	99.8%	99.9%	100.0%	100.1%	100.2%	99.9%	99.9%	99.9%	99.9%	0.0%		
Hourly average	1,570	1,553	1,582	1,579	1,572	1,577	1,602	1,499	1,524	775	777	1,107	1,564	1,575	1,588	1,516		

JUNE 2018																		
		Friday 6/1/2018	Saturday 6/2/2018	Sunday 6/3/2018	Monday 6/4/2018	Tuesday 6/5/2018	Wednesday 6/6/2018	Thursday 6/7/2018	Friday 6/8/2018	Saturday 6/9/2018	Sunday 6/10/2018	Monday 6/11/2018	Tuesday 6/12/2018	Wednesday 6/13/2018	Thursday 6/14/2018	Friday 6/15/2018	Saturday 6/16/2018	
LFG and Biogas Flow to the Engines (KSCF)		958	970	978	956	952	955	1,104	1,240	1,205	1,176	1,098	1,054	1,015	1,026	944	961	
LFG and Biogas Flow to the Engines (MMBTU HHV)		506	513	516	509	507	508	548	602	537	500	489	480	480	485	446	476	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		958	970	978	956	952	955	1,104	1,240	1,205	1,176	1,098	1,054	1,015	1,026	944	961	
LFG and Biogas Total Flow (MMBTU HHV)		506	513	516	509	507	508	548	602	537	500	489	480	480	485	446	476	
Average Methane Content (%)		52.2	52.2	52.2	52.6	52.6	52.6	49.0	48.0	44.0	42.0	44.0	45.0	46.7	46.7	46.7	49.0	
Engine 1 Hours		24	24	24	24	24	24	24	24	-	24	24	24	24	24	24	24	
Engine 2 Hours		-	-	-	-	-	1	16	24	-	24	8	-	-	-	-	-	
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4 Hours		24	24	24	24	24	24	24	24	-	24	24	24	24	24	20	24	
Generator 1 Power Output (kW/hr)		19,736	19,736	19,732	19,736	19,732	19,736	17,116	15,596	14,208	13,800	17,628	19,732	19,736	19,736	19,740	19,736	
Generator 2 Power Output (kW/hr)		-	-	-	-	-	-	10,060	15,572	14,664	13,812	4,424	-	-	-	-	-	
Generator 3 Power Output (kW/hr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4 Power Output (kW/hr)		19,692	19,700	19,696	19,688	19,700	19,008	17,852	16,616	14,852	13,764	17,648	19,680	19,608	19,676	16,228	19,692	
Gross Power Output (kW/hr)		39,429	39,484	39,431	39,401	39,452	38,752	45,051	47,837	43,879	41,258	39,580	39,305	39,250	39,302	35,955	39,414	
Net Power Output (kW/hr)		38,148	38,196	38,272	38,228	38,224	37,524	43,564	46,088	41,928	39,593	38,060	37,880	37,812	37,872	34,780	38,140	
Power Sold as metered by NStar, (kW/hr)		38,100	38,146	38,250	38,214	38,199	37,507	43,468	45,972	41,865	39,639	38,075	37,893	37,820	37,871	34,772	38,101	
Offgrid RECs (kW/hr)		1,282	1,288	1,159	1,173	1,228	1,228	1,488	1,750	1,750	1,665	1,520	1,426	1,438	1,431	1,174	1,274	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1			822	822		822	822	713	650	-	575	735	822	822	822	823	822	
Generator 2		-	-	-	-	-	-	629	649	-	576	553	-	-	-	-	-	
Generator 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4		821	821	821	820	821	792	744	692	-	574	735	820	817	820	811	821	
Power output (kW average over 24-hrs)																		
Facility Gross		1,643	1,645	1,643	1,642	1,644	1,615	1,877	1,993	1,820	1,719	1,649	1,638	1,635	1,638	1,498	1,642	
Facility Net		1,590	1,592	1,595	1,593	1,593	1,564	1,815	1,920	1,747	1,650	1,586	1,578	1,576	1,578	1,449	1,589	
In-plant load		53	54	48	49	51	51	62	73	73	69	63	59	60	60	49	53	
Daily availability factor																		
Facility		50%	50%	50%	50%	50%	51%	67%	75%	0%	75%	58%	50%	50%	50%	46%	50%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	0%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		0%	0%	0%	0%	0%	4%	67%	100%	0%	100%	33%	0%	0%	0%	0%	0%	
Engine 3		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%	0%	100%	100%	100%	100%	100%	83%	100%	
Daily capacity factor																		
Facility		50%	50%	50%	50%	50%	49%	57%	60%	55%	52%	50%	50%	50%	50%	45%	50%	
Engine 1		100%	100%	100%	100%	100%	100%	86%	79%	0%	70%	89%	100%	100%	100%	100%	100%	
Engine 2		0%	0%	0%	0%	0%	0%	76%	79%	0%	70%	67%	0%	0%	0%	0%	0%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		99%	99%	99%	99%	99%	96%	90%	84%	0%	70%	89%	99%	99%	99%	98%	99%	
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	192	216	240	264	288	312	336	360	
Engine 2		0	0	0	0	0	1	17	41	41	65	73	73	73	73	73	73	
Engine 3		0	0	0	0	0	0	0	0	0	-	-	-	-	-	-	-	
Engine 4		24	48	72	96	120	144	168	192	192	216	240	264	288	312	332	356	
Engine operating run hours total from 0 hours																		
Engine 1		99,254	99,278	99,302	99,326	99,350	99,374	99,398	99,422	99,446	99,446	99,470	99,494	99,518	99,542	99,566	99,590	
Engine 2		93,340	93,340	93,340	93,340	93,340	93,341	93,357	93,381	93,381	93,381	93,405	93,413	93,413	93,413	93,413	93,413	
Engine 3		95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	
Engine 4		93,155	93,179	93,203	93,227	93,251	93,275	93,299	93,323	93,347	93,347	93,371	93,395	93,419	93,443	93,467	93,511	
Cumulative availability, %	June, 2018 @ 00:00 hours																	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	89%	90%	91%	92%	92%	93%	93%	94%	
Engine 2		0%	0%	0%	0%	0%	0%	1%	10%	19%	27%	28%	25%	23%	22%	20%	19%	
Engine 3		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%	89%	90%	91%	92%	92%	93%	92%	93%	
Engine cumulative gross output, kW/hr																		
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		822	1,645	2,467	3,289	4,111	4,934	5,647	6,297	6,297	6,872	7,606	8,428	9,251	10,073	10,896	11,718	
Engine 2		-	-	-	-	-	-	629	1,278	1,278	1,853	2,406	2,406	2,406	2,406	2,406	2,406	
Engine 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4		821	1,641	2,462	3,282	4,103	4,895	5,639	6,331	6,331	6,905	7,640	8,460	9,277	10,097	10,908	11,729	
Cumulative capacity factor, %																		
Engine 1		100%	100%	100%	100%	100%	100%	98%	95%	85%	83%	84%	85%	86%	87%	88%	89%	
Engine 2		0%	0%	0%	0%	0%	0%	11%	19%	27%	22%	24%	24%	21%	19%	18%	18%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		99%	99%	99%	99%	99%	99%	98%	96%	85%	84%	84%	85%	87%	87%	88%	89%	

		Friday 6/1/2018	Saturday 6/2/2018	Sunday 6/3/2018	Monday 6/4/2018	Tuesday 6/5/2018	Wednesday 6/6/2018	Thursday 6/7/2018	Friday 6/8/2018	Saturday 6/9/2018	Sunday 6/10/2018	Monday 6/11/2018	Tuesday 6/12/2018	Wednesday 6/13/2018	Thursday 6/14/2018	Friday 6/15/2018	Saturday 6/16/2018
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		48	96	144	192	240	289	353	425	497	553	601	649	697	741	789	837
Cumulative Availability, %		50.0%	50.0%	50.0%	50.0%	50.0%	50.2%	52.5%	55.3%	49.2%	51.8%	52.4%	52.2%	52.0%	51.9%	51.5%	51.4%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		39,429	78,913	118,344	157,745	197,197	235,949	281,000	328,837	372,516	413,774	453,354	492,659	531,909	571,211	607,166	646,580
Cumulative Capacity Factor		49.8%	49.8%	49.8%	49.8%	49.8%	49.7%	50.7%	51.9%	52.3%	52.2%	52.0%	51.8%	51.7%	51.5%	51.1%	51.0%
Cumulative fuel input, MMBtu HHV		506	1,019	1,535	2,044	2,551	3,059	3,607	4,209	4,745	5,245	5,734	6,214	6,694	7,179	7,625	8,101
Cumulative gross output, kWhr		39,429	78,913	118,344	157,745	197,197	235,949	281,000	328,837	372,516	413,774	453,354	492,659	531,909	571,211	607,166	646,580
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,552	11,687	11,789	11,629	11,562	11,805	10,942	11,330	11,059	10,905	11,122	10,993	11,006	11,102	11,174	10,878
Daily heat rate, Btu/kWe gross HHV		12,833	12,982	13,096	12,918	12,843	13,114	12,155	12,586	12,285	12,114	12,355	12,212	12,227	12,333	12,413	12,085
Cumulative heat rate, Btu/kWe gross LHV		11,552	11,620	11,676	11,664	11,644	11,670	11,554	11,521	11,467	11,411	11,386	11,354	11,329	11,313	11,305	11,279
Cumulative heat rate, Btu/kWe gross HHV		12,833	12,908	12,971	12,958	12,935	12,964	12,835	12,798	12,738	12,676	12,648	12,613	12,585	12,567	12,558	12,529
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		14,300	14,396	14,492	14,588	14,684	14,780	14,876	14,972	15,068	15,164	15,260	15,356	15,452	15,548	15,644	15,740
Actual cumulative engine run hours		9,775	9,823	9,871	9,919	9,967	10,016	10,080	10,152	10,152	10,224	10,280	10,328	10,376	10,424	10,468	10,516
Cumulative Availability, %		68.4%	68.2%	68.1%	68.0%	67.9%	67.8%	67.8%	67.8%	67.4%	67.4%	67.4%	67.3%	67.1%	67.0%	66.9%	66.8%
Max cumulative gross output, kWhr		11,800,800	11,880,000	11,959,200	12,038,400	12,117,600	12,196,800	12,276,000	12,355,200	12,434,400	12,513,600	12,592,800	12,672,000	12,751,200	12,830,400	12,909,600	12,988,800
Actual cumulative gross output, kWhr		6,274,913	6,314,397	6,353,828	6,393,229	6,432,681	6,471,433	6,516,484	6,564,321	6,608,000	6,649,258	6,688,838	6,728,143	6,767,393	6,806,695	6,842,650	6,882,064
Cumulative Capacity Factor		53.2%	53.2%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.0%	53.0%
Cumulative fuel input, MMBtu HHV		63,264	63,777	64,293	64,802	65,309	65,817	66,365	66,967	67,504	68,003	68,492	68,972	69,452	69,937	70,383	70,860
Cumulative gross output, kWhr		4,896,679	4,936,163	4,975,594	5,014,995	5,054,447	5,093,199	5,138,250	5,186,087	5,229,766	5,271,024	5,310,604	5,349,909	5,389,159	5,428,461	5,464,416	5,503,830
Cumulative heat rate, Btu/kWe gross LHV		11,630	11,631	11,632	11,632	11,632	11,633	11,627	11,624	11,619	11,614	11,610	11,606	11,601	11,598	11,595	11,590
Cumulative heat rate, Btu/kWe gross HHV		12,920	12,920	12,922	12,922	12,921	12,923	12,916	12,913	12,908	12,901	12,897	12,892	12,887	12,883	12,880	12,875
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		Friday 6/1/2018	Saturday 6/2/2018	Sunday 6/3/2018	Monday 6/4/2018	Tuesday 6/5/2018	Wednesday 6/6/2018	Thursday 6/7/2018	Friday 6/8/2018	Saturday 6/9/2018	Sunday 6/10/2018	Monday 6/11/2018	Tuesday 6/12/2018	Wednesday 6/13/2018	Thursday 6/14/2018	Friday 6/15/2018	Saturday 6/16/2018
Hour																	
1		1,591	1,589	1,595	1,594	1,597	1,594	1,594	2,053	1,918	1,654	1,654	1,586	1,582	1,581	1,585	1,597
2		1,594	1,587	1,594	1,593	1,596	1,594	1,593	1,964	1,901	1,653	1,652	1,586	1,579	1,580	1,585	1,596
3		1,595	1,591	1,596	1,594	1,597	1,595	1,595	1,958	1,868	1,654	1,652	1,584	1,581	1,581	1,585	1,594
4		1,595	1,593	1,596	1,593	1,597	1,594	1,595	1,958	1,871	1,654	1,638	1,587	1,581	1,581	1,585	1,598
5		1,594	1,594	1,595	1,593	1,595	1,594	1,591	1,956	1,869	1,653	1,627	1,586	1,581	1,579	1,581	1,598
6		1,592	1,595	1,597	1,594	1,597	1,595	1,592	1,957	1,870	1,654	1,630	1,588	1,581	1,581	1,581	1,594
7		1,596	1,595	1,596	1,594	1,599	1,595	1,594	1,957	1,823	1,654	1,619	1,587	1,582	1,582	1,582	1,595
8		1,592	1,590	1,594	1,593	1,594	1,592	1,590	1,952	1,797	1,652	1,619	1,585	1,577	1,577	1,577	1,588
9		1,586	1,589	1,595	1,585	1,590	1,582	1,706	1,836	1,796	1,652	1,435	1,571	1,566	1,568	991	1,589
10		1,586	1,588	1,592	1,586	1,587	1,584	1,713	1,825	1,793	1,648	1,575	1,573	1,513	1,571	1,593	1,586
11		1,582	1,587	1,594	1,586	1,585	991	1,658	1,823	1,778	1,646	1,573	1,571	1,573	1,571	1,591	1,584
12		1,579	1,587	1,593	1,589	1,583	1,500	1,676	1,811	1,737	1,651	1,571	1,569	1,574	1,572	1,588	1,583
13		1,581	1,587	1,592	1,589	1,585	1,586	1,702	1,856	1,687	1,651	1,570	1,570	1,572	1,574	1,588	1,582
14		1,579	1,586	1,590	1,589	1,582	1,584	1,702	1,899	1,647	1,650	1,570	1,568	1,573	1,572	1,586	1,580
15		1,581	1,587	1,592	1,589	1,584	1,585	1,816	1,909	1,649	1,651	1,573	1,567	1,576	1,574	1,585	1,581
16		1,581	1,587	1,592	1,582	1,586	1,587	1,958	1,913	1,649	1,651	1,572	1,570	1,577	1,575	1,589	1,581
17		1,585	1,586	1,592	1,596	1,593	1,592	2,139	1,916	1,648	1,651	1,579	1,578	1,582	1,579	1,595	1,580
18		1,585	1,588	1,595	1,597	1,594	1,596	2,144	1,917	1,649	1,653	1,582	1,581	1,583	1,580	1,597	1,581
19		1,585	1,587	1,595	1,597	1,594	1,596	2,146	1,917	1,649	1,652	1,582	1,581	1,582	1,581	1,597	1,583
20		1,587	1,586	1,590	1,595	1,592	1,594	2,148	1,915	1,652	1,651	1,580	1,581	1,581	1,580	1,595	1,584
21		1,587	1,588	1,592	1,595	1,594	1,595	2,058	1,919	1,654	1,652	1,577	1,581	1,581	1,581	1,597	1,585
22		1,587	1,591	1,595	1,594	1,595	1,595	2,053	1,921	1,653	1,652	1,580	1,581	1,581	1,582	1,597	1,585
23		1,589	1,593	1,593	1,592	1,592	1,593	2,052	1,920	1,652	1,650	1,581	1,580	1,581	1,584	1,594	1,588
24		1,591	1,595	1,595	1,595	1,591	1,594	2,053	1,920	1,655	1,650	1,584	1,582	1,581	1,585	1,596	1,589
TOTAL		38,100	38,146	38,250	38,214	38,199	37,507	43,468	45,972	41,865	39,639	38,075	37,893	37,820	37,871	34,772	38,101
Cumulative Output Sold, kWhr		38,100	76,246	114,496	152,710	190,909	228,416	271,884	317,856	359,721	399,360	437,435	475,328	513,148	551,019	585,791	623,892
Transformer and line efficiency		99.9%	99.9%	99.9%	100.0%	99.9%	100.0%	99.8%	99.7%	99.8%	100.1%	100.0%	100.0%	100.0%	100.0%	100.0%	99.9%
Hourly average		1,588	1,589	1,594	1,592	1,592	1,563	1,811	1,916	1,744	1,652	1,586	1,579	1,576	1,578	1,449	1,588

JUNE 2018																	
	Sunday 6/17/2018	Monday 6/18/2018	Tuesday 6/19/2018	Wednesday 6/20/2018	Thursday 6/21/2018	Friday 6/22/2018	Saturday 6/23/2018	Sunday 6/24/2018	Monday 6/25/2018	Tuesday 6/26/2018	Wednesday 6/27/2018	Thursday 6/28/2018	Friday 6/29/2018	Saturday 6/30/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	999	989	975	956	943	975	980	959	995	965	1,043	1,125	1,108	1,105	30,709	1,478	29,232
LFG and Biogas Flow to the Engine	486	481	478	491	484	492	498	484	496	482	527	568	565	555	15,186	1,011	14,175
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.7%	93%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
LFG and Biogas Total Flow (KSCF)	999	989	975	956	943	975	980	959	995	965	1,043	1,125	1,108	1,105	30,709		
LFG and Biogas Total Flow (MMBT	486	481	478	491	484	492	498	484	496	482	527	568	565	555	15,186		
Average Methane Content (%)	48.0	48.0	48.5	50.8	50.8	49.8	50.2	49.9	49.2	49.3	49.9	50.3	49.9	50.3	48.9		
Engine 1 Hours	24	24	24	24	23	24	24	24	24	24	24	24	24	24	695		
Engine 2 Hours	-	-	-	-	-	-	-	-	-	-	11	24	24	24	156		
Engine 3 Hours	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	24	692		
Generator 1 Power Output (kWhr)	19,736	19,740	19,736	19,740	18,488	18,880	19,736	19,736	19,740	19,732	17,768	14,424	14,420	14,428	551,740		
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	6,152	13,824	13,828	12,680	105,016		
Generator 3 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Generator 4 Power Output (kWhr)	19,684	19,692	19,692	19,676	19,676	19,220	19,696	19,684	19,684	19,680	18,308	16,744	14,600	14,388	553,524		
Gross Power Output (kWhr)	39,384	39,401	39,395	39,359	38,103	38,086	39,396	39,319	39,336	39,349	42,263	45,076	42,945	41,554	1,209,546		
Net Power Output (kWhr)	38,040	38,032	38,056	38,048	36,784	36,764	38,152	38,016	37,972	38,024	40,815	43,440	41,268	39,924	1,167,644		
Power Sold as metered by NStar, (l	37,985	37,988	38,018	37,969	36,741	36,739	38,151	38,038	37,969	37,985	40,848	43,353	41,196	39,837	1,166,709	CRMCB Inplant	
Offgrid RECs (kWhr)	1,344	1,369	1,339	1,311	1,320	1,321	1,244	1,303	1,364	1,325	1,448	1,636	1,677	1,630	41,905	6,743	
Calculated Performance Results																	
Daily																	
Power output (kW average whe																	16%
Generator 1	822	823	822	823	804	787	822	822	823	822	740	601	601	601		of total in-plant	
Generator 2	-	-	-	-	-	-	-	-	-	-	559	576	576	528		power	
Generator 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Generator 4	820	821	821	820	820	801	821	820	820	820	763	698	608	600			
Power output (kW average ove																	
Facility Gross	1,641	1,642	1,641	1,640	1,588	1,587	1,642	1,638	1,639	1,640	1,761	1,878	1,789	1,731			
Facility Net	1,585	1,585	1,586	1,585	1,533	1,532	1,590	1,584	1,582	1,584	1,701	1,810	1,720	1,664			
In-plant load	56	57	56	55	55	55	52	54	57	55	60	68	70	68			
Daily availability factor																	
Facility	50%	50%	50%	50%	49%	50%	50%	50%	50%	50%	61%	75%	75%	75%			
Engine 1	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	46%	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%	100%	100%	100%	100%			
Daily capacity factor																	
Facility	50%	50%	50%	50%	48%	48%	50%	50%	50%	50%	53%	57%	54%	52%			
Engine 1	100%	100%	100%	100%	97%	95%	100%	100%	100%	100%	90%	73%	73%	73%			
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	68%	70%	70%	64%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	99%	99%	99%	99%	99%	97%	99%	99%	99%	99%	92%	85%	74%	73%			
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	384	408	432	456	479	503	527	551	575	599	623	647	671	695			
Engine 2	73	73	73	73	73	73	73	73	73	73	84	108	132	156			
Engine 3	-	0	0	0	0	0	0	0	0	0	0	0	0	0			
Engine 4	380	404	428	452	476	500	524	548	572	596	620	644	668	692			
Engine operating run hours tota																	
Engine 1	99,638	99,662	99,686	99,710	99,733	99,757	99,781	99,805	99,829	99,853	99,877	99,901	99,925	99,949			
Engine 2	93,413	93,413	93,413	93,413	93,413	93,413	93,413	93,413	93,413	93,413	93,424	93,448	93,472	93,496			
Engine 3	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465			
Engine 4	93,535	93,559	93,583	93,607	93,631	93,655	93,679	93,703	93,727	93,751	93,775	93,799	93,823	93,847			
Cumulative availability, %																	
Engine 1	94%	94%	95%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	97%			
Engine 2	18%	17%	16%	15%	14%	14%	13%	13%	12%	13%	13%	16%	19%	22%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	93%	94%	94%	94%	94%	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			
Engine 1	12,540	13,363	14,185	15,008	15,811	16,598	17,420	18,243	19,065	19,887	20,628	21,229	21,829	22,431			
Engine 2	2,406	2,406	2,406	2,406	2,406	2,406	2,406	2,406	2,406	2,406	2,965	3,541	4,118	4,646			
Engine 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
Engine 4	12,549	13,370	14,190	15,010	15,830	16,631	17,451	18,271	19,092	19,912	20,674	21,372	21,980	22,580			
Cumulative capacity factor, %																	
Engine 1	89%	90%	90%	91%	91%	91%	92%	92%	92%	93%	93%	92%	91%	91%			
Engine 2	17%	16%	15%	15%	14%	13%	13%	12%	11%	13%	13%	15%	17%	19%			
Engine 3	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 4	89%	90%	91%	91%	91%	92%	92%	93%	93%	93%	93%	93%	92%	91%			

	Sunday 6/17/2018	Monday 6/18/2018	Tuesday 6/19/2018	Wednesday 6/20/2018	Thursday 6/21/2018	Friday 6/22/2018	Saturday 6/23/2018	Sunday 6/24/2018	Monday 6/25/2018	Tuesday 6/26/2018	Wednesday 6/27/2018	Thursday 6/28/2018	Friday 6/29/2018	Saturday 6/30/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine run time, hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880			
Actual cumulative engine run time, hours	837	885	933	981	1,028	1,076	1,124	1,172	1,220	1,268	1,316	1,364	1,412	1,460			
Cumulative Availability, %	51.3%	51.2%	51.2%	51.1%	51.0%	50.9%	50.9%	50.9%	50.8%	50.8%	51.2%	52.0%	52.8%	53.6%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000			
Actual cumulative gross output, kWh	685,964	725,365	764,760	804,119	842,222	880,308	919,704	959,023	998,359	1,037,708	1,079,971	1,125,047	1,167,992	1,209,546			
Cumulative Capacity Factor	50.9%	50.9%	50.8%	50.8%	50.6%	50.5%	50.5%	50.5%	50.4%	50.4%	50.5%	50.7%	50.9%	50.9%			
Cumulative fuel input, MMBtu	8,587	9,067	9,546	10,037	10,521	11,013	11,510	11,994	12,490	12,971	13,498	14,066	14,631	15,186			
Cumulative gross output, kWh	685,964	725,365	764,760	804,119	842,222	880,308	919,704	959,023	998,359	1,037,708	1,079,971	1,125,047	1,167,992	1,209,546			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,097	10,980	10,932	11,232	11,439	11,622	11,372	11,074	11,344	11,018	11,214	11,347	11,835	12,023			
Daily heat rate, Btu/kWe net	12,327	12,198	12,144	12,477	12,708	12,910	12,633	12,302	12,602	12,239	12,458	12,605	13,147	13,356			
Cumulative heat rate, Btu/kWe gross	11,268	11,253	11,236	11,236	11,245	11,282	11,266	11,258	11,262	11,253	11,251	11,255	11,276	11,302			
Cumulative heat rate, Btu/kWe net	12,518	12,500	12,482	12,482	12,492	12,510	12,515	12,507	12,510	12,500	12,498	12,503	12,526	12,555			
Cumulative by Facility starting 6/17/2018																	
Max cumulative available engine run time, hours	15,836	15,932	16,028	16,124	16,220	16,316	16,412	16,508	16,604	16,700	16,796	16,892	16,988	17,084			
Actual cumulative engine run time, hours	10,564	10,612	10,660	10,708	10,755	10,803	10,851	10,899	10,947	10,995	11,054	11,126	11,198	11,270			
Cumulative Availability, %	66.7%	66.6%	66.5%	66.4%	66.3%	66.2%	66.1%	66.0%	65.9%	65.8%	65.8%	65.9%	65.9%	66.0%			
Max cumulative gross output, kWh	13,068,000	13,147,200	13,226,400	13,305,600	13,384,800	13,464,000	13,543,200	13,622,400	13,701,600	13,780,800	13,860,000	13,939,200	14,018,400	14,097,600			
Actual cumulative gross output, kWh	6,921,448	6,960,849	7,000,244	7,039,603	7,077,706	7,115,792	7,155,188	7,194,507	7,233,843	7,273,192	7,315,455	7,360,531	7,403,476	7,445,030			
Cumulative Capacity Factor	53.0%	52.9%	52.9%	52.9%	52.9%	52.9%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%			
Cumulative fuel input, MMBtu	71,345	71,826	72,304	72,795	73,279	73,771	74,269	74,752	75,248	75,730	76,256	76,824	77,389	77,944			
Cumulative gross output, kWh	5,543,214	5,582,615	5,622,010	5,661,369	5,699,472	5,737,558	5,776,954	5,816,273	5,855,609	5,894,958	5,937,221	5,982,297	6,025,242	6,066,796			
Cumulative heat rate, Btu/kWe gross	11,586	11,582	11,577	11,575	11,574	11,574	11,573	11,570	11,568	11,564	11,562	11,560	11,562	11,565			
Cumulative heat rate, Btu/kWe net	12,871	12,866	12,861	12,858	12,857	12,858	12,856	12,852	12,851	12,847	12,844	12,842	12,844	12,848			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports																	
Date	6/17/2018	6/18/2018	6/19/2018	6/20/2018	6/21/2018	6/22/2018	6/23/2018	6/24/2018	6/25/2018	6/26/2018	6/27/2018	6/28/2018	6/29/2018	6/30/2018	TOTAL		
Hour																	
1	1,589	1,589	1,589	1,595	1,590	1,591	1,592	1,586	1,587	1,585	1,593	1,811	1,810	1,711			
2	1,586	1,588	1,588	1,594	1,589	1,591	1,590	1,585	1,585	1,584	1,592	1,812	1,809	1,706			
3	1,588	1,589	1,589	1,595	1,590	1,594	1,592	1,586	1,587	1,589	1,593	1,807	1,737	1,707			
4	1,588	1,589	1,591	1,594	1,590	1,594	1,591	1,586	1,587	1,589	1,593	1,807	1,716	1,711			
5	1,588	1,588	1,589	1,593	1,589	1,592	1,590	1,585	1,586	1,587	1,591	1,809	1,716	1,710			
6	1,589	1,589	1,589	1,595	1,590	1,593	1,591	1,587	1,587	1,588	1,592	1,810	1,711	1,707			
7	1,588	1,590	1,588	1,596	1,590	1,594	1,593	1,587	1,587	1,590	1,592	1,812	1,712	1,708			
8	1,583	1,584	1,584	1,588	1,588	1,591	1,592	1,587	1,586	1,587	1,592	1,810	1,714	1,703			
9	1,582	1,576	1,579	1,578	1,583	916	1,593	1,588	1,580	1,578	1,585	1,799	1,700	1,667			
10	1,577	1,578	1,576	1,576	1,578	988	1,593	1,586	1,569	1,578	1,579	1,802	1,696	1,634			
11	1,574	1,575	1,576	1,574	1,567	1,510	1,592	1,585	1,570	1,575	1,579	1,803	1,699	1,633			
12	1,575	1,572	1,577	1,568	1,566	1,576	1,593	1,585	1,573	1,568	1,573	1,801	1,702	1,632			
13	1,575	1,575	1,578	1,568	1,565	1,577	1,590	1,583	1,574	1,567	1,576	1,801	1,701	1,633			
14	1,574	1,575	1,576	1,567	1,017	1,574	1,586	1,580	1,568	1,564	1,754	1,798	1,700	1,631			
15	1,574	1,577	1,578	1,568	1,355	1,576	1,588	1,581	1,571	1,567	1,891	1,798	1,701	1,631			
16	1,579	1,579	1,578	1,570	1,356	1,577	1,589	1,581	1,578	1,572	1,894	1,800	1,701	1,633			
17	1,581	1,582	1,582	1,573	1,360	1,583	1,587	1,582	1,582	1,580	1,902	1,806	1,707	1,634			
18	1,583	1,584	1,584	1,575	1,552	1,586	1,588	1,584	1,586	1,588	1,904	1,809	1,708	1,633			
19	1,583	1,584	1,585	1,575	1,586	1,587	1,589	1,585	1,587	1,589	1,819	1,810	1,710	1,636			
20	1,583	1,583	1,584	1,581	1,584	1,588	1,587	1,584	1,588	1,590	1,812	1,809	1,711	1,636			
21	1,584	1,585	1,586	1,586	1,587	1,589	1,587	1,586	1,589	1,592	1,810	1,809	1,710	1,635			
22	1,586	1,585	1,588	1,586	1,589	1,591	1,586	1,587	1,589	1,593	1,812	1,811	1,707	1,638			
23	1,587	1,585	1,590	1,585	1,588	1,590	1,586	1,585	1,588	1,592	1,810	1,810	1,710	1,634			
24	1,589	1,587	1,594	1,589	1,592	1,591	1,586	1,587	1,585	1,593	1,810	1,809	1,708	1,634			
TOTAL	37,985	37,988	38,018	37,969	36,741	36,739	38,151	38,038	37,969	37,985	40,848	43,353	41,196	39,837			
Cumulative Output Sold, kWh	661,877	699,865	737,883	775,852	812,593	849,332	887,483	925,521	963,490	1,001,475	1,042,323	1,085,676	1,126,872	1,166,709			
Transformer and line efficiency	99.9%	99.9%	99.9%	99.8%	99.9%	99.9%	100.0%	100.1%	100.0%	99.9%	100.1%	99.8%	99.8%	99.8%	0.0%		
Hourly average	1,583	1,583	1,584	1,582	1,531	1,531	1,590	1,585	1,582	1,583	1,702	1,806	1,717	1,660	1,620		

JULY 2018																		
		Sunday 7/1/2018	Monday 7/2/2018	Tuesday 7/3/2018	Wednesday 7/4/2018	Thursday 7/5/2018	Friday 7/6/2018	Saturday 7/7/2018	Sunday 7/8/2018	Monday 7/9/2018	Tuesday 7/10/2018	Wednesday 7/11/2018	Thursday 7/12/2018	Friday 7/13/2018	Saturday 7/14/2018	Sunday 7/15/2018	Monday 7/16/2018	
LFG and Biogas Flow to the Engines (KSCF)		1,105	1,103	1,103	1,114	1,108	1,058	1,115	1,119	1,070	1,066	1,095	1,125	1,074	1,116	1,126	1,124	
LFG and Biogas Flow to the Engines (MMBTU HHV)		548	549	549	549	544	526	539	537	523	530	537	538	517	540	545	545	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,105	1,103	1,103	1,114	1,108	1,058	1,115	1,119	1,070	1,066	1,095	1,125	1,074	1,116	1,126	1,124	
LFG and Biogas Total Flow (MMBTU HHV)		548	549	549	549	544	526	539	537	523	530	537	538	517	540	545	545	
Average Methane Content (%)		49.0	49.1	49.1	48.7	48.5	49.2	47.8	47.4	48.3	49.1	48.5	47.2	47.6	47.9	47.8	47.9	
Engine 1 Hours		24	24	24	24	24	24	24	24	22	24	24	24	24	24	24	24	
Engine 2 Hours		24	24	24	24	24	24	24	24	23	24	24	24	24	24	24	24	
Engine 3 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4 Hours		24	24	24	24	24	24	24	24	22	24	24	24	24	24	24	24	
Generator 1 Power Output (kWhr)		14,428	14,424	14,424	14,432	14,424	14,628	14,424	14,424	13,556	14,432	14,740	14,428	14,576	14,416	14,416	14,492	
Generator 2 Power Output (kWhr)		12,052	12,052	12,052	12,056	12,052	12,736	12,192	12,044	11,860	12,052	11,344	12,056	11,876	12,048	12,048	12,124	
Generator 3 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4 Power Output (kWhr)		14,388	14,376	14,376	14,392	14,380	14,388	14,396	14,396	13,736	14,388	14,696	14,376	13,968	14,368	14,360	14,024	
Gross Power Output (kWhr)		40,926	40,862	40,862	40,981	40,924	41,815	41,056	40,916	39,279	40,913	40,803	40,906	40,382	40,726	40,717	40,557	
Net Power Output (kWhr)		39,288	39,200	39,200	39,348	39,152	40,032	39,532	37,660	39,212	39,128	39,184	38,516	38,664	38,560	38,424	38,424	
Power Sold as metered by NStar, (kWhr)		39,218	39,148	39,142	39,250	39,074	39,961	39,482	39,274	37,577	39,147	39,065	39,122	38,495	38,680	38,581	38,422	
Offgrid RECs (kWhr)		1,638	1,662	1,662	1,633	1,772	1,782	1,524	1,564	1,619	1,701	1,676	1,722	1,867	2,062	2,157	2,133	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		601	601	601	601	601	610	601	601	616	601	614	601	607	601	601	604	
Generator 2		502	502	502	502	502	531	508	502	516	502	516	502	495	502	502	505	
Generator 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Generator 4		600	599	599	600	599	600	600	600	624	600	612	599	582	599	598	584	
Power output (kW average over 24-hrs)																		
Facility Gross		1,705	1,703	1,703	1,708	1,705	1,742	1,711	1,705	1,637	1,705	1,700	1,704	1,683	1,697	1,697	1,690	
Facility Net		1,637	1,633	1,633	1,640	1,631	1,668	1,647	1,640	1,569	1,634	1,630	1,633	1,605	1,611	1,607	1,601	
In-plant load		68	69	69	68	74	74	64	65	67	71	70	72	78	86	90	89	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	75%	75%	75%	70%	75%	73%	75%	75%	75%	75%	75%	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	
Engine 2		100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	92%	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%	100%	100%	100%	100%	92%	100%	100%	100%	100%	100%	100%	100%	
Daily capacity factor																		
Facility		52%	52%	52%	52%	52%	53%	52%	52%	50%	52%	52%	51%	51%	51%	51%	51%	
Engine 1		73%	73%	73%	73%	73%	74%	73%	73%	75%	73%	74%	73%	74%	73%	73%	73%	
Engine 2		61%	61%	61%	61%	61%	64%	62%	61%	63%	61%	63%	61%	60%	61%	61%	61%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		73%	73%	73%	73%	73%	73%	73%	73%	76%	73%	74%	73%	71%	73%	73%	71%	
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	214	238	262	286	310	334	358	382	
Engine 2		24	48	72	96	120	144	168	192	215	239	261	285	309	333	357	381	
Engine 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Engine 4		24	48	72	96	120	144	168	192	214	238	262	286	310	334	358	382	
Engine operating run hours total from 0 hours																		
Engine 1		99,949	99,997	100,021	100,045	100,069	100,093	100,117	100,141	100,163	100,187	100,211	100,235	100,259	100,283	100,307	100,331	
Engine 2		93,496	93,520	93,544	93,568	93,592	93,616	93,640	93,664	93,688	93,711	93,735	93,757	93,781	93,805	93,829	93,853	
Engine 3		95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	95,465	
Engine 4		93,847	93,871	93,895	93,919	93,943	93,967	93,991	94,015	94,039	94,061	94,085	94,109	94,133	94,157	94,181	94,205	
Cumulative availability, %	July, 2018 @ 00:00 hours																	
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	
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%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	99%	99%	99%	99%	99%	99%	99%	99%	
Engine cumulative gross output, kWhr																		
Max cumulative capacity one engine		825	1,650	2,475	3,300	4,125	4,950	5,775	6,600	7,425	8,250	9,075	9,900	10,725	11,550	12,375	13,200	
Engine 1		601	1,202	1,803	2,405	3,006	3,615	4,216	4,817	5,433	6,035	6,649	7,250	7,857	8,458	9,059	9,662	
Engine 2		502	1,004	1,507	2,009	2,511	3,042	3,550	4,052	4,567	5,069	5,585	6,087	6,582	7,084	7,586	8,091	
Engine 3		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Engine 4		600	1,199	1,798	2,397	2,996	3,596	4,196	4,796	5,420	6,019	6,632	7,231	7,813	8,411	9,010	9,594	
Cumulative capacity factor, %																		
Engine 1		73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	
Engine 2		61%	61%	61%	61%	61%	62%	61%	61%	62%	61%	62%	61%	61%	61%	61%	61%	
Engine 3		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	
Engine 4		73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	

		Sunday 7/1/2018	Monday 7/2/2018	Tuesday 7/3/2018	Wednesday 7/4/2018	Thursday 7/5/2018	Friday 7/6/2018	Saturday 7/7/2018	Sunday 7/8/2018	Monday 7/9/2018	Tuesday 7/10/2018	Wednesday 7/11/2018	Thursday 7/12/2018	Friday 7/13/2018	Saturday 7/14/2018	Sunday 7/15/2018	Monday 7/16/2018
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, kWh		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, kWh		40,926	81,788	122,650	163,631	204,555	246,370	287,426	328,342	367,621	408,534	449,337	490,243	530,625	571,351	612,068	652,625
Cumulative Capacity Factor		51.7%	51.6%	51.6%	51.7%	51.7%	51.8%	51.8%	51.8%	51.6%	51.6%	51.6%	51.6%	51.5%	51.5%	51.5%	51.5%
Cumulative fuel input, MMBtu HHV		548	1,097	1,645	2,194	2,737	3,264	3,803	4,339	4,862	5,392	5,930	6,467	6,984	7,524	8,069	8,614
Cumulative gross output, kWh		40,926	81,788	122,650	163,631	204,555	246,370	287,426	328,342	367,621	408,534	449,337	490,243	530,625	571,351	612,068	652,625
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		12,056	12,086	12,086	12,051	11,955	11,330	11,816	11,808	11,982	11,668	11,852	11,831	11,521	11,943	12,047	12,086
Daily heat rate, Btu/kWe gross HHV		13,392	13,426	13,426	13,387	13,281	12,586	13,126	13,117	13,310	12,962	13,166	13,142	12,798	13,267	13,383	13,426
Cumulative heat rate, Btu/kWe gross LHV		12,056	12,071	12,076	12,069	12,047	11,925	11,909	11,897	11,906	11,882	11,879	11,875	11,848	11,855	11,868	11,881
Cumulative heat rate, Btu/kWe gross HHV		13,392	13,409	13,415	13,408	13,382	13,247	13,230	13,216	13,226	13,199	13,196	13,192	13,162	13,169	13,184	13,199
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		17,180	17,276	17,372	17,468	17,564	17,660	17,756	17,852	17,948	18,044	18,140	18,236	18,332	18,428	18,524	18,620
Actual cumulative engine run hours		11,342	11,414	11,486	11,558	11,630	11,702	11,774	11,846	11,918	11,989	12,061	12,132	12,203	12,274	12,345	12,416
Cumulative Availability, %		66.0%	66.1%	66.1%	66.2%	66.2%	66.3%	66.3%	66.4%	66.4%	66.4%	66.5%	66.5%	66.5%	66.6%	66.6%	66.7%
Max cumulative gross output, kWh		14,176,800	14,256,000	14,335,200	14,414,400	14,493,600	14,572,800	14,652,000	14,731,200	14,810,400	14,889,600	14,968,800	15,048,000	15,127,200	15,206,400	15,285,600	15,364,800
Actual cumulative gross output, kWh		7,485,956	7,526,818	7,567,680	7,608,661	7,649,585	7,691,400	7,732,456	7,773,372	7,812,651	7,853,564	7,894,367	7,935,273	7,975,655	8,016,381	8,057,098	8,097,655
Cumulative Capacity Factor		52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.8%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%	52.7%
Cumulative fuel input, MMBtu HHV		78,492	79,041	79,589	80,138	80,681	81,208	81,747	82,283	82,806	83,336	83,874	84,411	84,928	85,468	86,013	86,558
Cumulative gross output, kWh		6,107,722	6,148,584	6,189,446	6,230,427	6,271,351	6,313,166	6,354,222	6,395,138	6,434,417	6,475,330	6,516,133	6,557,039	6,597,421	6,638,147	6,678,864	6,719,421
Cumulative heat rate, Btu/kWe gross LHV		11,569	11,572	11,576	11,579	11,581	11,579	11,581	11,582	11,585	11,585	11,587	11,589	11,588	11,590	11,593	11,596
Cumulative heat rate, Btu/kWe gross HHV		12,851	12,855	12,859	12,862	12,865	12,863	12,865	12,867	12,869	12,870	12,872	12,873	12,873	12,875	12,878	12,882
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		Sunday 7/1/2018	Monday 7/2/2018	Tuesday 7/3/2018	Wednesday 7/4/2018	Thursday 7/5/2018	Friday 7/6/2018	Saturday 7/7/2018	Sunday 7/8/2018	Monday 7/9/2018	Tuesday 7/10/2018	Wednesday 7/11/2018	Thursday 7/12/2018	Friday 7/13/2018	Saturday 7/14/2018	Sunday 7/15/2018	Monday 7/16/2018
Date																	
Hour																	
1		1.639	1.634	1.636	1.639	1.638	1.631	1.716	1.644	1.643	1.641	1.640	1.631	1.634	1.616	1.614	1.609
2		1.639	1.633	1.637	1.640	1.640	1.631	1.714	1.644	1.643	1.641	1.640	1.635	1.638	1.616	1.613	1.609
3		1.641	1.632	1.635	1.639	1.641	1.630	1.644	1.642	1.641	1.641	1.639	1.635	1.637	1.615	1.612	1.608
4		1.642	1.634	1.635	1.641	1.643	1.632	1.645	1.643	1.642	1.639	1.640	1.638	1.638	1.616	1.613	1.609
5		1.642	1.634	1.634	1.640	1.642	1.631	1.644	1.642	1.642	1.643	1.639	1.639	1.638	1.615	1.613	1.610
6		1.640	1.634	1.633	1.640	1.642	1.627	1.645	1.640	1.641	1.642	1.637	1.638	1.637	1.615	1.612	1.610
7		1.641	1.638	1.637	1.640	1.642	1.633	1.644	1.644	1.641	1.641	1.639	1.640	1.638	1.615	1.613	1.610
8		1.638	1.635	1.639	1.637	1.635	1.630	1.643	1.641	1.636	1.634	1.638	1.635	1.633	1.614	1.613	1.607
9		1.636	1.628	1.629	1.634	1.620	1.618	1.639	1.637	1.625	1.621	1.624	1.625	1.621	1.610	1.611	1.593
10		1.634	1.630	1.627	1.633	1.623	1.618	1.638	1.634	1.622	1.624	1.618	1.624	1.618	1.609	1.605	1.597
11		1.632	1.628	1.625	1.632	1.623	1.617	1.635	1.626	1.616	1.621	1.621	1.619	1.616	1.609	1.605	1.604
12		1.632	1.624	1.620	1.630	1.617	1.616	1.629	1.622	1.616	1.620	1.624	1.618	1.614	1.608	1.604	1.601
13		1.632	1.623	1.621	1.632	1.618	1.618	1.629	1.621	1.620	1.620	1.626	1.621	1.619	1.608	1.604	1.604
14		1.629	1.623	1.621	1.631	1.617	1.623	1.630	1.627	92	1.620	1.624	1.613	1.335	1.609	1.603	1.605
15		1.627	1.623	1.621	1.630	1.611	1.664	1.629	1.630	664	1.620	1.615	1.620	1.432	1.607	1.602	1.362
16		1.627	1.626	1.623	1.631	1.615	1.529	1.633	1.632	1.856	1.621	1.529	1.624	1.641	1.607	1.603	1.658
17		1.627	1.631	1.629	1.631	1.621	1.782	1.634	1.632	1.797	1.627	1.603	1.629	1.610	1.609	1.604	1.613
18		1.627	1.633	1.630	1.632	1.622	1.707	1.638	1.632	1.766	1.630	1.628	1.609	1.608	1.608	1.603	1.613
19		1.630	1.635	1.634	1.635	1.626	1.708	1.640	1.636	1.707	1.633	1.635	1.631	1.612	1.610	1.604	1.616
20		1.633	1.635	1.632	1.636	1.628	1.707	1.641	1.639	1.711	1.633	1.637	1.632	1.615	1.613	1.606	1.617
21		1.631	1.634	1.632	1.635	1.625	1.708	1.642	1.640	1.711	1.629	1.638	1.633	1.614	1.611	1.604	1.616
22		1.632	1.634	1.636	1.636	1.627	1.710	1.644	1.642	1.712	1.633	1.639	1.637	1.616	1.613	1.605	1.616
23		1.633	1.634	1.637	1.637	1.628	1.714	1.644	1.642	1.693	1.634	1.633	1.638	1.615	1.614	1.607	1.617
24		1.634	1.633	1.639	1.639	1.630	1.714	1.642	1.642	1.640	1.636	1.629	1.637	1.615	1.613	1.608	1.618
TOTAL		39,218	39,148	39,142	39,250	39,074	39,961	39,482	39,274	37,577	39,147	39,065	39,122	38,495	38,680	38,581	38,422
Cumulative Output Sold, kWh		39,218	78,366	117,508	156,758	195,832	235,793	275,275	314,549	352,126	391,273	430,338	469,460	507,955	546,635	585,216	623,638
Transformer and line efficiency		99.8%	99.9%	99.9%	99.8%	99.8%	99.8%	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	99.9%	100.0%	100.1%	100.0%
Hourly average		1.634	1.631	1.631	1.635	1.628	1.665	1.645	1.636	1.566	1.631	1.628	1.630	1.604	1.612	1.608	1.601

JULY 2018																					
	Tuesday 7/17/2018	Wednesday 7/18/2018	Thursday 7/19/2018	Friday 7/20/2018	Saturday 7/21/2018	Sunday 7/22/2018	Monday 7/23/2018	Tuesday 7/24/2018	Wednesday 7/25/2018	Thursday 7/26/2018	Friday 7/27/2018	Saturday 7/28/2018	Sunday 7/29/2018	Monday 7/30/2018	Tuesday 7/31/2018	TOTAL	Biogas	LFG			
LFG and Biogas Flow to the Engine	1,050	1,087	1,093	1,087	1,054	1,059	1,041	1,025	1,026	1,067	1,074	1,151	1,125	1,113	1,135	33,809	1,497	32,312			
LFG and Biogas Flow to the Engine	523	540	533	535	519	516	508	510	521	543	526	558	543	533	549	16,570	1,015	15,555			
LFG and Biogas Flow to the Flare (-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.1%	94%			
LFG and BiogasFlow to the Flare (0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)	1,050	1,087	1,093	1,087	1,054	1,059	1,041	1,025	1,026	1,067	1,074	1,151	1,125	1,113	1,135	33,809					
LFG and Biogas Total Flow (MMBT	523	540	533	535	519	516	508	510	521	543	526	558	543	533	549	16,570					
Average Methane Content (%)	49.2	49.1	48.2	48.6	48.6	48.1	48.2	49.2	50.2	50.3	48.4	47.9	47.7	47.4	47.8	48.4					
Engine 1 Hours	18	1		-	-		-	-	-	-	-	-	-	-	-	401					
Engine 2 Hours	20	24	24	24	24	24	11	6	8	16	24	24	24	23	24	681					
Engine 3 Hours	10	23	24	24	23	24	24	24	24	24	24	24	24	22	24	342					
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	22	24	740					
Generator 1 Power Output (kWhr)	10,220	724	-	-	-	-	-	-	-	-	-	-	-	-	-	241,608					
Generator 2 Power Output (kWhr)	10,176	13,228	12,408	12,052	13,204	12,460	5,488	1,748	1,984	7,784	14,632	14,440	14,440	13,844	15,608	356,140					
Generator 3 Power Output (kWhr)	4,828	12,248	13,344	13,208	12,608	13,184	16,732	19,724	19,720	18,108	14,772	15,452	14,600	13,692	14,876	217,096					
Generator 4 Power Output (kWhr)	14,636	15,244	14,360	14,360	14,556	14,352	17,256	19,660	19,660	17,980	14,256	14,352	14,356	13,784	14,000	461,820					
Gross Power Output (kWhr)	39,772	41,330	40,027	39,470	40,224	39,848	39,261	40,927	41,183	43,731	43,569	44,165	43,317	41,313	44,477	1,275,239					
Net Power Output (kWhr)	37,928	39,624	38,352	37,808	38,596	38,180	37,592	39,288	39,548	41,964	41,688	42,296	41,512	39,584	42,624	1,221,036					
Power Sold as metered by NStar, (l	37,920	39,591	38,326	37,824	38,586	38,214	37,590	39,263	39,521	41,889	41,650	42,230	41,449	39,511	42,503	1,219,705	CRMCB inplant				
Offgrid RECs (kWhr)	1,843	1,706	1,674	1,662	1,628	1,668	1,669	1,639	1,635	1,767	1,881	1,869	1,805	1,729	1,853	54,202	6,399				
Calculated Performance Results																	12%				
Daily																	of total in-plant				
Power output (kW average whe																	power				
Generator 1	568	724	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
Generator 2	509	551	517	502	550	519	499	291	248	487	610	602	602	602	650						
Generator 3	483	533	556	550	548	549	697	822	822	755	616	644	608	622	620						
Generator 4	610	635	598	598	607	598	719	819	819	749	594	598	598	627	583						
Power output (kW average ove																					
Facility Gross	1,657	1,722	1,668	1,645	1,676	1,660	1,636	1,705	1,716	1,822	1,815	1,840	1,805	1,721	1,853						
Facility Net	1,580	1,651	1,598	1,575	1,608	1,591	1,566	1,637	1,648	1,749	1,737	1,762	1,730	1,649	1,776						
In-plant load	77	71	70	69	68	70	70	68	68	74	78	78	75	72	77						
Daily availability factor																					
Facility	75%	75%	75%	75%	74%	75%	61%	56%	58%	67%	75%	75%	75%	70%	75%						
Engine 1	75%	4%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Engine 2	83%	100%	100%	100%	100%	100%	46%	25%	33%	67%	100%	100%	100%	96%	100%						
Engine 3	42%	96%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%						
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	92%	100%						
Daily capacity factor																					
Facility	50%	52%	51%	50%	51%	50%	50%	52%	52%	55%	55%	56%	55%	52%	56%						
Engine 1	69%	88%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Engine 2	62%	67%	63%	61%	67%	63%	60%	35%	30%	59%	74%	73%	73%	73%	79%						
Engine 3	59%	65%	67%	67%	66%	67%	85%	100%	100%	91%	75%	78%	74%	75%	75%						
Engine 4	74%	77%	73%	73%	74%	72%	87%	99%	99%	91%	72%	72%	73%	76%	71%						
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	720						
Engine 1	400	401	401	401	401	401	401	401	401	401	401	401	401	401	401						
Engine 2	401	425	449	473	497	521	532	538	546	562	586	610	634	657	658						
Engine 3	10	33	57	81	104	128	152	176	200	224	248	272	296	318	320						
Engine 4	406	430	454	478	502	526	550	574	598	622	646	670	694	716	718						
Engine operating run hours tota																					
Engine 1	100,349	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350	100,350						
Engine 2	93,897	93,921	93,945	93,969	93,993	94,017	94,028	94,034	94,042	94,058	94,082	94,106	94,130	94,153	94,154						
Engine 3	95,475	95,498	95,522	95,546	95,569	95,593	95,617	95,641	95,665	95,689	95,713	95,737	95,761	95,783	95,785						
Engine 4	94,253	94,277	94,301	94,325	94,349	94,373	94,397	94,421	94,445	94,469	94,493	94,517	94,541	94,563	94,565						
Cumulative availability, %																					
Engine 1	98%	93%	88%	84%	80%	76%	73%	70%	67%	64%	62%	60%	58%	56%	56%						
Engine 2	98%	98%	98%	99%	99%	99%	96%	93%	91%	90%	91%	91%	91%	91%	91%						
Engine 3	2%	8%	13%	17%	21%	24%	28%	31%	33%	36%	38%	40%	43%	44%	44%						
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99%	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	24,750						
Engine 1	10,230	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954	10,954						
Engine 2	8,600	9,151	9,668	10,170	10,721	11,240	11,739	12,030	12,278	12,764	13,374	13,976	14,577	15,179	15,228						
Engine 3	483	1,015	1,571	2,122	2,670	3,219	3,916	4,738	5,560	6,314	6,930	7,574	8,182	8,804	8,802						
Engine 4	10,204	10,839	11,437	12,036	12,642	13,240	13,959	14,778	15,598	16,347	16,941	17,539	18,137	18,763	18,720						
Cumulative capacity factor, %																					
Engine 1	73%	74%	70%	66%	63%	60%	58%	55%	53%	51%	49%	47%	46%	44%	44%						
Engine 2	61%	62%	62%	62%	62%	60%	62%	61%	60%	60%	61%	61%	61%	61%	62%						
Engine 3	3%	7%	10%	13%	15%	18%	21%	24%	27%	29%	31%	33%	34%	36%	36%						
Engine 4	73%	73%	73%	73%	73%	73%	74%	75%	76%	76%	76%	76%	76%	76%	76%						

	Tuesday 7/17/2018	Wednesday 7/18/2018	Thursday 7/19/2018	Friday 7/20/2018	Saturday 7/21/2018	Sunday 7/22/2018	Monday 7/23/2018	Tuesday 7/24/2018	Wednesday 7/25/2018	Thursday 7/26/2018	Friday 7/27/2018	Saturday 7/28/2018	Sunday 7/29/2018	Monday 7/30/2018	Tuesday 7/31/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engi	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 t	1,217	1,289	1,361	1,433	1,504	1,576	1,635	1,689	1,745	1,809	1,881	1,953	2,025	2,092	2,097			
Cumulative Availability, %	74.6%	74.6%	74.6%	74.6%	74.6%	74.6%	74.0%	73.3%	72.7%	72.5%	72.6%	72.7%	72.7%	72.6%	72.8%			
Max cumulative gross output, k	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,	692,397	733,727	773,754	813,224	853,448	893,296	932,557	973,484	1,014,667	1,058,398	1,101,967	1,146,132	1,189,449	1,230,762	1,233,926			
Cumulative Capacity Factor	51.4%	51.5%	51.4%	51.3%	51.3%	51.3%	51.2%	51.2%	51.2%	51.4%	51.5%	51.7%	51.8%	51.8%	51.9%			
Cumulative fuel input, MMBtu t	9,137	9,677	10,210	10,745	11,263	11,779	12,287	12,797	13,318	13,861	14,387	14,945	15,488	16,021	16,037			
Cumulative gross output, kWhr	692,397	733,727	773,754	813,224	853,448	893,296	932,557	973,484	1,014,667	1,058,398	1,101,967	1,146,132	1,189,449	1,230,762	1,233,926			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,840	11,762	11,992	12,197	11,604	11,655	11,641	11,224	11,390	11,176	10,862	11,373	11,282	11,620	11,112			
Daily heat rate, Btu/kWe gross	13,152	13,066	13,321	13,550	12,890	12,947	12,931	12,469	12,653	12,415	12,066	12,634	12,533	12,909	12,343			
Cumulative heat rate, Btu/kWe	11,879	11,872	11,878	11,894	11,880	11,870	11,861	11,834	11,816	11,789	11,753	11,738	11,721	11,718	11,699			
Cumulative heat rate, Btu/kWe	13,196	13,189	13,195	13,213	13,197	13,186	13,175	13,146	13,126	13,096	13,056	13,039	13,021	13,017	12,997			
Cumulative by Facility starting C																		
Max cumulative available engi	18,716	18,812	18,908	19,004	19,100	19,196	19,292	19,388	19,484	19,580	19,676	19,772	19,868	19,964	19,964			
Actual cumulative engine run t	12,487	12,559	12,631	12,703	12,774	12,846	12,905	12,959	13,015	13,079	13,151	13,223	13,295	13,362	13,367			
Cumulative Availability, %	66.7%	66.8%	66.8%	66.8%	66.9%	66.9%	66.9%	66.8%	66.8%	66.8%	66.8%	66.9%	66.9%	66.9%	67.0%			
Max cumulative gross output, k	15,444,000	15,523,200	15,602,400	15,681,600	15,760,800	15,840,000	15,919,200	15,998,400	16,077,600	16,156,800	16,236,000	16,315,200	16,394,400	16,473,600	16,473,600			
Actual cumulative gross output,	8,137,427	8,178,757	8,218,784	8,258,254	8,298,478	8,338,326	8,377,587	8,418,514	8,459,697	8,503,428	8,546,997	8,591,162	8,634,479	8,675,792	8,678,956			
Cumulative Capacity Factor	52.7%	52.7%	52.7%	52.7%	52.7%	52.6%	52.6%	52.6%	52.6%	52.6%	52.6%	52.7%	52.7%	52.7%	52.7%			
Cumulative fuel input, MMBtu t	87,081	87,621	88,154	88,689	89,207	89,723	90,231	90,741	91,262	91,805	92,331	92,889	93,432	93,965	93,981			
Cumulative gross output, kWhr	6,759,193	6,800,523	6,840,550	6,880,020	6,920,244	6,960,092	6,999,353	7,040,280	7,081,463	7,125,194	7,168,763	7,212,928	7,256,245	7,297,558	7,300,722			
Cumulative heat rate, Btu/kWe	11,598	11,599	11,601	11,604	11,604	11,605	11,605	11,603	11,601	11,599	11,594	11,593	11,591	11,591	11,588			
Cumulative heat rate, Btu/kWe	12,883	12,884	12,887	12,891	12,891	12,891	12,891	12,889	12,887	12,885	12,880	12,878	12,876	12,876	12,873			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Commission E-3 Rebuild																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports																		
Date	7/17/2018	7/18/2018	7/19/2018	7/20/2018	7/21/2018	7/22/2018	7/23/2018	7/24/2018	7/25/2018	7/26/2018	7/27/2018	7/28/2018	7/29/2018	7/30/2018	7/31/2018	TOTAL		
Hour																		
1	1,619	1,629	1,679	1,586	1,307	1,627	1,573	1,571	1,572	1,572	1,760	1,758	1,761	1,723	1,819			
2	1,619	1,627	1,679	1,585	1,190	1,627	1,573	1,572	1,572	1,573	1,763	1,759	1,762	1,722	1,819			
3	1,619	1,626	1,668	1,583	1,724	1,626	1,572	1,570	1,572	1,571	1,762	1,763	1,763	1,720	1,819			
4	1,620	1,627	1,631	1,586	1,724	1,627	1,573	1,571	1,572	1,572	1,763	1,764	1,765	1,724	1,821			
5	1,621	1,627	1,631	1,585	1,695	1,627	1,573	1,572	1,572	1,570	1,763	1,764	1,766	1,724	1,822			
6	1,619	1,627	1,629	1,583	1,675	1,624	1,573	1,570	1,571	1,567	1,762	1,762	1,728	1,724	1,821			
7	1,620	1,630	1,630	1,585	1,676	1,626	1,574	1,572	1,573	1,572	1,748	1,761	1,722	1,726	1,822			
8	1,620	1,628	1,601	1,584	1,629	1,625	1,574	1,572	1,573	1,573	1,720	1,761	1,720	1,723	1,820			
9	1,608	1,614	1,569	1,569	1,624	1,600	1,564	1,561	1,775	1,651	1,683	1,758	1,715	1,710	1,720			
10	1,618	1,576	1,567	1,566	1,623	1,575	1,561	1,565	1,887	1,780	1,662	1,759	1,713	1,711	1,713			
11	1,613	1,658	1,569	1,565	1,621	1,578	1,550	1,846	1,854	1,877	1,661	1,758	1,714	1,710	1,713			
12	1,612	1,436	1,569	1,561	1,619	1,576	1,532	1,852	1,827	1,898	1,678	1,755	1,715	1,710	1,710			
13	1,618	1,665	1,571	1,563	1,621	1,574	1,560	1,850	1,759	1,898	1,684	1,756	1,716	825	1,709			
14	1,601	1,710	1,568	1,565	1,621	1,572	1,559	1,852	1,759	1,897	1,700	1,756	1,715	-	1,711			
15	1,478	1,710	1,565	1,564	1,621	1,572	1,558	1,849	1,758	1,897	1,701	1,755	1,714	1,355	1,755			
16	1,728	1,713	1,568	1,567	1,621	1,573	1,561	1,765	1,760	1,872	1,741	1,757	1,715	1,865	1,759			
17	1,603	1,719	1,576	1,574	1,621	1,573	1,569	1,568	1,572	1,848	1,761	1,760	1,715	1,869	1,762			
18	1,090	1,719	1,576	1,574	1,621	1,572	1,569	1,566	1,566	1,847	1,762	1,759	1,715	1,867	1,766			
19	1,265	1,673	1,579	1,577	1,623	1,574	1,570	1,570	1,571	1,849	1,764	1,761	1,717	1,868	1,770			
20	1,626	1,672	1,579	1,578	1,625	1,574	1,571	1,570	1,572	1,848	1,765	1,761	1,718	1,867	1,770			
21	1,627	1,672	1,572	1,579	1,625	1,573	1,570	1,566	1,570	1,824	1,762	1,760	1,718	1,866	1,769			
22	1,627	1,675	1,582	1,583	1,627	1,573	1,571	1,569	1,572	1,805	1,764	1,762	1,719	1,866	1,771			
23	1,625	1,679	1,584	1,582	1,627	1,573	1,571	1,571	1,571	1,767	1,763	1,761	1,721	1,819	1,770			
24	1,624	1,679	1,584	1,580	1,626	1,573	1,569	1,570	1,571	1,761	1,758	1,760	1,722	1,817	1,772			
TOTAL	37,920	39,591	38,326	37,824	38,586	38,214	37,590	39,263	39,521	41,889	41,650	42,230	41,449	39,511	42,503			
Cumulative Output Sold, kv	661,558	701,149	739,475	777,299	815,885	854,099	891,689	930,952	970,473	1,012,362	1,054,012	1,096,242	1,137,691	1,177,202	1,219,705			
Transformer and line efficien	100.0%	99.9%	99.9%	100.0%	100.0%	100.1%	100.0%	99.9%	99.9%	99.8%	99.9%	99.8%	99.8%	99.8%	99.7%	0.0%		
Hourly average	1,580	1,650	1,597	1,576	1,608	1,592	1,566	1,636	1,647	1,745	1,735	1,760	1,727	1,646	1,771	1,639		

AUGUST 2018																		
		Wednesday 8/1/2018	Thursday 8/2/2018	Friday 8/3/2018	Saturday 8/4/2018	Sunday 8/5/2018	Monday 8/6/2018	Tuesday 8/7/2018	Wednesday 8/8/2018	Thursday 8/9/2018	Friday 8/10/2018	Saturday 8/11/2018	Sunday 8/12/2018	Monday 8/13/2018	Tuesday 8/14/2018	Wednesday 8/15/2018	Thursday 8/16/2018	
LFG and Biogas Flow to the Engines (KSCF)		1,141	1,130	1,146	1,139	1,129	1,103	1,157	1,165	1,145	1,147	1,143	1,166	1,151	1,142	1,143	1,082	
LFG and Biogas Flow to the Engines (MMBTU HHV)		552	547	554	556	558	548	575	566	556	551	552	568	569	576	575	528	
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
LFG and Biogas Total Flow (KSCF)		1,141	1,130	1,146	1,139	1,129	1,103	1,157	1,165	1,145	1,147	1,143	1,166	1,151	1,142	1,143	1,082	
LFG and Biogas Total Flow (MMBTU HHV)		552	547	554	556	558	548	575	566	556	551	552	568	569	576	575	528	
Average Methane Content (%)		47.8	47.8	47.8	48.2	48.8	49.0	49.1	48.0	48.0	47.5	47.7	48.2	48.9	49.8	49.7	48.2	
Engine 1 Hours		-	-	-	-	-	1	10	24	11	-	2	-	-	-	-	-	
Engine 2 Hours		24	24	24	24	24	24	15	-	16	24	24	24	24	24	24	19	
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	25	24	24	24	24	24	24	24	23	
Generator 1 Power Output (kWhr)		-	-	-	-	-	-	6,072	14,436	5,788	-	12	-	-	-	-	-	
Generator 2 Power Output (kWhr)		13,872	13,228	13,224	13,228	13,228	13,232	9,376	-	8,768	14,436	15,688	16,788	16,788	16,520	16,800	12,488	
Generator 3 Power Output (kWhr)		15,564	15,564	15,568	15,564	15,572	15,556	16,480	17,356	16,576	15,004	14,936	14,984	14,976	15,864	14,984	15,888	
Generator 4 Power Output (kWhr)		14,460	13,744	15,484	15,532	15,524	15,500	15,756	14,952	14,108	14,972	14,920	14,948	14,849	15,060	14,956	14,712	
Gross Power Output (kWhr)		43,884	42,489	44,231	44,280	44,264	44,211	47,690	46,771	45,236	44,336	45,507	46,687	46,670	47,405	46,712	43,029	
Net Power Output (kWhr)		42,032	40,604	42,284	42,444	42,448	42,336	45,764	44,904	43,268	42,246	43,600	44,872	44,848	45,532	44,868	41,212	
Power Sold as metered by NStar, (kWhr)		41,915	40,526	42,210	42,363	42,352	42,253	45,599	44,753	43,154	42,149	43,470	44,730	44,718	45,387	44,737	41,110	
Offgrid RECs (kWhr)		1,853	1,884	1,948	1,835	1,816	1,875	1,927	1,867	1,968	2,090	1,906	1,815	1,822	1,873	1,844	1,817	
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1		-	-	-	-	-	-	607	602	526	-	6	-	-	-	-	-	
Generator 2		578	551	551	551	551	551	625	-	548	602	654	700	700	688	700	657	
Generator 3		649	649	649	649	649	648	687	723	691	625	622	624	624	661	624	662	
Generator 4		603	573	645	647	647	646	657	598	588	624	622	623	619	628	623	640	
Power output (kW average over 24-hrs)																		
Facility Gross		1,829	1,770	1,843	1,845	1,844	1,842	1,987	1,949	1,885	1,847	1,896	1,945	1,945	1,975	1,946	1,793	
Facility Net		1,751	1,692	1,762	1,769	1,769	1,764	1,907	1,871	1,803	1,760	1,817	1,870	1,869	1,897	1,870	1,717	
In-plant load		77	79	81	77	76	78	80	78	82	87	79	76	76	78	77	76	
Daily availability factor																		
Facility		75%	75%	75%	75%	75%	76%	76%	76%	78%	75%	77%	75%	75%	75%	75%	69%	
Engine 1		0%	0%	0%	0%	0%	4%	42%	100%	46%	0%	8%	0%	0%	0%	0%	0%	
Engine 2		100%	100%	100%	100%	100%	100%	63%	0%	67%	100%	100%	100%	100%	100%	100%	79%	
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%	104%	100%	100%	100%	100%	100%	100%	100%	96%	
Daily capacity factor																		
Facility		55%	54%	56%	56%	56%	56%	60%	59%	57%	56%	57%	59%	59%	60%	59%	54%	
Engine 1		0%	0%	0%	0%	0%	0%	74%	73%	64%	0%	1%	0%	0%	0%	0%	0%	
Engine 2		70%	67%	67%	67%	67%	67%	76%	0%	66%	73%	79%	85%	85%	83%	85%	80%	
Engine 3		79%	79%	79%	79%	79%	79%	83%	88%	84%	76%	75%	76%	76%	80%	76%	80%	
Engine 4		73%	69%	78%	78%	78%	78%	80%	72%	71%	76%	75%	75%	75%	76%	76%	78%	
Cumulative by engine																		
Engine operating run hours in the month																		
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	
Engine 1		0	0	0	0	0	1	11	35	46	46	48	48	48	48	48	48	
Engine 2		24	48	72	96	120	144	159	159	175	199	223	247	271	295	319	338	
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	193	217	241	265	289	313	337	361	384	
Engine operating run hours total from 0 hours																		
Engine 1		100,350	100,350	100,350	100,350	100,350	100,351	100,361	100,385	100,396	100,396	100,398	100,398	100,398	100,398	100,398	100,398	
Engine 2		94,154	94,178	94,202	94,226	94,250	94,274	94,298	94,313	94,313	94,329	94,353	94,377	94,401	94,425	94,449	94,473	
Engine 3		95,785	95,809	95,833	95,857	95,881	95,905	95,929	95,953	95,977	96,001	96,025	96,049	96,073	96,097	96,121	96,145	
Engine 4		94,565	94,589	94,613	94,637	94,661	94,685	94,709	94,733	94,758	94,782	94,806	94,830	94,854	94,878	94,902	94,949	
Cumulative availability, %	August, 2018 @ 00:00 hours																	
Engine 1		0%	0%	0%	0%	0%	1%	7%	18%	21%	19%	18%	17%	15%	14%	13%	13%	
Engine 2		100%	100%	100%	100%	100%	100%	83%	83%	81%	83%	84%	86%	87%	88%	89%	88%	
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%	101%	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		-	-	-	-	-	-	607	1,209	1,735	1,735	1,741	1,741	1,741	1,741	1,741	1,741	
Engine 2		578	1,129	1,680	2,231	2,783	3,334	3,959	3,959	4,507	5,108	5,762	6,462	7,161	7,849	8,549	9,207	
Engine 3		649	1,297	1,946	2,594	3,243	3,891	4,578	5,301	5,992	6,617	7,239	7,864	8,488	9,149	9,773	10,435	
Engine 4		603	1,175	1,820	2,468	3,114	3,760	4,417	5,015	5,603	6,226	6,848	7,471	8,090	8,717	9,340	9,980	
Cumulative capacity factor, %																		
Engine 1		0%	0%	0%	0%	0%	0%	11%	18%	23%	21%	19%	18%	16%	15%	14%	13%	
Engine 2		70%	68%	68%	67%	67%	69%	69%	63%	63%	62%	63%	65%	67%	68%	69%	70%	
Engine 3		79%	79%	79%	79%	79%	79%	79%	80%	81%	80%	80%	79%	79%	79%	79%	79%	
Engine 4		73%	71%	74%	75%	75%	76%	76%	75%	75%	75%	75%	75%	75%	75%	75%	76%	

		Wednesday 8/1/2018	Thursday 8/2/2018	Friday 8/3/2018	Saturday 8/4/2018	Sunday 8/5/2018	Monday 8/6/2018	Tuesday 8/7/2018	Wednesday 8/8/2018	Thursday 8/9/2018	Friday 8/10/2018	Saturday 8/11/2018	Sunday 8/12/2018	Monday 8/13/2018	Tuesday 8/14/2018	Wednesday 8/15/2018	Thursday 8/16/2018
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%	75.2%	75.3%	75.4%	75.7%	75.6%	75.8%	75.7%	75.6%	75.6%	75.6%	75.1%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		43,884	86,373	130,604	174,884	219,148	263,359	311,049	357,820	403,056	447,392	492,899	539,586	586,256	633,661	680,373	723,402
Cumulative Capacity Factor		55.4%	54.5%	55.0%	55.2%	55.3%	55.4%	56.1%	56.5%	56.5%	56.5%	56.6%	56.8%	56.9%	57.1%	57.3%	57.1%
Cumulative fuel input, MMBtu HHV		552	1,099	1,653	2,209	2,766	3,314	3,888	4,454	5,010	5,562	6,113	6,682	7,251	7,827	8,402	8,929
Cumulative gross output, kWhr		43,884	86,373	130,604	174,884	219,148	263,359	311,049	357,820	403,056	447,392	492,899	539,586	586,256	633,661	680,373	723,402
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,315	11,587	11,281	11,297	11,338	11,148	10,846	10,898	11,064	11,192	10,917	10,956	10,983	10,934	11,077	11,036
Daily heat rate, Btu/kWe gross HHV		12,570	12,872	12,532	12,550	12,595	12,384	12,049	12,106	12,291	12,432	12,128	12,170	12,201	12,146	12,305	12,259
Cumulative heat rate, Btu/kWe gross LHV		11,315	11,449	11,392	11,368	11,362	11,326	11,252	11,206	11,190	11,190	11,165	11,147	11,134	11,119	11,116	11,111
Cumulative heat rate, Btu/kWe gross HHV		12,570	12,718	12,655	12,628	12,622	12,582	12,500	12,448	12,431	12,431	12,403	12,383	12,368	12,352	12,349	12,343
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	20,060		20,156	20,252	20,348	20,444	20,540	20,636	20,732	20,828	20,924	21,020	21,116	21,212	21,308	21,404	21,500
Actual cumulative engine run hours	13,439		13,511	13,583	13,655	13,727	13,800	13,873	13,946	14,021	14,093	14,167	14,239	14,311	14,383	14,455	14,521
Cumulative Availability, %	67.0%		67.0%	67.1%	67.1%	67.1%	67.2%	67.2%	67.3%	67.3%	67.4%	67.4%	67.4%	67.5%	67.5%	67.5%	67.5%
Max cumulative gross output, kWhr	16,552,800		16,632,000	16,711,200	16,790,400	16,869,600	16,948,800	17,028,000	17,107,200	17,186,400	17,265,600	17,344,800	17,424,000	17,503,200	17,582,400	17,661,600	17,740,800
Actual cumulative gross output, kWhr	8,722,840		8,765,329	8,809,560	8,853,840	8,898,104	8,942,315	8,986,526	9,030,737	9,074,948	9,119,159	9,163,370	9,207,581	9,251,792	9,296,003	9,340,214	9,384,425
Cumulative Capacity Factor	52.7%		52.7%	52.7%	52.7%	52.7%	52.8%	52.8%	52.8%	52.8%	52.9%	52.9%	52.9%	52.9%	53.0%	53.0%	53.0%
Cumulative fuel input, MMBtu HHV	94,532		95,079	95,634	96,189	96,744	97,299	97,854	98,409	98,964	99,519	100,074	100,629	101,184	101,739	102,294	102,849
Cumulative gross output, kWhr	7,344,606		7,387,095	7,431,326	7,475,606	7,519,870	7,564,081	7,608,292	7,652,503	7,696,714	7,740,925	7,785,136	7,829,347	7,873,558	7,917,769	7,961,980	8,006,191
Cumulative heat rate, Btu/kWe gross LHV	11,586		11,586	11,585	11,583	11,581	11,579	11,574	11,570	11,567	11,565	11,561	11,558	11,554	11,551	11,548	11,545
Cumulative heat rate, Btu/kWe gross HHV	12,871		12,871	12,869	12,867	12,865	12,863	12,858	12,853	12,850	12,847	12,843	12,839	12,835	12,831	12,828	12,825
Service																	
Engine 1							Top end complete										
Engine 2										Lightening Strike							Damaged LFSGS re
Engine 3										Knocked out some controls							
Engine 4										and Nstar Meter							
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Wednesday 8/1/2018	Thursday 8/2/2018	Friday 8/3/2018	Saturday 8/4/2018	Sunday 8/5/2018	Monday 8/6/2018	Tuesday 8/7/2018	Wednesday 8/8/2018	Thursday 8/9/2018	Friday 8/10/2018	Saturday 8/11/2018	Sunday 8/12/2018	Monday 8/13/2018	Tuesday 8/14/2018	Wednesday 8/15/2018	Thursday 8/16/2018
Date																	
Hour																	
1		1,774	1,766	1,713	1,764	1,767	1,767	1,767	1,868	1,869	1,765	1,755	1,864	1,866	1,866	1,870	1,867
2		1,774	1,765	1,766	1,761	1,767	1,767	1,769	1,865	1,870	1,765	1,758	1,864	1,866	1,867	1,868	1,867
3		1,773	1,763	1,761	1,764	1,766	1,766	1,832	1,867	1,867	1,764	1,761	1,863	1,865	1,866	1,865	1,867
4		1,774	1,765	1,764	1,766	1,768	1,768	1,865	1,869	1,868	1,765	1,762	1,863	1,866	1,866	1,867	1,868
5		1,775	1,766	1,768	1,767	1,770	1,769	1,865	1,869	1,868	1,764	1,762	1,864	1,867	1,867	1,871	1,868
6		1,772	1,722	1,766	1,767	1,769	1,768	1,864	1,868	1,867	1,763	1,760	1,864	1,865	1,867	1,869	1,866
7		1,723	1,672	1,768	1,767	1,770	1,771	1,864	1,870	1,868	1,765	1,762	1,865	1,866	1,867	1,870	1,867
8		1,674	1,672	1,767	1,767	1,769	1,767	1,862	1,869	1,867	1,759	1,757	1,867	1,866	1,867	1,869	1,864
9		1,666	1,663	1,759	1,764	1,763	1,755	1,776	1,860	1,672	1,744	1,753	1,865	1,858	1,856	1,859	1,504
10		1,665	1,660	1,758	1,763	1,763	1,755	1,708	1,861	1,855	1,748	1,757	1,861	1,856	1,853	1,859	1,559
11		1,665	1,660	1,751	1,764	1,762	1,754	1,801	1,859	1,853	1,749	1,645	1,861	1,857	1,857	1,858	1,558
12		1,731	1,655	1,754	1,765	1,761	1,755	1,976	1,857	1,852	1,744	1,884	1,863	1,857	1,664	1,856	1,169
13		1,756	1,657	1,756	1,762	1,761	1,755	2,044	1,858	1,853	1,741	1,863	1,863	1,858	2,012	1,858	739
14		1,758	1,657	1,754	1,762	1,761	1,703	2,007	1,857	1,711	1,765	1,862	1,862	1,859	1,951	1,858	1,137
15		1,757	1,659	1,750	1,765	1,759	1,754	2,007	1,858	1,406	1,744	1,860	1,860	1,856	1,948	1,857	1,942
16		1,759	1,660	1,754	1,767	1,762	1,756	2,003	1,858	1,904	1,750	1,862	1,862	1,861	1,953	1,859	1,532
17		1,764	1,666	1,760	1,764	1,761	1,761	2,056	1,860	1,777	1,751	1,864	1,865	1,868	1,958	1,864	2,010
18		1,765	1,669	1,762	1,766	1,763	1,763	2,002	1,866	1,752	1,752	1,862	1,865	1,869	1,958	1,865	1,956
19		1,767	1,672	1,765	1,767	1,765	1,766	1,965	1,869	1,760	1,758	1,863	1,865	1,869	1,962	1,866	1,876
20		1,767	1,672	1,764	1,766	1,765	1,767	1,965	1,870	1,761	1,759	1,864	1,865	1,868	1,962	1,867	1,863
21		1,766	1,671	1,761	1,765	1,762	1,766	1,962	1,868	1,761	1,758	1,863	1,864	1,861	1,924	1,865	1,860
22		1,766	1,672	1,762	1,767	1,766	1,767	1,902	1,869	1,762	1,760	1,864	1,866	1,863	1,861	1,866	1,861
23		1,762	1,672	1,764	1,767	1,766	1,767	1,869	1,870	1,763	1,760	1,864	1,865	1,864	1,867	1,865	1,840
24		1,762	1,670	1,763	1,766	1,766	1,766	1,868	1,868	1,763	1,756	1,863	1,864	1,867	1,868	1,866	1,770
TOTAL		41,915	40,526	42,210	42,363	42,352	42,253	45,599	44,753	43,154	42,149	43,470	44,730	44,718	45,387	44,737	41,110
Cumulative Output Sold, kWhr		41,915	82,441	124,651	167,014	209,366	251,619	297,218	341,971	385,125	427,274	470,744	515,474	560,192	605,579	650,316	691,426
Transformer and line efficiency		99.7%	99.8%	99.8%	99.8%	99.8%	99.8%	99.6%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%	99.8%
Hourly average		1,746	1,689	1,759	1,765	1,765	1,761	1,900	1,865	1,798	1,756	1,811	1,864	1,863	1,891	1,864	1,713

AUGUST 2018																		
	Friday 8/17/2018	Saturday 8/18/2018	Sunday 8/19/2018	Monday 8/20/2018	Tuesday 8/21/2018	Wednesday 8/22/2018	Thursday 8/23/2018	Friday 8/24/2018	Saturday 8/25/2018	Sunday 8/26/2018	Monday 8/27/2018	Tuesday 8/28/2018	Wednesday 8/29/2018	Thursday 8/30/2018	Friday 8/31/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,163	1,119	1,150	1,150	1,152	1,151	1,114	1,151	1,117	1,093	1,060	1,124	1,080	1,092	1,085	35,034	1,503	33,531
LFG and Biogas Flow to the Engine	565	565	573	571	582	597	567	575	554	550	519	558	537	539	525	17,305	1,034	16,271
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.0%	94%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)	1,163	1,119	1,150	1,150	1,152	1,151	1,114	1,151	1,117	1,093	1,060	1,124	1,080	1,092	1,085	35,034	-	-
LFG and Biogas Total Flow (MMBT	565	565	573	571	582	597	567	575	554	550	519	558	537	539	525	17,305	-	-
Average Methane Content (%)	48.0	49.9	49.2	49.0	49.9	51.2	50.3	49.4	49.0	49.7	48.4	49.1	49.1	48.8	47.8	48.8	-	-
Engine 1 Hours	15	24	24	24	24	24	24	24	24	24	24	24	24	24	24	399	-	-
Engine 2 Hours	9	-	-	-	14	12	-	-	-	-	-	-	-	-	-	373	-	-
Engine 3 Hours	24	24	24	24	11	14	24	24	24	24	24	24	24	24	24	721	-	-
Engine 4 Hours	24	24	24	24	24	23	24	24	24	24	24	24	24	24	24	743	-	-
Generator 1 Power Output (kWhr)	9,864	14,476	14,432	14,436	14,420	14,420	14,432	14,432	14,436	14,428	14,472	14,440	14,436	14,440	14,436	238,308	-	-
Generator 2 Power Output (kWhr)	5,188	-	-	-	9,520	8,816	-	-	-	-	-	-	-	-	-	231,188	-	-
Generator 3 Power Output (kWhr)	15,820	17,360	17,360	17,176	7,736	9,680	17,356	17,356	15,596	14,984	13,868	14,996	15,320	13,868	14,520	473,432	-	-
Generator 4 Power Output (kWhr)	14,752	14,976	14,980	14,972	14,964	15,196	15,032	14,952	14,948	13,800	13,252	13,188	13,188	13,192	13,328	455,961	-	-
Gross Power Output (kWhr)	45,671	46,890	46,845	46,687	46,710	48,127	46,821	46,713	44,960	44,318	42,090	42,644	42,912	41,479	42,256	1,398,525	-	-
Net Power Output (kWhr)	43,796	45,144	45,120	44,900	44,928	46,280	45,036	44,872	43,244	42,632	40,256	40,828	41,068	39,692	40,500	1,341,558	-	-
Power Sold as metered by NStar, (l	43,679	45,048	45,047	44,787	44,808	46,160	44,834	44,739	43,145	42,532	40,197	40,749	40,984	39,634	40,457	1,338,226	CRMCB inplant	-
Offgrid RECs (kWhr)	1,876	1,745	1,725	1,787	1,781	1,848	1,785	1,841	1,716	1,686	1,834	1,816	1,844	1,787	1,756	56,967	6,867	-
Calculated Performance Results																		12%
Daily																		of total in-plant power
Power output (kW average whe																		
Generator 1	658	603	601	602	601	601	601	601	602	601	603	602	602	602	602			
Generator 2	576	-	-	-	680	735	-	-	-	-	-	-	-	-	-			
Generator 3	659	723	723	716	703	691	723	723	650	624	578	625	638	578	605			
Generator 4	615	624	624	624	624	661	626	623	623	623	575	552	550	550	555			
Power output (kW average ove																		
Facility Gross	1,903	1,954	1,952	1,945	1,946	2,005	1,951	1,946	1,873	1,847	1,754	1,777	1,788	1,728	1,761			
Facility Net	1,825	1,881	1,880	1,871	1,872	1,928	1,877	1,870	1,802	1,776	1,677	1,701	1,711	1,654	1,688			
In-plant load	78	73	72	74	74	77	74	77	72	70	76	76	77	74	73			
Daily availability factor																		
Facility	75%	75%	75%	75%	76%	76%	75%	75%	75%	75%	75%	75%	75%	75%	75%			
Engine 1	63%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	38%	0%	0%	0%	58%	50%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 3	100%	100%	100%	100%	46%	58%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4	100%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Daily capacity factor																		
Facility	58%	59%	59%	59%	59%	61%	59%	59%	57%	56%	53%	54%	54%	52%	53%			
Engine 1	80%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%	73%			
Engine 2	70%	0%	0%	0%	82%	89%	0%	0%	0%	0%	0%	0%	0%	0%	0%			
Engine 3	80%	88%	88%	87%	85%	84%	88%	88%	79%	76%	70%	76%	77%	70%	73%			
Engine 4	75%	76%	76%	76%	76%	80%	76%	76%	76%	75%	70%	67%	67%	67%	67%			
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	720			
Engine 1	63	87	111	135	159	183	207	231	255	279	303	327	351	375	375			
Engine 2	347	347	347	347	361	373	373	373	373	373	373	373	373	373	373			
Engine 3	408	432	456	480	491	505	529	553	577	601	625	649	673	697	697			
Engine 4	408	432	456	480	504	527	551	575	599	623	647	671	695	719	719			
Engine operating run hours tota																		
Engine 1	100,413	100,437	100,461	100,485	100,509	100,533	100,557	100,581	100,605	100,629	100,653	100,677	100,701	100,725	100,725			
Engine 2	94,501	94,501	94,501	94,501	94,515	94,527	94,527	94,527	94,527	94,527	94,527	94,527	94,527	94,527	94,527			
Engine 3	96,193	96,217	96,241	96,265	96,276	96,290	96,314	96,338	96,362	96,386	96,410	96,434	96,458	96,482	96,482			
Engine 4	94,973	94,997	95,021	95,045	95,069	95,092	95,116	95,140	95,164	95,188	95,212	95,236	95,260	95,284	95,284			
Cumulative availability, %																		
Engine 1	15%	20%	24%	28%	32%	35%	38%	40%	43%	45%	47%	49%	50%	52%	52%			
Engine 2	85%	80%	76%	72%	72%	71%	68%	65%	62%	60%	58%	56%	54%	52%	52%			
Engine 3	100%	100%	100%	100%	97%	96%	96%	96%	96%	96%	96%	97%	97%	97%	97%			
Engine 4	100%	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	24,750			
Engine 1	2,398	3,002	3,603	4,204	4,805	5,406	6,007	6,609	7,210	7,811	8,414	9,016	9,618	10,219	10,219			
Engine 2	9,783	9,783	9,783	9,783	10,463	11,198	11,198	11,198	11,198	11,198	11,198	11,198	11,198	11,198	11,198			
Engine 3	11,094	11,817	12,541	13,256	13,960	14,651	15,374	16,097	16,747	17,372	17,949	18,574	19,213	19,790	19,818			
Engine 4	10,595	11,219	11,843	12,467	13,090	13,751	14,377	15,000	15,623	16,246	16,821	17,373	17,923	18,472	18,478			
Cumulative capacity factor, %																		
Engine 1	17%	20%	23%	25%	28%	30%	32%	33%	35%	36%	38%	39%	40%	41%	41%			
Engine 2	70%	66%	62%	59%	60%	62%	59%	57%	54%	52%	50%	48%	47%	45%	45%			
Engine 3	79%	80%	80%	80%	81%	81%	81%	81%	81%	81%	81%	80%	80%	80%	80%			
Engine 4	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	76%	75%	75%	75%	75%			

	Friday 8/17/2018	Saturday 8/18/2018	Sunday 8/19/2018	Monday 8/20/2018	Tuesday 8/21/2018	Wednesday 8/22/2018	Thursday 8/23/2018	Friday 8/24/2018	Saturday 8/25/2018	Sunday 8/26/2018	Monday 8/27/2018	Tuesday 8/28/2018	Wednesday 8/29/2018	Thursday 8/30/2018	Friday 8/31/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine run time, hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880	2,880			
Actual cumulative engine run time, hours	1,226	1,298	1,370	1,442	1,515	1,588	1,660	1,732	1,804	1,876	1,948	2,020	2,092	2,164	2,164			
Cumulative Availability, %	75.1%	75.1%	75.1%	75.1%	75.1%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.1%	75.1%	75.1%	75.1%			
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	2,376,000			
Actual cumulative gross output, kWh	769,073	815,963	862,808	909,495	956,205	1,004,332	1,051,153	1,097,866	1,142,826	1,187,144	1,229,234	1,271,878	1,314,790	1,356,269	1,357,046			
Cumulative Capacity Factor	57.1%	57.2%	57.3%	57.4%	57.5%	57.6%	57.7%	57.8%	57.7%	57.7%	57.5%	57.4%	57.2%	57.1%	57.1%			
Cumulative fuel input, MMBtu	9,494	10,059	10,632	11,202	11,784	12,380	12,948	13,523	14,077	14,627	15,146	15,704	16,241	16,780	16,766			
Cumulative gross output, kWh	769,073	815,963	862,808	909,495	956,205	1,004,332	1,051,153	1,097,866	1,142,826	1,187,144	1,229,234	1,271,878	1,314,790	1,356,269	1,357,046			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,142	10,837	11,009	11,000	11,207	11,159	10,905	11,088	11,096	11,168	11,109	11,779	11,259	11,702	11,184			
Daily heat rate, Btu/kWe net	12,378	12,039	12,230	12,220	12,449	12,396	12,114	12,318	12,327	12,406	12,340	13,085	12,507	12,999	12,424			
Cumulative heat rate, Btu/kWe gross	11,113	11,097	11,093	11,088	11,094	11,097	11,088	11,088	11,089	11,091	11,092	11,115	11,120	11,138	11,122			
Cumulative heat rate, Btu/kWe net	12,345	12,328	12,322	12,317	12,324	12,327	12,318	12,318	12,318	12,321	12,322	12,347	12,353	12,372	12,355			
Cumulative by Facility starting 8/1/2018																		
Max cumulative available engine run time, hours	21,596	21,692	21,788	21,884	21,980	22,076	22,172	22,268	22,364	22,460	22,556	22,652	22,748	22,844	22,844			
Actual cumulative engine run time, hours	14,593	14,665	14,737	14,809	14,882	14,955	15,027	15,099	15,171	15,243	15,315	15,387	15,459	15,531	15,531			
Cumulative Availability, %	67.6%	67.6%	67.6%	67.7%	67.7%	67.7%	67.8%	67.8%	67.8%	67.9%	67.9%	67.9%	68.0%	68.0%	68.0%			
Max cumulative gross output, kWh	17,820,000	17,899,200	17,978,400	18,057,600	18,136,800	18,216,000	18,295,200	18,374,400	18,453,600	18,532,800	18,612,000	18,691,200	18,770,400	18,849,600	18,849,600			
Actual cumulative gross output, kWh	9,448,029	9,494,919	9,541,764	9,588,451	9,635,161	9,683,288	9,730,109	9,776,822	9,821,782	9,866,100	9,908,190	9,950,834	9,993,746	10,035,225	10,036,002			
Cumulative Capacity Factor	53.0%	53.0%	53.1%	53.1%	53.1%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%			
Cumulative fuel input, MMBtu	103,475	104,040	104,613	105,183	105,765	106,361	106,928	107,504	108,058	108,608	109,127	109,685	110,222	110,761	110,747			
Cumulative gross output, kWh	8,069,795	8,116,685	8,163,530	8,210,217	8,256,927	8,305,054	8,351,875	8,398,588	8,443,548	8,487,866	8,529,956	8,572,600	8,615,512	8,656,991	8,657,768			
Cumulative heat rate, Btu/kWe gross	11,543	11,539	11,536	11,533	11,531	11,529	11,525	11,523	11,520	11,519	11,517	11,518	11,517	11,517	11,515			
Cumulative heat rate, Btu/kWe net	12,823	12,818	12,815	12,811	12,809	12,807	12,803	12,800	12,798	12,796	12,793	12,795	12,793	12,794	12,792			
Service																		
Engine 1																		
Engine 2	paired																	
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Friday 8/17/2018	Saturday 8/18/2018	Sunday 8/19/2018	Monday 8/20/2018	Tuesday 8/21/2018	Wednesday 8/22/2018	Thursday 8/23/2018	Friday 8/24/2018	Saturday 8/25/2018	Sunday 8/26/2018	Monday 8/27/2018	Tuesday 8/28/2018	Wednesday 8/29/2018	Thursday 8/30/2018	Friday 8/31/2018	TOTAL		
Hour																		
1	1,772	1,919	1,876	1,878	1,879	1,874	1,943	1,875	1,868	1,773	1,774	1,641	1,721	1,722	1,631			
2	1,772	1,875	1,877	1,879	1,881	1,875	1,875	1,874	1,869	1,774	1,774	1,677	1,641	1,723	1,631			
3	1,771	1,875	1,877	1,877	1,879	1,873	1,875	1,872	1,869	1,774	1,772	1,675	1,627	1,723	1,630			
4	1,773	1,876	1,877	1,877	1,878	1,873	1,875	1,873	1,870	1,778	1,768	1,676	1,642	1,723	1,629			
5	1,773	1,877	1,877	1,878	1,879	1,874	1,876	1,873	1,870	1,777	1,767	1,677	1,724	1,722	1,630			
6	1,772	1,876	1,877	1,878	1,878	1,873	1,874	1,871	1,868	1,775	1,766	1,676	1,722	1,719	1,626			
7	1,774	1,878	1,877	1,876	1,877	1,875	1,874	1,872	1,790	1,777	1,766	1,677	1,723	1,690	1,626			
8	1,772	1,878	1,878	1,877	1,877	1,875	1,874	1,870	1,775	1,776	1,738	1,676	1,722	1,629	1,630			
9	1,663	1,877	1,877	1,824	1,867	1,867	1,772	1,855	1,771	1,773	1,568	1,661	1,712	1,617	1,621			
10	1,484	1,876	1,877	1,771	1,867	1,936	1,863	1,856	1,770	1,772	1,685	1,663	1,711	1,615	1,620			
11	754	1,875	1,877	1,828	1,792	1,884	1,859	1,857	1,771	1,772	1,708	1,664	1,709	1,617	1,640			
12	1,882	1,872	1,875	1,862	1,835	1,947	1,860	1,850	1,767	1,763	1,640	1,767	1,710	1,618	1,709			
13	2,053	1,873	1,876	1,866	1,850	1,919	1,862	1,850	1,767	1,763	1,614	1,712	1,712	1,619	1,750			
14	2,008	1,873	1,876	1,867	1,864	1,954	1,858	1,847	1,772	1,764	1,616	1,713	1,710	1,619	1,811			
15	1,956	1,871	1,875	1,865	1,863	1,955	1,859	1,849	1,772	1,764	1,616	1,712	1,711	1,618	1,729			
16	1,958	1,873	1,876	1,867	1,864	1,959	1,865	1,859	1,773	1,765	1,618	1,714	1,714	1,621	1,721			
17	1,965	1,875	1,878	1,874	1,870	1,968	1,870	1,862	1,774	1,773	1,623	1,719	1,721	1,628	1,726			
18	1,966	1,877	1,878	1,875	1,870	1,968	1,872	1,866	1,773	1,773	1,623	1,720	1,721	1,629	1,727			
19	1,968	1,876	1,879	1,878	1,872	1,968	1,873	1,868	1,776	1,774	1,625	1,722	1,722	1,630	1,729			
20	1,970	1,876	1,878	1,878	1,873	1,968	1,873	1,869	1,776	1,774	1,625	1,722	1,723	1,631	1,729			
21	1,969	1,876	1,877	1,877	1,873	1,968	1,869	1,867	1,775	1,774	1,625	1,721	1,721	1,630	1,728			
22	1,968	1,876	1,877	1,878	1,873	1,969	1,868	1,868	1,776	1,775	1,628	1,721	1,721	1,630	1,729			
23	1,968	1,874	1,878	1,879	1,874	1,969	1,872	1,868	1,777	1,775	1,629	1,722	1,723	1,631	1,728			
24	1,968	1,874	1,877	1,878	1,873	1,969	1,873	1,868	1,776	1,774	1,629	1,721	1,721	1,630	1,727			
TOTAL	43,679	45,048	45,047	44,787	44,808	46,160	44,834	44,739	43,145	42,532	40,197	40,749	40,984	39,634	40,457			
Cumulative Output Sold, kWh	735,105	780,153	825,200	869,987	914,795	960,955	1,005,789	1,050,528	1,093,673	1,136,205	1,176,402	1,217,151	1,258,135	1,297,769	1,338,226			
Transformer and line efficiency	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%	99.6%	99.7%	99.8%	99.8%	99.9%	99.8%	99.8%	99.9%	99.9%	0.0%		
Hourly average	1,820	1,877	1,877	1,866	1,867	1,923	1,868	1,864	1,798	1,772	1,675	1,698	1,708	1,651	1,686	1,799		

SEPTEMBER 2018																	
		Saturday 9/1/2018	Sunday 9/2/2018	Monday 9/3/2018	Tuesday 9/4/2018	Wednesday 9/5/2018	Thursday 9/6/2018	Friday 9/7/2018	Saturday 9/8/2018	Sunday 9/9/2018	Monday 9/10/2018	Tuesday 9/11/2018	Wednesday 9/12/2018	Thursday 9/13/2018	Friday 9/14/2018	Saturday 9/15/2018	Sunday 9/16/2018
LFG and Biogas Flow to the Engines (KSCF)		1,136	1,077	1,102	1,100	1,114	1,101	1,059	1,085	1,064	1,110	1,081	1,105	1,089	567	522	1,125
LFG and Biogas Flow to the Engines (MMBTU HHV)		544	516	530	534	541	535	512	515	515	538	548	554	550	286	263	564
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	387	416	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	194	208	-
LFG and Biogas Total Flow (KSCF)		1,136	1,077	1,102	1,100	1,114	1,101	1,059	1,085	1,064	1,110	1,081	1,105	1,089	954	938	1,125
LFG and Biogas Total Flow (MMBTU HHV)		544	516	530	534	541	535	512	515	515	538	548	554	550	480	471	564
Average Methane Content (%)		47.3	47.4	47.5	48.0	48.0	48.0	47.8	46.9	47.8	47.9	50.1	49.5	49.9	49.7	49.7	49.5
Engine 1 Hours		24	24	24	24	24	24	16	-	-	-	5	1	-	3	-	-
Engine 2 Hours		-	-	-	-	-	-	4	24	24	24	18	24	24	12	12	24
Engine 3 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	12	12	24
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	12	12	24
Generator 1 Power Output (kWhr)		14,432	14,428	14,436	14,440	14,440	14,436	7,840	-	-	-	2,248	72	-	1,388	-	-
Generator 2 Power Output (kWhr)		-	-	-	-	-	-	1,532	12,060	12,056	12,060	8,680	11,860	12,044	4,708	6,011	12,660
Generator 3 Power Output (kWhr)		15,576	13,328	13,228	14,468	14,652	15,024	16,128	14,384	14,380	15,312	15,980	14,636	16,888	8,548	8,750	14,384
Generator 4 Power Output (kWhr)		13,180	13,180	13,504	13,192	13,192	13,192	15,568	15,108	14,368	14,368	16,008	15,548	14,364	7,916	8,500	17,348
Gross Power Output (kWhr)		43,176	40,931	41,179	42,105	42,323	42,707	41,111	41,512	40,770	41,685	42,850	42,009	43,167	22,492	23,261	44,356
Net Power Output (kWhr)		41,428	39,252	39,444	40,288	40,540	40,868	39,428	39,796	39,032	39,852	41,004	40,176	41,312	21,520	22,272	42,448
Power Sold as metered by NStar, (kWhr)		41,356	39,189	39,408	40,244	40,494	40,817	39,380	39,774	39,018	39,840	40,947	40,137	41,275	21,510	22,228	42,411
Offgrid RECs (kWhr)		1,747	1,680	1,735	1,817	1,784	1,838	1,683	1,715	1,739	1,833	1,847	1,831	1,857	972	989	1,908
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		601	601	602	602	602	602	490	-	-	-	450	72	-	463	-	-
Generator 2		-	-	-	-	-	-	383	503	502	503	482	494	502	392	501	528
Generator 3		649	555	551	603	611	626	672	599	599	638	666	610	704	712	729	599
Generator 4		549	549	563	550	550	550	649	630	599	599	667	648	599	660	708	723
Power output (kW average over 24-hrs)																	
Facility Gross		1,799	1,705	1,716	1,754	1,763	1,779	1,713	1,730	1,699	1,737	1,785	1,750	1,799	937	969	1,848
Facility Net		1,726	1,636	1,644	1,679	1,689	1,703	1,643	1,658	1,626	1,661	1,709	1,674	1,721	897	928	1,769
In-plant load		73	70	72	76	74	77	70	72	72	76	77	76	77	41	41	80
Daily availability factor																	
Facility		75%	75%	75%	75%	75%	75%	71%	75%	75%	75%	74%	76%	75%	41%	38%	75%
Engine 1		100%	100%	100%	100%	100%	100%	67%	0%	0%	0%	21%	4%	0%	13%	0%	0%
Engine 2		0%	0%	0%	0%	0%	0%	17%	100%	100%	100%	75%	100%	100%	50%	50%	100%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	50%	100%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	50%	50%	100%
Daily capacity factor																	
Facility		55%	52%	52%	53%	53%	54%	52%	52%	51%	53%	54%	53%	55%	28%	29%	56%
Engine 1		73%	73%	73%	73%	73%	73%	59%	0%	0%	0%	54%	9%	0%	56%	0%	0%
Engine 2		0%	0%	0%	0%	0%	0%	46%	61%	61%	61%	58%	60%	61%	48%	61%	64%
Engine 3		79%	67%	67%	73%	74%	76%	81%	73%	73%	73%	81%	74%	85%	86%	88%	73%
Engine 4		67%	67%	68%	67%	67%	67%	79%	76%	73%	73%	81%	79%	73%	80%	86%	88%
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	160	160	160	160	165	166	166	169	169	169
Engine 2		0	0	0	0	0	0	4	28	52	76	94	118	142	154	166	190
Engine 3		24	48	72	96	120	144	168	192	216	240	264	288	312	324	336	360
Engine 4		24	48	72	96	120	144	168	192	216	240	264	288	312	324	336	360
Engine operating run hours total from 0 hours																	
Engine 1		100,725	100,749	100,773	100,797	100,821	100,845	100,869	100,885	100,885	100,885	100,885	100,890	100,891	100,894	100,894	100,894
Engine 2		94,527	94,527	94,527	94,527	94,527	94,527	94,531	94,555	94,579	94,603	94,621	94,645	94,669	94,681	94,693	94,717
Engine 3		96,482	96,506	96,530	96,554	96,578	96,602	96,626	96,650	96,674	96,698	96,722	96,746	96,770	96,794	96,818	96,842
Engine 4		95,284	95,308	95,332	95,356	95,380	95,404	95,428	95,452	95,476	95,500	95,524	95,548	95,572	95,596	95,620	95,644
Cumulative availability, %	September, 2018 @ 00:00 hours																
Engine 1		100%	100%	100%	100%	100%	100%	95%	83%	74%	67%	63%	58%	53%	50%	47%	44%
Engine 2		0%	0%	0%	0%	0%	0%	2%	15%	24%	32%	36%	41%	46%	46%	46%	49%
Engine 3		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	93%	94%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	93%	94%
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		601	1,203	1,804	2,406	3,007	3,609	4,099	4,099	4,099	4,099	4,548	4,620	4,620	5,083	5,083	5,083
Engine 2		-	-	-	-	-	-	383	886	1,388	1,890	2,373	2,867	3,369	3,761	4,262	4,789
Engine 3		649	1,204	1,756	2,358	2,969	3,595	4,267	4,866	5,465	6,103	6,769	7,379	8,083	8,795	9,524	10,124
Engine 4		549	1,098	1,661	2,211	2,760	3,310	3,959	4,588	5,187	5,786	6,453	7,100	7,699	8,359	9,067	9,790
Cumulative capacity factor, %																	
Engine 1		73%	73%	73%	73%	73%	73%	71%	62%	55%	50%	50%	47%	43%	44%	41%	39%
Engine 2		0%	0%	0%	0%	0%	0%	7%	13%	19%	23%	26%	29%	31%	33%	34%	36%
Engine 3		79%	73%	71%	71%	72%	73%	74%	74%	74%	74%	75%	75%	75%	76%	77%	77%
Engine 4		67%	67%	67%	67%	67%	67%	69%	70%	70%	70%	71%	72%	72%	72%	73%	74%

		Saturday 9/1/2018	Sunday 9/2/2018	Monday 9/3/2018	Tuesday 9/4/2018	Wednesday 9/5/2018	Thursday 9/6/2018	Friday 9/7/2018	Saturday 9/8/2018	Sunday 9/9/2018	Monday 9/10/2018	Tuesday 9/11/2018	Wednesday 9/12/2018	Thursday 9/13/2018	Friday 9/14/2018	Saturday 9/15/2018	Sunday 9/16/2018
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	500	572	644	716	787	860	932	971	1,007	1,079
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.4%	74.5%	74.5%	74.6%	74.5%	74.7%	74.7%	72.2%	69.9%	70.2%
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		43,176	84,107	125,286	167,391	209,714	252,421	293,532	335,044	375,814	417,499	460,349	502,358	545,525	568,017	591,278	635,634
Cumulative Capacity Factor		54.5%	53.1%	52.7%	52.8%	53.0%	53.1%	52.9%	52.9%	52.7%	52.7%	52.8%	52.9%	53.0%	51.2%	49.8%	50.2%
Cumulative fuel input, MMBtu HHV		544	1,060	1,590	2,124	2,665	3,200	3,711	4,227	4,742	5,280	5,827	6,381	6,931	7,217	7,481	8,044
Cumulative gross output, kWhr		43,176	84,107	125,286	167,391	209,714	252,421	293,532	335,044	375,814	417,499	460,349	502,358	545,525	568,017	591,278	635,634
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,346	11,353	11,575	11,423	11,496	11,273	11,205	11,174	11,371	11,618	11,506	11,869	11,465	11,461	10,195	11,438
Daily heat rate, Btu/kWe gross HHV		12,604	12,611	12,858	12,690	12,771	12,523	12,447	12,413	12,632	12,906	12,782	13,185	12,737	12,731	11,326	12,706
Cumulative heat rate, Btu/kWe gross LHV		11,346	11,349	11,424	11,424	11,438	11,410	11,381	11,356	11,357	11,383	11,395	11,435	11,437	11,438	11,389	11,392
Cumulative heat rate, Btu/kWe gross HHV		12,604	12,608	12,690	12,690	12,706	12,675	12,643	12,615	12,617	12,646	12,658	12,702	12,705	12,706	12,652	12,656
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		22,940	23,036	23,132	23,228	23,324	23,420	23,516	23,612	23,708	23,804	23,900	23,996	24,092	24,188	24,284	24,380
Actual cumulative engine run hours		15,603	15,675	15,747	15,819	15,891	15,963	16,031	16,103	16,175	16,247	16,318	16,391	16,463	16,502	16,538	16,610
Cumulative Availability, %		68.0%	68.0%	68.1%	68.1%	68.1%	68.2%	68.2%	68.2%	68.2%	68.3%	68.3%	68.3%	68.3%	68.2%	68.1%	68.1%
Max cumulative gross output, kWhr		18,928,800	19,008,000	19,087,200	19,166,400	19,245,600	19,324,800	19,404,000	19,483,200	19,562,400	19,641,600	19,720,800	19,800,000	19,879,200	19,958,400	20,037,600	20,116,800
Actual cumulative gross output, kWhr		10,079,178	10,120,109	10,161,288	10,203,393	10,245,716	10,288,423	10,329,534	10,371,046	10,411,816	10,453,501	10,496,351	10,538,360	10,581,527	10,604,019	10,627,280	10,671,636
Cumulative Capacity Factor		53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.2%	53.1%	53.0%	53.0%
Cumulative fuel input, MMBtu HHV		111,291	111,807	112,337	112,871	113,412	113,946	114,458	114,973	115,488	116,026	116,574	117,128	117,678	117,964	118,228	118,791
Cumulative gross output, kWhr		8,700,944	8,741,875	8,783,054	8,825,159	8,867,482	8,910,189	8,951,300	8,992,812	9,033,582	9,075,267	9,118,117	9,160,126	9,203,293	9,225,785	9,249,046	9,293,402
Cumulative heat rate, Btu/kWe gross LHV		11,514	11,513	11,514	11,513	11,513	11,512	11,511	11,509	11,508	11,509	11,509	11,511	11,510	11,510	11,507	11,507
Cumulative heat rate, Btu/kWe gross HHV		12,791	12,790	12,790	12,790	12,790	12,788	12,787	12,785	12,784	12,785	12,785	12,787	12,786	12,786	12,783	12,782
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports																	
Date		Saturday 9/1/2018	Sunday 9/2/2018	Monday 9/3/2018	Tuesday 9/4/2018	Wednesday 9/5/2018	Thursday 9/6/2018	Friday 9/7/2018	Saturday 9/8/2018	Sunday 9/9/2018	Monday 9/10/2018	Tuesday 9/11/2018	Wednesday 9/12/2018	Thursday 9/13/2018	Friday 9/14/2018	Saturday 9/15/2018	Sunday 9/16/2018
Hour																	
1		1,728	1,726	1,632	1,630	1,692	1,727	1,728	1,742	1,627	1,622	1,746	1,693	1,732	1,738	-	1,771
2		1,727	1,655	1,632	1,630	1,633	1,727	1,729	1,742	1,625	1,626	1,747	1,622	1,742	1,738	-	1,771
3		1,726	1,632	1,630	1,630	1,633	1,727	1,729	1,741	1,626	1,624	1,746	1,622	1,741	1,742	-	1,770
4		1,725	1,632	1,630	1,631	1,633	1,726	1,730	1,747	1,623	1,626	1,745	1,622	1,740	1,743	-	1,770
5		1,726	1,633	1,631	1,631	1,634	1,728	1,730	1,748	1,627	1,622	1,746	1,623	1,742	1,685	-	1,770
6		1,727	1,631	1,630	1,631	1,633	1,727	1,731	1,747	1,625	1,621	1,745	1,622	1,675	1,623	-	1,769
7		1,727	1,632	1,630	1,632	1,635	1,726	1,731	1,635	1,626	1,625	1,650	1,618	1,624	1,624	-	1,770
8		1,726	1,630	1,630	1,630	1,635	1,692	1,731	1,630	1,628	1,627	1,625	1,617	1,623	1,624	-	1,770
9		1,723	1,629	1,629	1,617	1,623	1,623	777	1,628	1,627	1,619	1,617	1,612	1,617	1,612	-	1,768
10		1,723	1,627	1,625	1,618	1,623	1,623	1,221	1,627	1,622	1,616	1,574	1,670	1,720	1,645	-	1,765
11		1,720	1,627	1,624	1,620	1,709	1,623	1,548	1,628	1,626	1,615	1,676	1,673	1,731	1,586	-	1,768
12		1,714	1,617	1,626	1,682	1,716	1,621	1,604	1,627	1,627	1,617	1,711	1,710	1,732	1,761	693	1,764
13		1,715	1,617	1,617	1,715	1,716	1,620	1,775	1,627	1,626	1,621	1,690	1,735	1,733	1,389	1,776	1,760
14		1,716	1,618	1,626	1,712	1,718	1,684	1,776	1,627	1,627	1,620	1,736	1,737	-	-	1,881	1,762
15		1,715	1,617	1,626	1,712	1,719	1,716	1,377	1,626	1,626	1,617	1,813	1,734	1,733	-	1,839	1,761
16		1,716	1,619	1,629	1,717	1,720	1,739	1,445	1,627	1,627	1,618	1,734	1,734	-	-	1,839	1,764
17		1,719	1,630	1,629	1,723	1,726	1,724	1,942	1,629	1,628	1,688	1,683	1,743	1,742	-	1,810	1,765
18		1,725	1,630	1,630	1,725	1,728	1,725	1,876	1,628	1,625	1,742	1,378	1,742	1,741	-	1,768	1,767
19		1,726	1,631	1,739	1,726	1,729	1,727	1,875	1,628	1,623	1,744	1,655	1,741	1,739	-	1,769	1,768
20		1,727	1,632	1,725	1,727	1,728	1,729	1,593	1,629	1,626	1,746	1,863	1,741	1,738	-	1,770	1,770
21		1,726	1,631	1,724	1,727	1,728	1,727	1,422	1,627	1,625	1,745	1,658	1,741	-	-	1,769	1,768
22		1,726	1,632	1,654	1,727	1,729	1,728	1,823	1,628	1,627	1,747	1,741	1,623	1,741	-	1,771	1,767
23		1,727	1,631	1,630	1,727	1,728	1,724	1,745	1,628	1,627	1,745	1,741	1,623	1,742	-	1,772	1,767
24		1,726	1,630	1,630	1,724	1,726	1,724	1,742	1,628	1,622	1,747	1,740	1,623	1,739	-	1,771	1,766
TOTAL		41,356	39,189	39,408	40,244	40,494	40,817	39,380	39,774	39,018	39,840	40,947	40,137	41,275	21,510	22,228	42,411
Cumulative Output Sold, kWhr		41,356	80,545	119,953	160,197	200,691	241,508	280,888	320,662	359,680	399,520	440,467	480,604	521,879	543,389	565,617	608,028
Transformer and line efficiency		99.8%	99.8%	99.9%	99.9%	99.9%	99.9%	99.9%	99.9%	100.0%	100.0%	99.9%	99.9%	99.9%	100.0%	99.8%	99.9%
Hourly average		1,723	1,633	1,642	1,677	1,687	1,701	1,641	1,657	1,626	1,660	1,706	1,672	1,720	896	926	1,767

SEPTEMBER 2018																	
	Monday 9/17/2018	Tuesday 9/18/2018	Wednesday 9/19/2018	Thursday 9/20/2018	Friday 9/21/2018	Saturday 9/22/2018	Sunday 9/23/2018	Monday 9/24/2018	Tuesday 9/25/2018	Wednesday 9/26/2018	Thursday 9/27/2018	Friday 9/28/2018	Saturday 9/29/2018	Sunday 9/30/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,099	1,088	1,086	1,114	1,087	1,103	1,055	1,090	1,103	1,072	1,097	1,114	1,131	1,112	31,786	1,650	30,136
LFG and Biogas Flow to the Engine	548	557	553	551	540	550	523	538	554	553	558	562	554	538	15,724	1,136	14,588
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	803	7.2%	93%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	402		
LFG and Biogas Total Flow (KSCF)	1,099	1,088	1,086	1,114	1,087	1,103	1,055	1,090	1,103	1,072	1,097	1,114	1,131	1,112	32,589		
LFG and Biogas Total Flow (MMBT	548	557	553	551	540	550	523	538	554	553	558	562	554	538	16,125		
Average Methane Content (%)	49.3	50.6	50.3	48.9	49.1	49.2	49.0	48.8	49.6	51.0	50.2	49.9	48.4	47.8	48.9		
Engine 1 Hours	1	16	24	24	24	24	24	24	24	24	24	24	24	24	474		
Engine 2 Hours	24	9	-	-	-	-	-	-	-	-	-	15	24	24	286		
Engine 3 Hours	24	24	24	24	24	24	24	24	24	24	24	8	-	-	632		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	23	24	24	24	695		
Generator 1 Power Output (kWhr)	132	5,992	12,204	13,840	13,844	13,844	13,840	13,848	14,072	14,428	14,188	14,780	15,012	14,260	272,444		
Generator 2 Power Output (kWhr)	11,784	4,296	-	-	-	-	-	-	-	-	-	9,416	13,828	13,820	146,815		
Generator 3 Power Output (kWhr)	14,508	16,840	15,744	14,356	14,816	14,388	13,800	14,708	16,040	15,068	14,928	5,860	-	-	396,722		
Generator 4 Power Output (kWhr)	16,980	16,384	16,240	15,020	15,888	15,568	13,776	13,780	14,788	16,112	15,136	15,832	13,800	13,796	431,636		
Gross Power Output (kWhr)	43,313	43,392	44,106	43,143	44,502	43,755	41,345	42,243	44,891	45,585	44,221	45,964	42,730	41,893	1,246,717		
Net Power Output (kWhr)	41,404	41,580	42,308	41,336	42,740	42,028	39,712	40,476	43,084	43,768	42,472	44,132	40,960	40,132	1,194,792		
Power Sold as metered by NStar, (l	41,365	41,543	42,257	41,303	42,667	41,959	39,689	40,456	43,006	43,701	42,376	44,032	40,868	40,065	1,193,315	CRMCB Inplant	
Offgrid RECs (kWhr)	1,909	1,811	1,797	1,809	1,761	1,726	1,633	1,768	1,807	1,817	1,749	1,832	1,770	1,761	51,925	7,663	
Calculated Performance Results																	
Daily																	
Power output (kW average whe																	15%
Generator 1	132	375	509	577	577	577	577	577	586	601	591	616	626	594			of total in-plant power
Generator 2	491	477	-	-	-	-	-	-	-	-	-	628	576	576			
Generator 3	605	702	656	598	617	600	575	613	668	628	622	733	-	-			
Generator 4	708	683	677	626	662	649	574	616	671	668	658	660	575	575			
Power output (kW average ove																	
Facility Gross	1,805	1,808	1,838	1,798	1,854	1,823	1,723	1,760	1,870	1,899	1,843	1,915	1,780	1,746			
Facility Net	1,725	1,733	1,763	1,722	1,781	1,751	1,655	1,687	1,795	1,824	1,770	1,839	1,707	1,672			
In-plant load	80	76	75	75	73	72	68	74	75	76	73	76	74	73			
Daily availability factor																	
Facility	76%	76%	75%	75%	75%	75%	75%	75%	75%	75%	74%	74%	75%	75%			
Engine 1	4%	67%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	38%	0%	0%	0%	0%	0%	0%	0%	0%	0%	63%	100%	100%			
Engine 3	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	33%	0%	0%			
Engine 4	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	96%	100%	100%	100%			
Daily capacity factor																	
Facility	55%	55%	56%	54%	56%	55%	52%	53%	57%	58%	56%	58%	54%	53%			
Engine 1	16%	45%	62%	70%	70%	70%	70%	70%	71%	73%	72%	75%	76%	72%			
Engine 2	60%	58%	0%	0%	0%	0%	0%	0%	0%	0%	0%	76%	70%	70%			
Engine 3	73%	85%	80%	73%	75%	73%	70%	74%	81%	76%	75%	89%	0%	0%			
Engine 4	86%	83%	82%	76%	80%	79%	70%	70%	75%	81%	80%	80%	70%	70%			
Cumulative by engine																	
Engine operating run hours in th																	
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720			
Engine 1	170	186	210	234	258	282	306	330	354	378	402	426	450	474			
Engine 2	214	223	223	223	223	223	223	223	223	223	223	238	262	286			
Engine 3	384	408	432	456	480	504	528	552	576	600	624	632	632	632			
Engine 4	384	408	432	456	480	504	528	552	576	600	623	647	671	695			
Engine operating run hours tota																	
Engine 1	100,895	100,911	100,935	100,959	100,983	101,007	101,031	101,055	101,079	101,103	101,127	101,151	101,175	101,199			
Engine 2	94,741	94,750	94,750	94,750	94,750	94,750	94,750	94,750	94,750	94,750	94,750	94,765	94,789	94,813			
Engine 3	96,866	96,890	96,914	96,938	96,962	96,986	97,010	97,034	97,058	97,082	97,106	97,114	97,114	97,114			
Engine 4	95,668	95,692	95,716	95,740	95,764	95,788	95,812	95,836	95,860	95,884	95,907	95,931	95,955	95,979			
Cumulative availability, %																	
Engine 1	42%	43%	46%	49%	51%	53%	55%	57%	59%	61%	62%	63%	65%	66%			
Engine 2	52%	52%	49%	46%	44%	42%	39%	37%	36%	34%	35%	38%	40%	40%			
Engine 3	94%	94%	95%	95%	95%	95%	96%	96%	96%	96%	96%	94%	91%	88%			
Engine 4	94%	94%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	96%	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	5,215	5,590	6,098	6,675	7,252	7,828	8,405	8,982	9,568	10,170	10,761	11,377	12,002	12,596			
Engine 2	5,280	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	5,758	6,385	6,962	7,537			
Engine 3	10,728	11,430	12,086	12,684	13,301	13,901	14,476	15,089	15,757	16,385	17,007	17,739	17,739	17,739			
Engine 4	10,497	11,180	11,857	12,482	13,144	13,793	14,367	14,941	15,557	16,229	16,887	17,546	18,121	18,696			
Cumulative capacity factor, %																	
Engine 1	37%	38%	39%	40%	42%	43%	44%	45%	46%	47%	48%	49%	50%	51%			
Engine 2	38%	39%	37%	35%	33%	32%	30%	28%	27%	26%	28%	29%	30%	30%			
Engine 3	76%	77%	77%	77%	77%	77%	76%	76%	76%	76%	76%	77%	74%	72%			
Engine 4	75%	75%	76%	76%	76%	76%	76%	75%	75%	76%	76%	76%	76%	76%			

	Monday 9/17/2018	Tuesday 9/18/2018	Wednesday 9/19/2018	Thursday 9/20/2018	Friday 9/21/2018	Saturday 9/22/2018	Sunday 9/23/2018	Monday 9/24/2018	Tuesday 9/25/2018	Wednesday 9/26/2018	Thursday 9/27/2018	Friday 9/28/2018	Saturday 9/29/2018	Sunday 9/30/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																	
Max cumulative available engine run hours	1,632	1,728	1,824	1,920	2,016	2,112	2,208	2,304	2,400	2,496	2,592	2,688	2,784	2,880			
Actual cumulative engine run hours	1,152	1,225	1,297	1,369	1,441	1,513	1,585	1,657	1,729	1,801	1,872	1,943	2,015	2,087			
Cumulative Availability, %	70.6%	70.9%	71.1%	71.3%	71.5%	71.6%	71.8%	71.9%	72.0%	72.2%	72.2%	72.3%	72.4%	72.5%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000			
Actual cumulative gross output, kWh	678,947	722,339	766,445	809,588	854,090	897,845	939,190	981,433	1,026,324	1,071,909	1,116,130	1,162,094	1,204,824	1,246,717			
Cumulative Capacity Factor	50.4%	50.7%	50.9%	51.1%	51.4%	51.5%	51.6%	51.6%	51.8%	52.1%	52.2%	52.4%	52.5%	52.5%			
Cumulative fuel input, MMBtu	8,593	9,150	9,703	10,254	10,794	11,344	11,867	12,405	12,959	13,512	14,070	14,632	15,186	15,724			
Cumulative gross output, kWh	678,947	722,339	766,445	809,588	854,090	897,845	939,190	981,433	1,026,324	1,071,909	1,116,130	1,162,094	1,204,824	1,246,717			
Heat Rate																	
Daily heat rate, Btu/kWe gross	11,398	11,560	11,283	11,497	10,927	11,311	11,385	11,467	11,113	10,928	11,351	11,011	11,661	11,558			
Daily heat rate, Btu/kWe net	12,661	12,841	12,533	12,771	12,139	12,565	12,647	12,738	12,345	12,140	12,609	12,231	12,953	12,840			
Cumulative heat rate, Btu/kWe gross	11,393	11,403	11,396	11,401	11,377	11,373	11,374	11,378	11,366	11,348	11,348	11,335	11,346	11,353			
Cumulative heat rate, Btu/kWe net	12,656	12,667	12,659	12,665	12,638	12,634	12,635	12,639	12,627	12,606	12,606	12,591	12,604	12,612			
Cumulative by Facility starting 9/17/2018																	
Max cumulative available engine run hours	24,476	24,572	24,668	24,764	24,860	24,956	25,052	25,148	25,244	25,340	25,436	25,532	25,628	25,724			
Actual cumulative engine run hours	16,683	16,756	16,828	16,900	16,972	17,044	17,116	17,188	17,260	17,332	17,403	17,474	17,546	17,618			
Cumulative Availability, %	68.2%	68.2%	68.2%	68.2%	68.3%	68.3%	68.3%	68.3%	68.4%	68.4%	68.4%	68.4%	68.5%	68.5%			
Max cumulative gross output, kWh	20,196,000	20,275,200	20,354,400	20,433,600	20,512,800	20,592,000	20,671,200	20,750,400	20,829,600	20,908,800	20,988,000	21,067,200	21,146,400	21,225,600			
Actual cumulative gross output, kWh	10,714,949	10,758,341	10,802,447	10,845,590	10,889,092	10,933,847	10,975,192	11,017,435	11,062,326	11,107,911	11,152,132	11,196,096	11,240,826	11,282,719			
Cumulative Capacity Factor	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.1%	53.2%	53.2%	53.2%			
Cumulative fuel input, MMBtu	119,340	119,897	120,450	121,001	121,541	122,091	122,614	123,152	123,706	124,259	124,817	125,379	125,933	126,470			
Cumulative gross output, kWh	9,336,715	9,380,107	9,424,213	9,467,356	9,511,858	9,555,613	9,596,958	9,639,201	9,684,092	9,729,677	9,773,898	9,819,862	9,862,592	9,904,485			
Cumulative heat rate, Btu/kWe gross	11,506	11,506	11,505	11,505	11,503	11,502	11,501	11,501	11,499	11,497	11,496	11,494	11,494	11,495			
Cumulative heat rate, Btu/kWe net	12,782	12,782	12,781	12,781	12,778	12,777	12,776	12,776	12,774	12,771	12,770	12,768	12,769	12,769			
Service																	
Engine 1																	
Engine 2																	
Engine 3																	
Engine 4																	
Oil - oil and filter change																	
Service - plugs, air filter, valve insp																	
Precipitation																	
NSTAR Power Reports																	
Date	9/17/2018	9/18/2018	9/19/2018	9/20/2018	9/21/2018	9/22/2018	9/23/2018	9/24/2018	9/25/2018	9/26/2018	9/27/2018	9/28/2018	9/29/2018	9/30/2018	TOTAL		
Hour																	
1	1,767	1,739	1,772	1,747	1,737	1,824	1,654	1,652	1,738	1,867	1,771	1,871	1,703	1,702			
2	1,769	1,638	1,773	1,746	1,738	1,825	1,654	1,646	1,738	1,867	1,772	1,873	1,703	1,699			
3	1,768	1,621	1,773	1,746	1,738	1,824	1,653	1,648	1,734	1,867	1,772	1,871	1,703	1,698			
4	1,768	1,635	1,773	1,745	1,738	1,825	1,654	1,648	1,736	1,805	1,772	1,871	1,703	1,698			
5	1,769	1,741	1,773	1,785	1,738	1,826	1,653	1,649	1,737	1,772	1,773	1,873	1,704	1,703			
6	1,767	1,738	1,706	1,791	1,738	1,824	1,652	1,646	1,738	1,773	1,769	1,873	1,703	1,702			
7	1,767	1,740	1,654	1,793	1,738	1,789	1,653	1,644	1,739	1,773	1,678	1,873	1,704	1,702			
8	1,747	1,740	1,655	1,791	1,738	1,738	1,653	1,648	1,739	1,774	1,678	1,875	1,705	1,703			
9	1,637	1,510	1,719	1,684	1,728	1,736	1,654	1,644	1,733	1,767	1,658	1,671	1,705	1,695			
10	1,521	1,682	1,739	1,642	1,731	1,735	1,654	1,645	1,732	1,767	1,646	1,802	1,704	1,649			
11	1,538	1,763	1,741	1,643	1,732	1,735	1,654	1,647	1,734	1,788	1,718	1,893	1,703	1,654			
12	1,688	1,761	1,789	1,644	1,732	1,735	1,654	1,646	1,735	1,861	1,893	1,893	1,702	1,642			
13	1,734	1,762	1,810	1,644	1,765	1,735	1,654	1,647	1,737	1,861	1,849	1,893	1,701	1,642			
14	1,734	1,765	1,808	1,646	1,820	1,735	1,655	1,659	1,778	1,862	1,861	1,893	1,701	1,643			
15	1,734	1,768	1,810	1,548	1,819	1,735	1,654	1,733	1,831	1,861	1,864	1,891	1,699	1,644			
16	1,740	1,769	1,727	1,816	1,821	1,736	1,653	1,734	1,867	1,863	1,870	1,894	1,701	1,650			
17	1,741	1,774	1,816	1,738	1,827	1,738	1,655	1,741	1,873	1,867	1,875	1,897	1,704	1,654			
18	1,739	1,771	1,820	1,738	1,828	1,738	1,655	1,740	1,870	1,867	1,877	1,845	1,703	1,655			
19	1,740	1,768	1,819	1,737	1,828	1,737	1,655	1,740	1,870	1,868	1,878	1,798	1,704	1,654			
20	1,741	1,770	1,791	1,738	1,828	1,739	1,655	1,741	1,872	1,868	1,878	1,799	1,705	1,654			
21	1,738	1,771	1,748	1,736	1,827	1,691	1,653	1,739	1,869	1,790	1,875	1,773	1,702	1,656			
22	1,739	1,772	1,748	1,736	1,827	1,652	1,652	1,739	1,868	1,771	1,876	1,703	1,702	1,655			
23	1,740	1,773	1,747	1,735	1,826	1,654	1,654	1,740	1,870	1,771	1,872	1,704	1,702	1,656			
24	1,739	1,772	1,746	1,734	1,825	1,653	1,652	1,740	1,868	1,771	1,873	1,703	1,702	1,655			
TOTAL	41,365	41,543	42,257	41,303	42,667	41,959	39,689	40,456	43,006	43,701	42,376	44,032	40,868	40,065			
Cumulative Output Sold, kWh	649,393	690,936	733,193	774,496	817,163	859,122	898,811	939,267	982,273	1,025,974	1,068,350	1,112,382	1,153,250	1,193,315			
Transformer and line efficiency	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%	99.9%	100.0%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	0.0%		
Hourly average	1,724	1,731	1,761	1,721	1,778	1,748	1,654	1,686	1,792	1,821	1,766	1,835	1,703	1,669	1,657		

OCTOBER 2018																	
		Monday 10/1/2018	Tuesday 10/2/2018	Wednesday 10/3/2018	Thursday 10/4/2018	Friday 10/5/2018	Saturday 10/6/2018	Sunday 10/7/2018	Monday 10/8/2018	Tuesday 10/9/2018	Wednesday 10/10/2018	Thursday 10/11/2018	Friday 10/12/2018	Saturday 10/13/2018	Sunday 10/14/2018	Monday 10/15/2018	Tuesday 10/16/2018
LFG and Biogas Flow to the Engines (KSCF)		1,099	1,139	1,096	1,112	1,096	1,108	1,098	1,056	1,087	1,138	1,099	1,101	1,118	1,140	1,157	1,072
LFG and Biogas Flow to the Engines (MMBTU HHV)		551	580	562	571	560	564	557	532	560	587	567	548	525	524	560	460
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and BiogasFlow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,099	1,139	1,096	1,112	1,096	1,108	1,098	1,056	1,087	1,138	1,099	1,101	1,118	1,140	1,157	1,072
LFG and Biogas Total Flow (MMBTU HHV)		551	580	562	571	560	564	557	532	560	587	567	548	525	524	560	460
Average Methane Content (%)		49.5	50.3	50.6	50.8	50.5	50.2	50.1	49.8	50.9	51.0	50.9	49.2	46.4	45.4	47.8	42.4
Engine 1 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	17
Engine 2 Hours		24	24	24	14	-	-	-	-	1	-	-	-	-	-	9	17
Engine 3 Hours		-	-	-	10	24	24	24	23	25	24	24	24	24	24	24	18
Engine 4 Hours		24	24	24	24	24	24	24	24	24	24	24	24	24	24	16	-
Generator 1 Power Output (kW/hr)		13,752	14,632	15,604	15,604	15,616	15,612	15,612	15,612	15,228	15,948	16,212	16,208	14,436	13,836	15,468	13,412
Generator 2 Power Output (kW/hr)		14,976	15,888	14,100	8,532	-	-	-	-	148	-	-	-	-	-	4,296	10,392
Generator 3 Power Output (kW/hr)		-	-	-	6,216	14,164	13,800	13,796	13,796	15,932	16,184	14,392	14,552	14,388	14,384	16,320	13,304
Generator 4 Power Output (kW/hr)		14,413	16,164	16,152	15,080	16,152	16,156	15,428	13,796	15,132	16,484	16,736	15,568	14,392	14,392	8,568	-
Gross Power Output (kW/hr)		43,574	46,797	45,972	45,530	46,004	45,622	44,876	43,240	46,510	48,732	47,458	46,446	43,290	42,688	44,713	37,167
Net Power Output (kW/hr)		41,779	44,952	44,128	43,700	44,216	43,900	43,156	41,592	44,736	46,884	45,684	44,708	41,588	40,948	42,884	35,760
Power Sold as metered by NStar, (kW/hr)		41,758	44,791	44,010	43,583	44,093	43,791	43,049	41,506	44,607	46,736	45,540	44,589	41,517	40,875	42,801	35,673
Offgrid RECs (kW/hr)		1,795	1,844	1,844	1,831	1,787	1,722	1,720	1,648	1,774	1,848	1,773	1,739	1,702	1,740	1,829	1,407
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		573	610	650	650	651	651	651	651	635	665	676	675	602	577	645	789
Generator 2		624	662	588	609	-	-	-	-	148	-	-	-	-	-	477	611
Generator 3		-	-	-	622	590	575	575	600	637	674	600	606	600	599	680	739
Generator 4		601	674	673	628	673	673	643	575	631	687	697	648	600	600	536	-
Power output (kW average over 24-hrs)																	
Facility Gross		1,816	1,950	1,916	1,897	1,917	1,901	1,870	1,802	1,938	2,031	1,977	1,935	1,804	1,779	1,863	1,549
Facility Net		1,741	1,873	1,839	1,821	1,842	1,829	1,798	1,733	1,864	1,954	1,904	1,863	1,733	1,706	1,787	1,490
In-plant load		75	77	77	76	75	72	72	69	74	77	74	72	71	73	76	59
Daily availability factor																	
Facility		75%	75%	75%	75%	75%	75%	75%	74%	77%	75%	75%	75%	75%	75%	76%	54%
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	71%
Engine 2		100%	100%	100%	58%	0%	0%	0%	0%	4%	0%	0%	0%	0%	0%	38%	71%
Engine 3		0%	0%	0%	42%	100%	100%	100%	96%	104%	100%	100%	100%	100%	100%	100%	75%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%	0%
Daily capacity factor																	
Facility		55%	59%	58%	57%	58%	58%	57%	55%	59%	62%	60%	59%	55%	54%	56%	47%
Engine 1		69%	74%	79%	79%	79%	79%	79%	79%	81%	82%	82%	82%	73%	70%	78%	96%
Engine 2		76%	80%	71%	74%	0%	0%	0%	0%	18%	0%	0%	0%	0%	0%	58%	74%
Engine 3		0%	0%	0%	75%	72%	70%	73%	77%	82%	73%	73%	73%	73%	73%	82%	90%
Engine 4		73%	82%	82%	76%	82%	82%	78%	70%	76%	83%	85%	79%	73%	73%	65%	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	377
Engine 2		24	48	72	86	86	86	86	86	87	87	87	87	87	87	96	113
Engine 3		0	0	0	10	34	58	82	105	130	154	178	202	226	250	274	292
Engine 4		24	48	72	96	120	144	168	192	216	240	264	288	312	336	352	352
Engine operating run hours total from 0 hours																	
Engine 1	101,199	101,223	101,247	101,271	101,295	101,319	101,343	101,367	101,391	101,415	101,439	101,463	101,487	101,511	101,535	101,559	101,576
Engine 2	94,813	94,837	94,861	94,885	94,899	94,899	94,899	94,899	94,899	94,900	94,900	94,900	94,900	94,900	94,900	94,909	94,926
Engine 3	97,114	97,114	97,114	97,114	97,124	97,148	97,172	97,196	97,219	97,244	97,268	97,292	97,316	97,340	97,364	97,388	97,406
Engine 4	95,979	96,003	96,027	96,051	96,075	96,099	96,123	96,147	96,171	96,195	96,219	96,243	96,267	96,291	96,315	96,331	96,331
Cumulative availability, %	October, 2018 @ 00:00 hours																
Engine 1		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%
Engine 2		100%	100%	100%	90%	72%	60%	51%	45%	40%	36%	33%	30%	28%	26%	27%	29%
Engine 3		0%	0%	0%	10%	28%	40%	49%	55%	60%	64%	67%	70%	72%	74%	76%	76%
Engine 4		100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%	92%
Engine cumulative gross output, kW/hr																	
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		573	1,183	1,833	2,483	3,134	3,784	4,435	5,085	5,720	6,384	7,060	7,735	8,337	8,913	9,558	10,346
Engine 2		624	1,286	1,874	2,483	2,483	2,483	2,483	2,483	2,631	2,631	2,631	2,631	2,631	2,631	3,108	3,720
Engine 3		-	-	-	622	1,212	1,787	2,362	2,961	3,599	4,273	4,873	5,479	6,079	6,678	7,358	8,097
Engine 4		601	1,274	1,947	2,575	3,248	3,922	4,564	5,139	5,770	6,457	7,154	7,802	8,402	9,001	9,537	9,537
Cumulative capacity factor, %																	
Engine 1		69%	72%	74%	75%	76%	76%	77%	77%	77%	77%	78%	78%	78%	77%	77%	78%
Engine 2		76%	78%	76%	75%	60%	50%	43%	38%	35%	32%	29%	27%	25%	23%	25%	28%
Engine 3		0%	0%	0%	19%	29%	36%	41%	45%	48%	52%	54%	55%	57%	58%	59%	61%
Engine 4		73%	77%	79%	78%	79%	79%	79%	78%	78%	78%	79%	79%	78%	78%	77%	72%

		Monday 10/1/2018	Tuesday 10/2/2018	Wednesday 10/3/2018	Thursday 10/4/2018	Friday 10/5/2018	Saturday 10/6/2018	Sunday 10/7/2018	Monday 10/8/2018	Tuesday 10/9/2018	Wednesday 10/10/2018	Thursday 10/11/2018	Friday 10/12/2018	Saturday 10/13/2018	Sunday 10/14/2018	Monday 10/15/2018	Tuesday 10/16/2018
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	575	649	721	793	865	937	1,009	1,082	1,134
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	75.0%	74.9%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%	75.1%	73.8%
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		43,574	90,371	136,343	181,873	227,877	273,499	318,375	361,615	408,125	456,857	504,315	550,761	594,051	636,739	681,452	718,619
Cumulative Capacity Factor		55.0%	57.1%	57.4%	57.4%	57.5%	57.6%	57.4%	57.1%	57.3%	57.7%	57.9%	58.0%	57.7%	57.4%	57.4%	56.7%
Cumulative fuel input, MMBtu HHV		551	1,130	1,692	2,263	2,823	3,387	3,944	4,477	5,037	5,624	6,190	6,738	7,264	7,787	8,347	8,807
Cumulative gross output, kWhr		43,574	90,371	136,343	181,873	227,877	273,499	318,375	361,615	408,125	456,857	504,315	550,761	594,051	636,739	681,452	718,619
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,375	11,149	11,001	11,297	10,956	11,121	11,179	11,082	10,839	10,845	10,747	10,623	10,924	11,042	11,268	11,133
Daily heat rate, Btu/kWe gross HHV		12,636	12,385	12,220	12,550	12,171	12,354	12,419	12,310	12,040	12,048	11,939	11,801	12,135	12,267	12,517	12,367
Cumulative heat rate, Btu/kWe gross LHV		11,375	11,258	11,171	11,203	11,153	11,148	11,152	11,144	11,109	11,081	11,049	11,013	11,007	11,009	11,026	11,032
Cumulative heat rate, Btu/kWe gross HHV		12,636	12,506	12,410	12,445	12,390	12,384	12,389	12,379	12,341	12,309	12,274	12,235	12,227	12,230	12,249	12,255
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours		25,820	25,916	26,012	26,108	26,204	26,300	26,396	26,492	26,588	26,684	26,780	26,876	26,972	27,068	27,164	27,260
Actual cumulative engine run hours		17,690	17,762	17,834	17,906	17,978	18,050	18,122	18,193	18,267	18,339	18,411	18,483	18,555	18,627	18,700	18,752
Cumulative Availability, %		68.5%	68.5%	68.6%	68.6%	68.6%	68.6%	68.7%	68.7%	68.7%	68.7%	68.7%	68.8%	68.8%	68.8%	68.8%	68.8%
Max cumulative gross output, kWhr		21,304,800	21,384,000	21,463,200	21,542,400	21,621,600	21,700,800	21,780,000	21,859,200	21,938,400	22,017,600	22,096,800	22,176,000	22,255,200	22,334,400	22,413,600	22,492,800
Actual cumulative gross output, kWhr		11,326,293	11,373,090	11,419,062	11,464,592	11,510,596	11,556,218	11,601,094	11,644,334	11,690,844	11,739,576	11,787,034	11,833,480	11,876,770	11,919,458	11,964,171	12,001,338
Cumulative Capacity Factor		53.2%	53.2%	53.2%	53.2%	53.2%	53.3%	53.3%	53.3%	53.3%	53.3%	53.3%	53.4%	53.4%	53.4%	53.4%	53.4%
Cumulative fuel input, MMBtu HHV		127,021	127,601	128,162	128,734	129,294	129,857	130,415	130,947	131,507	132,094	132,661	133,209	133,734	134,258	134,817	135,277
Cumulative gross output, kWhr		9,948,059	9,994,856	10,040,828	10,086,358	10,132,362	10,177,984	10,222,860	10,266,100	10,312,610	10,361,342	10,408,800	10,455,246	10,498,536	10,541,224	10,585,937	10,623,104
Cumulative heat rate, Btu/kWe gross LHV		11,494	11,492	11,490	11,489	11,487	11,485	11,484	11,482	11,479	11,476	11,473	11,469	11,467	11,465	11,464	11,463
Cumulative heat rate, Btu/kWe gross HHV		12,768	12,767	12,764	12,763	12,760	12,759	12,757	12,755	12,752	12,749	12,745	12,741	12,738	12,736	12,736	12,734
Service																	
Engine 1																	
Engine 2																	
Engine 3																	NSTAR Outage 4
Engine 4																	Horizontal start
Oil - oil and filter change																	
Service - plugs, air filter, valve inspection and adjustment																	
Precipitation																	
NSTAR Power Reports		Monday 10/1/2018	Tuesday 10/2/2018	Wednesday 10/3/2018	Thursday 10/4/2018	Friday 10/5/2018	Saturday 10/6/2018	Sunday 10/7/2018	Monday 10/8/2018	Tuesday 10/9/2018	Wednesday 10/10/2018	Thursday 10/11/2018	Friday 10/12/2018	Saturday 10/13/2018	Sunday 10/14/2018	Monday 10/15/2018	Tuesday 10/16/2018
Date																	
Hour																	
1		1,654	1,848	1,824	1,824	1,918	1,828	1,823	1,729	1,730	1,922	1,898	1,901	1,801	1,703	1,703	1,872
2		1,655	1,850	1,826	1,783	1,920	1,828	1,825	1,729	1,730	1,924	1,899	1,902	1,801	1,704	1,703	943
3		1,654	1,850	1,826	1,730	1,920	1,827	1,824	1,729	1,776	1,924	1,899	1,901	1,801	1,704	1,702	-
4		1,654	1,848	1,826	1,729	1,882	1,824	1,824	1,728	1,825	1,923	1,898	1,900	1,799	1,701	1,700	-
5		1,655	1,849	1,827	1,731	1,824	1,822	1,823	1,730	1,827	1,924	1,899	1,903	1,802	1,703	1,702	-
6		1,654	1,850	1,825	1,729	1,824	1,821	1,824	1,729	1,825	1,923	1,899	1,901	1,800	1,701	1,703	-
7		1,655	1,850	1,826	1,729	1,824	1,825	1,824	1,729	1,826	1,923	1,899	1,902	1,707	1,701	1,701	-
8		1,655	1,850	1,826	1,730	1,825	1,826	1,824	1,725	1,827	1,924	1,899	1,902	1,707	1,703	1,703	-
9		1,648	1,842	1,821	1,726	1,812	1,824	1,824	1,724	1,817	1,861	1,891	1,901	1,705	1,702	1,691	673
10		1,648	1,843	1,818	1,720	1,811	1,823	1,823	1,729	1,818	1,820	1,893	1,896	1,707	1,701	1,685	1,896
11		1,646	1,844	1,816	1,742	1,813	1,823	1,823	1,730	1,878	1,939	1,893	1,896	1,709	1,702	1,796	1,929
12		1,701	1,844	1,816	1,818	1,814	1,824	1,822	1,730	1,910	1,985	1,893	1,892	1,707	1,704	1,798	2,150
13		1,745	1,844	1,817	1,864	1,816	1,822	1,820	1,730	1,838	1,983	1,893	1,799	1,706	1,704	1,799	2,190
14		1,747	1,896	1,811	1,888	1,818	1,823	1,821	1,730	1,747	1,983	1,893	1,800	1,707	1,705	1,813	2,196
15		1,748	1,912	1,814	1,836	1,819	1,823	1,820	1,731	1,921	1,985	1,896	1,801	1,707	1,705	1,870	2,197
16		1,843	1,915	1,817	1,913	1,824	1,824	1,819	1,730	1,918	1,988	1,900	1,846	1,708	1,705	1,764	2,199
17		1,851	1,919	1,828	1,699	1,830	1,826	1,789	1,732	1,925	1,993	1,902	1,903	1,708	1,705	1,872	2,201
18		1,851	1,921	1,831	1,860	1,831	1,827	1,726	1,731	1,925	1,993	1,900	1,826	1,707	1,704	1,872	2,199
19		1,850	1,919	1,922	1,923	1,826	1,826	1,727	1,730	1,925	1,993	1,899	1,804	1,705	1,704	1,871	2,207
20		1,849	1,920	1,923	1,924	1,830	1,826	1,729	1,731	1,925	1,994	1,900	1,805	1,706	1,703	1,871	2,209
21		1,849	1,902	1,896	1,824	1,829	1,825	1,728	1,730	1,924	1,993	1,899	1,803	1,704	1,703	1,870	2,206
22		1,848	1,824	1,826	1,921	1,828	1,823	1,728	1,729	1,923	1,993	1,899	1,801	1,705	1,703	1,870	2,183
23		1,849	1,826	1,824	1,920	1,829	1,826	1,730	1,731	1,924	1,948	1,899	1,802	1,704	1,703	1,871	2,112
24		1,849	1,825	1,824	1,920	1,826	1,825	1,729	1,730	1,923	1,898	1,900	1,802	1,704	1,702	1,871	2,111
TOTAL		41,758	44,791	44,010	43,583	44,093	43,791	43,049	41,506	44,607	46,736	45,540	44,589	41,517	40,875	42,801	35,673
Cumulative Output Sold, kWhr		41,758	86,549	130,559	174,142	218,235	262,026	305,075	346,581	391,188	437,924	483,464	528,053	569,570	610,445	653,246	688,919
Transformer and line efficiency		99.9%	99.6%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%
Hourly average		1,740	1,866	1,834	1,816	1,837	1,825	1,794	1,729	1,859	1,947	1,898	1,858	1,730	1,703	1,783	1,486

OCTOBER 2018																					
	Wednesday 10/17/2018	Thursday 10/18/2018	Friday 10/19/2018	Saturday 10/20/2018	Sunday 10/21/2018	Monday 10/22/2018	Tuesday 10/23/2018	Wednesday 10/24/2018	Thursday 10/25/2018	Friday 10/26/2018	Saturday 10/27/2018	Sunday 10/28/2018	Monday 10/29/2018	Tuesday 10/30/2018	Wednesday 10/31/2018	TOTAL	Biogas	LFG			
LFG and Biogas Flow to the Engine	1,283	821	1,312	1,268	1,249	1,277	1,264	1,257	1,299	1,320	1,288	1,272	1,279	1,275	1,298	36,477	1,706	34,771			
LFG and Biogas Flow to the Engine	634	402	644	652	630	629	633	631	633	635	644	642	649	630	641	18,135	1,174	16,961			
LFG and Biogas Flow to the Flare (	-	342	-	-	-	-	-	-	-	-	-	-	-	-	-	342	6.5%	94%			
LFG and BiogasFlow to the Flare (	-	180	-	-	-	-	-	-	-	-	-	-	-	-	-	180					
LFG and Biogas Total Flow (KSCF)	1,283	1,163	1,312	1,268	1,249	1,277	1,264	1,257	1,299	1,320	1,288	1,272	1,279	1,275	1,298	36,819					
LFG and Biogas Total Flow (MMBT	634	582	644	652	630	629	633	631	633	635	644	642	649	630	641	18,315					
Average Methane Content (%)	48.8	49.4	48.5	50.8	49.9	48.7	49.5	48.2	47.6	49.4	49.9	50.1	48.8	48.8	48.8	49.2					
Engine 1 Hours	24	15	24	24	24	24	24	24	24	24	24	24	24	24	24	728					
Engine 2 Hours	24	16	11	-	-	-	-	-	-	-	-	-	-	-	-	164					
Engine 3 Hours	24	15	24	24	24	24	24	24	24	24	24	24	24	24	24	643					
Engine 4 Hours	-	-	14	24	24	24	24	24	24	24	24	24	24	24	24	654					
Generator 1 Power Output (kWhr)	19,548	12,116	18,640	17,972	17,980	17,980	17,976	17,976	17,980	17,620	17,976	17,976	17,976	17,976	17,716	508,200					
Generator 2 Power Output (kWhr)	14,736	8,264	5,852	-	-	-	-	-	-	-	-	-	-	-	-	97,184					
Generator 3 Power Output (kWhr)	18,392	11,736	18,440	17,796	15,588	16,344	16,200	16,200	16,200	16,620	16,864	16,752	16,204	16,200	16,956	427,720					
Generator 4 Power Output (kWhr)	-	-	9,744	17,940	17,944	17,012	17,940	17,940	17,944	17,152	17,944	17,932	17,936	17,936	17,740	447,705					
Gross Power Output (kWhr)	52,757	32,193	52,738	53,827	51,645	51,463	52,247	52,262	52,259	51,505	52,813	52,687	52,151	52,144	52,432	1,483,742					
Net Power Output (kWhr)	50,660	30,924	50,760	51,896	49,752	49,556	50,392	50,444	50,412	49,640	51,008	50,872	50,332	50,320	50,624	1,428,207					
Power Sold as metered by NStar, (l	50,523	30,851	50,644	51,766	49,639	49,434	50,261	50,304	50,284	49,523	50,870	50,740	50,186	50,188	50,491	1,424,623	CRMCB inplant				
Offgrid RECs (kWhr)	2,097	1,269	1,979	1,931	1,892	1,908	1,854	1,819	1,847	1,865	1,805	1,815	1,819	1,824	1,808	55,535	9,365				
Calculated Performance Results																		17%			
Daily																	of total in-plant power				
Power output (kW average whe																					
Generator 1	815	808	777	749	749	749	749	749	749	734	749	749	749	749	738						
Generator 2	614	517	532	-	-	-	-	-	-	-	-	-	-	-	-						
Generator 3	766	782	768	742	650	681	675	675	675	693	703	698	675	675	707						
Generator 4	-	-	696	748	748	709	748	748	748	715	748	747	747	747	739						
Power output (kW average ove																					
Facility Gross	2,198	1,341	2,197	2,243	2,152	2,144	2,177	2,178	2,177	2,146	2,201	2,195	2,173	2,173	2,185						
Facility Net	2,111	1,289	2,115	2,162	2,073	2,065	2,100	2,102	2,101	2,068	2,125	2,120	2,097	2,097	2,109						
In-plant load	87	53	82	80	79	79	77	76	77	78	75	76	76	76	75						
Daily availability factor																					
Facility	75%	48%	76%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%						
Engine 1	100%	63%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Engine 2	100%	67%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Engine 3	100%	63%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Engine 4	0%	0%	58%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%						
Daily capacity factor																					
Facility	67%	41%	67%	68%	65%	65%	66%	66%	66%	65%	67%	67%	66%	66%	66%						
Engine 1	99%	98%	94%	91%	91%	91%	91%	91%	91%	89%	91%	91%	91%	91%	89%						
Engine 2	74%	63%	64%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%						
Engine 3	93%	95%	93%	90%	79%	83%	82%	82%	84%	85%	85%	85%	82%	82%	86%						
Engine 4	0%	0%	84%	91%	91%	86%	91%	91%	91%	87%	91%	91%	91%	91%	90%						
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	401	416	440	464	488	512	536	560	584	608	632	656	680	704	704						
Engine 2	137	153	164	164	164	164	164	164	164	164	164	164	164	164	164						
Engine 3	316	331	355	379	403	427	451	475	499	523	547	571	595	619	619						
Engine 4	352	352	366	390	414	438	462	486	510	534	558	582	606	630	630						
Engine operating run hours tota																					
Engine 1	101,600	101,615	101,639	101,663	101,687	101,711	101,735	101,759	101,783	101,807	101,831	101,855	101,879	101,903	101,903						
Engine 2	94,950	94,966	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977						
Engine 3	97,430	97,445	97,469	97,493	97,517	97,541	97,565	97,589	97,613	97,637	97,661	97,685	97,709	97,733	97,733						
Engine 4	96,331	96,331	96,345	96,369	96,393	96,417	96,441	96,465	96,489	96,513	96,537	96,561	96,585	96,609	96,609						
Cumulative availability, %																					
Engine 1	98%	96%	96%	97%	97%	97%	97%	97%	97%	97%	98%	98%	98%	98%	98%						
Engine 2	34%	35%	36%	34%	33%	31%	30%	28%	27%	26%	25%	24%	24%	23%	23%						
Engine 3	77%	77%	78%	79%	80%	81%	82%	83%	84%	84%	84%	85%	85%	86%	86%						
Engine 4	86%	81%	80%	81%	82%	83%	84%	84%	85%	86%	86%	87%	87%	88%	88%						
Engine cumulative gross output																					
Max cumulative capacity or	14,025	14,850	15,675	16,500	17,325	18,150	18,975	19,800	20,625	21,450	22,275	23,100	23,925	24,750	24,750						
Engine 1	11,161	11,969	12,745	13,494	14,243	14,993	15,742	16,491	17,240	17,974	18,723	19,472	20,221	20,970	20,959						
Engine 2	4,334	4,850	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382	5,382						
Engine 3	8,863	9,646	10,414	11,156	11,805	12,486	13,161	13,836	14,511	15,204	15,906	16,604	17,279	17,954	17,986						
Engine 4	9,537	9,537	10,233	10,980	11,728	12,437	13,184	13,932	14,680	15,394	16,142	16,889	17,636	18,384	18,376						
Cumulative capacity factor, %																					
Engine 1	80%	81%	81%	82%	82%	83%	83%	83%	84%	84%	84%	84%	85%	85%	85%						
Engine 2	31%	33%	34%	33%	31%	30%	28%	27%	26%	25%	24%	23%	22%	22%	22%						
Engine 3	63%	65%	66%	68%	68%	69%	69%	70%	70%	71%	71%	72%	72%	73%	73%						
Engine 4	68%	64%	65%	67%	68%	69%	69%	70%	71%	72%	72%	73%	74%	74%	74%						

	Wednesday 10/17/2018	Thursday 10/18/2018	Friday 10/19/2018	Saturday 10/20/2018	Sunday 10/21/2018	Monday 10/22/2018	Tuesday 10/23/2018	Wednesday 10/24/2018	Thursday 10/25/2018	Friday 10/26/2018	Saturday 10/27/2018	Sunday 10/28/2018	Monday 10/29/2018	Tuesday 10/30/2018	Wednesday 10/31/2018	TOTAL	Biogas	LFG
Cumulative by Facility in month																		
Max cumulative available engine run time	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 time	1,206	1,252	1,325	1,397	1,469	1,541	1,613	1,685	1,757	1,829	1,901	1,973	2,045	2,117	2,117			
Cumulative Availability, %	73.9%	72.5%	72.6%	72.8%	72.9%	73.0%	73.1%	73.1%	73.2%	73.3%	73.3%	73.4%	73.5%	73.5%	73.5%			
Max cumulative gross output, kWh	1,346,400	1,425,600	1,504,800	1,584,000	1,663,200	1,742,400	1,821,600	1,900,800	1,980,000	2,059,200	2,138,400	2,217,600	2,296,800	2,376,000	2,376,000			
Actual cumulative gross output, kWh	771,376	803,569	856,307	910,134	961,779	1,013,242	1,065,489	1,117,751	1,170,010	1,221,515	1,274,328	1,327,015	1,379,166	1,431,310	1,431,598			
Cumulative Capacity Factor	57.3%	56.4%	56.9%	57.5%	57.8%	58.2%	58.5%	58.8%	59.1%	59.3%	59.6%	59.8%	60.0%	60.2%	60.3%			
Cumulative fuel input, MMBtu	9,441	9,842	10,486	11,137	11,768	12,397	13,030	13,661	14,294	14,930	15,574	16,216	16,864	17,494	17,505			
Cumulative gross output, kWh	771,376	803,569	856,307	910,134	961,779	1,013,242	1,065,489	1,117,751	1,170,010	1,221,515	1,274,328	1,327,015	1,379,166	1,431,310	1,431,598			
Heat Rate																		
Daily heat rate, Btu/kWe gross	10,817	11,227	10,985	10,900	10,988	11,006	10,904	10,872	10,909	11,105	10,980	10,970	11,195	10,872	10,999			
Daily heat rate, Btu/kWe net	12,016	12,472	12,203	12,108	12,206	12,226	12,113	12,077	12,118	12,336	12,197	12,186	12,436	12,077	12,219			
Cumulative heat rate, Btu/kWe gross	11,017	11,026	11,023	11,016	11,014	11,014	11,008	11,002	10,998	11,002	11,001	11,000	11,008	11,003	11,007			
Cumulative heat rate, Btu/kWe net	12,239	12,248	12,245	12,237	12,235	12,235	12,229	12,222	12,217	12,222	12,221	12,220	12,228	12,222	12,228			
Cumulative by Facility starting C																		
Max cumulative available engine run time	27,356	27,452	27,548	27,644	27,740	27,836	27,932	28,028	28,124	28,220	28,316	28,412	28,508	28,604	28,604			
Actual cumulative engine run time	18,824	18,870	18,943	19,015	19,087	19,159	19,231	19,303	19,375	19,447	19,519	19,591	19,663	19,735	19,735			
Cumulative Availability, %	68.8%	68.7%	68.8%	68.8%	68.8%	68.8%	68.8%	68.9%	68.9%	68.9%	68.9%	69.0%	69.0%	69.0%	69.0%			
Max cumulative gross output, kWh	22,572,000	22,651,200	22,730,400	22,809,600	22,888,800	22,968,000	23,047,200	23,126,400	23,205,600	23,284,800	23,364,000	23,443,200	23,522,400	23,601,600	23,601,600			
Actual cumulative gross output, kWh	12,054,095	12,086,288	12,139,026	12,192,853	12,244,498	12,295,961	12,348,208	12,400,470	12,452,729	12,504,234	12,557,047	12,609,734	12,661,885	12,714,029	12,714,317			
Cumulative Capacity Factor	53.4%	53.4%	53.4%	53.5%	53.5%	53.5%	53.6%	53.6%	53.7%	53.7%	53.7%	53.8%	53.8%	53.9%	53.9%			
Cumulative fuel input, MMBtu	135,911	136,312	136,956	137,608	138,238	138,867	139,500	140,131	140,765	141,400	142,044	142,686	143,335	143,965	143,975			
Cumulative gross output, kWh	10,675,861	10,708,054	10,760,792	10,814,619	10,866,264	10,917,727	10,969,974	11,022,236	11,074,495	11,126,000	11,178,813	11,231,500	11,283,651	11,335,795	11,336,083			
Cumulative heat rate, Btu/kWe gross	11,460	11,459	11,457	11,454	11,452	11,450	11,447	11,445	11,442	11,441	11,438	11,436	11,435	11,433	11,433			
Cumulative heat rate, Btu/kWe net	12,731	12,730	12,727	12,724	12,722	12,719	12,717	12,714	12,711	12,709	12,707	12,704	12,703	12,700	12,701			
Service																		
Engine 1																		
Engine 2																		
Engine 3																		
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve inspection																		
Precipitation																		
NSTAR Power Reports	Wednesday 10/17/2018	Thursday 10/18/2018	Friday 10/19/2018	Saturday 10/20/2018	Sunday 10/21/2018	Monday 10/22/2018	Tuesday 10/23/2018	Wednesday 10/24/2018	Thursday 10/25/2018	Friday 10/26/2018	Saturday 10/27/2018	Sunday 10/28/2018	Monday 10/29/2018	Tuesday 10/30/2018	Wednesday 10/31/2018	TOTAL		
Hour																		
1	2,111	2,030	2,111	2,164	2,068	2,065	2,094	2,098	2,096	2,096	2,090	2,162	2,093	2,095	2,094			
2	2,112	2,032	2,112	2,162	2,070	2,066	2,094	2,099	2,097	2,096	2,092	2,163	2,093	2,096	2,095			
3	2,110	2,031	2,111	2,163	2,070	2,062	2,094	2,098	2,095	2,096	2,091	2,161	2,092	2,095	2,093			
4	2,111	2,030	2,110	2,163	2,069	2,064	2,092	2,098	2,095	2,096	2,090	2,161	2,091	2,090	2,092			
5	2,112	2,031	2,109	2,164	2,070	2,021	2,093	2,096	2,099	2,025	2,090	2,162	2,094	2,094	2,093			
6	2,111	2,030	2,110	2,165	2,070	1,970	2,097	2,098	2,099	2,024	2,090	2,159	2,093	2,093	2,090			
7	2,112	2,030	2,055	2,164	2,070	1,967	2,095	2,098	2,098	2,023	2,092	2,158	2,091	2,093	2,093			
8	2,110	544	2,040	2,165	2,070	1,969	2,095	2,099	2,098	2,026	2,092	2,129	2,093	2,094	2,096			
9	2,102	-	2,034	2,165	2,069	1,960	2,089	2,093	2,093	2,018	2,093	2,093	2,087	2,083	2,092			
10	2,133	-	2,028	2,164	2,069	1,970	2,088	2,091	2,090	1,858	2,093	2,092	2,084	2,079	2,085			
11	2,122	-	1,962	2,163	2,070	1,974	2,090	2,093	2,092	1,300	2,095	2,092	2,086	2,081	2,088			
12	2,194	-	2,149	2,163	2,068	1,972	2,090	2,093	2,091	2,165	2,095	2,093	2,088	2,081	1,809			
13	2,197	-	1,923	2,163	2,068	2,068	2,090	2,092	2,092	2,162	2,093	2,093	2,089	2,084	1,878			
14	2,193	-	2,159	2,164	2,070	2,074	2,091	2,093	2,093	2,162	2,094	2,094	2,090	2,089	2,153			
15	2,193	-	2,158	2,163	2,068	2,160	2,092	2,093	2,093	2,161	2,096	2,094	2,090	2,090	2,161			
16	2,200	-	2,162	2,164	2,070	2,162	2,092	2,093	2,093	2,162	2,093	2,093	2,090	2,088	2,162			
17	1,625	1,283	2,166	2,165	2,071	2,168	2,099	2,099	2,101	2,168	2,168	2,094	2,096	2,096	2,166			
18	2,105	2,122	2,166	2,164	2,069	2,166	2,099	2,096	2,096	2,166	2,166	2,093	2,093	2,095	2,166			
19	2,105	2,117	2,163	2,162	2,065	2,105	2,099	2,098	2,097	2,161	2,165	2,091	2,091	2,095	2,164			
20	2,105	2,117	2,165	2,165	2,067	2,096	2,096	2,100	2,096	2,160	2,166	2,094	2,092	2,095	2,166			
21	2,100	2,116	2,163	2,164	2,064	2,094	2,098	2,097	2,091	2,119	2,165	2,092	2,091	2,097	2,164			
22	2,097	2,114	2,162	2,163	2,065	2,094	2,098	2,096	2,096	2,094	2,162	2,092	2,091	2,097	2,164			
23	2,102	2,113	2,163	2,096	2,064	2,093	2,098	2,096	2,096	2,091	2,163	2,093	2,091	2,094	2,163			
24	2,061	2,111	2,163	2,068	2,065	2,094	2,098	2,097	2,097	2,092	2,163	2,092	2,097	2,094	2,164			
TOTAL	50,523	30,851	50,644	51,766	49,639	49,434	50,261	50,304	50,284	49,523	50,870	50,740	50,186	50,188	50,491			
Cumulative Output Sold, kWh	739,442	770,293	820,937	872,703	922,342	971,776	1,022,037	1,072,341	1,122,625	1,172,148	1,223,018	1,273,758	1,323,944	1,374,132	1,424,623			
Transformer and line efficiency	99.7%	99.8%	99.8%	99.7%	99.8%	99.8%	99.7%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%	99.7%			
Hourly average	2,105	1,285	2,110	2,157	2,068	2,060	2,094	2,096	2,095	2,063	2,120	2,114	2,091	2,091	2,104			

NOVEMBER 2018																	
		Thursday	Friday	Saturday	DLST Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday
		11/1/2018	11/2/2018	11/3/2018	11/4/2018	11/5/2018	11/6/2018	11/7/2018	11/8/2018	11/9/2018	11/10/2018	11/12/2018	11/12/2018	11/13/2018	11/14/2018	11/15/2018	11/16/2018
LFG and Biogas Flow to the Engines (KSCF)		1,215	1,194	1,197	1,231	1,185	1,176	1,236	1,244	1,234	1,247	1,227	1,218	1,186	1,245	1,232	1,201
LFG and Biogas Flow to the Engines (MMBTU HHV)		614	607	612	589	590	609	634	616	615	638	597	598	619	620	604	632
LFG and Biogas Flow to the Flare (KSCF)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Flow to the Flare (MMBTU HHV)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LFG and Biogas Total Flow (KSCF)		1,215	1,194	1,197	1,231	1,185	1,176	1,236	1,244	1,234	1,247	1,227	1,218	1,186	1,245	1,232	1,201
LFG and Biogas Total Flow (MMBTU HHV)		614	607	612	589	590	609	634	616	615	638	597	598	619	620	604	632
Average Methane Content (%)		49.9	50.3	50.6	47.3	49.2	51.2	50.7	48.9	50.5	48.0	51.6	48.6	51.9	49.3	48.4	52.0
Engine 1 Hours		24	24	24	25	24	24	24	24	24	24	24	24	24	24	24	13
Engine 2 Hours		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	12
Engine 3 Hours		24	24	24	25	24	24	24	24	23	24	24	24	24	24	24	24
Engine 4 Hours		24	24	24	24	25	24	24	24	24	24	24	24	24	24	24	24
Generator 1 Power Output (kWhr)		17,468	17,976	17,980	17,276	16,208	17,292	17,976	17,980	18,340	18,560	16,452	16,216	17,536	16,292	15,460	7,632
Generator 2 Power Output (kWhr)		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6,064
Generator 3 Power Output (kWhr)		17,472	16,256	17,044	16,872	17,512	17,968	17,972	16,236	15,544	17,208	16,204	17,360	17,864	16,684	17,556	17,544
Generator 4 Power Output (kWhr)		17,420	17,932	17,660	16,832	17,000	17,936	17,940	16,836	17,484	17,732	16,164	16,164	17,380	16,248	15,424	18,884
Gross Power Output (kWhr)		52,387	52,203	52,718	51,015	50,764	53,211	53,892	51,086	51,384	53,502	48,836	49,746	52,789	49,242	48,445	50,095
Net Power Output (kWhr)		50,572	50,320	50,936	49,236	49,044	51,460	52,076	49,296	49,628	51,744	47,140	47,992	50,992	47,468	46,672	48,356
Power Sold as metered by NStar, (kWhr)		50,425	50,176	50,791	49,120	48,904	51,315	51,931	49,157	49,512	51,660	47,067	47,901	50,858	47,352	46,567	48,246
Offgrid RECs (kWhr)		1,815	1,883	1,782	1,778	1,720	1,751	1,817	1,790	1,756	1,758	1,695	1,754	1,798	1,774	1,772	1,740
Calculated Performance Results																	
Daily																	
Power output (kW average when running)																	
Generator 1		728	749	749	691	675	721	749	749	764	773	686	676	731	679	644	587
Generator 2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	505
Generator 3		728	677	710	675	730	749	749	677	676	717	675	723	744	695	732	731
Generator 4		726	747	736	673	708	747	748	702	729	739	674	674	724	677	643	787
Power output (kW average over 24-hrs)																	
Facility Gross		2,183	2,175	2,197	2,126	2,115	2,217	2,246	2,129	2,141	2,229	2,035	2,073	2,200	2,052	2,019	2,087
Facility Net		2,107	2,097	2,122	2,052	2,044	2,144	2,170	2,054	2,068	2,156	1,964	2,000	2,125	1,978	1,945	2,015
In-plant load		76	78	74	74	72	73	76	75	73	73	71	73	75	74	74	72
Daily availability factor																	
Facility		75%	75%	75%	78%	75%	75%	75%	75%	74%	75%	75%	75%	75%	75%	75%	76%
Engine 1		100%	100%	100%	104%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	54%
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	50%
Engine 3		100%	100%	100%	104%	100%	100%	100%	100%	96%	100%	100%	100%	100%	100%	100%	100%
Engine 4		100%	100%	100%	104%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%
Daily capacity factor																	
Facility		66%	66%	67%	64%	64%	67%	68%	65%	65%	68%	62%	63%	67%	62%	61%	63%
Engine 1		88%	91%	91%	84%	82%	87%	91%	91%	93%	94%	83%	82%	89%	82%	78%	71%
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	61%
Engine 3		88%	82%	86%	82%	88%	91%	91%	82%	82%	87%	82%	88%	90%	84%	89%	89%
Engine 4		88%	91%	89%	82%	86%	91%	91%	85%	88%	90%	82%	82%	88%	82%	78%	95%
Cumulative by engine																	
Engine operating run hours in the month																	
Max Cumulative Available, hours		24	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384
Engine 1		24	48	72	97	121	145	169	193	217	241	265	289	313	337	361	374
Engine 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12
Engine 3		24	48	72	97	121	145	169	193	216	240	264	288	312	336	360	384
Engine 4		24	48	72	97	121	145	169	193	217	241	265	289	313	337	361	385
Engine operating run hours total from 0 hours																	
Engine 1		101,903	101,927	101,951	101,975	102,000	102,024	102,048	102,072	102,096	102,120	102,144	102,168	102,192	102,216	102,240	102,277
Engine 2		94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,977	94,989
Engine 3		97,733	97,757	97,781	97,805	97,830	97,854	97,878	97,902	97,926	97,949	97,973	97,997	98,021	98,045	98,069	98,117
Engine 4		96,609	96,633	96,657	96,681	96,706	96,730	96,754	96,778	96,802	96,826	96,850	96,874	96,898	96,922	96,946	96,994
Cumulative availability, %		November, 2018 @ 00:00 hours															
Engine 1		100%	100%	100%	101%	101%	101%	101%	101%	100%	100%	100%	100%	100%	100%	100%	97%
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	3%
Engine 3		100%	100%	100%	101%	101%	101%	101%	101%	100%	100%	100%	100%	100%	100%	100%	100%
Engine 4		100%	100%	100%	101%	101%	101%	101%	101%	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		728	1,477	2,226	2,917	3,592	4,313	5,062	5,811	6,575	7,349	8,034	8,710	9,440	10,119	10,763	11,350
Engine 2		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	505
Engine 3		728	1,405	2,116	2,790	3,520	4,269	5,018	5,694	6,370	7,087	7,762	8,485	9,230	9,925	10,656	11,387
Engine 4		726	1,473	2,209	2,882	3,590	4,338	5,085	5,787	6,515	7,254	7,928	8,601	9,325	10,002	10,645	11,432
Cumulative capacity factor, %																	
Engine 1		88%	90%	90%	88%	87%	87%	88%	88%	89%	89%	89%	88%	88%	88%	87%	86%
Engine 2		0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	4%
Engine 3		88%	85%	85%	85%	85%	86%	87%	86%	86%	86%	86%	86%	86%	86%	86%	86%
Engine 4		88%	89%	89%	87%	87%	88%	88%	88%	88%	88%	87%	87%	87%	87%	86%	87%

		Thursday 11/1/2018	Friday 11/2/2018	Saturday 11/3/2018	Sunday 11/4/2018	Monday 11/5/2018	Tuesday 11/6/2018	Wednesday 11/7/2018	Thursday 11/8/2018	Friday 11/9/2018	Saturday 11/10/2018	Sunday 11/11/2018	Monday 11/12/2018	Tuesday 11/13/2018	Wednesday 11/14/2018	Thursday 11/15/2018	Friday 11/16/2018
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	291	363	435	507	579	650	722	794	866	938	1,010	1,082	1,155
Cumulative Availability, %		75.0%	75.0%	75.0%	75.8%	75.6%	75.5%	75.4%	75.4%	75.2%	75.2%	75.2%	75.2%	75.2%	75.1%	75.1%	75.2%
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		52,387	104,590	157,308	208,323	259,087	312,298	366,190	417,276	468,660	522,162	570,998	620,744	673,533	722,775	771,220	821,315
Cumulative Capacity Factor		66.1%	66.0%	66.2%	65.8%	65.4%	65.7%	66.1%	65.9%	65.7%	65.9%	65.5%	65.3%	65.4%	65.2%	64.9%	64.8%
Cumulative fuel input, MMBtu HHV		614	1,221	1,833	2,423	3,013	3,622	4,256	4,871	5,486	6,124	6,720	7,319	7,938	8,558	9,161	9,794
Cumulative gross output, kWhr		52,387	104,590	157,308	208,323	259,087	312,298	366,190	417,276	468,660	522,162	570,998	620,744	673,533	722,775	771,220	821,315
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		10,544	10,474	10,457	10,395	10,464	10,308	10,585	10,849	10,767	10,730	10,997	10,829	10,554	11,342	11,214	11,361
Daily heat rate, Btu/kWe gross HHV		11,713	11,635	11,617	11,548	11,624	11,451	11,759	12,052	11,961	11,919	12,216	12,029	11,724	12,599	12,457	12,620
Cumulative heat rate, Btu/kWe gross LHV		10,544	10,509	10,492	10,468	10,467	10,440	10,461	10,509	10,537	10,557	10,595	10,613	10,609	10,659	10,694	10,734
Cumulative heat rate, Btu/kWe gross HHV		11,713	11,674	11,655	11,629	11,628	11,598	11,621	11,674	11,706	11,727	11,769	11,790	11,785	11,840	11,879	11,924
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	28,700	28,796	28,892	28,988	29,084	29,180	29,276	29,372	29,468	29,564	29,660	29,756	29,852	29,948	30,044	30,140	30,236
Actual cumulative engine run hours	19,807	19,879	19,951	20,026	20,098	20,170	20,242	20,314	20,385	20,457	20,529	20,601	20,673	20,745	20,817	20,890	20,962
Cumulative Availability, %	69.0%	69.0%	69.1%	69.1%	69.1%	69.1%	69.1%	69.1%	69.2%	69.2%	69.2%	69.2%	69.3%	69.3%	69.3%	69.3%	69.3%
Max cumulative gross output, kWhr	23,680,800	23,760,000	23,839,200	23,918,400	23,997,600	24,076,800	24,156,000	24,235,200	24,314,400	24,393,600	24,472,800	24,552,000	24,631,200	24,710,400	24,789,600	24,868,800	24,948,000
Actual cumulative gross output, kWhr	12,766,704	12,818,907	12,871,625	12,922,640	12,973,404	13,026,615	13,080,507	13,131,593	13,182,977	13,236,479	13,285,315	13,335,061	13,387,850	13,437,092	13,485,537	13,535,632	13,585,727
Cumulative Capacity Factor	53.9%	54.0%	54.0%	54.0%	54.1%	54.1%	54.2%	54.2%	54.2%	54.2%	54.3%	54.3%	54.3%	54.4%	54.4%	54.4%	54.4%
Cumulative fuel input, MMBtu HHV	144,589	145,196	145,809	146,398	146,988	147,597	148,231	148,847	149,461	150,099	150,696	151,294	151,913	152,533	153,137	153,796	154,398
Cumulative gross output, kWhr	11,388,470	11,440,673	11,493,391	11,544,406	11,595,170	11,648,381	11,702,273	11,753,359	11,804,743	11,858,245	11,907,081	11,956,827	12,009,616	12,058,858	12,107,303	12,157,398	12,207,398
Cumulative heat rate, Btu/kWe gross LHV	11,429	11,425	11,420	11,416	11,412	11,406	11,403	11,400	11,398	11,395	11,393	11,391	11,387	11,387	11,386	11,386	11,386
Cumulative heat rate, Btu/kWe gross HHV	12,696	12,691	12,686	12,681	12,677	12,671	12,667	12,664	12,661	12,658	12,656	12,653	12,649	12,649	12,648	12,648	12,648
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		Thursday 11/1/2018	Friday 11/2/2018	Saturday 11/3/2018	Sunday 11/4/2018	Monday 11/5/2018	Tuesday 11/6/2018	Wednesday 11/7/2018	Thursday 11/8/2018	Friday 11/9/2018	Saturday 11/10/2018	Sunday 11/11/2018	Monday 11/12/2018	Tuesday 11/13/2018	Wednesday 11/14/2018	Thursday 11/15/2018	Friday 11/16/2018
Date																	
Hour																	
1		2,162	2,143	2,093	2,020	1,956	2,099	2,169	2,123	2,022	2,223	2,045	1,953	2,046	1,975	1,948	1,977
2		2,165	2,092	2,094	2,022	1,955	2,097	2,167	2,090	2,022	2,242	2,047	1,952	2,047	1,976	1,947	1,976
3		2,162	2,093	2,090	2,021	1,953	2,097	2,167	2,093	2,023	2,241	1,995	1,950	2,045	1,976	1,942	1,976
4		2,163	2,091	2,090	2,021	1,955	2,097	2,167	2,093	2,024	2,242	1,995	1,952	2,048	1,977	1,940	1,977
5		2,163	2,092	2,092	2,021	1,954	2,098	2,167	2,094	2,023	2,240	1,951	1,951	2,047	1,976	1,941	1,976
6		2,163	2,092	2,101	1,975	1,954	2,095	2,165	2,093	2,023	2,239	1,950	1,951	2,045	1,973	1,939	1,939
7		2,113	2,091	2,166	1,947	2,015	2,097	2,166	2,090	2,023	2,242	1,951	1,951	2,049	1,977	1,939	1,939
8		2,094	2,092	2,168	1,949	2,023	2,097	2,167	2,088	2,025	2,239	1,951	1,952	2,047	1,977	1,938	1,938
9		1,967	2,087	2,167	1,949	2,008	2,094	2,160	2,086	2,018	2,241	1,950	1,945	2,040	1,950	1,901	1,936
10		1,944	2,075	2,166	1,945	2,014	2,138	2,158	2,022	2,015	2,240	1,953	1,946	2,210	1,942	1,795	2,111
11		1,944	2,079	2,167	1,947	2,016	2,162	2,159	2,015	2,017	2,178	1,952	1,945	2,270	1,946	1,797	2,001
12		1,993	2,077	2,167	1,947	2,017	2,160	2,161	2,016	1,919	2,142	1,952	1,944	2,290	1,946	1,838	1,983
13		2,016	2,080	2,167	1,946	2,047	2,162	2,161	2,018	1,548	2,144	1,954	2,014	2,290	1,949	1,972	2,065
14		1,741	2,084	2,167	1,950	2,090	2,160	2,161	2,019	1,916	2,145	1,953	2,044	2,288	2,017	1,970	1,889
15		2,163	2,086	2,166	1,950	2,090	2,162	2,161	2,018	2,226	2,145	1,953	2,044	2,272	2,066	1,971	1,983
16		2,165	2,086	2,165	1,949	2,090	2,164	2,166	2,022	2,233	2,146	1,955	2,044	2,181	2,070	1,977	1,967
17		2,166	2,091	2,166	1,952	2,096	2,162	2,165	2,022	2,236	2,054	1,954	2,048	2,185	2,036	1,976	1,899
18		2,165	2,092	2,121	1,951	2,096	2,164	2,165	2,025	2,237	2,044	1,948	2,047	2,184	1,949	1,976	1,898
19		2,161	2,092	2,092	1,950	2,096	2,169	2,165	2,025	2,238	2,046	1,952	2,045	2,175	1,945	1,976	1,901
20		2,164	2,092	2,092	1,951	2,096	2,169	2,164	2,022	2,245	2,045	1,952	2,044	2,074	1,945	1,976	1,900
21		2,163	2,091	2,040	1,952	2,094	2,169	2,162	2,020	2,143	2,047	1,947	2,043	2,070	1,947	1,976	1,899
22		2,162	2,092	2,018	1,950	2,095	2,168	2,164	2,023	2,146	2,047	1,950	2,047	2,003	1,947	1,978	1,895
23		2,164	2,093	2,018	1,953	2,097	2,169	2,163	2,021	2,145	2,046	1,949	2,045	1,976	1,946	1,977	1,896
24		2,162	2,093	2,018	1,953	2,097	2,166	2,161	2,019	2,145	2,042	1,951	2,044	1,976	1,944	1,977	1,898
TOTAL		50,425	50,176	50,791	49,120	48,904	51,315	51,931	49,157	49,512	51,660	47,067	47,901	50,858	47,352	46,567	48,246
Cumulative Output Sold, kWhr		50,425	100,601	151,392	200,512	249,416	300,731	352,662	401,819	451,331	502,991	550,058	597,959	648,817	696,169	742,736	790,982
Transformer and line efficiency		99.7%	99.7%	99.7%	99.8%	99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.8%	99.7%	99.8%	99.8%	99.8%
Hourly average		2,101	2,091	2,116	2,047	2,038	2,138	2,164	2,048	2,063	2,153	1,961	1,996	2,119	1,973	1,940	2,010

NOVEMBER 2018																		
		Saturday 11/17/2018	Sunday 11/18/2018	Monday 11/19/2018	Tuesday 11/20/2018	Wednesday 11/21/2018	Thursday 11/22/2018	Friday 11/23/2018	Saturday 11/24/2018	Sunday 11/25/2018	Monday 11/26/2018	Tuesday 11/27/2018	Wednesday 11/28/2018	Thursday 11/29/2018	Friday 11/30/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	1,157	1,169	1,196	1,254	1,234	1,224	1,306	1,183	1,188	1,200	1,211	1,228	1,257	1,264	36,537	1,751	34,787	
LFG and Biogas Flow to the Engine	580	578	598	635	614	577	608	579	596	602	631	626	623	624	18,264	1,205	17,059	
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	6.6%	93%	
LFG and BiogasFlow to the Flare (fl	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-			
LFG and Biogas Total Flow (KSCF)	1,157	1,169	1,196	1,254	1,234	1,224	1,306	1,183	1,188	1,200	1,211	1,228	1,257	1,264	36,537			
LFG and Biogas Total Flow (MMBT	580	578	598	635	614	577	608	579	596	602	631	626	623	624	18,264			
Average Methane Content (%)	49.5	48.9	49.4	50.1	49.2	46.6	46.0	48.3	49.6	49.6	51.5	50.4	49.0	48.8	49.4			
Engine 1 Hours	-	-	13	24	24	24	24	24	24	24	24	24	24	24	24	651		
Engine 2 Hours	24	24	11	-	-	-	-	-	-	-	-	-	-	2	-	73		
Engine 3 Hours	24	24	24	24	32,768	24	24	24	24	24	24	24	24	24	24	33,464		
Engine 4 Hours	24	24	24	24	24	24	24	24	24	24	24	24	24	23	24	720		
Generator 1 Power Output (kWhr)	-	-	8,868	17,380	17,376	15,664	13,464	12,340	16,212	16,208	16,916	17,272	17,372	17,372	453,088			
Generator 2 Power Output (kWhr)	13,228	13,228	6,124	-	-	-	-	-	-	-	-	-	-	792	-	39,436		
Generator 3 Power Output (kWhr)	16,784	15,792	16,604	15,560	15,364	15,596	16,548	17,280	13,936	15,252	16,960	15,892	15,700	15,592	496,156			
Generator 4 Power Output (kWhr)	15,472	15,000	15,996	17,352	16,376	15,548	15,480	16,136	16,132	16,132	16,460	16,508	15,496	16,240	499,364			
Gross Power Output (kWhr)	45,442	43,973	47,590	50,324	49,158	46,774	45,420	45,698	46,281	47,597	50,348	49,689	49,378	49,231	1,488,218			
Net Power Output (kWhr)	43,836	42,420	45,832	48,544	47,392	44,852	43,416	43,844	44,484	45,752	48,604	47,940	47,504	47,400	1,434,752			
Power Sold as metered by NSTar, (l	43,752	42,344	45,731	48,476	47,283	44,775	43,352	43,765	44,386	45,646	48,466	47,808	47,374	47,281	1,431,421	CRMCB inplant		
Offgrid RECs (kWhr)	1,604	1,554	1,759	1,781	1,765	1,923	2,003	1,854	1,797	1,845	1,744	1,749	1,874	1,831	53,466	9,113	17%	
Calculated Performance Results																		
Daily																	of total in-plant power	
Power output (kW average whe																		
Generator 1	-	-	682	724	724	653	561	514	676	675	705	720	724	724				
Generator 2	551	551	557	-	-	-	-	-	-	-	-	-	-	396	-			
Generator 3	699	658	692	648	0	650	690	720	581	636	707	662	654	650				
Generator 4	645	625	667	723	682	648	645	672	672	672	686	688	674	677				
Power output (kW average ove																		
Facility Gross	1,893	1,832	1,983	2,097	2,048	1,949	1,893	1,904	1,928	1,983	2,098	2,070	2,057	2,051				
Facility Net	1,827	1,768	1,910	2,023	1,975	1,869	1,827	1,854	1,906	1,909	2,025	1,989	1,979	1,975				
In-plant load	67	65	73	74	74	80	84	77	75	77	73	73	78	76				
Daily availability factor																		
Facility	75%	75%	75%	75%	34183%	75%	75%	75%	75%	75%	75%	75%	75%	76%	75%			
Engine 1	0%	0%	54%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 2	100%	100%	46%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	8%	0%			
Engine 3	100%	100%	100%	100%	136533%	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%	96%	100%			
Daily capacity factor																		
Facility	57%	56%	60%	64%	62%	59%	57%	58%	58%	60%	64%	63%	62%	62%				
Engine 1	0%	0%	83%	88%	88%	79%	68%	82%	82%	85%	87%	85%	88%	88%				
Engine 2	67%	67%	67%	0%	0%	0%	0%	0%	0%	0%	0%	0%	48%	0%				
Engine 3	85%	80%	84%	79%	0%	79%	84%	87%	77%	86%	80%	79%	79%	79%				
Engine 4	78%	76%	81%	88%	83%	79%	78%	81%	81%	81%	83%	83%	82%	82%				
Cumulative by engine																		
Engine operating run hours in ti																		
Max Cumulative Available,	408	432	456	480	504	528	552	576	600	624	648	672	696	720				
Engine 1	374	374	387	411	435	459	483	507	531	555	579	603	627	651				
Engine 2	36	60	71	71	71	71	71	71	71	71	71	71	73	73				
Engine 3	408	432	456	480	33248	33272	33296	33320	33344	33368	33392	33416	33440	33464				
Engine 4	409	433	457	481	505	529	553	577	601	625	649	673	696	720				
Engine operating run hours tota																		
Engine 1	102,277	102,277	102,290	102,314	102,338	102,362	102,386	102,410	102,434	102,458	102,482	102,506	102,530	102,554				
Engine 2	95,013	95,037	95,048	95,048	95,048	95,048	95,048	95,048	95,048	95,048	95,048	95,048	95,048	95,050				
Engine 3	98,141	98,165	98,189	98,213	130,981	131,005	131,029	131,053	131,077	131,101	131,125	131,149	131,173	131,197				
Engine 4	97,018	97,042	97,066	97,090	97,114	97,138	97,162	97,186	97,210	97,234	97,258	97,282	97,305	97,329				
Cumulative availability, %																		
Engine 1	92%	87%	85%	86%	86%	87%	88%	88%	89%	89%	89%	90%	90%	90%				
Engine 2	9%	14%	16%	15%	14%	13%	13%	12%	12%	11%	11%	11%	10%	10%				
Engine 3	100%	100%	100%	100%	6597%	6302%	6032%	5785%	5557%	5347%	5153%	4973%	4805%	4648%				
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	11,350	11,350	12,033	12,757	13,481	14,133	14,694	15,209	15,884	16,559	17,264	17,984	18,708	19,432				
Engine 2	1,057	1,608	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,164	2,560	2,560				
Engine 3	12,087	12,745	13,437	14,085	14,085	14,735	15,425	16,145	16,725	17,361	18,068	18,730	19,384	20,034				
Engine 4	12,076	12,701	13,368	14,091	14,773	15,421	16,066	16,738	17,411	18,083	18,769	19,456	20,130	20,807				
Cumulative capacity factor, %																		
Engine 1	81%	76%	77%	77%	78%	78%	77%	77%	77%	77%	78%	78%	78%	79%				
Engine 2	8%	11%	14%	13%	12%	12%	11%	11%	10%	10%	9%	9%	11%	10%				
Engine 3	86%	86%	86%	85%	81%	81%	81%	82%	81%	81%	81%	81%	81%	81%				
Engine 4	86%	86%	85%	85%	85%	85%	85%	85%	84%	84%	84%	84%	84%	84%				

	Saturday 11/17/2018	Sunday 11/18/2018	Monday 11/19/2018	Tuesday 11/20/2018	Wednesday 11/21/2018	Thursday 11/22/2018	Friday 11/23/2018	Saturday 11/24/2018	Sunday 11/25/2018	Monday 11/26/2018	Tuesday 11/27/2018	Wednesday 11/28/2018	Thursday 11/29/2018	Friday 11/30/2018	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 hours	1,227	1,299	1,371	1,443	1,515	1,587	1,659	1,731	1,803	1,875	1,947	2,019	2,091	2,163			
Cumulative Availability, %	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%	75.2%			
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	866,757	910,730	958,320	1,008,644	1,057,802	1,104,576	1,149,996	1,195,694	1,241,975	1,289,572	1,339,920	1,389,609	1,438,987	1,488,218			
Cumulative Capacity Factor	64.4%	63.9%	63.7%	63.7%	63.6%	63.4%	63.1%	62.9%	62.7%	62.6%	62.7%	62.7%	62.7%	62.6%			
Cumulative fuel input, MMBtu	10,373	10,951	11,549	12,184	12,798	13,375	13,983	14,562	15,158	15,760	16,391	17,017	17,640	18,264			
Cumulative gross output, kWh	866,757	910,730	958,320	1,008,644	1,057,802	1,104,576	1,149,996	1,195,694	1,241,975	1,289,572	1,339,920	1,389,609	1,438,987	1,488,218			
Heat Rate																	
Daily heat rate, Btu/kWh gross	11,482	11,833	11,312	11,359	11,240	11,097	12,056	11,402	11,600	11,380	11,280	11,341	11,363	11,408			
Daily heat rate, Btu/kWh net	12,755	13,144	12,566	12,618	12,486	12,327	13,393	12,666	12,886	12,642	12,531	12,598	12,623	12,673			
Cumulative heat rate, Btu/kWh gross	10,773	10,825	10,849	10,874	10,891	10,900	10,946	10,963	10,987	11,001	11,012	11,024	11,035	11,048			
Cumulative heat rate, Btu/kWh net	11,968	12,025	12,052	12,080	12,099	12,108	12,159	12,178	12,205	12,221	12,233	12,246	12,259	12,272			
Cumulative by Facility starting C																	
Max cumulative available engine	30,236	30,332	30,428	30,524	30,620	30,716	30,812	30,908	31,004	31,100	31,196	31,292	31,388	31,484			
Actual cumulative engine run hours	20,962	21,034	21,106	21,178	21,250	21,322	21,394	21,466	21,538	21,610	21,682	21,754	21,826	21,898			
Cumulative Availability, %	69.3%	69.3%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%	69.4%			
Max cumulative gross output, kWh	24,948,000	25,027,200	25,106,400	25,185,600	25,264,800	25,344,000	25,423,200	25,502,400	25,581,600	25,660,800	25,740,000	25,819,200	25,898,400	25,977,600			
Actual cumulative gross output, kWh	13,581,074	13,625,047	13,672,637	13,722,961	13,772,119	13,818,893	13,864,313	13,910,011	13,956,292	14,003,889	14,054,237	14,103,926	14,153,304	14,202,535			
Cumulative Capacity Factor	54.4%	54.4%	54.5%	54.5%	54.5%	54.5%	54.5%	54.5%	54.6%	54.6%	54.6%	54.6%	54.6%	54.7%			
Cumulative fuel input, MMBtu	154,349	154,927	155,525	156,160	156,773	157,350	157,958	158,537	159,134	159,735	160,366	160,992	161,615	162,239			
Cumulative gross output, kWh	12,202,840	12,246,813	12,294,403	12,344,727	12,393,885	12,440,659	12,486,079	12,531,777	12,578,058	12,625,655	12,676,003	12,725,692	12,775,070	12,824,301			
Cumulative heat rate, Btu/kWh gross	11,386	11,388	11,388	11,387	11,387	11,386	11,388	11,388	11,389	11,389	11,389	11,388	11,388	11,388			
Cumulative heat rate, Btu/kWh net	12,649	12,650	12,650	12,650	12,649	12,648	12,651	12,651	12,652	12,652	12,651	12,651	12,651	12,651			
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	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	TOTAL		
Date	11/17/2018	11/18/2018	11/19/2018	11/20/2018	11/21/2018	11/22/2018	11/23/2018	11/24/2018	11/25/2018	11/26/2018	11/27/2018	11/28/2018	11/29/2018	11/30/2018			
Hour																	
1	1,899	1,735	1,899	1,999	1,996	1,923	1,855	1,815	1,822	1,820	1,996	1,951	2,015	1,945			
2	1,897	1,734	1,895	1,998	1,998	1,865	1,851	1,816	1,865	1,820	1,998	1,948	2,020	1,945			
3	1,862	1,730	1,894	1,997	1,998	1,863	1,845	1,813	1,986	1,818	1,996	1,946	2,017	1,945			
4	1,732	1,734	1,897	1,998	1,916	1,868	1,847	1,815	1,989	1,820	1,997	1,947	2,016	1,945			
5	1,732	1,731	1,897	1,998	1,904	1,868	1,852	1,817	1,930	1,820	1,997	1,950	2,018	1,945			
6	1,731	1,730	1,876	1,997	1,902	1,865	1,850	1,816	1,987	1,819	1,995	1,947	2,015	1,941			
7	1,731	1,732	1,733	1,998	1,904	1,863	1,850	1,816	1,863	1,819	1,997	1,950	1,968	1,941			
8	1,732	1,731	1,733	1,999	1,905	1,867	1,852	1,815	1,823	1,821	1,996	1,950	1,945	1,945			
9	1,731	1,730	1,787	1,989	1,899	1,870	1,853	1,813	1,822	1,814	1,991	1,942	1,920	1,939			
10	1,896	1,734	1,892	1,996	1,898	1,865	1,522	1,814	1,823	1,812	1,996	1,890	1,744	1,936			
11	1,899	1,734	1,768	1,995	1,942	1,862	1,631	1,815	1,823	1,814	2,015	1,892	1,863	1,937			
12	1,898	1,734	1,748	1,994	2,087	1,864	1,742	1,814	1,819	1,829	2,073	2,085	1,829	1,939			
13	1,899	1,736	1,792	1,998	2,088	1,867	1,814	1,815	1,823	1,969	2,161	2,086	1,963	1,940			
14	1,901	1,735	1,876	1,998	2,056	1,867	1,817	1,816	1,823	1,940	2,161	2,087	2,008	1,938			
15	1,899	1,734	2,083	2,082	1,990	1,861	1,816	1,815	1,821	1,983	2,156	2,085	2,008	1,963			
16	1,901	1,786	1,992	2,094	1,994	1,864	1,817	1,821	1,821	1,986	2,032	2,027	2,009	2,012			
17	1,900	1,896	1,999	2,097	1,993	1,862	1,823	1,820	1,821	1,992	2,066	2,016	2,014	2,015			
18	1,894	1,896	1,996	2,092	1,990	1,860	1,821	1,815	1,815	1,988	2,090	2,018	2,010	2,016			
19	1,898	1,897	1,997	2,096	1,996	1,861	1,819	1,812	1,821	1,991	2,019	2,013	2,007	2,015			
20	1,800	1,801	1,995	2,071	1,993	1,858	1,815	1,821	1,816	1,991	1,947	2,016	2,013	2,016			
21	1,729	1,729	1,996	1,998	1,994	1,860	1,814	1,819	1,815	1,993	1,943	2,018	2,014	2,016			
22	1,732	1,733	1,995	2,000	1,953	1,861	1,816	1,819	1,818	1,994	1,946	2,016	2,013	2,016			
23	1,730	1,732	1,996	1,997	1,945	1,858	1,815	1,918	1,821	1,995	1,949	2,014	2,004	2,016			
24	1,729	1,880	1,995	1,995	1,942	1,853	1,815	1,895	1,819	1,998	1,949	2,014	1,941	2,015			
TOTAL	43,752	42,344	45,731	48,476	47,283	44,775	43,352	43,765	44,386	45,646	48,466	47,808	47,374	47,281			
Cumulative Output Sold, kWh	834,734	877,078	922,809	971,285	1,018,568	1,063,343	1,106,695	1,150,460	1,194,846	1,240,492	1,288,958	1,336,766	1,384,140	1,431,421			
Transformer and line efficiency	99.8%	99.8%	99.8%	99.9%	99.8%	99.8%	99.8%	99.8%	99.8%	99.8%	99.7%	99.7%	99.7%	99.7%	0.0%		
Hourly average	1,823	1,764	1,905	2,020	1,970	1,866	1,806	1,824	1,849	1,902	2,019	1,992	1,974	1,970	1,988		

DECEMBER 2018																		
			Saturday 12/1/2018	Sunday 12/2/2018	Monday 12/3/2018	Tuesday 12/4/2018	Wednesday 12/5/2018	Thursday 12/6/2018	Friday 12/7/2018	Saturday 12/8/2018	Sunday 12/9/2018	Monday 12/10/2018	Tuesday 12/11/2018	Wednesday 12/12/2018	Thursday 12/13/2018	Friday 12/14/2018	Saturday 12/15/2018	Sunday 12/16/2018
LFG and Biogas Flow to the Engines (KSCF)			1,242	1,234	1,186	1,242	1,221	1,252	1,229	1,263	1,228	1,255	1,223	1,223	1,256	1,238	1,241	758
LFG and Biogas Flow to the Engines (MMBTU HHV)			607	631	609	617	597	617	597	593	587	612	603	605	613	617	626	384
LFG and Biogas Flow to the Flare (KSCF)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	288
LFG and Biogas Flow to the Flare (MMBTU HHV)			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146
LFG and Biogas Total Flow (KSCF)			1,242	1,234	1,186	1,242	1,221	1,252	1,229	1,263	1,228	1,255	1,223	1,223	1,256	1,238	1,241	1,046
LFG and Biogas Total Flow (MMBTU HHV)			607	631	609	617	597	617	597	593	587	612	603	605	613	617	626	530
Average Methane Content (%)			48.3	50.5	50.8	49.1	48.4	48.7	48.0	46.4	47.2	48.2	48.7	48.9	48.2	49.2	49.8	50.1
Engine 1 Hours			24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	16
Engine 2 Hours			-	-	-	-	-	-	-	-	-	-	-	-	-	-	3	-
Engine 3 Hours			24	24	24	24	24	23	24	24	24	24	24	24	24	23	24	16
Engine 4 Hours			24	24	24	24	24	24	24	24	24	24	24	23	25	24	24	16
Generator 1 Power Output (kWhr)			15,800	16,564	17,372	17,264	15,616	16,496	15,828	15,284	13,240	13,236	13,240	13,236	13,240	15,244	16,796	10,984
Generator 2 Power Output (kWhr)			-	-	-	-	-	-	-	-	-	-	-	-	-	840	-	-
Generator 3 Power Output (kWhr)			15,600	16,844	15,884	15,596	15,600	15,460	15,592	15,380	16,924	16,512	15,836	16,776	15,864	14,604	14,400	9,420
Generator 4 Power Output (kWhr)			17,332	17,324	17,328	15,836	15,544	16,056	15,548	15,220	15,252	16,948	16,724	16,732	16,724	16,720	16,712	10,936
Gross Power Output (kWhr)			48,743	50,767	50,616	48,714	46,741	48,045	47,034	45,947	45,456	46,740	45,796	46,793	45,836	47,423	47,950	31,374
Net Power Output (kWhr)			46,976	49,012	48,852	47,004	45,076	46,368	45,340	44,104	43,712	44,948	44,092	45,044	44,096	45,656	46,240	30,260
Power Sold as metered by NStar, (kWhr)			46,849	48,850	48,691	46,880	44,987	46,265	45,253	44,038	43,644	44,879	44,040	44,961	44,038	45,564	46,122	30,181
Offgrid RECs (kWhr)			1,767	1,755	1,764	1,710	1,664	1,678	1,694	1,843	1,745	1,791	1,704	1,749	1,739	1,768	1,710	1,114
Calculated Performance Results																		
Daily																		
Power output (kW average when running)																		
Generator 1			658	690	724	719	651	687	660	637	552	552	552	552	552	635	700	687
Generator 2			-	-	-	-	-	-	-	-	-	-	-	-	-	280	-	-
Generator 3			650	702	662	650	650	672	650	641	705	688	660	699	661	635	600	589
Generator 4			722	722	722	660	648	669	648	634	636	706	697	727	669	697	696	684
Power output (kW average over 24-hrs)																		
Facility Gross			2,031	2,115	2,109	2,030	1,948	2,002	1,960	1,914	1,894	1,948	1,908	1,950	1,910	1,976	1,998	1,307
Facility Net			1,957	2,042	2,036	1,959	1,878	1,932	1,889	1,838	1,821	1,873	1,837	1,877	1,837	1,902	1,927	1,261
In-plant load			74	73	74	71	69	70	71	77	73	75	71	73	73	74	71	46
Daily availability factor																		
Facility			75%	75%	75%	75%	75%	74%	75%	75%	75%	75%	75%	74%	76%	77%	75%	50%
Engine 1			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%
Engine 2			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	13%	0%	0%
Engine 3			100%	100%	100%	100%	100%	98%	100%	100%	100%	100%	100%	100%	100%	96%	100%	67%
Engine 4			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	67%
Daily capacity factor																		
Facility			62%	64%	64%	62%	59%	61%	59%	57%	59%	58%	59%	58%	58%	60%	61%	40%
Engine 1			80%	84%	88%	87%	79%	83%	80%	77%	67%	67%	67%	67%	67%	77%	85%	83%
Engine 2			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	34%	0%	0%
Engine 3			79%	85%	80%	79%	79%	81%	79%	78%	85%	83%	80%	85%	80%	77%	73%	71%
Engine 4			88%	87%	88%	80%	79%	81%	79%	77%	77%	86%	84%	88%	81%	84%	84%	83%
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	376
Engine 2			0	0	0	0	0	0	0	0	0	0	0	0	0	3	3	3
Engine 3			24	48	72	96	120	143	167	191	215	239	263	287	311	334	358	374
Engine 4			24	48	72	96	120	144	168	192	216	240	264	287	312	336	360	376
Engine operating run hours total from 0 hours																		
Engine 1			102,554	102,578	102,602	102,650	102,674	102,698	102,722	102,746	102,770	102,794	102,818	102,842	102,866	102,890	102,914	102,930
Engine 2			95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,050	95,053	95,053	95,053
Engine 3			131,197	131,221	131,245	131,269	131,293	131,317	131,340	131,364	131,388	131,412	131,436	131,460	131,484	131,508	131,531	131,571
Engine 4			97,329	97,353	97,377	97,401	97,425	97,449	97,473	97,497	97,521	97,545	97,569	97,593	97,616	97,641	97,665	97,705
Cumulative availability, %			December, 2018 @ 00:00 hours															
Engine 1			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%
Engine 2			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	1%	1%	1%
Engine 3			100%	100%	100%	100%	100%	99%	99%	99%	100%	100%	100%	100%	100%	99%	99%	97%
Engine 4			100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	98%
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			658	1,349	2,072	2,792	3,442	4,130	4,789	5,426	5,978	6,529	7,081	7,632	8,184	8,819	9,519	10,206
Engine 2			-	-	-	-	-	-	-	-	-	-	-	-	-	280	280	280
Engine 3			650	1,352	2,014	2,664	3,314	3,986	4,635	5,276	5,981	6,669	7,329	8,028	8,689	9,324	9,924	10,513
Engine 4			722	1,444	2,166	2,826	3,474	4,143	4,790	5,425	6,060	6,766	7,463	8,190	8,859	9,556	10,252	10,936
Cumulative capacity factor, %																		
Engine 1			80%	82%	84%	85%	83%	83%	83%	82%	81%	79%	78%	77%	76%	76%	77%	77%
Engine 2			0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	2%	2%
Engine 3			79%	82%	81%	81%	80%	81%	80%	80%	81%	81%	81%	81%	81%	81%	80%	80%
Engine 4			88%	88%	88%	86%	84%	84%	83%	82%	82%	82%	82%	83%	83%	83%	83%	83%

		Saturday 12/1/2018	Sunday 12/2/2018	Monday 12/3/2018	Tuesday 12/4/2018	Wednesday 12/5/2018	Thursday 12/6/2018	Friday 12/7/2018	Saturday 12/8/2018	Sunday 12/9/2018	Monday 12/10/2018	Tuesday 12/11/2018	Wednesday 12/12/2018	Thursday 12/13/2018	Friday 12/14/2018	Saturday 12/15/2018	Sunday 12/16/2018
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	431	503	575	647	719	791	862	935	1,009	1,081	1,129
Cumulative Availability, %		75.0%	75.0%	75.0%	75.0%	75.0%	74.8%	74.9%	74.9%	74.9%	74.9%	74.9%	74.8%	74.9%	75.1%	75.1%	73.5%
Max cumulative gross output, kWhr		79,200	158,400	237,600	316,800	396,000	475,200	554,400	633,600	712,800	792,000	871,200	950,400	1,029,600	1,108,800	1,188,000	1,267,200
Actual cumulative gross output, kWhr		48,743	99,510	150,126	198,840	245,581	293,626	340,660	386,607	432,063	478,803	524,599	571,392	617,228	664,651	712,601	743,975
Cumulative Capacity Factor		61.5%	62.8%	63.2%	62.8%	62.0%	61.8%	61.4%	61.0%	60.6%	60.5%	60.2%	60.1%	59.9%	59.9%	60.0%	58.7%
Cumulative fuel input, MMBtu HHV		607	1,238	1,847	2,464	3,062	3,679	4,276	4,869	5,455	6,067	6,671	7,276	7,888	8,505	9,131	9,515
Cumulative gross output, kWhr		48,743	99,510	150,126	198,840	245,581	293,626	340,660	386,607	432,063	478,803	524,599	571,392	617,228	664,651	712,601	743,975
Heat Rate																	
Daily heat rate, Btu/kWe gross LHV		11,216	11,191	10,831	11,400	11,504	11,562	11,432	11,614	11,617	11,785	11,857	11,639	12,029	11,710	11,747	11,024
Daily heat rate, Btu/kWe gross HHV		12,459	12,431	12,032	12,664	12,779	12,844	12,699	12,902	12,905	13,092	13,171	12,929	13,363	13,008	13,049	12,246
Cumulative heat rate, Btu/kWe gross LHV		11,216	11,203	11,078	11,156	11,223	11,278	11,299	11,337	11,366	11,407	11,446	11,462	11,504	11,519	11,534	11,513
Cumulative heat rate, Btu/kWe gross HHV		12,459	12,445	12,306	12,393	12,467	12,529	12,552	12,594	12,626	12,672	12,715	12,733	12,780	12,796	12,813	12,789
Cumulative by Facility starting Calendar Year																	
Max cumulative available engine run hours	31,580	31,676	31,772	31,868	31,964	32,060	32,156	32,252	32,348	32,444	32,540	32,636	32,732	32,828	32,924	33,020	
Actual cumulative engine run hours	54,715	54,787	54,859	54,931	55,003	55,074	55,146	55,218	55,290	55,362	55,434	55,505	55,578	55,652	55,724	55,772	
Cumulative Availability, %	173.3%	173.0%	172.7%	172.4%	172.1%	171.8%	171.5%	171.2%	170.9%	170.6%	170.4%	170.1%	169.8%	169.5%	169.3%	168.9%	
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	
Actual cumulative gross output, kWhr	14,251,278	14,302,045	14,352,661	14,401,375	14,448,116	14,496,161	14,543,195	14,589,142	14,634,598	14,681,338	14,727,134	14,773,927	14,819,763	14,867,186	14,915,136	14,946,510	
Cumulative Capacity Factor	54.7%	54.7%	54.7%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.9%	54.9%	54.9%	54.9%	54.9%	54.9%	
Cumulative fuel input, MMBtu HHV	162,847	163,478	164,087	164,704	165,301	165,918	166,515	167,108	167,695	168,307	168,910	169,513	170,127	170,744	171,370	171,754	
Cumulative gross output, kWhr	12,873,044	12,923,811	12,974,427	13,023,141	13,069,882	13,117,927	13,164,961	13,210,908	13,256,364	13,303,104	13,348,900	13,395,693	13,441,529	13,488,952	13,536,902	13,568,276	
Cumulative heat rate, Btu/kWe gross LHV	11,388	11,387	11,385	11,385	11,385	11,386	11,386	11,387	11,388	11,389	11,391	11,391	11,391	11,394	11,395	11,396	
Cumulative heat rate, Btu/kWe gross HHV	12,650	12,649	12,647	12,647	12,647	12,648	12,648	12,649	12,650	12,652	12,653	12,654	12,657	12,658	12,659	12,659	
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 12/1/2018	Sunday 12/2/2018	Monday 12/3/2018	Tuesday 12/4/2018	Wednesday 12/5/2018	Thursday 12/6/2018	Friday 12/7/2018	Saturday 12/8/2018	Sunday 12/9/2018	Monday 12/10/2018	Tuesday 12/11/2018	Wednesday 12/12/2018	Thursday 12/13/2018	Friday 12/14/2018	Saturday 12/15/2018	Sunday 12/16/2018
Date	Hour																
1		2,016	1,945	2,090	2,020	1,877	1,875	1,953	1,875	1,751	1,921	1,776	1,877	1,867	1,875	1,922	1,922
2		2,016	1,942	2,089	2,022	1,875	1,878	1,953	1,874	1,749	1,920	1,775	1,877	1,867	1,872	1,922	1,922
3		1,984	1,939	2,087	2,019	1,873	1,878	1,942	1,870	1,749	1,918	1,774	1,876	1,867	1,872	1,921	1,920
4		1,943	1,945	2,083	2,014	1,874	1,878	1,881	1,870	1,749	1,918	1,774	1,876	1,867	1,872	1,921	1,920
5		1,941	1,947	2,017	1,949	1,871	1,878	1,882	1,869	1,731	1,902	1,775	1,877	1,872	1,870	1,923	1,919
6		1,943	1,945	2,016	1,948	1,874	1,877	1,881	1,869	1,750	1,755	1,775	1,874	1,870	1,868	1,921	1,917
7		1,946	1,947	2,018	1,951	1,875	1,878	1,881	1,869	1,750	1,755	1,774	1,875	1,798	1,869	1,921	1,918
8		1,946	2,008	2,018	1,951	1,876	1,879	1,880	1,868	1,751	1,755	1,775	1,876	1,775	1,873	1,921	1,924
9		1,944	2,019	2,013	1,943	1,865	1,872	1,875	1,869	1,752	1,787	1,772	1,868	1,773	1,865	1,921	1,924
10		1,947	2,020	2,010	1,941	1,869	1,871	1,872	1,872	1,678	1,892	1,819	1,869	1,774	1,821	1,922	1,924
11		1,944	2,020	2,016	1,943	1,873	1,873	1,875	1,873	1,758	1,897	1,873	1,870	1,775	1,767	1,923	1,926
12		1,945	2,085	2,014	1,942	1,871	1,823	1,870	1,871	1,757	1,897	1,874	1,871	1,778	1,785	1,921	1,924
13		1,946	2,092	2,016	1,944	1,873	1,939	1,876	1,873	1,910	1,899	1,876	1,874	1,782	1,921	1,924	1,925
14		1,945	2,093	2,014	1,943	1,873	2,017	1,873	1,874	1,926	1,897	1,875	1,781	2,014	1,924	1,924	1,928
15		1,944	2,091	2,011	1,943	1,870	2,014	1,874	1,874	1,924	1,896	1,875	1,873	1,778	2,015	1,923	1,927
16		1,944	2,092	2,016	1,943	1,874	2,015	1,877	1,875	1,924	1,898	1,875	1,873	1,829	2,016	1,923	1,340
17		1,943	2,091	2,024	1,948	1,880	2,022	1,878	1,872	1,924	1,903	1,878	1,877	1,877	1,936	1,924	-
18		1,943	2,090	2,023	1,942	1,878	2,018	1,875	1,868	1,922	1,898	1,872	1,871	1,872	1,923	1,920	-
19		1,945	2,091	2,024	1,945	1,879	2,019	1,876	1,867	1,923	1,899	1,878	1,878	1,872	1,923	1,921	-
20		1,946	2,090	2,019	1,947	1,879	1,952	1,875	1,863	1,923	1,895	1,875	1,875	1,872	1,920	1,922	-
21		1,944	2,089	2,017	1,947	1,876	1,952	1,874	1,765	1,919	1,893	1,874	1,871	1,870	1,922	1,920	-
22		1,945	2,090	2,016	1,948	1,879	1,953	1,876	1,579	1,922	1,893	1,877	1,871	1,871	1,922	1,919	-
23		1,945	2,090	2,020	1,912	1,880	1,953	1,878	1,584	1,919	1,820	1,873	1,869	1,875	1,922	1,921	-
24		1,944	2,089	2,020	1,875	1,873	1,951	1,876	1,695	1,786	1,772	1,872	1,867	1,874	1,921	1,920	-
TOTAL		46,849	48,850	48,691	46,880	44,987	46,265	45,253	44,038	43,644	44,879	44,040	44,961	44,038	45,564	46,122	30,181
Cumulative Output Sold, kWhr		46,849	95,699	144,390	191,270	236,257	282,522	327,775	371,813	415,457	460,336	504,376	549,337	593,375	638,939	685,061	715,242
Transformer and line efficiency		99.7%	99.7%	99.7%	99.7%	99.8%	99.8%	99.8%	99.9%	99.8%	99.8%	99.9%	99.8%	99.9%	99.8%	99.7%	99.7%
Hourly average		1,952	2,035	2,029	1,953	1,874	1,928	1,886	1,835	1,819	1,870	1,835	1,873	1,835	1,899	1,922	1,258

DECEMBER 2018																		
	Monday 12/17/2018	Tuesday 12/18/2018	Wednesday 12/19/2018	Thursday 12/20/2018	Friday 12/21/2018	Saturday 12/22/2018	Sunday 12/23/2018	Monday 12/24/2018	Tuesday 12/25/2018	Wednesday 12/26/2018	Thursday 12/27/2018	Friday 12/28/2018	Saturday 12/29/2018	Sunday 12/30/2018	Monday 12/31/2018	TOTAL	Biogas	LFG
LFG and Biogas Flow to the Engine	420	1,224	1,217	1,191	1,190	1,152	1,189	1,177	1,155	1,216	1,212	1,238	1,190	1,153	1,073	36,288	1,983	34,305
LFG and Biogas Flow to the Engine	220	635	602	588	615	577	560	573	564	591	576	611	560	544	544	17,875	1,365	16,510
LFG and Biogas Flow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	288	7.6%	92%
LFG and BiogasFlow to the Flare (	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	146		
LFG and Biogas Total Flow (KSCF)	420	1,224	1,217	1,191	1,190	1,152	1,189	1,177	1,155	1,216	1,212	1,238	1,190	1,153	1,073	36,576		
LFG and Biogas Total Flow (MMBT	220	635	602	588	615	577	560	573	564	591	576	611	560	544	544	18,021		
Average Methane Content (%)	51.8	51.3	48.9	48.8	51.1	49.5	46.5	48.1	48.2	48.0	47.0	48.8	46.5	46.6	50.1	48.7		
Engine 1 Hours	8	24	24	24	24	24	24	24	24	24	24	24	24	24	24	720		
Engine 2 Hours	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	4		
Engine 3 Hours	8	24	24	24	24	24	24	24	24	24	24	24	24	24	24	718		
Engine 4 Hours	9	24	24	24	24	24	24	24	24	24	24	24	24	24	24	721		
Generator 1 Power Output (kWhr)	5,572	16,788	16,792	16,788	16,788	15,280	13,704	13,232	13,236	13,236	15,008	15,768	16,328	14,440	14,436	456,836		
Generator 2 Power Output (kWhr)	-	-	-	-	-	-	-	-	-	-	-	324	-	-	-	1,164		
Generator 3 Power Output (kWhr)	6,124	15,668	14,404	14,408	15,128	14,396	15,376	15,816	13,480	15,140	14,688	15,328	14,396	13,900	14,208	458,752		
Generator 4 Power Output (kWhr)	6,108	16,636	14,372	14,368	14,364	13,652	16,920	17,332	17,332	17,332	17,332	17,324	15,208	13,868	13,196	479,312		
Gross Power Output (kWhr)	17,829	49,091	45,527	45,542	46,249	43,977	42,658	45,911	43,978	45,642	46,979	48,751	45,928	42,144	41,840	1,396,021		
Net Power Output (kWhr)	17,172	47,144	43,588	43,564	44,356	42,104	40,744	44,000	42,112	43,648	44,964	46,708	43,976	40,256	39,880	1,340,996		
Power Sold as metered by NStar, (l	17,129	47,038	43,539	43,500	44,279	42,062	40,727	43,946	42,073	43,598	44,907	46,601	43,886	40,241	39,892	1,338,660	CRMCB inplant	
Offgrid RECs (kWhr)	657	1,948	1,937	1,979	1,893	1,875	1,912	1,912	1,866	1,994	2,015	2,043	1,952	1,888	1,960	55,026	10,788	
Calculated Performance Results																	20%	
Daily																	of total in-plant power	
Power output (kW average whe																		
Generator 1	697	700	700	700	700	637	571	551	552	552	625	657	680	602	602			
Generator 2	-	-	-	-	-	-	-	-	-	-	-	324	-	-	-			
Generator 3	766	653	600	600	630	600	641	659	562	631	612	639	600	579	592			
Generator 4	679	693	599	599	599	599	569	705	722	722	722	722	634	578	550			
Power output (kW average ove																		
Facility Gross	743	2,045	1,897	1,898	1,927	1,832	1,777	1,913	1,832	1,902	1,957	2,031	1,914	1,756	1,743			
Facility Net	716	1,964	1,816	1,815	1,848	1,754	1,698	1,833	1,755	1,819	1,874	1,946	1,832	1,677	1,662			
In-plant load	27	81	81	82	79	78	80	80	78	83	84	85	81	79	82			
Daily availability factor																		
Facility	26%	75%	75%	75%	75%	75%	75%	75%	75%	75%	75%	76%	75%	75%	75%			
Engine 1	33%	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%	4%	0%	0%	0%			
Engine 3	33%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Engine 4	38%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%			
Daily capacity factor																		
Facility	23%	62%	57%	58%	58%	56%	54%	58%	56%	58%	59%	62%	58%	53%	53%			
Engine 1	84%	85%	85%	85%	85%	77%	69%	67%	67%	67%	76%	80%	82%	73%	73%			
Engine 2	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	39%	0%	0%	0%			
Engine 3	93%	79%	73%	73%	76%	73%	78%	80%	68%	76%	74%	77%	73%	70%	72%			
Engine 4	82%	84%	73%	73%	73%	73%	69%	85%	88%	88%	88%	87%	77%	70%	67%			
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	384	408	432	456	480	504	528	552	576	600	624	648	672	696	696			
Engine 2	3	3	3	3	3	3	3	3	3	3	3	4	4	4	4			
Engine 3	382	406	430	454	478	502	526	550	574	598	622	646	670	694	694			
Engine 4	385	409	433	457	481	505	529	553	577	601	625	649	673	697	697			
Engine operating run hours tota																		
Engine 1	102,938	102,962	102,986	103,010	103,034	103,058	103,082	103,106	103,130	103,154	103,178	103,202	103,226	103,250	103,250			
Engine 2	95,053	95,053	95,053	95,053	95,053	95,053	95,053	95,053	95,053	95,053	95,053	95,054	95,054	95,054	95,054			
Engine 3	131,579	131,603	131,627	131,651	131,675	131,699	131,723	131,747	131,771	131,795	131,819	131,843	131,867	131,891	131,891			
Engine 4	97,714	97,738	97,762	97,786	97,810	97,834	97,858	97,882	97,906	97,930	97,954	97,978	98,002	98,026	98,026			
Cumulative availability, %																		
Engine 1	94%	94%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	97%	97%	97%			
Engine 2	1%	1%	1%	1%	1%	1%	1%	1%	1%	0%	0%	1%	1%	1%	1%			
Engine 3	94%	94%	94%	95%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	96%			
Engine 4	94%	95%	95%	95%	95%	96%	96%	96%	96%	96%	96%	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	24,750			
Engine 1	10,902	11,602	12,301	13,001	13,700	14,397	15,095	15,793	16,491	17,189	17,887	18,585	19,283	19,981	19,981			
Engine 2	280	280	280	280	280	280	280	280	280	280	280	280	280	280	280			
Engine 3	11,278	11,931	12,583	13,235	13,762	14,362	15,003	15,662	16,223	16,854	17,466	18,054	18,705	19,284	19,284			
Engine 4	11,615	12,308	12,907	13,505	14,104	14,702	15,271	15,976	16,698	17,420	18,143	18,864	19,498	20,076	20,048			
Cumulative capacity factor, %																		
Engine 1	78%	78%	78%	79%	79%	79%	79%	78%	78%	77%	77%	77%	77%	77%	77%			
Engine 2	2%	2%	2%	2%	2%	2%	1%	1%	1%	1%	1%	3%	3%	2%	2%			
Engine 3	80%	80%	80%	80%	79%	79%	79%	79%	79%	78%	78%	78%	78%	78%	78%			
Engine 4	83%	83%	82%	82%	81%	81%	80%	81%	81%	81%	81%	82%	81%	81%	81%			

	Monday 12/17/2018	Tuesday 12/18/2018	Wednesday 12/19/2018	Thursday 12/20/2018	Friday 12/21/2018	Saturday 12/22/2018	Sunday 12/23/2018	Monday 12/24/2018	Tuesday 12/25/2018	Wednesday 12/26/2018	Thursday 12/27/2018	Friday 12/28/2018	Saturday 12/29/2018	Sunday 12/30/2018	Monday 12/31/2018	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	1,154	1,226	1,298	1,370	1,442	1,514	1,586	1,658	1,730	1,802	1,874	1,947	2,019	2,091	2,091			
Cumulative Availability, %	70.7%	70.9%	71.2%	71.4%	71.5%	71.7%	71.8%	72.0%	72.1%	72.2%	72.3%	72.4%	72.5%	72.6%	72.6%			
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, kW	761,804	810,895	856,422	901,964	948,213	992,190	1,034,848	1,080,759	1,124,737	1,170,379	1,217,358	1,266,109	1,312,037	1,354,181	1,353,877			
Cumulative Capacity Factor	56.6%	56.9%	56.9%	56.9%	57.0%	56.9%	56.8%	56.9%	56.8%	56.8%	56.9%	57.1%	57.1%	57.0%	57.0%			
Cumulative fuel input, MMBtu h	9,735	10,370	10,972	11,560	12,175	12,752	13,312	13,885	14,449	15,039	15,615	16,227	16,787	17,331	17,331			
Cumulative gross output, kWhr	761,804	810,895	856,422	901,964	948,213	992,190	1,034,848	1,080,759	1,124,737	1,170,379	1,217,358	1,266,109	1,312,037	1,354,181	1,353,877			
Heat Rate																		
Daily heat rate, Btu/kWe gross	11,108	11,648	11,903	11,621	11,978	11,811	11,809	11,235	11,536	11,646	11,043	11,286	10,980	11,618	11,709			
Daily heat rate, Btu/kWe net	12,339	12,939	13,223	12,909	13,306	13,120	13,118	12,481	12,815	12,938	12,267	12,537	12,197	12,906	13,007			
Cumulative heat rate, Btu/kWe gross	11,503	11,512	11,533	11,537	11,559	11,570	11,580	11,565	11,564	11,567	11,547	11,537	11,517	11,521	11,523			
Cumulative heat rate, Btu/kWe net	12,779	12,788	12,811	12,816	12,840	12,853	12,864	12,847	12,846	12,850	12,827	12,816	12,794	12,798	12,801			
Cumulative by Facility starting C																		
Max cumulative available engine	33,116	33,212	33,308	33,404	33,500	33,596	33,692	33,788	33,884	33,980	34,076	34,172	34,268	34,364	34,364			
Actual cumulative engine run h	55,797	55,869	55,941	56,013	56,085	56,157	56,229	56,301	56,373	56,445	56,517	56,590	56,662	56,734	56,734			
Cumulative Availability, %	168.5%	168.2%	168.0%	167.7%	167.4%	167.2%	166.9%	166.6%	166.4%	166.1%	165.9%	165.6%	165.3%	165.1%	165.1%			
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, kWhr	14,964,339	15,013,430	15,058,957	15,104,499	15,150,748	15,194,725	15,237,383	15,283,294	15,327,272	15,372,914	15,419,893	15,468,644	15,514,572	15,556,412	15,556,412			
Cumulative Capacity Factor	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.8%	54.9%	54.9%	54.9%	54.9%			
Cumulative fuel input, MMBtu h	171,974	172,609	173,211	173,799	174,415	174,992	175,551	176,124	176,688	177,278	177,855	178,466	179,026	179,570	179,570			
Cumulative gross output, kWhr	13,586,105	13,635,196	13,680,723	13,726,265	13,772,514	13,816,491	13,859,149	13,905,060	13,949,038	13,994,680	14,041,659	14,090,410	14,136,338	14,178,482	14,178,178			
Cumulative heat rate, Btu/kWe gross	11,395	11,396	11,397	11,398	11,400	11,401	11,403	11,402	11,403	11,403	11,402	11,402	11,400	11,401	11,401			
Cumulative heat rate, Btu/kWe net	12,658	12,659	12,661	12,662	12,664	12,665	12,667	12,666	12,667	12,668	12,666	12,666	12,664	12,665	12,665			
Service																		
Engine 1																		
Engine 2		Eversource Outage 6 PM																
Engine 3		Fault repaired in front of Ahead																
Engine 4																		
Oil - oil and filter change																		
Service - plugs, air filter, valve insp																		
Precipitation																		
NSTAR Power Reports	Monday 12/17/2018	Tuesday 12/18/2018	Wednesday 12/19/2018	Thursday 12/20/2018	Friday 12/21/2018	Saturday 12/22/2018	Sunday 12/23/2018	Monday 12/24/2018	Tuesday 12/25/2018	Wednesday 12/26/2018	Thursday 12/27/2018	Friday 12/28/2018	Saturday 12/29/2018	Sunday 12/30/2018	Monday 12/31/2018	TOTAL		
Date																		
Hour																		
1	-	2,064	1,816	1,816	1,815	1,817	1,714	1,745	1,890	1,743	1,909	1,888	1,934	1,717	1,623			
2	-	2,065	1,816	1,815	1,814	1,817	1,715	1,747	1,840	1,742	1,907	1,888	1,933	1,717	1,623			
3	-	2,062	1,814	1,814	1,814	1,816	1,713	1,851	1,743	1,744	1,753	1,884	1,934	1,714	1,622			
4	-	2,062	1,816	1,814	1,816	1,815	1,714	1,910	1,741	1,742	1,854	1,886	1,932	1,714	1,622			
5	-	2,063	1,816	1,813	1,816	1,816	1,714	1,841	1,741	1,741	1,906	1,889	1,933	1,716	1,623			
6	-	2,061	1,814	1,809	1,817	1,816	1,712	1,749	1,740	1,740	1,820	1,888	1,932	1,719	1,621			
7	-	2,061	1,816	1,813	1,818	1,816	1,713	1,910	1,744	1,743	1,738	1,887	1,908	1,719	1,622			
8	-	2,061	1,816	1,811	1,818	1,815	1,713	1,852	1,744	1,743	1,741	1,888	1,813	1,717	1,622			
9	-	2,052	1,810	1,816	1,813	1,779	1,710	1,743	1,742	1,739	1,742	1,881	1,813	1,717	1,623			
10	-	2,047	1,813	1,806	1,812	1,720	1,616	1,832	1,742	1,728	1,826	1,881	1,816	1,718	1,620			
11	-	1,954	1,812	1,811	1,815	1,721	1,569	1,911	1,743	1,731	1,900	1,760	1,818	1,718	1,615			
12	-	1,931	1,810	1,812	1,817	1,721	1,572	1,908	1,742	1,767	1,903	1,896	1,818	1,717	1,618			
13	-	1,934	1,815	1,809	1,909	1,718	1,574	1,909	1,742	1,902	2,043	1,956	1,818	1,720	1,622			
14	-	1,938	1,812	1,811	1,930	1,718	1,575	1,770	1,744	1,904	1,989	1,957	1,818	1,695	1,749			
15	-	1,935	1,813	1,812	1,931	1,716	1,714	1,775	1,742	1,901	1,884	1,953	1,815	1,624	1,665			
16	480	1,935	1,813	1,812	1,931	1,714	1,744	1,911	1,745	1,905	1,885	1,970	1,813	1,624	1,791			
17	2,187	1,939	1,817	1,819	1,940	1,715	1,743	1,908	1,744	1,909	1,891	2,056	1,809	1,624	1,653			
18	2,096	1,935	1,817	1,813	1,940	1,716	1,741	1,839	1,744	1,909	1,889	2,056	1,808	1,622	1,624			
19	2,060	1,860	1,817	1,812	1,826	1,718	1,746	1,742	1,744	1,908	1,887	2,056	1,807	1,622	1,624			
20	2,059	1,816	1,812	1,813	1,819	1,718	1,744	1,749	1,743	1,907	1,885	2,055	1,743	1,622	1,644			
21	2,062	1,814	1,812	1,811	1,816	1,715	1,742	1,909	1,743	1,907	1,889	2,054	1,717	1,619	1,772			
22	2,059	1,817	1,812	1,811	1,818	1,715	1,741	1,909	1,743	1,807	1,889	2,055	1,718	1,620	1,710			
23	2,063	1,817	1,815	1,814	1,818	1,715	1,742	1,785	1,743	1,832	1,889	1,984	1,718	1,624	1,792			
24	2,063	1,815	1,815	1,813	1,816	1,715	1,746	1,741	1,744	1,904	1,888	1,933	1,718	1,622	1,792			
TOTAL	17,129	47,038	43,539	43,500	44,279	42,062	40,727	43,946	42,073	43,598	44,907	46,601	43,886	40,241	39,892			
Cumulative Output Sold, kW	732,371	779,409	822,948	866,448	910,727	952,789	993,516	1,037,462	1,079,535	1,123,133	1,168,040	1,214,641	1,258,527	1,298,768	1,338,660			
Transformer and line efficiency	99.7%	99.8%	99.9%	99.9%	99.8%	99.9%	100.0%	99.9%	99.9%	99.9%	99.9%	99.8%	99.8%	100.0%	100.0%			
Hourly average	714	1,960	1,814	1,813	1,845	1,753	1,697	1,831	1,753	1,817	1,871	1,942	1,829	1,677	1,662	1,799		

CRMC Bioenergy Biogas Flow Rate: SCADA Data

Data Point	Date	Time	Minutes in Period	Totalizer Reading, KSCF	scfm	Tot KSCF in month	% Methane Start	Heat valued per time period, MMBtu	Tot Heat value in month, MMBtu	Average methane content, %	Biogas flow rate, ave scfm	Biogas flow rate 50% methane, ave scfm
2018-001	1-Jan-18	0:00	5,113	1,007.78	33	1,514.54	70%	119.4	1,072.9	70.0	35	49.1
2018-002	2-Jan-18	12:32	2,192	1,080.05	33		70%	51.2				
2018-003	2-Jan-18	12:32	-	-		Reset to 0	70%					
2018-004	5-Jan-18	14:00	4,408	143.03	32		70%	101.3				
2018-005	8-Jan-18	12:43	4,243	183.52	10		70%	25.6				
2018-006	11-Jan-18	10:53	4,210	226.12	10		55%	23.7				
2018-007	16-Jan-18	11:00	7,207	296.23	10		55%	36.2				
2018-008	23-Jan-18	13:00	10,200	393.74	10		47%	46.4				
2018-009	30-Jan-18	9:45	9,885	491.03	10		47%	46.3				
2018-010	1-Feb-18	0:00	2,295	514.14	10	586.41	47%	11.0	341.7	57.6	14	15.6
2018-011	1-Feb-18	10:00	600	520.18	10		47%	2.9				
2018-012	15-Feb-18	11:13	20,233	884.374	18		47%	215.6				
2018-013	1-Mar-18	0:00	19,487	1,342.48	24	828.34	70%	324.5	543.0	64.8	19	24.8
2018-014	1-Mar-18	10:00	600	1,356.58	24		70%	10.1				
2018-015	5-Mar-18	10:03	5,763	1,506.42	26		72%	110.7				
2018-016	12-Mar-18	11:00	10,137	1,790.25	28		74%	212.6				
2018-017	20-Mar-18	10:30	11,490	2,133.87	30		74%	257.3				
2018-018	20-Mar-18	10:30	-	-	-	Reset to 0	74%					
2018-019	20-Mar-18	12:40	130	4.34	33		74%	3.3				
2018-020	21-Mar-18	16:37	1,677	65.06	36		74%	45.5				
2018-021	22-Mar-18	10:14	1,057	104.12	37		74%	29.3				
2018-022	26-Mar-18	10:57	5,803	289.16	32		74%	138.6				
2018-023	26-Mar-18	10:57	-	-	-	Reset to 0	74%					
2018-024	27-Mar-18	9:31	1,354	42.89	32		74%	32.1				
2018-025	28-Mar-18	9:16	1,425	93.38	35		74%	37.8				
2018-026	30-Mar-18	11:55	3,039	200.58	35		74%	80.3				
2018-027	1-Apr-18	0:00	2,165	278.42	36	1,358.98	74%	58.3	1,015.8	73.9	31	46.5
2018-028	2-Apr-18	10:30	2,070	352.84	36		74%	55.7				
2018-029	2-Apr-18	10:30	-	-	-	Reset to 0	70%					
2018-030	3-Apr-18	10:33	1,443	38.60	27		70%	27.3				
2018-031	4-Apr-18	12:45	1,572	93.58	35		70%	38.9				
2018-032	6-Apr-18	9:12	2,667	178.68	32		70%	60.3				
2018-033	9-Apr-18	8:47	4,295	326.48	34		70%	104.7				
2018-034	10-Apr-18	11:37	1,610	384.43	36		70%	41.1				
2018-035	16-Apr-18	11:15	8,618	659.84	32		70%	195.1				
2018-036	16-Apr-18	11:15	-	-	-	Reset to 0	70%					
2018-037	17-Apr-18	15:27	1,692	56.20	33		70%	39.8				
2018-038	18-Apr-18	14:19	1,372	100.96	33		70%	31.7				
2018-039	20-Apr-18	9:10	2,571	188.56	34		70%	62.1				
2018-040	23-Apr-18	11:01	4,431	329.01	32		70%	99.5				
2018-041	24-Apr-18	10:40	1,419	376.28	33		70%	33.5				
2018-042	25-Apr-18	11:18	1,478	425.67	33		70%	35.0				
2018-043	26-Apr-18	10:27	1,389	478.90	38		70%	37.7				
2018-044	26-Apr-18	10:27	-	-	-	Reset to 0	70%					
2018-045	27-Apr-18	10:13	1,426	52.82	37		70%	37.4				
2018-046	30-Apr-18	7:00	4,127	201.30	36		70%	105.2				
2018-047	30-Apr-18	7:00	-	-	-	Reset to 0	70%					
2018-048	30-Apr-18	13:02	362	13.80	38		70%	9.8				
2018-049	1-May-18	0:00	658	38.47	37	1,452.93	70%	17.5	1,032.3	70.2	34	47.2
2018-050	1-May-18	9:14	554	59.24	37		70%	14.7				
2018-051	4-May-18	14:00	4,606	180.14	26		70%	85.6				
2018-052	7-May-18	9:00	4,020	320.06	35		70%	99.1				
2018-053	14-May-18	9:05	10,085	661.12	34		70%	241.6				
2018-054	14-May-18	9:05	-	-	-	Reset to 0	70%					
2018-055	14-May-18	12:02	177	6.09	34		70%	4.3				
2018-056	16-May-18	13:09	2,947	95.76	30		70%	63.5				
2018-057	16-May-18	13:09	-	-	-	Reset to 0	70%					
2018-058	17-May-18	9:29	1,220	39.00	32		70%	27.6				
2018-059	22-May-18	16:26	7,617	282.39	32		70%	172.4				
2018-060	25-May-18	14:17	4,191	413.62	31		70%	93.0				
2018-061	29-May-18	9:36	5,479	598.09	34		70%	130.7				
2018-062	30-May-18	9:45	1,449	638.71	28		70%	28.8				
2018-063	1-Jun-18	0:00	2,295	710.22	31	1,428.63	70%	50.7	1,012.0	70.0	33	46.3
2018-064	1-Jun-18	9:27	567	727.89	31		70%	12.5				
2018-065	4-Jun-18	10:54	4,407	866.17	31		70%	98.0				
2018-066	5-Jun-18	10:26	1,412	919.81	38		70%	38.0				
2018-067	8-Jun-18	10:00	4,294	1,070.00	35		70%	106.4				
2018-068	8-Jun-18	10:00	-	-	-	Reset to 0	70%					
2018-069	8-Jun-18	10:30	30	0.99	33		70%	0.7				
2018-070	8-Jun-18	15:09	279	11.68	38		70%	7.6				
2018-071	9-Jun-18	17:02	1,553	53.81	27		70%	29.8				
2018-072	12-Jun-18	18:48	4,426	208.10	35		70%	109.3				
2018-073	13-Jun-18	10:00	912	239.02	34		70%	21.6				
2018-074	13-Jun-18	10:00	-	-	-	Reset to 0	66%					
2018-075	15-Jun-18	12:29	3,029	119.97	40		66%	80.1				
2018-076	18-Jun-18	10:22	4,193	227.87	26		66%	72.1				
2018-077	19-Jun-18	10:13	1,431	286.48	41		66%	39.1				
2018-078	25-Jun-18	9:47	8,614	604.53	37		66%	212.4				
2018-079	26-Jun-18	13:40	1,673	662.24	34		66%	38.5				
2018-080	27-Jun-18	12:51	1,391	705.86	31		66%	29.1				
2018-081	28-Jun-18	9:38	1,247	754.40	39		66%	32.4				
2018-082	28-Jun-18	15:46	368	770.63	44		66%	10.8				
2018-083	1-Jul-18	0:00	3,374	878.71	32	1,477.51	66%	72.2	1,010.8	67.6	34	46.2
2018-084	2-Jul-18	12:26	2,186	948.74	32		66%	46.8				
2018-085	2-Jul-18	12:26	-	-	-	Reset to 0	66%					
2018-086	5-Jul-18	11:00	4,234	132.00	31		66%	88.2				
2018-087	5-Jul-18	11:00	-	-	-	Reset to 0	66%					
2018-088	9-Jul-18	10:59	5,759	185.63	32		66%	124.0				

CRM Bioenergy Biogas Flow Rate: SCADA Data

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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 an

		Engine 1, kW	680	600	600	650	-	825	600
		Engine 2, kW	680	600	620	600	825	-	500
		Engine 3, kW	600	650	-	600	-	-	-
		Engine 4, kW	-	-	620	-	825	825	600
		Gross, kW	1,959	1,850	1,840	1,850	1,650	1,650	1,700
MEASURING INSTRUMENT:			Pitot Tube:	166	166	166	166	166	166
			Manometer:	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II
DATE OF MEASUREMENT:			9-Jan-18	8-Feb-18	23-Mar-18	17-Apr-18	23-May-18	11-Jun-18	10-Jul-18
TIME OF MEASUREMENT:			11:30	13:15	13:30	13:30	11:00	11:30	13:50
PARAMETERS			UNITS	VALUES	VALUES	VALUES	VALUES	VALUES	VALUES
Pipe dimensions									
Inside Diameter			inches	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
Flow Calculation									
Kp	pitot tube constant		ft/sec[(lb/lb-mole)(in. Hg)/(R)(in H20)]^1/2	85.49	85.49	85.49	85.49	85.49	85.49
Cp	Pitot tube coefficient		dimensionless	1.00	1.00	1.00	1.00	1.00	1.00
dP	Average velocity pressure of stack gas		in H20	0.136	0.126	0.120	0.120	0.090	0.120
Blower Inlet									
Ts	Stack temperature		Degrees Fahrenheit	62	62	64	64	64	80
			Degrees Rankine	522	522	524	524	524	540
Pg	Stack static pressure		inch H20	-62	-65	-64	-58	-57	-62
			inch Hg	(4.56)	(4.78)	(4.71)	(4.27)	(4.19)	(4.56)
Ps	Absolute stack gas pressure		inch Hg	25.44	25.26	25.19	25.23	25.72	25.34
Blower Outlet									
Ts	Stack temperature		Degrees Fahrenheit	120	120	122	125	120	120
			Degrees Rankine	580	580	582	585	580	580
Pg	Stack static pressure		inch H20	60.9	55.4	52.6	52.6	52.6	60.9
			inch Hg	4.48	4.07	3.87	3.87	3.87	4.48
			psig	2.20	2.00	1.90	1.90	1.90	2.20
Pbar	Barometric pressure		inch Hg	30.00	30.04	29.90	29.50	29.91	30.05
Ps	Absolute stack gas pressure		inch Hg	34.48	34.11	33.77	33.37	33.78	34.38
Ms	Molecular weight of stack gas, wet		lb/lb-mole	28.33	28.29	28.09	27.14	27.96	28.04
Vs	Average stack gas velocity		feet per second	26.8	25.9	25.5	25.9	21.9	25.3
Qact	Volumetric Flow		actual cubic feet per minute	952	920	905	920	778	905
Qstd	Volumetric Flow at actual methane content		standard cubic feet per minute *	819	786	768	782	674	749
Qstd corr	Volumetric Flow at 50% methane		standard cubic feet per minute **	786	746	768	845	687	736
Ht HHV	Heat input		MMBtu per hour HHV	23.86	22.66	23.32	25.65	20.86	22.33
Ht LHV	Heat input		MMBtu per hour LHV	21.48	20.40	20.99	23.09	18.78	20.10
	Methane Content		%, vol/vol wet	48.00%	47.50%	50.00%	54.00%	51.00%	49.10%
Diff. between	pitot tube and orifice reading:			1.1%	2.4%	-0.6%	1.0%	1.5%	1.7%
dP	Delta pressure across orifice plate		inches H20	4.80	4.35	4.50	4.65	3.30	4.00
Qact	Volumetric Flow		acfm	771	739	755	769	645	728
Qstd	Volumetric Flow at actual methane content		standard cubic feet per minute *	809	767	773	775	663	737
Qstd	Volumetric Flow at 50% methane		standard cubic feet per minute **	777	728	773	836	677	723
Ht HHV	Heat input		MMBtu per hour HHV	23.59	22.12	23.47	25.40	20.54	21.96
Ht LHV	Heat input		MMBtu per hour LHV	21.23	19.91	21.13	22.86	18.49	19.77
* 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 H20/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 Calculation

Crapo Hill Landfill, New Bedford/Dartmouth, Massachusetts

Note: Calculation of volumetric flow of LFG through a pipe using a pitot tube an

		Engine 1, kW	-	-	630	750	560
		Engine 2, kW	550	500	-	-	-
		Engine 3, kW	650	700	640	750	700
		Engine 4, kW	570	600	630	750	700
		Gross, kW	1,770	1,800	1,900	2,250	1,960
MEASURING INSTRUMENT:			Pitot Tube:	166	166	166	166
			Manometer:	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II	Dwyer Mark II
DATE OF MEASUREMENT:				2-Aug-18	13-Sep-18	9-Oct-18	7-Nov-18
TIME OF MEASUREMENT:				13:30	13:30	13:00	13:30
PARAMETERS			UNITS	VALUES	VALUES	VALUES	VALUES
Pipe dimensions							
Inside Diameter			inches	10.420	10.420	10.420	10.420
Area of cross section			square feet	0.5922	0.5922	0.5922	0.5922
Flow Calculation							
Kp	pitot tube constant	ft/sec((lb/lb-mole)(in. Hg)/(R)(in H20))^1/2	85.49	85.49	85.49	85.49	85.49
Cp	Pitot tube coefficient	dimensionless	1.00	1.00	1.00	1.00	1.00
dP	Average velocity pressure of stack gas	in H2O	0.118	0.117	0.118	0.153	0.144
Blower Inlet							
Ts	Stack temperature	Degrees Fahrenheit	85	85	80	75	64
		Degrees Rankine	545	545	540	535	524
Pg	Stack static pressure	inch H2O	-60	-59	-62	-60	-62
		inch Hg	(4.41)	(4.34)	(4.56)	(4.41)	(4.56)
Ps	Absolute stack gas pressure	inch Hg	25.74	25.93	25.70	25.49	25.34
Blower Outlet							
Ts	Stack temperature	Degrees Fahrenheit	122	120	120	120	120
		Degrees Rankine	582	580	580	580	580
Pg	Stack static pressure	inch H2O	55.4	52.6	52.6	52.6	52.6
		inch Hg	4.07	3.87	3.87	3.87	3.87
		psig	2.00	1.90	1.90	1.90	1.90
Pbar	Barometric pressure	inch Hg	30.15	30.27	30.26	29.90	29.90
Ps	Absolute stack gas pressure	inch Hg	34.22	34.14	34.13	33.77	33.77
Ms	Molecular weight of stack gas, wet	lb/lb-mole	28.15	27.99	27.93	27.99	28.26
Vs	Average stack gas velocity	feet per second	25.4	25.3	25.4	29.0	27.8
Qact	Volumetric Flow	actual cubic feet per minute	904	899	904	1,030	988
Qstd	Volumetric Flow at actual methane content	standard cubic feet per minute *	753	755	759	866	843
Qstd corr	Volumetric Flow at 50% methane	standard cubic feet per minute **	720	755	769	875	826
Ht HHV	Heat input	MMBtu per hour HHV	21.87	22.92	23.33	26.55	25.08
Ht LHV	Heat input	MMBtu per hour LHV	19.69	20.63	21.00	23.90	22.57
	Methane Content	%, vol/vol wet	47.80%	50.00%	50.60%	50.50%	49.00%
Diff. between pitot tube and orifice reading:			-1.3%	1.0%	-0.2%	-1.5%	1.2%
dP	Delta pressure across orifice plate	inches H2O	4.30	4.10	4.25	5.80	5.20
Qact	Volumetric Flow	acfm	736	719	732	856	810
Qstd	Volumetric Flow at actual methane content	standard cubic feet per minute *	764	747	761	879	832
Qstd	Volumetric Flow at 50% methane	standard cubic feet per minute **	730	747	770	888	816
Ht HHV	Heat input	MMBtu per hour HHV	22.16	22.69	23.37	26.96	24.77
Ht LHV	Heat input	MMBtu per hour LHV	19.95	20.42	21.04	24.27	22.30
* 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/Dartn												
Measurements by	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY	TY
Date	9-Jan-18	8-Feb-18	23-Mar-18	17-Apr-18	23-May-18	11-Jun-18	10-Jul-18	2-Aug-18	13-Sep-18	9-Oct-18	7-Nov-18	11-Dec-18
Time	11:30	13:15	13:30	13:30	11:00	11:30	13:50	13:30	13:30	13:00	13:30	13:00
Flow valve												
Pipe inside diameter, inches	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42	10.42
Orifice measurement, cfm	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Ambient Temperature, F	34	26	36	45	64	59	76	83	68	69	56	27
Barometric Pressure, In Hg	30.00	30.04	29.90	29.50	29.91	30.05	29.90	30.15	30.27	30.26	29.90	29.90
Blower Inlet Temperature, F	62	62	64	64	64	77	80	85	85	80	75	64
Outlet Temperature, F	120	120	122	125	120	120	120	122	120	120	120	120
Blower Inlet Pressure (SP), In H2O	-62	-65	-64	-58	-57	-58	-62	-60	-59	-62	-60	-62
Blower Outlet Pressure, PSIG	2.2	2.0	1.9	1.9	1.9	1.9	2.2	2.0	1.9	1.9	1.9	1.9
Blower Outlet Pressure, In H2O	60.90	55.36	52.59	52.59	52.59	52.59	60.90	55.36	52.59	52.59	52.59	52.59
Measurement												
Manometer												
Pitot Tube												
Velocity Pressure (dP)												
Point												
1	0.12	0.11	0.10	0.10	0.07	0.10	0.10	0.10	0.10	0.10	0.14	0.13
2	0.13	0.12	0.11	0.11	0.08	0.11	0.11	0.11	0.11	0.11	0.15	0.14
3	0.13	0.12	0.11	0.11	0.08	0.11	0.11	0.11	0.11	0.11	0.15	0.14
4	0.13	0.12	0.11	0.11	0.09	0.12	0.11	0.12	0.11	0.12	0.15	0.15
5	0.14	0.13	0.13	0.13	0.10	0.13	0.13	0.13	0.13	0.13	0.16	0.15
6	0.14	0.13	0.13	0.13	0.10	0.13	0.13	0.13	0.13	0.13	0.16	0.15
7	0.14	0.13	0.13	0.13	0.10	0.13	0.13	0.13	0.13	0.13	0.16	0.15
8	0.14	0.13	0.13	0.13	0.10	0.13	0.12	0.12	0.12	0.12	0.16	0.15
9	0.15	0.14	0.13	0.13	0.09	0.12	0.11	0.11	0.11	0.11	0.15	0.14
Average	0.136	0.126	0.120	0.120	0.090	0.120	0.117	0.118	0.117	0.118	0.153	0.144
Gas Composition												
Compound, %v/v												
Methane (CH4)	48.0%	47.5%	50.0%	54.0%	51.0%	44.0%	49.1%	47.8%	50.0%	50.6%	50.5%	49.0%
Carbon dioxide (CO2)	39.0%	38.3%	39.1%	38.0%	39.0%	38.0%	39.0%	39.0%	39.8%	39.5%	39.4%	39.3%
Oxygen (O2)	1.00%	1.20%	0.90%	0.50%	1.00%	1.80%	1.00%	1.40%	0.70%	0.80%	1.00%	1.20%
Balance gas	12.00%	13.00%	10.00%	6.50%	9.00%	16.20%	10.90%	11.80%	9.50%	9.10%	9.10%	10.50%
Total	100.0%	100.0%	100.0%	99.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Moisture (H2O) (included in balance gas)	1.9%	1.9%	2.0%	2.0%	2.0%	3.1%	3.5%	4.1%	4.1%	3.5%	2.9%	2.0%
Molecular weight, lb/lb-mole wet	28.33	28.29	28.09	27.14	27.96	28.56	28.04	28.15	27.99	27.93	27.99	28.26

CommonWealth New Bedford Energy, LLC
 Greater New Bedford LFG Utilization Project
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 New Bedford, Massachusetts
 (508) 985-0923

'California Analytical' Analyzer Calibration Results

Month: January 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
12/31/17	1/4/18	62 Deg F	55%	54.62%	49.23%	0.21%	54.52%	49.29%
1/7/18	1/12/18	63 Deg F	55%	54.60%	47.70%	2.56%	54.32%	47.09%
1/14/18	1/18/18	62 Deg F	55%	54.62%	48.50%	-1.25%	54.45%	48.42%
1/21/18	1/25/18	62 Deg F	55%	54.62%	49.75%	0.22%	54.78%	49.50%

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'California Analytical' Analyzer Calibration Results

Month: February 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
1/28/18	2/2/18	62 Deg F	55%	54.62%	49.88%	-2.82%	54.75%	48.55%
2/4/18	2/8/18	62 Deg F	55%	54.62%	48.75%	-0.01%	53.25%	48.85%
2/11/18	2/15/18	62 Deg F	55%	54.62%	48.95%	3.45%	54.40%	48.99%
2/18/18	2/21/18	63 Deg F	55%	54.60%	48.56%	1.43%	53.30%	49.00%

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'California Analytical' Analyzer Calibration Results

Month: March 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
2/25/18	3/1/18	64 Deg F	55%	54.59%	49.89%	0.02%	55.25%	49.80%
3/4/18	3/8/18	62 Deg F	55%	54.62%	52.20%	-0.12%	54.75%	52.28%
3/11/18	3/12/18	62 Deg F	55%	54.62%	48.86%	-1.50%	54.78%	47.40%
3/18/18	3/22/18	60 Deg F	55%	54.64%	51.12%	0.64%	55.32%	50.15%
3/25/18	3/29/18	61 Deg F	55%	54.63%	52.16%	1.70%	54.73%	51.39%

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'California Analytical' Analyzer Calibration Results

Month: April 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
4/1/18	4/5/18	61 Deg F	55%	54.63%	51.28%	1.02%	53.89%	51.35%
4/8/18	4/13/18	62 Deg F	55%	54.62%	51.01%	-2.45%	53.69%	52.05%
4/15/18	4/19/18	62 Deg F	55%	54.62%	51.92%	1.45%	56.08%	51.36%
4/22/18	4/24/18	62 Deg F	55%	54.62%	51.05%	1.05%	55.65%	51.25%

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'California Analytical' Analyzer Calibration Results

Month: May 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
4/29/18	5/2/18	64 Deg F	55%	54.59%	49.85%	1.02%	53.89%	49.90%
5/6/18	5/11/18	x	x	x	x	x	x	x
5/13/18	5/18/18	x	x	x	x	x	x	x
5/20/18	5/23/18	x	x	x	x	x	x	x
5/27/18	5/30/18	x	x	x	x	x	x	x
Landtec GEM								
5/6/18	5/11/18		50.0%		49.7%	0.2%	50.0%	50.0%
5/13/18	5/18/18		50.0%		50.0%	0.0%	50.0%	50.0%
5/20/18	5/23/18		50.0%		49.7%	0.1%	50.0%	50.0%
5/27/18	5/30/18		50.0%		49.9%	0.2%	50.0%	50.0%

x - analyzer removed and shipped to cai for factory service

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'California Analytical' Analyzer Calibration Results

Month: June 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
6/3/18	6/7/18	x	x	x	x	x	x	x
6/10/18	6/14/18	x	x	x	x	x	x	x
6/17/18	6/21/18	x	x	x	x	x	x	x
6/24/18	6/28/18	76 Deg F	55%	54.40%	50.48%	-0.01%	53.42%	49.31%
Landtec GEM								
6/3/18	6/7/18		50.0%		50.3%	0.0%	50.0%	50.0%
6/10/18	6/14/18		50.0%		49.4%	0.3%	50.0%	50.0%

x - analyzer removed and shipped to cai for factory service

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'California Analytical' Analyzer Calibration Results

Month: July 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
7/1/18	7/6/18	79 Deg F	55%	54.34%	48.90%	0.01%	53.45%	48.98%
7/8/18	7/13/18	80 Deg F	55%	54.32%	48.39%	0.34%	56.37%	47.36%
7/15/18	7/20/18	82 Deg F	55%	54.28%	47.86%	-0.10%	56.13%	47.89%
7/22/18	7/26/18	82 Deg F	55%	54.28%	48.25%	-0.01%	56.12%	48.32%

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'California Analytical' Analyzer Calibration Results

Month: August 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
7/29/18	8/2/18	82 Deg F	55%	54.28%	50.48%	-0.01%	54.61%	49.31%
8/5/18	8/9/18	83 Deg F	55%	54.26%	49.23%	0.01%	54.78%	48.87%
8/12/18	8/17/18	86 Deg F	55%	54.20%	49.31%	-0.09%	52.86%	49.38%
8/19/18	8/24/18	84 Deg F	55%	54.24%	49.12%	0.08%	53.36%	48.97%
8/26/18	8/29/18	85 Deg F	55%	54.22%	48.40%	0.02%	53.52%	48.48%

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'California Analytical' Analyzer Calibration Results

Month: September 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
9/2/18	9/5/18	84 Deg F	55%	54.24%	47.72%	0.01%	54.95%	47.79%
9/9/18	9/10/18	83 Deg F	55%	54.26%	46.50%	7.36%	53.93%	47.86%
9/16/18	9/19/18	83 Deg F	55%	54.26%	50.04%	0.01%	54.96%	50.09%
9/23/18	9/24/18	82 Deg F	55%	54.28%	47.35%	-0.64%	56.20%	48.03%

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'California Analytical' Analyzer Calibration Results

Month: October 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
9/30/18	10/4/18	82 Deg F	55%	54.28%	50.41%	0.01%	54.52%	50.47%
10/7/18	10/10/18	82 Deg F	55%	54.28%	50.70%	0.02%	54.55%	50.78%
10/14/18	10/15/18	80 Deg F	55%	54.32%	48.20%	-0.12%	53.96%	49.07%
10/21/18	10/22/18	77 Deg F	55%	54.38%	49.94%	0.02%	54.75%	49.19%
10/28/18	10/30/18	75 Deg F	55%	54.42%	49.02%	0.01%	54.54%	49.08%

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'California Analytical' Analyzer Calibration Results

Month: October 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
11/4/18	11/7/18	74 Deg F	55%	54.44%	50.01%	0.02%	54.25%	50.09%
11/11/18	11/12/18	72 Deg F	55%	54.47%	49.04%	-0.10%	53.96%	49.41%
11/18/18	11/21/18	70 Deg F	55%	54.50%	48.74%	-0.04%	53.38%	48.81%
11/25/18	11/27/18	70 Deg F	55%	54.50%	50.91%	-0.02%	53.45%	50.95%

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'California Analytical' Analyzer Calibration Results

Month: October 2018		Methane (% v/v) measurements						
Week	Date	LFG Temp @ blower inlet	Cal Gas dry	Cal Gas wet	Pre-calibration	Zero gas	Span gas	Post-calibration
12/2/18	12/4/18	67 Deg F	55%	54.55%	48.62%	0.01%	53.85%	48.67%
12/9/18	12/13/18	64 Deg F	55%	54.59%	48.41%	1.22%	51.82%	49.19%
12/16/18	12/20/18	61 Deg F	55%	54.63%	48.52%	0.03%	53.98%	48.58%
12/23/18	12/28/18	63 Deg F	55%	54.60%	47.33%	-1.40%	58.08%	48.71%

CERTIFICATION OF CALIBRATION

ISSUED BY: QED Environmental Systems, Inc. Services Facility

Date Of Calibration: April 3, 2018

Certificate Number: GM12256_10/34009



No. 66916

Page 1 of 2

Approved By Signatory

John Parisho
Laboratory Inspection



LANDTEC

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

Customer: New England Energy Services Corp

66 Edwards St
Quincy, MA 02169
USA

Description: Gas Analyser

Model: GEM2000

Serial Number: GM12256

Accredited Results:

Methane (CH ₄)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.9	0.41
15.0	14.9	0.65
50.0	49.4	1.05

Carbon Dioxide (CO ₂)		
Certified Gas (%)	Instrument Reading (%)	Uncertainty (%)
5.0	4.7	0.43
15.0	14.6	0.71
50.0	49.8	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: 35.4 °C/95.7 °F

Barometric Pressure: 28.49 "Hg

O₂ readings recorded at: 25.2 °C/77.4 °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.

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
Jan-18	5-Jan-18	25	0.14	25	1.5%	25	-30	13.61	85
Feb-18	8-Feb-18	10	0.02	9	6.4%	10	-25	13.79	85
Mar-18	23-Mar-18	35	0.3	35	0.4%	35	-54	12.74	85
Apr-18	17-Apr-18	33	0.27	33	-1.1%	33	-48	12.96	85
May-18	23-May-18	30	0.23	31	-2.8%	31	-47	13.00	85
Jun-18	11-Jun-18	30	0.23	31	-2.6%	30	-48	12.96	85
Jul-18	10-Jul-18	30	0.23	31	-2.0%	30	-52	12.82	85
Aug-18	2-Aug-18	27	0.18	27	-0.6%	28	-50	12.89	85
Sep-18	13-Sep-18	40	0.4	41	-1.3%	40	-49	12.92	85
Oct-18	9-Oct-18	40	0.4	40	-0.9%	40	-52	12.82	85
Nov-18	7-Nov-18	40	0.39	40	0.1%	40	-50	12.89	85
Dec-18	11-Dec-18	44	0.46	43	1.6%	43	-52	12.82	85
Jan-19	10-Jan-19	43	0.43	42	2.1%	43	-48	12.96	85

CRMC Bioenergy LLC						
Biogas Methane Calibration						
		SCADA Reading		Measured		SCADA Reading
		Pre-calibration	Calibration	Calibration	Difference between	Post-calibration
Month	Date	Methane, %	Methane, %	Methane, %	Measured and SCADA, %	Methane, %
Jan-18	5-Jan-18	70.0%	50.0%	49.5%	1.0%	70.0%
Feb-18	8-Feb-18	47.0%	50.0%	49.8%	0.4%	47.0%
Mar-18	23-Mar-18	74.0%	50.0%	50.3%	-0.6%	74.0%
Apr-18	17-Apr-18	70.0%	50.0%	50.0%	0.0%	70.0%
May-18	23-May-18	70.0%	50.0%	49.9%	0.2%	70.0%
Jun-18	11-Jun-18	70.0%	50.0%	50.3%	-0.6%	70.0%
Jul-18	10-Jul-18	66.0%	50.0%	50.2%	-0.4%	66.0%
Aug-18	2-Aug-18	68.0%	50.0%	49.7%	0.6%	68.0%
Sep-18	13-Sep-18	68.0%	50.0%	50.0%	0.0%	68.0%
Oct-18	9-Oct-18	68.0%	50.0%	49.8%	0.4%	68.0%
Nov-18	7-Nov-18	68.0%	50.0%	49.8%	0.4%	68.0%
Dec-18	11-Dec-18	68.0%	50.0%	50.0%	0.0%	68.0%

Exhibit 7

Attestation Statement

Attestation Statement

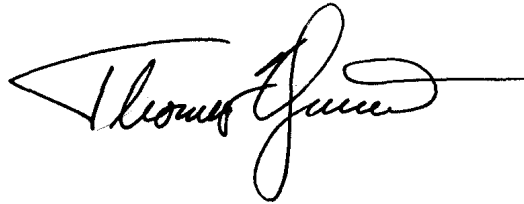
As an officer of Commonwealth New Bedford Energy LLC (CNBE) I hereby certify that the verified carbon units (VCUs) verified under the verified carbon standard (VCS) for the period January 1, 2018 through December 31, 2018 from the Project Activity will be registered on the Markit Environmental Registry (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: February 18, 2019