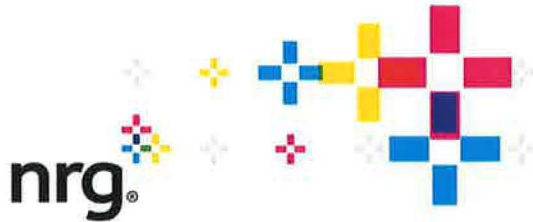


DOCKETED

Docket Number:	07-AFC-06C
Project Title:	Carlsbad Energy Center - Compliance
TN #:	232982
Document Title:	Quarterly Operational Report Fourth Quarter 2019
Description:	Quarterly Operational Report- Fourth Quarter 2019
Filer:	Anwar Ali
Organization:	Carlsbad Energy Center LLC
Submitter Role:	Applicant
Submission Date:	5/14/2020 4:59:08 PM
Docketed Date:	5/14/2020



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Anwar Ali, Ph.D.
Compliance Project Manager
Carlsbad Energy Center Project (07-AFC-06C)
California Energy Commission
1516 Ninth Street (MS-2000)
Sacramento, CA 95814

**RE: CARLSBAD ENERGY CENTER PROJECT, DOCKET NO. 07-AFC-06C
CONDITION OF CERTIFICATION, AQ-SC8
QUARTERLY OPERATIONAL REPORT, FOURTH QUARTER 2019**

Dear Dr. Ali:

Carlsbad Energy Center LLC ("Project Owner") submits the third quarter 2019 Operational Report in compliance with the AFC Docket No. 07-AFC-06C, Conditions of Certification (COCs) AQ-SC8 for the amended Carlsbad Energy Center Project (ACECP) located at 4950 Avenida Encinas, Carlsbad, California.

This report includes operational and emissions information that demonstrates the facility met all applicable conditions of certification during this operational period.

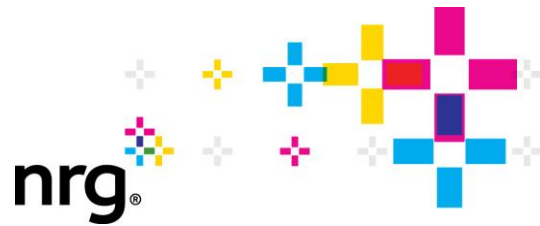
If you have any questions or comments, please do not hesitate to contact Ryan Goerl at (760) 710-3943.

Sincerely,

Paul Mattesich
Plant Manager
Carlsbad Energy Center LLC

Attached: Carlsbad Energy Center Project (07-AFC-06C), California Energy Commission, Quarterly Operational Report, Fourth Quarter 2019,

Cc: File



Carlsbad Energy Center Project (07-AFC-06C)

**California Energy Commission
Quarterly Operational Report**

Fourth Quarter 2019

***Submitted by: Carlsbad Energy Center LLC
Date Submitted: 01-30-2020***

Table of Contents

I.	Summary.....	5
	a. Project Quarterly Compliance Summary.....	5

List of Attachments

Attachment A SO₂ Allowance Compliance Statement:

AQ-11: Annual SO₂ Emission and Allowances

Attachment B Quality Assurance Plan Compliance Statement:

AQ-14: Shutdown Event Duration

AQ-15: Startup Event Duration

AQ-24: CEMS Data Summaries (Part 60 Subpart KKKK, and 40 CFR Part 75)

AQ-26: CEMS Minute Data Summary

AQ-75: Data Substitution Calculations

AQ-80: Natural Gas Fuel Flow Summary Per Unit

Attachment C Sulfur Content Lab Report:

AQ-22: Natural Gas Sulfur Content

Attachment D Post Commercial Data Summary:

AQ-27: NO_x Corrected 2.5 PPM 1-Hour Average Data

AQ-28: CO Corrected 4.0 PPM 1-Hour Average Data

AQ-30: Ammonia Source Test and Calculated Corrected Ammonia Slip 5.0 PPM 1-Hour Average

AQ-31: NO_x 42 PPM Limit

AQ-32: NO_x 13.6 PPM Limit

AQ-33: NO_x 22.6 PPM Limit

AQ-39: NO_x, CO, and VOC Pound Per Operating Hour Summary

AQ-42: NO_x 90 Pound Per Hour and 100 PPM Limit Summary

AQ-43: CO 248 Pound Per Hour and 400 PPM Limit Summary

Attachment E CEMS Startup/Shutdown Report:

AQ-40: NO_x, CO, and VOC Pound Per Startup Summary

AQ-41: NO_x, CO, and VOC Pound Per Shutdown Summary

Attachment F 40 CFR Part 60, Subpart KKKK Report:

AQ-34: Rolling Four-Unit Operating Pound Per Mega Watt Hour Summary

AQ-88: Part 60, KKKK Semiannual Report Summary

Attachment G Air Pollution Control District Monthly Report:

AQ-44: Rolling 12-Month Annual Emissions Summary NO_x, CO, VOC, PM₁₀, and Sox

AQ-45: Rolling 12-Month Annual Emissions CO

AQ-46: NO_x and PM₁₀ Annual Emissions Summary

AQ-48: Monthly and Rolling 12-Month Calculated NO_x, CO, VOCs, PM₁₀, and SOX Emissions Summary

Attachment H VOC Statement:

AQ-29: Calculated VOC Corrected 2.0 PPM 1-Hour Average Data

AQ-40: VOC Portion Only

AQ-41: VOC Portion Only

Attachment I Encina Power Station Operations Statement:

AQ-47: Encina Emissions Summary Following CECP Startup

Attachment J Noncompliance Statement:

AQ-76: CEMS Emissions Exceedance Summary

AQ-78: DAHS Programming Compliance Summary

Attachment K Diesel Fire Pump Operations Logs:

AQ-95: Fire Pump Hour Limit

AQ-105: Fire Pump Operating Log

Attachment L Diesel Generator Conditions:

AQ-110: Diesel Engine Run Hours

AQ-120: Diesel Engine Operation Logs

AQ-121: Diesel Engine District Notification

Attachment M Annual Operations Summary:

AQ-49: Annual Operating Hours Summary

AQ-50: Annual Starts Per Turbine Summary

Attachment N Verifications Not Included:

AQ-51: Commissioning Starts Per Turbine Summary

AQ-90: Initial Startup Notification

I. Summary

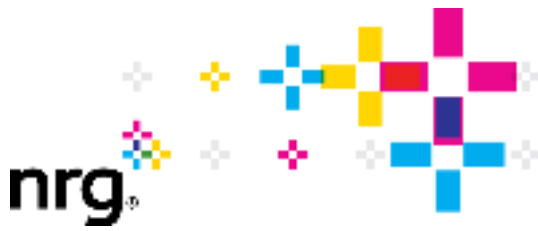
a. Project Quarterly Compliance Summary

The Carlsbad Energy Center Project (CECP) began commercial operation on December 12, 2018. In compliance with the California Energy Commission (Energy Commission) license, CECP submits the information herein demonstrating compliance with condition of certification AQ-SC8 quarterly reporting requirements.

This quarterly report includes data required by AQ-SC8 for the fourth quarter of 2019.

Attachment A Clean Air Markets Compliance Summary:

AQ-11: Annual SO₂ Emission and Allowances



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – SO2 COMPLIANCE STATEMENT

The following conditions required in AQ-SC8 Quarterly Report require an annual SO2 allowance and emission report that is generated annually by the EPA based on the prior year's EPA EDR submittals and will not be available until the first quarter Quarterly Operations Report:

- AQ-11

Attachment B Quality Assurance Plan Compliance Statement:

AQ-14: Shutdown Event Duration

AQ-15: Startup Event Duration

AQ-24: CEMS Data Summaries (Part 60 Subpart KKKK,
and 40 CFR Part 75)

AQ-26: CEMS Minute Data Summary

AQ-75: Data Substitution Calculations

AQ-80: Natural Gas Fuel Flow Summary Per Unit



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT - QUALITY ASSURANCE
PLAN COMPLIANCE STATEMENT

The following conditions required in AQ-SC8 Quarterly Report are covered in the Quality Assurance Plan:

- AQ-14
- AQ-15
- AQ-24
- AQ-26
- AQ-75
- AQ-80

Attachment C Sulfur Content Lab Report:

AQ-22: Natural Gas Sulfur Content



January 22, 2020

Mr. Ryan Goerl
Carlsbad Energy Center, LLC
4600 Carlsbad Blvd.
Carlsbad, CA 92008

**Subject: 4Q19 Quarterly Fuel Analysis Results for Carlsbad Energy Center
Report Number: W002AS-563212-RT-752**

Dear Ryan,

Montrose Air Quality Services, LLC (MAQS) collected two natural gas samples from Carlsbad Energy Center on October 21, 2019. The samples were delivered to Quantum Analytical Services and analyzed for sulfur compounds by EPA Method ASTM D6228-98. The result of the analysis was 1.36 ppmv total reduced sulfur compounds as Sulfur. This letter presents the calculations from ppm to grains per hundred standard cubic feet.

$$\frac{1.10 \text{ scf S}}{10^6 \text{ scf fuel}} * \frac{32 \text{ lb}}{\text{lb-mole}} * \frac{\text{lb-mole}}{379.5 \text{ scf}} * \frac{100 \text{ scf}}{\text{hundred scf}} * \frac{7000 \text{ grains}}{\text{lb}} = \frac{0.08 \text{ grains S}}{\text{hundred scf}}$$

The lab report is attached for your reference. Please give me a call if you have any further questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read "Rik Dupont", with a horizontal line drawn through the end of the signature.

Rik Dupont
Sr. Field Technician
Montrose Air Quality Services, LLC

CLIENT: MONTROSE
CLIENT PROJ NO: Carlsbad
LABORATORY NO: 19-937
SAMPLING DATE: 10/21/19
RECEIVING DATE: 10/21/19
ANALYSIS DATE: 10/22/19
REPORT DATE: 10/23/19

Laboratory Analysis Report

Analysis Method: ASTM 1945-03 ; HHV Calculations: ASTM 3588-98

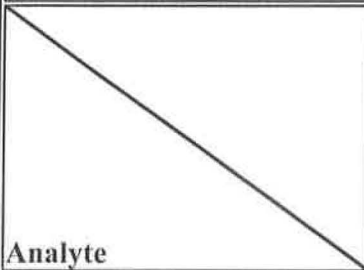
Analyte, Units	Sample ID	1-Fuel	2-Fuel
	Sample Date	10/21/19	10/21/19
	Sample Time	0930	0932
	Lab ID	29419-8	29419-9
	Units	Mole %	Mole %
Methane, %		92.67	93.55
Ethane, %		3.27	3.26
Ethylene, %		<0.01	<0.01
Propane, %		0.18	0.18
Propylene, %		<0.01	<0.01
i-Butane, %		<0.01	<0.01
n-Butane, %		<0.01	<0.01
1-Butene, %		<0.01	<0.01
i-Butylene, %		<0.01	<0.01
trans-2-Butene, %		<0.01	<0.01
cis-2-Butene, %		<0.01	<0.01
i-Pentane, %		<0.01	<0.01
n-Pentane, %		<0.01	<0.01
2,2-Dimethyl Butane, %		<0.01	<0.01
2,3-Dimethyl Butane, %		<0.01	<0.01
2-Methyl Pentane, %		<0.01	<0.01
3-Methyl Pentane, %		<0.01	<0.01
n-Hexane, %		<0.01	<0.01
C6+, %		<0.01	<0.01
CO2, %		0.65	0.65
CO, %		<0.01	<0.01
O2, %		0.10	0.16
N2, %		3.11	2.18
H2, %		<0.01	<0.01
H2S, %		<0.01	<0.01
Average Molecular Weight		17.132	17.028
Total Wt.% Adjusted Sp. Gravity		0.5892	0.5857
Compressibility Factor (14.696 Psi, 60 F)		0.9978	0.9978
NET BTU/Cub. Ft		901	908
GROSS BTU/Cub. Ft		999	1008
CHONS		%	%
Carbon		70.46	71.49
Hydrogen		23.06	23.41
Oxygen		1.40	1.52
Nitrogen		5.08	3.59
Sulfur		<0.01	<0.01
Dry F Factor (60 F, 1 Atm):		8596	8584
SDCF/MMBTU, ASTM 3588			



Dr. Andrew Kitto
President

CLIENT: MONTROSE
CLIENT PROJ NO: Carlsbad
LABORATORY NO: 19-937
SAMPLING DATE: 10/21/19
RECEIVING DATE: 10/21/19
ANALYSIS DATE: 10/21/19
REPORT DATE: 10/23/19

Laboratory Analysis Report

Analysis Method	ASTM D6228-98		
Detection Limits	0.1 PPMV		
 Analyte	Client ID	1-Fuel	2-Fuel
	Sampling Date	10/21/2019	10/21/19
	Sampling Time	0930	0932
	Lab ID	29419-8	29419-9
	Units	PPMV	PPMV
	Hydrogen Sulfide	<0.1	<0.1
Carbonyl Sulfide	<0.1	<0.1	
Methyl Mercaptan	<0.1	<0.1	
Ethyl Mercaptan	<0.1	<0.1	
Un-Identified S Compounds	1.30	1.42	
Total Sulfur as H₂S	1.30	1.42	



Dr. Andrew Kitto
President

CLIENT: MONTROSE
CLIENT PROJ NO: Carlsbad
LABORATORY NO: 19-937
SAMPLING DATE: 10/21/19
RECEIVING DATE: 10/21/19
ANALYSIS DATE: 10/21/19
REPORT DATE: 10/23/19

Quality Assurance Report

Duplicate Analysis

Sample ID: 2-Fuel

Lab ID: 29419-9

Analysis Method		SCAQMD 307-91		
Detection Limit		0.05 PPMV		
	Aver. Conc.	Dil. Factor	DF*A/CF	% Sample*
Analyte	PPMV	Ambient Air	PPMV	Recovery
Hydrogen Sulfide	<0.1	1	<0.1	N/A
Carbonyl Sulfide	<0.1	1	<0.1	N/A
Methyl Mercaptan	<0.1	1	<0.1	N/A
Ethyl Mercaptan	<0.1	1	<0.1	N/A
Unidentified S Compounds	1.33	1	1.25	94
Total Sulfur as H2S	1.33	1	1.25	94

N/A: Not Applicable

*Must be ±10%



Dr. Andrew Kitto
President

19-937

CHAIN OF CUSTODY

CLIENT: Carlsbad Energy Center PROJECT NUMBER: 002AS-563212 TEST DATE(S): 10/21/2019
 LOCATION: Carlsbad SAMPLER(S): RD
 SAMPLE LOCATION: Gas Line PROJECT MANAGER: JP
 TEST METHOD(S): ASTM D6228-98 DATE DUE: 10/31/2019
 OUTSIDE LAB REQUIRED?: Yes - Quantum Lab COMPLIANCE TEST? Yes

DATE	TIME	TEST #	SAMPLE DESCRIPTION	CONTAINERS	SAMPLER	COMMENTS
10/21/2019	0930	1-Fuel	5L Tedlar Bag	1	RD	5 L Tedlar Bag
10/21/2019	0932	2-Fuel	5L Tedlar Bag	1	RD	5 L Tedlar Bag

RELEASED BY	DATE/TIME	RECEIVED BY	DATE/TIME
	10/21/19 @ 1045		10-21-19 10:45

ANALYSIS REQUIRED: Please report TRS as Sulfur in addition to H₂S
USE PO# PO1034145



Date of Last Revision 9/1/2017

Chain of Custody - DS834001 - Excel
 Master Document Storage\Forms\Datashets\Lab Forms

W002AS-563212-RT-752

93-8
949-8
-9

5 of 6

THIS IS THE LAST PAGE OF THIS DOCUMENT

If you have any questions, please contact one of the following individuals by email or phone.

Name: Rik Dupont
Title: Sr. Field Technician
Region: West
E-Mail: RDupont@montrose-env.com
Phone: (949) 379-9231

Name: Mr. Matt McCune
Title: Regional Vice President
Region: West
E-Mail: MMccune@montrose-env.com
Phone: (714) 279-6777

Attachment D Post Commercial Data Summary:

AQ-27: NO_x Corrected 2.5 PPM 1-Hour Average Data

AQ-28: CO Corrected 4.0 PPM 1-Hour Average Data

AQ-30: Ammonia Source Test and Calculated Corrected Ammonia Slip 5.0 PPM 1-Hour Average

AQ-31: NO_x 42 PPM Limit

AQ-32: NO_x 13.6 PPM Limit

AQ-33: NO_x 22.6 PPM Limit

AQ-39: NO_x, CO, and VOC Pound Per Operating Hour Summary

AQ-42: NO_x 90 Pound Per Hour and 100 PPM Limit Summary

AQ-43: CO 248 Pound Per Hour and 400 PPM Limit Summary

Average Values Report
Generated: 1/21/2020 12:42

Company: NRG Carlsbad
Plant: 4600 Carlsbad Blvd
City/St: Carlsbad, CA 92008
Source: 6

Period Start: 10/1/2019 00:00
Period End: 12/31/2019 23:59
Validation Type: 1/60 min
Averaging Period: 1 hr
Type: Block Avg

Period Start:	Average 6NOxCorOP1 ppm	Average 6NOX#OP1HR LBS	Average 6COCorOP1 ppm	Average 6CO#OP1HR LBS	Average 6NH3CorOP1 ppm
10/01/2019 05:00	1.5	1.5	0.0	0.0	1.1
10/01/2019 06:00	1.5	1.8	0.0	0.0	1.1
10/02/2019 18:00	1.6	2.0	0.0	0.0	1.2
10/02/2019 19:00	1.5	0.3	0.0	0.0	1.2
10/03/2019 05:00	1.7	2.5	0.3	0.3	1.0
10/03/2019 06:00	1.3	0.9	0.7	0.3	1.1
10/03/2019 17:00	1.2	0.4	0.0	0.0	1.1
10/03/2019 18:00	1.6	1.3	0.0	0.0	1.1
10/04/2019 05:00	1.3	0.4	0.0	0.0	1.1
10/04/2019 06:00	1.6	1.5	0.0	0.0	1.2
10/06/2019 16:00	1.5	1.8	0.0	0.0	1.1
10/06/2019 17:00	1.5	2.0	0.0	0.0	1.1
10/06/2019 18:00	1.5	1.8	0.0	0.0	1.1
10/07/2019 17:00	1.6	2.1	0.0	0.0	1.1
10/07/2019 18:00	1.5	1.8	0.0	0.0	1.0
10/08/2019 16:00	1.5	1.8	0.0	0.0	1.1
10/08/2019 17:00	1.5	2.6	0.0	0.0	1.0
10/08/2019 18:00	1.5	1.7	0.0	0.0	1.1
10/09/2019 17:00	1.6	1.7	0.2	0.1	0.8
10/09/2019 18:00	1.5	3.9	0.2	0.3	0.8
10/10/2019 18:00	1.5	2.0	0.0	0.0	0.9
10/11/2019 10:00	1.5	2.4	0.0	0.0	0.9
10/11/2019 11:00	1.5	3.1	0.0	0.0	0.9
10/11/2019 12:00	1.5	2.7	0.0	0.0	0.9
10/11/2019 13:00	1.5	3.2	0.3	0.5	0.9
10/11/2019 14:00	1.6	2.9	0.0	0.0	1.0
10/11/2019 15:00	1.4	3.6	0.1	0.2	0.7
10/11/2019 16:00	1.5	3.7	0.2	0.4	0.9
10/11/2019 17:00	1.5	2.8	0.6	1.2	1.1
10/11/2019 18:00	1.5	1.6	0.0	0.0	1.1
10/12/2019 08:00	1.8	0.4	0.2	0.0	0.7
10/12/2019 09:00	1.5	5.2	0.8	1.6	0.8
10/12/2019 10:00	1.5	4.5	0.4	0.9	0.7
10/12/2019 11:00	1.5	3.0	0.7	0.8	0.7
10/12/2019 12:00	1.5	3.2	0.3	0.6	1.0
10/12/2019 13:00	1.5	1.8	0.0	0.0	1.1
10/12/2019 17:00	1.5	1.4	0.0	0.0	1.1
10/12/2019 18:00	1.5	1.7	0.0	0.0	1.2
10/13/2019 17:00	1.5	2.0	0.0	0.0	1.1
10/13/2019 18:00	1.5	1.8	0.0	0.0	1.1
10/20/2019 17:00	1.5	1.3	0.0	0.0	1.1
10/21/2019 19:00	1.5	1.3	0.0	0.0	1.1
10/22/2019 06:00	1.6	1.6	0.0	0.0	1.1
10/22/2019 11:00	1.6	1.1	0.2	0.1	0.9
10/22/2019 12:00	1.6	0.6	0.0	0.0	0.9
10/22/2019 13:00	1.5	3.5	0.0	0.0	0.9
10/22/2019 14:00	1.5	3.6	0.0	0.0	0.9
10/22/2019 15:00	1.5	3.6	0.3	0.6	0.9
10/22/2019 16:00	1.5	2.8	0.0	0.0	1.1
10/22/2019 17:00	1.5	2.7	0.0	0.0	1.0
10/22/2019 18:00	1.5	1.9	0.0	0.0	1.1
10/22/2019 19:00	1.5	1.8	0.0	0.0	1.1
10/23/2019 13:00	1.7	1.3	0.1	0.1	1.1
10/23/2019 14:00	1.4	2.0	0.0	0.0	1.1
10/24/2019 12:00	1.6	2.7	0.3	0.4	1.0
10/24/2019 13:00	1.5	3.2	0.2	0.5	1.0
10/24/2019 14:00	1.5	2.5	0.0	0.0	1.1
10/24/2019 15:00	1.7	0.4	0.0	0.0	1.2
10/24/2019 19:00	1.5	1.6	0.0	0.0	1.1
10/24/2019 20:00	1.4	1.7	0.1	0.0	1.1
10/24/2019 21:00	1.5	0.9	0.1	0.0	1.3
10/25/2019 17:00	1.5	1.0	0.1	0.0	0.8
10/25/2019 18:00	1.5	2.6	0.0	0.0	1.0

Period Start:	Average 6NOxCorOP1	Average 6NOX#OP1HR	Average 6COCorOP1	Average 6CO#OP1HR	Average 6NH3CorOP1
	ppm	LBS	ppm	LBS	ppm
10/25/2019 19:00	1.5	2.4	0.0	0.0	1.1
10/25/2019 20:00	1.5	2.7	0.1	0.2	1.2
10/25/2019 21:00	1.5	0.8	0.0	0.0	1.2
10/26/2019 16:00	1.5	2.1	0.0	0.0	1.0
10/26/2019 17:00	1.5	2.5	0.0	0.0	1.0
10/26/2019 18:00	1.5	1.9	0.0	0.0	1.1
10/28/2019 16:00	1.3	0.2	0.1	0.0	0.8
10/28/2019 17:00	1.5	5.0	1.0	2.2	0.8
10/28/2019 18:00	1.3	0.7	0.4	0.1	0.8
10/29/2019 05:00	2.0	1.8	0.0	0.0	1.1
10/29/2019 06:00	0.6	0.2	0.1	0.0	1.5
10/29/2019 16:00	1.4	0.3	1.5	0.2	0.9
10/29/2019 17:00	1.5	4.0	0.3	0.6	0.8
10/29/2019 18:00	1.5	1.6	0.0	0.0	1.0
10/30/2019 05:00	1.8	2.2	0.8	0.7	1.1
10/30/2019 06:00	1.5	2.8	0.5	0.7	0.9
10/30/2019 17:00	1.5	2.3	1.3	1.3	1.0
10/30/2019 18:00	1.5	2.2	0.0	0.0	1.0
10/30/2019 19:00	1.5	2.0	0.0	0.0	1.3
10/30/2019 20:00	1.6	0.3	0.0	0.0	1.4
10/31/2019 05:00	1.7	2.3	0.6	0.6	1.1
10/31/2019 06:00	1.4	2.6	0.7	1.0	0.9
10/31/2019 17:00	1.5	1.0	0.0	0.0	1.1
10/31/2019 18:00	1.5	0.3	0.0	0.0	1.1
11/01/2019 05:00	1.9	1.5	0.0	0.0	1.1
11/01/2019 06:00	1.1	1.5	1.0	0.9	1.2
11/01/2019 16:00	1.0	0.8	1.6	0.8	1.2
11/01/2019 17:00	1.6	2.1	0.0	0.0	1.0
11/01/2019 18:00	1.5	0.3	0.0	0.0	1.0
11/02/2019 07:00	1.5	0.2	0.0	0.0	1.3
11/02/2019 08:00	1.4	2.1	0.0	0.0	0.9
11/04/2019 06:00	1.5	3.1	0.3	0.4	0.9
11/04/2019 07:00	1.5	1.6	0.1	0.0	1.0
11/04/2019 14:00	1.4	0.1	0.7	0.0	0.4
11/04/2019 15:00	1.6	3.4	0.9	1.5	1.2
11/04/2019 16:00	1.5	4.4	0.6	1.3	1.0
11/04/2019 17:00	1.5	3.4	0.1	0.2	1.0
11/04/2019 18:00	1.5	2.4	0.0	0.0	1.1
11/04/2019 19:00	1.5	4.4	0.8	1.7	1.0
11/04/2019 20:00	1.4	2.0	0.6	0.5	0.8
11/05/2019 16:00	1.5	3.3	0.4	0.9	1.1
11/05/2019 17:00	1.5	2.3	0.0	0.0	1.1
11/05/2019 18:00	1.5	1.3	0.0	0.0	1.1
11/06/2019 16:00	1.5	1.5	0.0	0.0	1.1
11/06/2019 17:00	1.6	2.2	0.0	0.0	1.1
11/07/2019 16:00	1.4	0.2	0.0	0.0	0.8
11/07/2019 17:00	1.5	4.6	0.8	1.8	1.0
11/07/2019 18:00	1.6	3.6	0.4	0.8	1.0
11/07/2019 19:00	1.4	2.6	0.3	0.6	1.0
11/07/2019 20:00	1.5	1.1	0.0	0.0	1.2
11/17/2019 17:00	1.5	1.0	0.2	0.1	1.1
11/18/2019 17:00	1.5	1.3	0.0	0.0	1.2
11/18/2019 20:00	1.5	2.3	0.1	0.1	0.9
11/18/2019 21:00	1.2	0.7	0.0	0.0	1.1
11/22/2019 17:00	1.5	1.7	0.0	0.0	1.0
11/22/2019 18:00	1.5	3.1	0.2	0.3	1.1
11/22/2019 19:00	1.5	4.4	0.7	1.3	0.8
11/22/2019 20:00	1.5	2.1	0.0	0.0	1.2
11/22/2019 21:00	1.5	2.2	0.0	0.0	1.2
11/22/2019 22:00	1.6	2.3	0.0	0.0	1.2
11/22/2019 23:00	1.4	1.9	0.0	0.0	1.2
11/23/2019 17:00	1.5	1.3	0.0	0.0	0.9
11/24/2019 14:00	1.5	1.2	0.2	0.1	1.3
11/24/2019 17:00	1.3	4.2	1.0	2.0	1.1
11/24/2019 18:00	1.6	4.4	0.2	0.4	0.8
11/24/2019 19:00	1.5	0.5	0.1	0.0	1.0
11/25/2019 09:00	1.5	1.3	0.0	0.0	1.0
11/25/2019 14:00	1.5	1.3	0.0	0.0	1.2
11/26/2019 06:00	1.6	0.9	0.0	0.0	1.1
11/26/2019 07:00	2.1	0.8	0.0	0.0	1.3
11/26/2019 09:00	1.5	1.5	0.0	0.0	1.1
11/26/2019 10:00	1.6	0.5	0.0	0.0	1.1

Period Start:	Average 6NOxCorOP1 ppm	Average 6NOX#OP1HR LBS	Average 6COCorOP1 ppm	Average 6CO#OP1HR LBS	Average 6NH3CorOP1 ppm
11/27/2019 07:00	1.3	4.1	0.8	1.5	1.1
11/27/2019 08:00	1.6	2.6	0.0	0.0	1.2
11/27/2019 09:00	1.5	2.4	0.4	0.5	1.1
11/27/2019 10:00	1.5	2.7	0.1	0.1	1.1
11/27/2019 11:00	1.5	5.0	0.5	1.0	0.9
11/27/2019 12:00	1.5	4.8	0.6	1.2	0.9
11/27/2019 13:00	1.5	4.4	0.2	0.4	0.8
11/27/2019 14:00	1.5	4.0	0.1	0.1	0.8
11/27/2019 15:00	1.5	4.2	0.1	0.1	0.8
11/27/2019 16:00	1.4	3.1	0.0	0.0	1.0
11/27/2019 17:00	1.5	2.1	0.0	0.0	1.0
11/28/2019 16:00	1.5	1.6	0.0	0.0	1.1
11/28/2019 17:00	1.5	2.5	0.0	0.0	1.1
11/28/2019 18:00	1.5	2.5	0.0	0.0	1.0
11/28/2019 19:00	1.5	0.5	0.0	0.0	1.2
11/29/2019 08:00	1.5	1.8	0.0	0.0	1.0
11/29/2019 09:00	1.5	1.4	0.0	0.0	1.0
11/29/2019 11:00	1.5	0.4	0.0	0.0	0.9
11/29/2019 12:00	1.5	1.0	0.0	0.0	1.1
11/29/2019 16:00	1.6	2.7	0.1	0.1	0.8
11/29/2019 17:00	1.4	1.4	0.1	0.1	1.3
11/29/2019 18:00	1.5	2.3	0.0	0.0	1.1
11/30/2019 10:00	1.4	4.3	0.7	1.3	0.9
11/30/2019 11:00	1.7	2.9	0.0	0.0	1.0
11/30/2019 12:00	1.5	1.1	0.0	0.0	1.0
11/30/2019 16:00	1.5	1.5	0.0	0.0	1.0
11/30/2019 17:00	1.5	1.8	0.0	0.0	1.0
12/01/2019 08:00	1.2	1.9	0.5	0.4	1.0
12/01/2019 09:00	1.5	4.4	0.4	0.7	1.0
12/01/2019 10:00	1.4	4.8	0.5	1.0	0.8
12/01/2019 11:00	1.5	4.4	0.4	0.8	0.9
12/01/2019 12:00	1.7	2.3	0.0	0.0	1.1
12/01/2019 13:00	1.5	2.6	0.0	0.0	1.2
12/01/2019 14:00	1.5	0.4	0.0	0.0	1.2
12/02/2019 06:00	1.2	0.7	0.2	0.1	0.8
12/02/2019 07:00	1.5	3.9	0.2	0.5	1.0
12/02/2019 08:00	1.5	1.5	0.0	0.0	1.1
12/02/2019 09:00	1.5	3.9	0.2	0.4	0.8
12/02/2019 11:00	1.4	1.9	0.0	0.0	1.1
12/02/2019 12:00	1.5	2.0	0.0	0.0	1.2
12/02/2019 13:00	1.5	2.4	0.0	0.0	1.1
12/02/2019 14:00	1.5	3.5	0.0	0.1	0.9
12/02/2019 15:00	1.5	3.0	0.0	0.0	1.0
12/02/2019 16:00	1.5	2.3	0.0	0.0	1.1
12/02/2019 17:00	1.5	1.8	0.0	0.0	1.1
12/02/2019 18:00	1.5	1.9	0.0	0.0	1.1
12/02/2019 19:00	1.5	0.4	0.0	0.0	1.0
12/02/2019 21:00	1.5	1.5	0.0	0.0	1.1
12/02/2019 22:00	1.5	2.2	0.0	0.0	1.1
12/03/2019 07:00	1.4	3.3	0.2	0.5	1.0
12/03/2019 08:00	1.5	4.7	0.4	0.9	0.8
12/03/2019 09:00	1.5	4.7	0.3	0.7	0.8
12/03/2019 10:00	1.5	3.0	0.6	0.7	0.8
12/03/2019 11:00	1.5	3.8	0.1	0.2	0.8
12/03/2019 12:00	1.5	3.1	0.2	0.4	0.9
12/03/2019 16:00	1.5	0.4	0.0	0.0	1.2
12/03/2019 17:00	1.5	2.7	0.0	0.0	1.1
12/03/2019 18:00	1.5	2.6	0.0	0.0	1.1
12/03/2019 19:00	1.5	2.1	0.0	0.0	1.1
12/03/2019 20:00	1.5	1.2	0.0	0.0	1.1
12/04/2019 08:00	1.4	4.2	0.7	1.4	0.9
12/04/2019 09:00	1.5	5.2	0.8	1.6	0.9
12/04/2019 10:00	1.5	5.4	0.7	1.4	1.0
12/04/2019 11:00	1.5	5.1	0.6	1.2	1.0
12/04/2019 12:00	1.5	5.0	0.7	1.5	0.9
12/04/2019 13:00	1.5	5.3	0.7	1.5	0.8
12/04/2019 14:00	1.5	5.1	0.9	1.9	0.8
12/04/2019 15:00	1.5	4.6	0.6	1.1	0.8
12/04/2019 16:00	1.5	5.1	0.8	1.6	0.8
12/04/2019 17:00	1.5	5.2	0.7	1.5	0.9
12/04/2019 18:00	1.5	3.2	1.0	1.3	0.8
12/04/2019 19:00	1.6	5.6	0.7	1.5	0.9

Period Start:	Average 6NOxCorOP1	Average 6NOX#OP1HR	Average 6COCorOP1	Average 6CO#OP1HR	Average 6NH3CorOP1
	ppm	LBS	ppm	LBS	ppm
12/04/2019 20:00	1.5	5.3	0.7	1.6	0.9
12/04/2019 21:00	1.5	5.2	0.8	1.8	0.8
12/05/2019 06:00	2.1	0.6	0.0	0.0	1.0
12/05/2019 07:00	1.5	5.1	0.8	1.7	0.9
12/05/2019 08:00	1.5	4.9	0.9	1.9	0.8
12/05/2019 09:00	1.5	5.3	1.1	2.3	0.9
12/05/2019 10:00	1.5	5.2	0.9	1.9	0.9
12/05/2019 11:00	1.4	2.7	0.7	0.8	0.9
12/07/2019 21:00	1.5	2.7	0.3	0.3	0.8
12/09/2019 06:00	1.6	1.6	0.1	0.1	1.1
12/09/2019 07:00	1.5	3.5	0.2	0.4	1.0
12/09/2019 08:00	1.5	3.6	0.4	0.8	0.9
12/09/2019 09:00	1.5	4.5	0.6	1.1	0.9
12/09/2019 10:00	1.5	4.0	0.6	1.2	0.9
12/09/2019 11:00	1.5	4.6	0.6	1.1	0.8
12/09/2019 12:00	1.5	3.8	0.2	0.4	0.7
12/09/2019 13:00	1.5	2.7	0.3	0.3	0.9
12/09/2019 14:00	1.4	3.4	0.4	0.6	0.8
12/09/2019 15:00	1.6	2.4	0.0	0.0	1.2
12/09/2019 16:00	1.4	3.5	0.4	0.7	1.0
12/09/2019 17:00	1.5	4.5	0.8	1.7	0.8
12/09/2019 18:00	1.5	4.4	0.5	0.9	0.7
12/09/2019 19:00	1.5	5.0	0.9	2.0	0.9
12/09/2019 20:00	1.5	4.8	0.7	1.4	0.8
12/09/2019 21:00	1.5	4.8	0.8	1.6	0.8
12/09/2019 22:00	1.5	2.6	0.3	0.3	0.8
12/10/2019 08:00	1.4	3.2	0.5	0.8	0.8
12/10/2019 09:00	1.5	4.7	0.8	1.6	0.8
12/10/2019 10:00	1.5	5.1	0.8	1.7	0.9
12/10/2019 11:00	1.5	4.7	0.6	1.2	0.8
12/10/2019 12:00	1.5	2.8	0.1	0.1	1.0
12/10/2019 13:00	1.5	3.2	0.2	0.2	0.9
12/10/2019 14:00	1.5	3.4	0.1	0.2	1.0
12/10/2019 15:00	1.5	3.9	0.3	0.5	0.8
12/10/2019 16:00	1.6	2.3	0.0	0.0	1.1
12/10/2019 17:00	1.4	3.2	0.2	0.2	1.0
12/10/2019 18:00	1.5	1.9	0.3	0.3	1.1
12/10/2019 19:00	1.5	1.5	0.0	0.0	1.1
12/11/2019 15:00	1.5	0.4	0.0	0.0	1.1
12/11/2019 16:00	1.5	3.0	0.1	0.2	1.0
12/11/2019 17:00	1.5	4.7	0.7	1.5	0.8
12/11/2019 18:00	1.5	4.7	0.6	1.2	0.8
12/11/2019 19:00	1.5	4.9	0.7	1.4	0.9
12/11/2019 20:00	1.5	4.0	0.2	0.4	0.8
12/11/2019 21:00	1.5	4.0	0.2	0.4	0.9
12/13/2019 09:00	1.7	1.7	0.0	0.0	1.1
12/13/2019 10:00	1.4	3.5	0.2	0.3	0.9
12/13/2019 11:00	1.5	3.7	0.2	0.4	0.8
12/13/2019 12:00	1.5	3.4	0.2	0.2	0.9
12/13/2019 13:00	1.5	4.1	0.3	0.5	0.8
12/13/2019 14:00	1.5	4.4	0.3	0.5	0.8
12/13/2019 15:00	1.5	4.4	0.4	0.7	0.7
12/13/2019 16:00	1.5	4.0	0.2	0.4	0.7
12/13/2019 17:00	1.5	4.0	0.2	0.4	0.8
12/13/2019 18:00	1.5	2.4	0.4	0.4	0.8
12/13/2019 19:00	1.5	3.9	0.2	0.4	0.8
12/14/2019 10:00	1.6	1.7	0.0	0.0	1.1
12/14/2019 11:00	1.5	4.2	0.5	1.0	0.9
12/14/2019 12:00	1.5	4.8	0.8	1.5	0.8
12/14/2019 13:00	1.5	4.8	0.6	1.1	0.8
12/14/2019 14:00	1.5	4.7	0.6	1.2	0.8
12/14/2019 15:00	1.5	4.8	0.7	1.3	0.8
12/14/2019 16:00	1.5	4.5	0.7	1.3	0.8
12/14/2019 17:00	1.5	5.1	0.8	1.7	0.8
12/14/2019 18:00	1.5	4.8	0.7	1.4	0.8
12/14/2019 19:00	1.5	4.7	0.6	1.1	0.8
12/15/2019 16:00	1.5	0.4	0.0	0.0	1.2
12/15/2019 17:00	1.5	1.0	0.0	0.0	1.2
12/16/2019 06:00	2.2	0.6	0.0	0.0	1.0
12/16/2019 07:00	1.5	2.4	0.0	0.1	1.2
12/16/2019 08:00	1.4	3.4	0.2	0.3	1.0
12/16/2019 09:00	1.5	2.1	0.4	0.4	0.9

Period Start:	Average 6NOxCorOP1 ppm	Average 6NOX#OP1HR LBS	Average 6COCorOP1 ppm	Average 6CO#OP1HR LBS	Average 6NH3CorOP1 ppm
12/16/2019 10:00	1.6	3.5	0.2	0.4	1.0
12/16/2019 11:00	1.4	2.6	0.2	0.3	1.1
12/16/2019 17:00	1.5	1.3	0.0	0.0	1.0
12/16/2019 18:00	1.5	2.7	0.1	0.1	1.1
12/16/2019 19:00	1.5	2.3	0.0	0.0	1.1
12/16/2019 20:00	1.5	1.7	0.2	0.1	1.0
12/17/2019 17:00	1.5	1.5	0.0	0.0	1.0
12/18/2019 08:00	1.4	3.6	0.8	1.2	0.9
12/18/2019 09:00	1.4	5.1	1.0	2.0	0.9
12/18/2019 10:00	1.5	5.0	1.2	2.5	0.8
12/18/2019 11:00	1.5	4.8	1.0	2.2	0.8
12/18/2019 12:00	1.5	4.9	1.0	2.1	0.8
12/18/2019 13:00	1.5	4.9	0.8	1.7	0.8
12/18/2019 14:00	1.5	4.8	1.0	2.2	0.8
12/18/2019 15:00	1.5	4.4	0.5	0.9	0.8
12/18/2019 16:00	1.5	3.1	1.0	1.3	0.8
12/18/2019 17:00	1.5	4.9	0.8	1.7	0.9
12/18/2019 18:00	1.5	4.7	0.6	1.2	0.8
12/18/2019 19:00	1.5	4.0	0.4	0.7	0.8
12/18/2019 20:00	1.5	3.5	0.4	0.7	0.9
12/18/2019 21:00	1.5	0.9	0.2	0.1	1.0
12/19/2019 06:00	1.6	0.4	0.2	0.0	1.0
12/19/2019 07:00	1.5	2.8	0.3	0.4	0.9
12/19/2019 08:00	1.5	3.2	0.4	0.5	0.7
12/19/2019 09:00	1.5	3.2	0.4	0.5	0.9
12/19/2019 10:00	1.5	3.3	0.3	0.4	1.0
12/19/2019 11:00	1.5	3.3	0.2	0.3	1.0
12/19/2019 12:00	1.5	3.2	0.2	0.3	1.0
12/19/2019 13:00	1.5	3.3	0.2	0.3	1.0
12/19/2019 14:00	1.5	3.3	0.2	0.3	1.0
12/19/2019 15:00	1.5	3.7	0.3	0.6	1.0
12/19/2019 16:00	1.5	4.0	0.4	0.7	0.9
12/19/2019 17:00	1.5	4.1	0.3	0.5	0.8
12/19/2019 18:00	1.5	4.0	0.3	0.5	0.9
12/19/2019 19:00	1.5	4.3	0.5	0.8	0.8
12/19/2019 20:00	1.4	0.4	0.2	0.0	1.2
12/20/2019 07:00	1.1	0.1	0.2	0.0	0.8
12/20/2019 08:00	1.5	2.5	0.5	0.6	0.9
12/20/2019 09:00	1.5	3.7	0.6	1.1	1.0
12/20/2019 10:00	1.5	4.6	0.7	1.4	0.8
12/20/2019 11:00	1.6	4.1	0.5	0.8	0.9
12/20/2019 12:00	1.4	2.4	0.2	0.4	1.1
12/20/2019 13:00	1.5	4.4	0.7	1.3	0.8
12/20/2019 14:00	1.5	3.4	0.4	0.8	1.1
12/20/2019 15:00	1.5	1.8	0.1	0.1	1.0
12/20/2019 16:00	1.5	2.6	0.2	0.3	1.1
12/20/2019 17:00	1.5	3.0	0.2	0.2	1.0
12/20/2019 18:00	1.4	0.6	0.1	0.0	1.2
12/26/2019 17:00	1.5	1.4	0.1	0.0	1.1
12/26/2019 18:00	1.6	3.9	0.4	0.8	1.1
12/26/2019 19:00	1.5	4.9	0.5	1.1	0.8
12/26/2019 20:00	1.5	4.9	0.6	1.2	0.9
12/26/2019 21:00	1.5	3.2	0.2	0.4	0.9
12/26/2019 22:00	1.5	2.1	0.4	0.3	0.9
12/27/2019 15:00	1.5	1.4	0.1	0.0	1.1
12/27/2019 16:00	1.5	1.2	0.2	0.1	1.1
12/27/2019 17:00	1.5	1.3	0.1	0.0	1.2
12/28/2019 12:00	1.5	1.3	0.1	0.0	1.1
12/29/2019 11:00	1.5	1.3	0.1	0.0	1.2
12/29/2019 16:00	1.5	0.4	0.0	0.0	1.2
12/29/2019 17:00	1.5	1.3	0.0	0.0	1.2
12/30/2019 17:00	1.5	1.3	0.1	0.0	1.1
12/30/2019 18:00	1.5	1.9	0.1	0.0	1.1
12/30/2019 19:00	1.5	1.9	0.1	0.1	1.1
12/31/2019 17:00	1.5	1.3	0.2	0.1	1.1
Final Average*	1.5	2.7	0.3	0.5	1.0
Maximum*	2.2	5.6	1.6	2.5	1.5
	12/16/2019 6:00	12/04/2019 19:00	11/01/2019 16:00	12/18/2019 10:00	10/29/2019 6:00
Minimum*	0.6	0.1	0.0	0.0	0.4
	10/29/2019 6:00	12/20/2019 7:00	12/29/2019 17:00	12/30/2019 18:00	11/04/2019 14:00

Period Start:	Average 6NOxCorOP1 ppm	Average 6NOX#OP1HR LBS	Average 6COCorOP1 ppm	Average 6CO#OP1HR LBS	Average 6NH3CorOP1 ppm
----------------------	---------------------------------------	---------------------------------------	--------------------------------------	--------------------------------------	---------------------------------------

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
 Generated: 1/21/2020 12:42

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008
 Source: 7

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Validation Type: 1/60 min
 Averaging Period: 1 hr
 Type: Block Avg

Period Start:	Average 7NOxCorOP1 ppm	Average 7NOX#OP1HR LBS	Average 7COCorOP1 ppm	Average 7CO#OP1HR LBS	Average 7NH3CorOP1 ppm
10/01/2019 05:00	1.5	1.5	0.1	0.0	1.5
10/01/2019 06:00	1.4	1.8	0.1	0.0	1.7
10/02/2019 18:00	1.5	2.0	0.0	0.0	1.9
10/02/2019 19:00	1.5	0.3	0.0	0.0	2.0
10/03/2019 05:00	1.7	0.3	0.0	0.0	1.2
10/03/2019 17:00	1.2	0.4	0.0	0.0	1.3
10/03/2019 18:00	1.5	1.4	0.0	0.0	1.8
10/06/2019 16:00	1.5	1.1	0.0	0.0	2.0
10/06/2019 17:00	1.5	2.1	0.0	0.0	1.7
10/06/2019 18:00	1.5	2.0	0.0	0.0	1.7
10/07/2019 17:00	1.6	2.2	0.0	0.0	1.7
10/07/2019 18:00	1.5	1.9	0.0	0.0	1.7
10/08/2019 16:00	1.5	1.8	0.0	0.0	1.7
10/08/2019 17:00	1.5	2.5	0.0	0.0	1.7
10/08/2019 18:00	1.5	1.9	0.0	0.0	1.8
10/09/2019 17:00	1.5	3.0	0.3	0.4	1.2
10/09/2019 18:00	1.4	3.8	0.5	0.8	1.1
10/10/2019 18:00	1.5	1.9	0.2	0.2	1.5
10/11/2019 13:00	1.4	0.3	0.2	0.0	1.3
10/11/2019 14:00	1.6	2.6	0.3	0.3	1.5
10/11/2019 15:00	1.4	3.7	0.6	0.9	1.3
10/11/2019 16:00	1.5	3.7	0.6	1.1	1.5
10/11/2019 17:00	1.5	2.8	1.0	1.9	2.0
10/11/2019 18:00	1.5	1.7	0.2	0.1	1.0
10/12/2019 08:00	1.9	0.4	1.0	0.1	0.5
10/12/2019 09:00	1.5	5.0	1.5	3.2	1.4
10/12/2019 10:00	1.5	4.7	0.7	1.5	1.1
10/12/2019 11:00	1.5	4.8	0.9	1.9	1.3
10/12/2019 12:00	1.5	3.2	0.6	1.1	1.6
10/12/2019 13:00	1.5	1.9	0.1	0.1	1.8
10/12/2019 17:00	1.5	1.4	0.1	0.1	1.9
10/12/2019 18:00	1.5	1.9	0.1	0.1	1.9
10/13/2019 17:00	1.5	2.0	0.1	0.1	1.6
10/13/2019 18:00	1.5	1.1	0.2	0.1	1.7
10/21/2019 17:00	1.5	0.8	0.2	0.1	2.0
10/21/2019 19:00	1.5	1.3	0.0	0.0	1.8
10/22/2019 13:00	1.6	0.6	0.3	0.1	1.1
10/22/2019 14:00	1.6	0.7	0.2	0.1	1.2
10/22/2019 15:00	1.5	3.2	0.6	1.0	1.7
10/22/2019 16:00	1.5	2.6	0.1	0.1	1.9
10/22/2019 17:00	1.5	2.8	0.1	0.1	1.3
10/22/2019 18:00	1.5	2.0	0.0	0.0	1.9
10/22/2019 19:00	1.5	1.8	0.0	0.0	1.9
10/23/2019 13:00	1.7	1.2	0.3	0.1	1.9
10/23/2019 14:00	1.4	2.1	0.2	0.2	1.7
10/24/2019 08:00	1.5	1.3	0.2	0.1	1.8
10/25/2019 20:00	1.6	0.6	0.3	0.1	1.7
10/25/2019 21:00	1.5	0.8	0.3	0.1	1.9
10/28/2019 16:00	1.1	0.2	0.5	0.1	1.0
10/28/2019 17:00	1.5	4.8	2.6	5.5	1.5
10/28/2019 18:00	1.5	0.7	1.5	0.5	0.8
10/29/2019 05:00	1.9	1.7	0.3	0.2	1.6
10/29/2019 06:00	0.6	0.2	0.4	0.1	2.4
10/29/2019 16:00	1.3	0.3	3.2	0.5	1.8
10/29/2019 17:00	1.5	2.6	1.1	1.2	1.4
10/29/2019 18:00	1.6	1.7	0.4	0.3	1.2
10/30/2019 05:00	1.6	2.7	1.1	1.8	2.2
10/30/2019 06:00	1.6	2.8	1.8	2.4	1.6
10/30/2019 17:00	1.4	2.2	3.4	3.4	2.3
10/30/2019 18:00	1.6	2.3	0.1	0.1	1.2
10/30/2019 19:00	1.5	2.0	0.0	0.0	1.4
10/30/2019 20:00	1.5	0.3	0.0	0.0	1.4
10/31/2019 05:00	1.6	2.1	1.7	1.9	2.6

Period Start:	Average	Average	Average	Average	Average
	7NOxCorOP1 ppm	7NOx#OP1HR LBS	7COCorOP1 ppm	7CO#OP1HR LBS	7NH3CorOP1 ppm
10/31/2019 06:00	1.5	2.6	1.9	2.7	1.5
10/31/2019 17:00	1.6	1.0	0.1	0.0	1.4
10/31/2019 18:00	1.5	0.3	0.0	0.0	1.6
11/01/2019 05:00	1.9	1.4	0.0	0.0	1.2
11/01/2019 06:00	1.2	1.2	2.3	2.0	2.2
11/01/2019 16:00	0.8	0.6	2.9	1.4	2.3
11/01/2019 17:00	1.6	2.1	0.1	0.0	1.6
11/01/2019 18:00	1.5	0.3	0.1	0.0	1.5
11/02/2019 07:00	1.5	0.2	0.2	0.0	2.6
11/02/2019 08:00	1.6	2.9	0.2	0.3	1.2
11/02/2019 09:00	1.3	2.0	1.3	1.7	2.2
11/02/2019 10:00	1.5	3.5	0.5	0.7	1.1
11/02/2019 11:00	1.5	3.9	0.4	0.6	1.1
11/02/2019 12:00	1.5	3.3	0.7	1.2	1.5
11/02/2019 13:00	1.5	3.1	0.2	0.3	1.2
11/02/2019 14:00	1.5	3.2	0.2	0.3	1.1
11/02/2019 15:00	1.5	3.2	0.3	0.3	1.2
11/02/2019 16:00	1.4	4.1	1.2	2.3	1.2
11/02/2019 17:00	1.5	4.5	0.4	0.7	1.0
11/02/2019 18:00	1.5	4.0	0.3	0.5	1.1
11/02/2019 19:00	1.5	4.2	0.7	1.3	1.3
11/02/2019 20:00	1.6	4.6	1.6	3.2	1.6
11/02/2019 21:00	1.4	3.3	0.3	0.4	1.3
11/02/2019 22:00	1.5	2.2	0.2	0.2	1.4
11/04/2019 06:00	1.5	3.0	0.8	1.2	1.4
11/04/2019 07:00	1.4	1.5	0.4	0.3	1.8
11/04/2019 14:00	1.8	1.0	0.5	0.2	1.4
11/04/2019 15:00	1.5	3.5	1.2	2.4	2.4
11/04/2019 16:00	1.4	4.1	1.2	2.4	1.8
11/04/2019 17:00	1.7	2.7	0.6	0.7	1.6
11/04/2019 18:00	1.5	2.3	0.2	0.2	1.8
11/04/2019 19:00	1.4	4.1	1.9	4.0	1.9
11/04/2019 20:00	1.6	2.1	1.7	1.5	1.6
11/05/2019 16:00	1.5	3.2	1.1	2.1	1.9
11/05/2019 17:00	1.5	2.2	0.1	0.1	1.7
11/05/2019 18:00	1.5	1.3	0.1	0.0	1.7
11/06/2019 16:00	1.5	1.5	0.3	0.2	1.6
11/06/2019 17:00	1.5	2.2	0.3	0.3	1.7
11/07/2019 16:00	1.6	0.2	0.4	0.0	0.5
11/07/2019 17:00	1.5	4.5	2.0	4.2	1.9
11/07/2019 18:00	1.6	3.4	1.0	1.8	1.7
11/07/2019 19:00	1.4	2.6	0.9	1.6	1.6
11/07/2019 20:00	1.5	1.0	0.4	0.2	1.9
11/16/2019 11:00	1.4	0.2	0.3	0.0	1.5
11/16/2019 12:00	1.4	3.9	0.8	1.4	1.4
11/17/2019 17:00	1.6	1.4	0.1	0.0	1.8
11/18/2019 17:00	1.5	1.3	0.0	0.0	1.9
11/18/2019 20:00	1.5	2.3	0.3	0.3	1.4
11/18/2019 21:00	1.2	0.7	0.4	0.1	2.2
11/24/2019 18:00	1.4	3.0	0.6	0.8	0.9
11/24/2019 19:00	1.6	0.6	0.2	0.1	1.1
11/26/2019 06:00	1.5	0.8	0.1	0.0	1.3
11/26/2019 07:00	2.2	0.7	0.1	0.0	1.5
11/27/2019 09:00	1.5	1.7	0.4	0.3	1.3
11/27/2019 10:00	1.5	2.6	0.1	0.1	1.4
11/27/2019 11:00	1.4	4.7	1.2	2.4	1.3
11/27/2019 12:00	1.5	4.7	1.5	3.2	1.3
11/27/2019 13:00	1.5	3.0	0.7	0.9	1.0
11/27/2019 14:00	1.5	3.8	0.4	0.7	0.9
11/27/2019 15:00	1.5	4.0	0.4	0.6	0.9
11/27/2019 16:00	1.5	3.1	0.2	0.3	1.3
11/27/2019 17:00	1.5	2.0	0.0	0.0	1.5
12/07/2019 09:00	1.1	0.7	5.6	2.2	2.1 Invalid Hour (<16min)
12/07/2019 10:00	1.5	3.7	0.8	1.2	0.8
12/07/2019 11:00	1.5	3.0	0.5	0.7	1.2
12/07/2019 12:00	1.5	2.2	0.3	0.3	1.5
12/07/2019 13:00	1.5	2.1	0.3	0.3	1.5
12/07/2019 14:00	1.6	4.4	1.9	3.8	1.6
12/07/2019 15:00	1.5	1.9	0.2	0.2	1.7
12/07/2019 16:00	1.5	1.9	0.2	0.2	1.7
12/07/2019 17:00	1.5	1.9	0.2	0.2	1.7
12/07/2019 18:00	1.5	2.1	0.2	0.2	1.6

Period Start:	Average	Average	Average	Average	Average
	7NOxCorOP1 ppm	7NOx#OP1HR LBS	7COCorOP1 ppm	7CO#OP1HR LBS	7NH3CorOP1 ppm
12/07/2019 19:00	1.4	3.6	1.3	2.6	1.5
12/07/2019 20:00	1.5	4.8	1.8	3.6	1.2
12/07/2019 21:00	1.6	3.9	0.7	1.1	0.9
12/08/2019 07:00	1.6	0.6	0.4	0.1	1.0
12/09/2019 06:00	1.5	1.5	0.4	0.2	1.5
12/09/2019 07:00	1.5	3.5	0.6	0.8	1.3
12/09/2019 08:00	1.4	3.5	1.0	1.9	1.3
12/09/2019 09:00	1.5	4.1	1.3	2.5	1.5
12/09/2019 10:00	1.5	4.0	1.5	2.9	1.4
12/09/2019 11:00	1.5	4.8	0.9	1.8	0.9
12/09/2019 12:00	1.5	3.8	0.6	0.9	0.9
12/09/2019 13:00	1.5	3.3	0.5	0.8	1.2
12/09/2019 14:00	1.4	3.5	0.7	1.1	1.1
12/09/2019 15:00	1.6	2.4	0.3	0.3	1.2
12/09/2019 16:00	1.5	3.4	0.9	1.6	1.4
12/09/2019 17:00	1.4	4.2	1.7	3.4	1.2
12/09/2019 18:00	1.5	4.6	0.9	1.7	0.8
12/09/2019 19:00	1.5	5.3	2.2	4.8	1.2
12/09/2019 20:00	1.5	5.0	1.6	3.2	0.9
12/09/2019 21:00	1.5	4.9	1.8	3.8	1.2
12/09/2019 22:00	1.6	2.6	0.6	0.7	1.0
12/10/2019 07:00	1.4	2.3	1.9	2.2	1.4
12/10/2019 08:00	1.4	4.0	1.2	2.4	1.3
12/10/2019 09:00	1.5	4.8	1.8	3.6	1.1
12/10/2019 10:00	1.5	5.2	1.9	3.9	1.2
12/10/2019 11:00	1.5	4.9	1.4	2.8	1.0
12/10/2019 12:00	1.6	2.9	0.4	0.5	1.1
12/10/2019 13:00	1.5	3.3	0.5	0.7	1.1
12/10/2019 14:00	1.4	0.6	0.4	0.1	1.4
12/10/2019 15:00	1.4	0.1	0.3	0.0	0.8
12/10/2019 16:00	1.6	2.4	0.1	0.2	1.5
12/10/2019 17:00	1.4	3.2	0.4	0.5	1.2
12/10/2019 18:00	1.5	2.5	0.2	0.3	1.7
12/10/2019 19:00	1.5	1.5	0.1	0.1	1.5
12/11/2019 08:00	1.3	4.1	1.5	3.0	1.2
12/11/2019 09:00	1.6	4.0	0.5	1.0	1.4
12/11/2019 10:00	1.6	3.7	0.7	1.2	1.3
12/11/2019 11:00	1.4	4.6	1.1	2.3	1.3
12/11/2019 12:00	1.5	3.9	1.0	1.9	1.2
12/11/2019 13:00	1.5	2.8	0.3	0.4	1.3
12/11/2019 14:00	1.5	3.3	0.7	1.2	1.5
12/11/2019 15:00	1.5	3.0	0.6	1.1	1.5
12/11/2019 16:00	1.5	2.8	0.2	0.3	1.6
12/11/2019 17:00	1.4	2.7	2.0	2.7	1.3
12/11/2019 18:00	1.5	4.7	1.2	2.4	1.1
12/11/2019 19:00	1.5	5.1	1.3	2.7	1.2
12/11/2019 20:00	1.5	4.1	0.5	0.8	1.1
12/11/2019 21:00	1.5	4.1	0.5	0.9	1.1
12/12/2019 06:00	1.5	1.6	0.1	0.1	1.5
12/12/2019 07:00	1.4	4.0	0.7	1.2	1.2
12/12/2019 08:00	1.6	3.2	0.3	0.5	1.7
12/12/2019 09:00	1.5	2.5	0.2	0.3	1.7
12/12/2019 10:00	1.6	2.2	0.2	0.2	1.6
12/12/2019 11:00	1.5	1.9	0.1	0.0	1.8
12/12/2019 12:00	1.5	2.2	0.2	0.1	1.6
12/12/2019 13:00	1.5	1.9	0.0	0.0	1.9
12/12/2019 14:00	1.5	2.1	0.1	0.1	1.7
12/12/2019 15:00	1.5	2.0	0.0	0.0	1.6
12/12/2019 16:00	1.5	2.1	0.1	0.1	1.6
12/12/2019 17:00	1.5	2.5	0.2	0.3	1.4
12/12/2019 18:00	1.5	1.9	0.0	0.0	1.6
12/12/2019 21:00	1.5	0.9	0.2	0.1	1.6
12/12/2019 22:00	1.5	2.0	0.1	0.1	1.5
12/12/2019 23:00	1.5	1.0	0.0	0.0	1.9
12/13/2019 09:00	1.7	1.6	0.1	0.1	1.6
12/13/2019 10:00	1.4	3.4	0.4	0.6	1.2
12/13/2019 11:00	1.5	3.8	0.4	0.6	0.9
12/13/2019 12:00	1.5	3.4	0.3	0.4	1.4
12/13/2019 13:00	1.5	3.8	0.5	0.8	0.8
12/13/2019 14:00	1.5	3.9	0.5	0.8	0.8
12/13/2019 15:00	1.5	4.0	0.8	1.4	0.8
12/13/2019 16:00	1.5	4.1	0.4	0.8	0.8

Period Start:	Average 7NOxCorOP1 ppm	Average 7NOX#OP1HR LBS	Average 7COCorOP1 ppm	Average 7CO#OP1HR LBS	Average 7NH3CorOP1 ppm
12/13/2019 17:00	1.5	4.0	0.5	0.8	0.7
12/13/2019 18:00	1.5	4.1	0.5	0.8	0.6
12/13/2019 19:00	1.5	4.0	0.4	0.8	0.8
12/14/2019 09:00	1.5	2.3	0.4	0.7	1.8
12/14/2019 10:00	1.6	2.4	0.1	0.1	1.4
12/14/2019 11:00	1.4	4.0	1.0	1.8	1.4
12/14/2019 12:00	1.5	4.7	1.1	2.2	1.2
12/14/2019 13:00	1.5	2.9	0.9	1.1	1.1
12/14/2019 14:00	1.5	4.5	0.7	1.4	1.1
12/14/2019 15:00	1.5	4.6	0.7	1.4	1.1
12/14/2019 16:00	1.5	4.5	0.7	1.4	1.1
12/14/2019 17:00	1.4	4.9	1.1	2.2	1.2
12/14/2019 18:00	1.5	4.9	0.8	1.5	1.1
12/14/2019 19:00	1.5	5.1	0.8	1.5	1.1
12/15/2019 16:00	1.6	0.4	0.1	0.0	1.2
12/15/2019 17:00	1.5	0.9	0.1	0.0	1.8
12/16/2019 06:00	4.4	1.2	0.1	0.0	1.8 Invalid Hour (<16min)
12/16/2019 07:00	1.4	2.2	0.2	0.2	1.6
12/16/2019 08:00	1.4	3.4	0.5	0.7	1.3
12/16/2019 09:00	1.3	0.8	0.8	0.3	1.4
12/16/2019 17:00	1.5	1.4	0.1	0.0	1.4
12/16/2019 18:00	1.5	2.5	0.3	0.3	1.5
12/16/2019 19:00	1.5	2.3	0.2	0.2	1.5
12/16/2019 20:00	1.4	1.5	0.5	0.4	1.6
12/17/2019 07:00	1.5	2.2	0.5	0.5	2.2
12/17/2019 08:00	1.5	3.0	0.5	1.0	1.4
12/17/2019 09:00	1.4	4.2	1.4	2.7	1.5
12/17/2019 10:00	1.5	2.5	0.3	0.3	1.3
12/17/2019 11:00	1.4	2.3	0.8	0.9	1.4
12/17/2019 16:00	1.6	2.5	0.4	0.6	1.6
12/17/2019 17:00	1.5	1.9	0.0	0.0	1.5
12/18/2019 07:00	1.5	2.9	0.8	1.4	1.5
12/18/2019 08:00	1.4	4.2	1.7	3.4	1.6
12/18/2019 09:00	1.5	4.9	2.3	4.9	1.2
12/18/2019 10:00	1.5	5.0	2.5	5.3	1.3
12/18/2019 11:00	1.5	5.0	2.3	4.8	1.2
12/18/2019 12:00	1.5	5.1	2.1	4.5	1.2
12/18/2019 13:00	1.5	4.9	1.8	3.7	1.1
12/18/2019 14:00	1.5	5.1	2.0	4.2	1.2
12/18/2019 15:00	1.5	4.4	0.8	1.5	0.9
12/18/2019 16:00	1.5	4.9	1.7	3.6	1.3
12/18/2019 17:00	1.5	3.3	1.8	2.4	1.3
12/18/2019 18:00	1.5	4.8	1.1	2.3	1.1
12/18/2019 19:00	1.5	4.1	0.7	1.2	1.1
12/18/2019 20:00	1.6	3.6	0.7	1.1	1.0
12/18/2019 21:00	1.5	1.0	0.3	0.1	1.6
12/19/2019 06:00	1.6	0.4	0.3	0.0	1.2
12/19/2019 07:00	1.4	2.8	0.5	0.6	1.3
12/19/2019 08:00	1.5	3.4	0.7	0.8	1.0
12/19/2019 09:00	1.5	3.4	0.6	0.8	1.0
12/19/2019 10:00	1.5	3.3	0.6	0.7	1.2
12/19/2019 11:00	1.5	3.5	0.5	0.6	1.0
12/19/2019 12:00	1.5	3.4	0.5	0.7	1.0
12/19/2019 13:00	1.5	3.4	0.5	0.7	1.1
12/19/2019 14:00	1.5	3.4	0.5	0.7	1.1
12/19/2019 15:00	1.5	3.7	0.7	1.1	1.2
12/19/2019 16:00	1.5	1.5	0.6	0.4	1.1
12/20/2019 07:00	1.4	0.4	0.5	0.1	1.0
12/20/2019 08:00	1.5	3.5	1.0	1.6	1.5
12/20/2019 09:00	1.4	3.5	1.2	2.2	1.4
12/20/2019 10:00	1.5	4.8	1.5	3.0	1.0
12/20/2019 11:00	1.6	2.5	1.2	1.4	1.5
12/20/2019 12:00	1.5	2.6	0.5	0.8	1.5
12/20/2019 13:00	1.4	4.0	1.4	2.7	1.3
12/20/2019 14:00	1.5	3.1	0.9	1.6	1.6
12/20/2019 15:00	1.5	1.9	0.2	0.2	1.5
12/20/2019 16:00	1.5	2.4	0.4	0.6	1.8
12/20/2019 17:00	1.5	3.0	0.5	0.6	1.2
12/20/2019 18:00	1.6	0.6	0.2	0.1	1.5
12/21/2019 19:00	1.4	0.9	0.4	0.2	1.3
12/21/2019 20:00	1.5	0.4	0.4	0.1	1.2
12/22/2019 09:00	1.5	2.0	0.4	0.3	1.2

Period Start:	Average 7NOxCorOP1 ppm	Average 7NOX#OP1HR LBS	Average 7COCorOP1 ppm	Average 7CO#OP1HR LBS	Average 7NH3CorOP1 ppm
12/22/2019 10:00	1.5	2.0	0.4	0.3	1.3
12/22/2019 11:00	1.5	2.0	0.4	0.3	1.3
12/22/2019 12:00	1.5	2.0	0.4	0.3	1.3
12/22/2019 13:00	1.5	2.0	0.4	0.3	1.4
12/22/2019 14:00	1.5	2.1	0.3	0.3	1.4
12/22/2019 15:00	1.5	2.0	0.3	0.3	1.4
12/22/2019 16:00	1.5	2.0	0.3	0.2	1.4
12/22/2019 17:00	1.5	2.0	0.2	0.2	1.2
12/22/2019 18:00	1.5	2.0	0.2	0.2	1.3
12/22/2019 19:00	1.5	2.0	0.2	0.2	1.2
12/22/2019 20:00	1.5	1.3	0.3	0.2	1.3
12/22/2019 21:00	1.5	1.9	0.4	0.3	1.4
12/23/2019 10:00	1.3	3.2	1.6	2.4	1.4
12/23/2019 11:00	1.7	3.0	1.4	1.7	1.1
12/24/2019 14:00	1.5	1.5	0.4	0.3	1.5
12/26/2019 11:00	1.4	1.2	0.3	0.1	1.4
12/26/2019 17:00	1.5	1.4	0.2	0.1	1.4
12/26/2019 18:00	1.4	3.5	1.0	2.1	1.8
12/26/2019 19:00	1.5	5.0	1.0	2.1	1.1
12/26/2019 20:00	1.5	5.2	1.2	2.6	1.3
12/26/2019 21:00	1.6	3.4	0.5	0.9	1.3
12/26/2019 22:00	1.4	1.9	0.8	0.7	1.7
12/28/2019 10:00	1.6	1.9	0.2	0.2	1.7
12/29/2019 08:00	1.7	0.8	0.4	0.1	1.5
12/29/2019 09:00	1.6	2.6	0.5	0.6	1.9
12/29/2019 10:00	1.4	3.2	0.8	1.3	1.9
12/29/2019 11:00	1.5	1.9	0.2	0.2	1.8
12/29/2019 16:00	1.5	0.4	0.2	0.0	1.2
12/29/2019 17:00	1.5	1.4	0.2	0.1	1.9
12/30/2019 17:00	1.5	1.3	0.3	0.2	1.6
12/30/2019 18:00	1.5	1.9	0.3	0.2	1.6
12/30/2019 19:00	1.5	1.9	0.3	0.2	1.5
12/31/2019 17:00	1.5	1.3	0.4	0.2	1.6
Final Average*	1.5	2.6	0.6	1.0	1.4
Maximum*	4.4	5.3	5.6	5.5	2.6
	12/16/2019	12/09/2019	12/07/2019	10/28/2019	11/02/2019
	6:00	19:00	9:00	17:00	7:00
Minimum*	0.6	0.1	0.0	0.0	0.5
	10/29/2019	12/10/2019	12/17/2019	12/29/2019	11/07/2019
	6:00	15:00	17:00	16:00	16:00

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 1/21/2020 12:43

Company: NRG Carlsbad
Plant: 4600 Carlsbad Blvd
City/St: Carlsbad, CA 92008
Source: 8

Period Start: 10/1/2019 00:00
Period End: 12/31/2019 23:59
Validation Type: 1/60 min
Averaging Period: 1 hr
Type: Block Avg

Period Start:	Average 8NOxCorOP1 ppm	Average 8NOX#OP1HR LBS	Average 8COCorOP1 ppm	Average 8CO#OP1HR LBS	Average 8NH3CorOP1 ppm
10/01/2019 05:00	1.5	1.5	0.0	0.0	1.5
10/01/2019 06:00	1.5	1.9	0.0	0.0	1.8
10/01/2019 09:00	1.5	1.6	0.0	0.0	2.0
10/03/2019 16:00	1.5	2.8	0.4	0.4	1.9
10/03/2019 17:00	1.5	3.5	0.1	0.2	2.1
10/03/2019 18:00	1.5	1.4	0.0	0.0	1.7
10/04/2019 05:00	1.2	0.4	0.0	0.0	2.4
10/04/2019 06:00	1.6	1.6	0.0	0.0	2.6
10/04/2019 17:00	1.4	1.2	0.0	0.0	2.0
10/04/2019 19:00	1.5	1.3	0.0	0.0	2.4
10/05/2019 16:00	1.5	2.0	0.1	0.1	2.0
10/05/2019 17:00	1.5	2.3	0.0	0.0	1.8
10/05/2019 18:00	1.5	2.3	0.0	0.0	1.8
10/05/2019 19:00	1.5	1.9	0.0	0.0	2.5
10/06/2019 12:00	1.5	1.5	0.0	0.0	2.2
10/06/2019 16:00	1.5	1.3	0.0	0.0	1.9
10/06/2019 17:00	1.5	2.2	0.0	0.0	1.8
10/06/2019 18:00	1.5	2.0	0.0	0.0	1.8
10/07/2019 08:00	1.5	2.7	0.0	0.0	2.3
10/07/2019 09:00	1.5	1.9	0.0	0.0	1.9
10/07/2019 15:00	1.5	1.4	0.0	0.0	2.0
10/07/2019 16:00	1.5	3.6	0.1	0.2	2.0
10/07/2019 17:00	1.5	2.1	0.0	0.0	2.4
10/07/2019 18:00	1.5	1.7	0.0	0.0	2.7
10/08/2019 14:00	1.5	0.5	0.0	0.0	1.8
10/08/2019 15:00	1.5	2.8	0.0	0.1	2.4
10/08/2019 16:00	1.5	2.3	0.0	0.0	2.3
10/08/2019 17:00	1.5	2.5	0.0	0.0	2.3
10/08/2019 18:00	1.5	1.9	0.0	0.0	1.9
10/09/2019 15:00	1.5	0.2	0.0	0.0	1.7
10/09/2019 16:00	1.6	3.2	0.0	0.0	2.4
10/09/2019 17:00	1.5	3.5	0.0	0.0	1.8
10/09/2019 18:00	1.4	3.8	0.0	0.0	1.6
10/10/2019 05:00	1.5	1.5	0.0	0.0	1.9
10/10/2019 06:00	1.5	0.4	0.0	0.0	1.9
10/10/2019 08:00	1.5	2.4	0.0	0.0	2.2
10/10/2019 09:00	1.6	2.7	0.0	0.0	2.1
10/10/2019 10:00	1.8	4.0	0.0	0.0	1.7
10/10/2019 11:00	1.5	2.4	0.0	0.0	2.1
10/10/2019 12:00	1.6	2.3	0.0	0.0	2.6
10/10/2019 13:00	1.4	3.3	0.0	0.0	2.1
10/10/2019 14:00	1.5	3.2	0.0	0.0	2.0
10/10/2019 15:00	1.4	0.5	0.0	0.0	2.0
10/11/2019 05:00	1.5	1.0	0.0	0.0	2.0
10/11/2019 06:00	1.5	0.8	0.0	0.0	2.3
10/11/2019 13:00	1.5	0.3	0.0	0.0	2.2
10/11/2019 14:00	1.5	2.1	0.0	0.0	2.1
10/11/2019 16:00	1.5	1.0	0.0	0.0	2.0
10/11/2019 17:00	1.4	2.9	0.2	0.4	2.3
10/11/2019 18:00	1.5	1.9	0.0	0.0	2.5
10/12/2019 06:00	1.2	3.7	0.0	0.0	2.0
10/12/2019 07:00	1.3	4.3	0.0	0.0	2.3
10/12/2019 08:00	1.3	4.2	0.0	0.0	1.9
10/12/2019 09:00	1.5	5.1	0.0	0.0	1.7
10/12/2019 10:00	1.5	4.7	0.0	0.0	1.7
10/12/2019 11:00	1.5	4.8	0.0	0.0	1.7
10/12/2019 12:00	1.4	3.1	0.0	0.0	2.3
10/12/2019 13:00	1.5	1.7	0.0	0.0	2.7
10/12/2019 17:00	1.5	1.5	0.0	0.0	1.7
10/12/2019 18:00	1.5	1.9	0.0	0.0	1.7
10/13/2019 12:00	0.7	0.0	0.0	0.0	2.4
10/13/2019 13:00	1.5	1.6	0.0	0.0	2.6
10/13/2019 14:00	1.5	2.3	0.0	0.0	2.3

Period Start:	Average	Average	Average	Average	Average
	8NOxCorOP1 ppm	8NOx#OP1HR LBS	8COCorOP1 ppm	8CO#OP1HR LBS	8NH3CorOP1 ppm
10/13/2019 15:00	1.6	2.2	0.0	0.0	2.6
10/13/2019 17:00	1.5	2.1	0.0	0.0	2.3
10/13/2019 18:00	1.5	2.0	0.0	0.0	2.7
10/17/2019 17:00	1.5	3.1	0.1	0.2	2.4
10/18/2019 17:00	1.5	1.4	0.0	0.0	1.7
10/19/2019 17:00	1.4	1.8	0.0	0.0	1.7
10/21/2019 19:00	1.5	1.4	0.0	0.0	1.6
10/22/2019 15:00	0.7	0.3	0.0	0.0	3.8
10/22/2019 16:00	1.6	1.5	0.0	0.0	2.3
10/22/2019 17:00	1.3	0.8	0.0	0.0	2.1
10/22/2019 18:00	1.5	2.2	0.0	0.0	1.8
10/22/2019 19:00	1.5	1.9	0.0	0.0	1.8
10/23/2019 06:00	1.3	1.6	0.0	0.0	2.5
10/23/2019 13:00	1.7	1.3	0.0	0.0	2.6
10/23/2019 14:00	1.5	2.5	0.0	0.0	2.2
10/23/2019 15:00	1.4	4.2	0.1	0.2	1.8
10/23/2019 16:00	1.5	3.8	0.0	0.0	1.6
10/23/2019 17:00	1.5	3.0	0.0	0.0	2.0
10/23/2019 18:00	1.5	2.1	0.0	0.0	2.2
10/24/2019 05:00	1.1	0.4	0.0	0.0	2.4
10/24/2019 06:00	1.5	1.3	0.0	0.0	1.8
10/24/2019 13:00	1.5	0.8	0.0	0.0	2.0
10/24/2019 14:00	1.5	2.4	0.0	0.0	2.0
10/24/2019 15:00	1.6	1.8	0.0	0.0	2.3
10/24/2019 16:00	1.5	4.1	0.0	0.0	2.0
10/24/2019 17:00	1.4	3.9	0.0	0.0	1.8
10/24/2019 18:00	1.5	4.0	0.0	0.0	2.0
10/24/2019 19:00	1.5	2.0	0.0	0.0	2.6
10/24/2019 20:00	1.3	0.3	0.0	0.0	2.3
10/25/2019 06:00	1.5	1.9	0.0	0.0	1.8
10/25/2019 10:00	1.5	2.1	0.0	0.0	1.7
10/25/2019 11:00	1.5	2.9	0.0	0.0	1.9
10/25/2019 12:00	1.5	3.3	0.0	0.0	1.8
10/25/2019 13:00	1.5	3.2	0.0	0.0	2.0
10/25/2019 14:00	1.6	3.7	0.0	0.0	1.9
10/25/2019 15:00	1.4	4.8	0.0	0.1	1.8
10/25/2019 16:00	1.5	4.7	0.0	0.0	1.6
10/25/2019 17:00	1.5	3.8	0.0	0.0	1.9
10/25/2019 18:00	1.5	2.6	0.0	0.0	2.0
10/25/2019 19:00	1.4	0.3	0.0	0.0	1.9
10/26/2019 13:00	1.5	1.8	0.1	0.1	1.9
10/26/2019 14:00	1.5	3.9	0.0	0.0	1.7
10/26/2019 15:00	1.5	3.8	0.1	0.1	2.0
10/26/2019 16:00	1.5	2.5	0.0	0.0	2.0
10/26/2019 17:00	1.5	1.8	0.0	0.0	2.3
10/28/2019 05:00	1.3	1.1	0.3	0.1	2.1
10/28/2019 06:00	1.6	4.3	0.2	0.5	2.0
10/28/2019 07:00	1.5	2.5	0.1	0.1	2.2
10/28/2019 08:00	1.3	2.4	0.1	0.1	2.1
10/28/2019 09:00	1.7	0.4	0.0	0.0	2.4
10/28/2019 15:00	1.9	1.3	0.3	0.1	2.3
10/28/2019 16:00	1.4	3.7	0.3	0.5	2.4
10/28/2019 17:00	1.5	4.9	0.3	0.6	1.9
10/28/2019 18:00	1.3	0.7	0.2	0.1	1.6
10/29/2019 05:00	2.0	1.9	0.1	0.1	1.9
10/29/2019 06:00	0.6	0.2	0.2	0.0	3.4
10/29/2019 15:00	0.9	0.7	0.4	0.2	2.6
10/29/2019 16:00	1.6	4.7	0.3	0.7	2.6
10/29/2019 17:00	1.5	4.0	0.2	0.3	2.0
10/29/2019 18:00	1.5	1.6	0.0	0.0	2.3
10/30/2019 05:00	1.8	2.3	0.5	0.4	2.6
10/30/2019 06:00	1.6	2.9	0.2	0.3	2.0
10/30/2019 16:00	0.7	1.9	0.3	0.6	4.4
10/30/2019 17:00	0.7	2.2	0.5	0.9	4.1
10/30/2019 18:00	0.5	0.8	0.1	0.1	4.6
10/30/2019 19:00	0.6	0.7	0.0	0.0	4.7
10/30/2019 20:00	0.6	0.1	0.0	0.0	4.5
10/31/2019 05:00	1.8	2.4	0.2	0.3	2.4
10/31/2019 06:00	1.4	2.6	0.3	0.4	1.7
10/31/2019 17:00	1.5	1.0	0.0	0.0	2.0
10/31/2019 18:00	1.5	0.3	0.0	0.0	2.7
11/01/2019 05:00	2.0	1.6	0.1	0.1	2.1

Period Start:	Average 8NOxCorOP1	Average 8NOX#OP1HR	Average 8COCorOP1	Average 8CO#OP1HR	Average 8NH3CorOP1	
	ppm	LBS	ppm	LBS	ppm	
11/01/2019 06:00	1.3	1.7	0.3	0.3	0.3	2.6
11/01/2019 16:00	0.8	0.7	1.4	0.7	0.7	2.8
11/01/2019 17:00	1.6	2.2	0.0	0.0	0.0	2.4
11/01/2019 18:00	1.5	0.3	0.0	0.0	0.0	2.6
11/02/2019 07:00	1.4	0.2	0.1	0.0	0.0	3.2
11/02/2019 08:00	1.4	2.0	0.1	0.1	0.1	1.8
11/02/2019 13:00	1.6	2.4	0.2	0.2	0.2	2.0
11/02/2019 14:00	1.5	3.1	0.1	0.1	0.1	2.1
11/02/2019 15:00	1.5	3.3	0.1	0.2	0.2	1.8
11/02/2019 16:00	1.5	4.4	0.3	0.6	0.6	1.7
11/02/2019 17:00	1.5	4.3	0.2	0.4	0.4	1.6
11/02/2019 18:00	1.6	4.1	0.2	0.3	0.3	1.6
11/02/2019 19:00	1.5	4.3	0.2	0.4	0.4	1.7
11/02/2019 20:00	1.4	3.8	0.3	0.5	0.5	2.1
11/04/2019 06:00	1.5	2.9	0.1	0.1	0.1	2.1
11/04/2019 07:00	1.6	1.7	0.0	0.0	0.0	2.7
11/04/2019 16:00	1.6	4.5	0.2	0.3	0.3	2.2
11/04/2019 17:00	1.5	3.4	0.1	0.1	0.1	2.1
11/04/2019 18:00	1.5	2.3	0.0	0.0	0.0	2.6
11/04/2019 19:00	1.5	4.5	0.1	0.3	0.3	1.9
11/04/2019 20:00	1.3	2.1	0.1	0.1	0.1	1.7
11/05/2019 16:00	1.5	3.3	0.1	0.2	0.2	2.0
11/05/2019 17:00	1.5	1.4	0.0	0.0	0.0	2.7
11/05/2019 18:00	1.5	1.2	0.0	0.0	0.0	2.8
11/06/2019 16:00	1.5	1.6	0.0	0.0	0.0	2.3
11/06/2019 17:00	1.6	2.3	0.0	0.0	0.0	2.5
11/07/2019 16:00	1.2	0.2	0.0	0.0	0.0	1.3
11/07/2019 17:00	1.5	4.8	0.1	0.3	0.3	2.1
11/07/2019 18:00	1.6	3.6	0.1	0.3	0.3	2.5
11/07/2019 19:00	1.4	2.5	0.1	0.2	0.2	2.3
11/07/2019 20:00	1.5	1.0	0.0	0.0	0.0	2.8
11/12/2019 17:00	1.5	1.4	0.0	0.0	0.0	1.7
11/17/2019 17:00	1.5	1.8	0.0	0.0	0.0	2.2
11/18/2019 17:00	1.5	1.3	0.0	0.0	0.0	2.1
11/18/2019 20:00	1.6	1.3	0.2	0.1	0.1	2.1
11/18/2019 21:00	1.0	0.6	0.2	0.1	0.1	3.1
11/20/2019 19:00	2.6	0.7	0.0	0.0	0.0	1.8 Invalid Hour (<16min)
11/20/2019 20:00	1.2	1.5	0.1	0.1	0.1	2.2
11/21/2019 17:00	1.5	2.3	0.0	0.0	0.0	2.3
11/21/2019 22:00	1.5	2.4	0.0	0.0	0.0	1.9
11/21/2019 23:00	1.5	2.2	0.0	0.0	0.0	2.4
11/22/2019 07:00	1.5	0.9	0.0	0.0	0.0	1.8
11/22/2019 08:00	1.5	3.0	0.0	0.1	0.1	2.3
11/22/2019 09:00	1.5	2.9	0.0	0.0	0.0	1.9
11/22/2019 10:00	1.5	2.1	0.0	0.0	0.0	2.3
11/22/2019 11:00	1.5	2.7	0.0	0.0	0.0	2.0
11/22/2019 12:00	1.5	3.0	0.1	0.1	0.1	2.2
11/22/2019 13:00	1.6	2.2	0.0	0.0	0.0	2.0
11/22/2019 14:00	1.5	3.2	0.1	0.1	0.1	2.4
11/22/2019 15:00	1.5	3.0	0.1	0.1	0.1	2.4
11/22/2019 16:00	1.5	2.6	0.0	0.1	0.1	2.2
11/22/2019 17:00	1.5	1.3	0.1	0.1	0.1	2.6
11/22/2019 18:00	1.9	0.2	0.0	0.0	0.0	2.4
11/23/2019 17:00	1.5	1.4	0.0	0.0	0.0	2.3
11/24/2019 18:00	1.4	3.1	0.5	0.6	0.6	1.6
11/24/2019 19:00	1.5	0.6	0.1	0.0	0.0	1.8
11/26/2019 06:00	1.5	0.9	0.2	0.1	0.1	2.3
11/26/2019 07:00	2.0	0.9	0.2	0.1	0.1	2.5
11/27/2019 08:00	1.5	1.7	0.2	0.1	0.1	2.2
11/27/2019 09:00	1.4	3.5	0.3	0.5	0.5	2.2
11/27/2019 10:00	1.5	2.7	0.1	0.2	0.2	2.2
11/27/2019 11:00	1.5	4.9	0.3	0.6	0.6	1.8
11/27/2019 12:00	1.5	4.8	0.4	0.7	0.7	1.7
11/27/2019 13:00	1.5	4.3	0.4	0.7	0.7	1.7
11/27/2019 14:00	1.5	3.8	0.4	0.6	0.6	1.5
11/27/2019 15:00	1.5	3.9	0.4	0.7	0.7	1.6
11/27/2019 16:00	1.5	3.0	0.3	0.4	0.4	2.0
11/27/2019 17:00	1.5	1.3	0.3	0.1	0.1	2.5
11/28/2019 16:00	1.5	1.5	0.3	0.2	0.2	2.4
11/28/2019 17:00	1.6	2.5	0.3	0.3	0.3	2.5
11/28/2019 18:00	1.4	2.4	0.3	0.4	0.4	2.4
11/28/2019 19:00	1.5	0.5	0.3	0.1	0.1	2.5

Period Start:	Average	Average	Average	Average	Average
	8NOxCorOP1 ppm	8NOX#OP1HR LBS	8COCorOP1 ppm	8CO#OP1HR LBS	8NH3CorOP1 ppm
11/30/2019 11:00	1.5	1.8	0.2	0.2	2.2
11/30/2019 12:00	1.6	3.2	0.3	0.4	2.3
11/30/2019 13:00	1.4	5.1	0.4	1.0	1.9
11/30/2019 14:00	1.6	4.6	0.4	0.8	1.9
11/30/2019 15:00	1.3	1.7	0.4	0.3	2.6
11/30/2019 16:00	1.5	1.9	0.2	0.2	2.5
11/30/2019 17:00	1.5	1.8	0.2	0.1	2.6
12/01/2019 09:00	1.3	0.1	0.4	0.0	2.0
12/01/2019 10:00	1.5	4.9	0.4	0.9	1.6
12/01/2019 11:00	1.5	4.5	0.4	0.7	1.8
12/01/2019 12:00	1.5	2.1	0.2	0.1	2.4
12/01/2019 13:00	1.5	2.6	0.2	0.2	2.4
12/01/2019 14:00	1.5	3.5	0.4	0.5	1.9
12/01/2019 15:00	1.5	3.8	0.4	0.6	1.6
12/01/2019 17:00	1.5	1.4	0.1	0.1	2.4
12/02/2019 06:00	1.1	0.7	0.3	0.1	1.6
12/02/2019 07:00	1.5	2.5	0.2	0.2	1.9
12/02/2019 11:00	1.4	1.9	0.1	0.1	2.1
12/02/2019 12:00	1.5	2.1	0.0	0.0	2.3
12/02/2019 13:00	1.5	2.4	0.0	0.0	2.0
12/02/2019 14:00	1.5	2.2	0.3	0.3	1.8
12/02/2019 15:00	1.5	3.0	0.1	0.2	2.1
12/02/2019 16:00	1.5	2.3	0.0	0.0	2.0
12/02/2019 17:00	1.5	2.1	0.0	0.0	2.2
12/02/2019 18:00	1.5	2.1	0.0	0.0	2.7
12/02/2019 19:00	1.5	0.4	0.0	0.0	2.7
12/02/2019 21:00	1.5	1.5	0.0	0.0	2.4
12/02/2019 22:00	1.5	2.1	0.0	0.0	2.4
12/03/2019 08:00	1.5	3.9	0.3	0.4	1.7
12/03/2019 09:00	1.5	4.8	0.4	0.7	1.6
12/03/2019 10:00	1.5	4.8	0.3	0.6	1.7
12/03/2019 11:00	1.5	2.6	0.2	0.2	1.8
12/03/2019 16:00	1.4	0.4	0.0	0.0	2.1
12/03/2019 17:00	1.5	2.5	0.0	0.0	2.0
12/03/2019 18:00	1.5	2.7	0.0	0.1	2.5
12/03/2019 19:00	1.5	2.0	0.0	0.0	2.5
12/03/2019 20:00	1.5	2.7	0.1	0.1	2.3
12/03/2019 21:00	1.5	2.1	0.1	0.1	2.2
12/04/2019 09:00	1.4	2.1	0.4	0.3	2.0
12/04/2019 10:00	1.5	5.6	0.2	0.4	2.0
12/04/2019 11:00	1.5	5.6	0.1	0.3	2.0
12/04/2019 12:00	1.5	5.3	0.2	0.5	2.0
12/04/2019 13:00	1.5	5.5	0.3	0.6	2.0
12/04/2019 14:00	1.5	5.2	0.4	0.8	2.0
12/04/2019 15:00	1.5	4.6	0.4	0.8	1.7
12/04/2019 16:00	1.5	5.1	0.4	0.9	1.7
12/04/2019 17:00	1.5	5.4	0.4	0.8	2.0
12/04/2019 18:00	1.5	5.3	0.4	0.8	1.9
12/04/2019 19:00	1.5	5.6	0.4	0.8	2.0
12/04/2019 20:00	1.5	5.3	0.3	0.7	2.0
12/04/2019 21:00	1.5	5.3	0.3	0.7	2.0
12/05/2019 06:00	1.8	0.5	0.0	0.0	2.0
12/05/2019 07:00	1.4	5.0	0.2	0.5	2.0
12/05/2019 08:00	1.4	5.1	0.2	0.5	1.9
12/05/2019 09:00	1.5	5.6	0.3	0.6	1.9
12/05/2019 10:00	1.5	5.5	0.4	0.8	1.9
12/05/2019 11:00	1.5	5.4	0.5	1.0	2.0
12/05/2019 12:00	1.5	3.6	0.5	0.7	2.0
12/05/2019 13:00	1.5	5.6	0.5	1.1	2.0
12/05/2019 14:00	1.5	5.7	0.4	0.9	2.0
12/05/2019 15:00	1.5	5.7	0.4	0.8	1.9
12/05/2019 16:00	1.5	5.7	0.4	0.8	1.9
12/05/2019 17:00	1.5	5.7	0.3	0.7	1.9
12/05/2019 18:00	1.5	5.8	0.3	0.6	1.9
12/05/2019 19:00	1.5	5.6	0.2	0.5	1.8
12/05/2019 20:00	1.5	5.3	0.2	0.5	1.8
12/05/2019 21:00	1.6	3.8	0.2	0.4	2.4
12/05/2019 22:00	1.1	0.4	0.3	0.1	2.7
12/06/2019 06:00	1.6	2.6	0.2	0.2	2.0
12/06/2019 07:00	1.4	4.9	0.3	0.7	1.7
12/06/2019 08:00	1.5	1.2	0.1	0.0	1.9
12/06/2019 10:00	1.4	2.8	0.1	0.2	2.5

Period Start:	Average	Average	Average	Average	Average
	8NOxCorOP1 ppm	8NOx#OP1HR LBS	8COCorOP1 ppm	8CO#OP1HR LBS	8NH3CorOP1 ppm
12/06/2019 11:00	1.5	2.2	0.0	0.0	2.7
12/06/2019 12:00	1.5	2.2	0.0	0.0	2.8
12/06/2019 13:00	1.5	4.1	0.2	0.4	2.3
12/06/2019 14:00	1.6	4.3	0.2	0.4	2.0
12/06/2019 15:00	1.5	2.6	0.0	0.1	2.7
12/06/2019 16:00	1.5	2.2	0.1	0.2	2.5
12/06/2019 17:00	1.5	3.7	0.5	0.7	1.9
12/06/2019 18:00	1.5	2.7	0.3	0.3	2.1
12/06/2019 19:00	1.5	2.9	0.3	0.3	2.6
12/06/2019 20:00	1.5	0.5	0.2	0.1	2.3
12/07/2019 09:00	1.2	0.8	0.3	0.1	2.1
12/07/2019 10:00	1.5	3.6	0.2	0.3	1.6
12/07/2019 11:00	1.5	3.0	0.1	0.2	2.0
12/07/2019 12:00	1.5	2.2	0.0	0.0	2.5
12/07/2019 13:00	1.5	2.2	0.0	0.0	2.5
12/07/2019 14:00	1.6	4.5	0.3	0.5	2.1
12/07/2019 15:00	1.4	1.8	0.0	0.0	2.8
12/07/2019 16:00	1.5	1.8	0.0	0.0	2.8
12/07/2019 17:00	1.5	1.8	0.0	0.0	2.8
12/07/2019 18:00	1.5	2.2	0.0	0.0	2.6
12/07/2019 19:00	1.5	3.9	0.2	0.4	2.1
12/07/2019 20:00	1.5	4.8	0.3	0.6	1.8
12/07/2019 21:00	1.5	3.7	0.2	0.4	1.7
12/08/2019 11:00	1.5	0.4	0.2	0.0	1.8
12/08/2019 12:00	1.5	1.0	0.2	0.1	2.1
12/09/2019 06:00	1.5	1.6	0.4	0.2	1.9
12/09/2019 07:00	1.5	3.5	0.4	0.6	2.1
12/09/2019 08:00	1.4	1.9	0.6	0.5	2.2
12/09/2019 09:00	1.4	2.4	0.5	0.4	2.1
12/09/2019 11:00	1.5	3.6	0.4	0.6	1.6
12/09/2019 12:00	1.5	3.8	0.4	0.6	1.7
12/09/2019 13:00	1.5	3.3	0.3	0.4	2.0
12/09/2019 14:00	1.4	0.6	0.3	0.1	2.0
12/09/2019 17:00	1.4	4.2	0.4	0.7	1.8
12/09/2019 18:00	1.5	4.5	0.4	0.8	1.6
12/09/2019 19:00	1.4	5.2	0.4	0.9	1.7
12/09/2019 20:00	1.5	4.9	0.4	0.9	1.7
12/09/2019 21:00	1.5	4.9	0.5	0.9	1.8
12/09/2019 22:00	1.5	2.5	0.4	0.5	1.9
12/10/2019 08:00	1.4	3.2	0.5	0.7	1.7
12/10/2019 09:00	1.5	4.9	0.5	0.9	1.7
12/10/2019 10:00	1.5	5.1	0.5	1.0	1.7
12/10/2019 11:00	1.5	4.9	0.5	0.9	1.6
12/10/2019 12:00	1.5	2.7	0.3	0.4	2.0
12/10/2019 13:00	1.5	2.9	0.4	0.4	1.8
12/10/2019 14:00	1.6	2.8	0.5	0.5	2.0
12/10/2019 15:00	1.5	3.8	0.4	0.6	1.9
12/10/2019 16:00	1.5	2.4	0.2	0.2	2.5
12/10/2019 17:00	1.4	3.3	0.4	0.5	2.0
12/10/2019 18:00	1.6	1.0	0.2	0.1	2.7
12/11/2019 09:00	1.5	2.5	0.4	0.4	1.9
12/11/2019 10:00	1.5	3.4	0.4	0.6	2.0
12/11/2019 15:00	1.6	0.4	0.2	0.0	2.0
12/11/2019 16:00	1.5	3.1	0.3	0.4	2.2
12/11/2019 17:00	1.5	4.5	0.5	0.9	1.7
12/11/2019 18:00	1.5	4.8	0.5	0.9	1.7
12/11/2019 19:00	1.5	5.1	0.4	0.9	1.8
12/11/2019 20:00	1.5	4.3	0.4	0.8	1.7
12/11/2019 21:00	1.5	4.2	0.4	0.8	1.6
12/12/2019 06:00	1.5	1.6	0.4	0.3	2.4
12/12/2019 07:00	1.5	4.2	0.6	1.0	2.0
12/12/2019 08:00	1.6	3.3	0.4	0.5	2.6
12/12/2019 09:00	1.4	2.5	0.4	0.4	2.4
12/12/2019 10:00	1.5	1.5	0.3	0.2	2.3
12/12/2019 11:00	1.5	2.1	0.4	0.3	2.8
12/12/2019 12:00	1.5	2.3	0.3	0.3	2.4
12/12/2019 13:00	1.5	2.1	0.2	0.2	2.3
12/12/2019 14:00	1.5	2.2	0.3	0.2	2.3
12/12/2019 15:00	1.5	2.1	0.2	0.2	2.5
12/12/2019 16:00	1.5	2.2	0.2	0.2	2.5
12/12/2019 17:00	1.5	2.5	0.3	0.3	2.2
12/12/2019 18:00	1.5	2.0	0.2	0.2	2.7

Period Start:	Average	Average	Average	Average	Average
	8NOxCorOP1 ppm	8NOx#OP1HR LBS	8COCorOP1 ppm	8CO#OP1HR LBS	8NH3CorOP1 ppm
12/13/2019 09:00	1.7	1.7	0.3	0.2	2.0
12/13/2019 10:00	1.4	3.5	0.4	0.7	1.8
12/13/2019 11:00	1.5	3.8	0.4	0.7	1.7
12/13/2019 12:00	1.5	3.4	0.4	0.5	2.1
12/13/2019 13:00	1.5	3.8	0.5	0.8	1.6
12/13/2019 14:00	1.5	3.9	0.5	0.8	1.4
12/13/2019 15:00	1.5	4.0	0.5	0.8	1.6
12/13/2019 16:00	1.5	4.2	0.4	0.8	1.9
12/13/2019 17:00	1.5	4.1	0.5	0.8	1.8
12/13/2019 18:00	1.5	2.6	0.6	0.6	1.8
12/13/2019 19:00	1.5	4.1	0.5	0.8	1.8
12/14/2019 09:00	1.5	2.6	0.3	0.4	2.1
12/14/2019 10:00	1.5	2.3	0.3	0.3	2.4
12/14/2019 11:00	1.5	4.3	0.4	0.7	2.0
12/14/2019 12:00	1.5	5.0	0.4	0.9	1.7
12/14/2019 13:00	1.5	5.1	0.4	0.9	1.6
12/14/2019 14:00	1.5	5.0	0.4	0.8	1.6
12/14/2019 15:00	1.5	5.0	0.5	0.9	1.7
12/14/2019 16:00	1.5	5.1	0.5	0.9	1.6
12/14/2019 17:00	1.5	5.4	0.5	0.9	1.8
12/14/2019 18:00	1.5	4.9	0.5	0.9	1.7
12/14/2019 19:00	1.5	5.1	0.5	0.9	1.6
12/15/2019 16:00	1.5	0.4	0.3	0.0	1.8
12/15/2019 17:00	1.5	1.0	0.3	0.1	1.8
12/16/2019 06:00	2.3	0.7	0.1	0.0	2.5
12/16/2019 07:00	1.4	2.3	0.2	0.2	2.3
12/16/2019 08:00	1.4	2.3	0.4	0.4	2.3
12/16/2019 09:00	1.5	3.5	0.3	0.5	1.9
12/16/2019 10:00	1.5	2.3	0.2	0.2	2.1
12/16/2019 17:00	1.5	1.4	0.0	0.0	2.5
12/16/2019 18:00	1.5	2.7	0.1	0.1	2.5
12/16/2019 19:00	1.5	2.4	0.0	0.0	2.3
12/16/2019 20:00	1.5	3.7	0.3	0.5	2.2
12/16/2019 21:00	1.5	1.7	0.0	0.0	2.6
12/17/2019 08:00	1.4	1.9	0.2	0.2	2.4
12/17/2019 09:00	1.5	4.4	0.4	0.7	2.0
12/17/2019 10:00	1.5	2.5	0.1	0.2	2.2
12/17/2019 11:00	1.5	3.4	0.3	0.4	2.0
12/17/2019 12:00	1.5	2.0	0.1	0.1	2.3
12/17/2019 17:00	1.5	1.6	0.3	0.2	2.5
12/18/2019 08:00	1.2	1.6	0.6	0.5	1.8
12/18/2019 09:00	1.5	5.0	0.5	1.0	1.7
12/18/2019 10:00	1.5	5.1	0.4	0.9	1.6
12/18/2019 11:00	1.5	4.9	0.3	0.7	1.7
12/18/2019 12:00	1.5	5.1	0.4	0.8	1.7
12/18/2019 13:00	1.5	5.2	0.4	0.8	1.6
12/18/2019 14:00	1.5	5.0	0.5	1.0	1.8
12/18/2019 15:00	1.5	4.5	0.5	0.9	1.5
12/18/2019 16:00	1.5	4.8	0.5	1.0	1.8
12/18/2019 17:00	1.5	5.2	0.5	1.1	1.7
12/18/2019 18:00	1.5	4.8	0.4	0.8	1.6
12/18/2019 19:00	1.5	4.2	0.4	0.7	1.7
12/18/2019 20:00	1.5	3.6	0.4	0.6	1.8
12/18/2019 21:00	1.5	1.0	0.2	0.1	2.4
12/19/2019 06:00	1.6	0.4	0.1	0.0	2.2
12/19/2019 07:00	1.5	3.0	0.2	0.3	2.1
12/19/2019 08:00	1.5	3.3	0.3	0.4	1.8
12/19/2019 09:00	1.5	3.3	0.3	0.4	1.8
12/19/2019 10:00	1.5	3.4	0.2	0.3	1.8
12/19/2019 11:00	1.5	3.4	0.4	0.5	1.8
12/19/2019 12:00	1.5	3.3	0.4	0.5	1.8
12/19/2019 13:00	1.5	2.1	0.5	0.5	2.0
12/19/2019 14:00	1.5	3.4	0.4	0.5	1.8
12/19/2019 15:00	1.5	3.7	0.4	0.6	1.9
12/19/2019 16:00	1.5	3.9	0.5	0.7	1.9
12/19/2019 17:00	1.5	4.2	0.5	0.8	1.7
12/19/2019 18:00	1.5	4.1	0.4	0.7	1.9
12/19/2019 19:00	1.5	4.4	0.3	0.6	1.7
12/19/2019 20:00	1.3	0.4	0.2	0.0	2.8
12/20/2019 17:00	1.5	2.4	0.2	0.2	2.1
12/20/2019 18:00	1.4	0.6	0.0	0.0	2.6
12/26/2019 17:00	1.5	1.4	0.0	0.0	2.1

Period Start:	Average 8NOxCorOP1 ppm	Average 8NOX#OP1HR LBS	Average 8COCorOP1 ppm	Average 8CO#OP1HR LBS	Average 8NH3CorOP1 ppm
12/26/2019 18:00	1.5	3.9	0.0	0.0	2.1
12/26/2019 19:00	1.5	5.0	0.0	0.1	1.6
12/26/2019 20:00	1.5	5.1	0.0	0.1	1.8
12/26/2019 21:00	1.5	3.3	0.0	0.0	2.2
12/26/2019 22:00	1.5	2.1	0.0	0.0	2.2
12/30/2019 17:00	1.5	1.5	0.0	0.0	2.2
12/30/2019 18:00	1.5	1.5	0.0	0.0	2.7
12/30/2019 19:00	1.5	1.9	0.0	0.0	2.5
12/31/2019 17:00	1.5	1.3	0.0	0.0	2.1
Final Average*	1.5	2.8	0.2	0.3	2.1
Maximum*	2.6	5.8	1.4	1.1	4.7
	11/20/2019 19:00	12/05/2019 18:00	11/01/2019 16:00	12/18/2019 17:00	10/30/2019 19:00
Minimum*	0.5	0.0	0.0	0.0	1.3
	10/30/2019 18:00	10/13/2019 12:00	12/31/2019 17:00	12/31/2019 17:00	11/07/2019 16:00

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
 Generated: 1/21/2020 12:44

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008
 Source: 9

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Validation Type: 1/60 min
 Averaging Period: 1 hr
 Type: Block Avg

Period Start:	Average 9NOxCorOP1 ppm	Average 9NOX#OP1HR LBS	Average 9COCorOP1 ppm	Average 9CO#OP1HR LBS	Average 9NH3CorOP1 ppm
10/01/2019 05:00	1.5	1.5	0.0	0.0	3.0
10/01/2019 06:00	1.5	1.8	0.0	0.0	3.2
10/02/2019 18:00	1.6	2.0	0.0	0.0	3.3
10/02/2019 19:00	1.5	0.3	0.0	0.0	3.4
10/03/2019 05:00	1.6	0.9	0.0	0.0	2.7
10/03/2019 17:00	1.4	0.6	0.0	0.0	2.9
10/03/2019 18:00	1.6	1.3	0.0	0.0	3.2
10/04/2019 05:00	1.3	0.4	0.0	0.0	2.9
10/04/2019 06:00	1.6	1.5	0.0	0.0	3.8
10/04/2019 17:00	1.6	1.3	0.0	0.0	3.0
10/05/2019 16:00	1.5	1.8	0.0	0.0	3.1
10/05/2019 17:00	1.5	1.5	0.0	0.0	2.6
10/05/2019 18:00	1.5	2.5	0.0	0.0	2.4
10/05/2019 19:00	1.6	1.8	0.0	0.0	3.2
10/06/2019 15:00	1.5	3.0	0.3	0.6	3.1
10/06/2019 16:00	1.5	2.1	0.0	0.0	3.1
10/06/2019 17:00	1.5	1.9	0.0	0.0	3.0
10/06/2019 18:00	1.5	1.7	0.0	0.0	2.9
10/07/2019 09:00	1.5	1.5	0.0	0.0	3.2
10/07/2019 17:00	1.6	2.1	0.0	0.0	3.2
10/07/2019 18:00	1.5	1.7	0.0	0.0	3.0
10/08/2019 16:00	1.5	1.8	0.0	0.0	3.1
10/08/2019 17:00	1.5	2.5	0.0	0.0	3.2
10/08/2019 18:00	1.6	1.8	0.0	0.0	3.2
10/09/2019 17:00	1.5	1.7	0.1	0.1	2.3
10/09/2019 18:00	1.5	3.7	0.0	0.0	2.2
10/10/2019 05:00	1.5	1.4	0.0	0.0	3.3
10/10/2019 06:00	1.5	0.4	0.0	0.0	3.7
10/10/2019 13:00	1.5	0.7	0.0	0.0	2.4
10/10/2019 14:00	1.5	3.1	0.0	0.0	2.5
10/10/2019 15:00	1.5	4.3	0.0	0.0	2.5
10/10/2019 16:00	1.5	4.3	0.0	0.0	2.5
10/10/2019 17:00	1.5	4.5	0.0	0.0	2.7
10/10/2019 18:00	1.5	2.3	0.0	0.0	2.5
10/11/2019 05:00	1.6	1.0	0.0	0.0	3.0
10/11/2019 06:00	1.5	2.7	0.0	0.0	2.9
10/11/2019 07:00	1.6	2.6	0.0	0.0	2.9
10/11/2019 08:00	1.3	3.5	0.0	0.0	2.3
10/11/2019 09:00	1.5	4.2	0.0	0.0	2.6
10/11/2019 10:00	1.4	3.2	0.0	0.0	2.7
10/11/2019 11:00	1.5	3.0	0.0	0.0	2.5
10/11/2019 12:00	1.6	2.8	0.0	0.0	2.6
10/11/2019 13:00	1.5	1.6	0.0	0.0	3.3
10/11/2019 14:00	1.5	2.5	0.0	0.0	2.7
10/11/2019 17:00	1.6	0.1	0.0	0.0	2.6
10/11/2019 18:00	1.5	1.9	0.0	0.0	2.6
10/12/2019 07:00	1.3	3.5	0.1	0.2	3.1
10/12/2019 08:00	1.5	4.8	0.0	0.0	2.4
10/12/2019 09:00	1.5	5.3	0.0	0.0	2.6
10/12/2019 10:00	1.5	4.6	0.0	0.0	2.5
10/12/2019 11:00	1.5	4.8	0.0	0.0	2.4
10/12/2019 12:00	1.5	3.3	0.0	0.0	3.1
10/12/2019 13:00	1.5	1.7	0.0	0.0	3.2
10/12/2019 17:00	1.5	1.4	0.0	0.0	3.3
10/12/2019 18:00	1.5	1.7	0.0	0.0	3.3
10/13/2019 17:00	1.5	1.3	0.0	0.0	3.2
10/13/2019 18:00	1.5	1.7	0.0	0.0	3.3
10/18/2019 17:00	1.5	1.3	0.0	0.0	3.2
10/21/2019 19:00	1.5	1.3	0.0	0.0	2.8
10/22/2019 05:00	4.6	5.8	0.0	0.0	2.7 BRK-0060
10/22/2019 06:00	1.5	1.8	0.0	0.0	2.7
10/22/2019 15:00	1.2	0.6	0.0	0.0	2.3
10/22/2019 16:00	1.5	2.2	0.0	0.0	2.8

Period Start:	Average	Average	Average	Average	Average
	9NOxCorOP1 ppm	9NOX#OP1HR LBS	9COCorOP1 ppm	9CO#OP1HR LBS	9NH3CorOP1 ppm
10/22/2019 17:00	1.5	2.0	0.0	0.0	2.7
10/22/2019 18:00	1.6	0.8	0.0	0.0	3.4
10/22/2019 19:00	1.5	1.4	0.0	0.0	3.0
10/23/2019 10:00	1.4	3.7	0.0	0.0	2.2
10/23/2019 11:00	1.5	2.6	0.0	0.0	2.8
10/23/2019 12:00	1.4	3.0	0.0	0.0	2.7
10/23/2019 13:00	1.5	3.5	0.0	0.0	3.1
10/23/2019 14:00	1.5	2.4	0.0	0.0	3.1
10/23/2019 15:00	1.4	4.3	0.0	0.1	2.6
10/23/2019 16:00	1.5	3.8	0.0	0.0	2.3
10/23/2019 17:00	1.5	3.0	0.0	0.0	2.4
10/23/2019 18:00	1.6	2.1	0.0	0.0	2.8
10/24/2019 05:00	1.4	0.5	0.0	0.0	3.4
10/24/2019 06:00	1.5	1.3	0.0	0.0	3.1
10/24/2019 13:00	1.6	0.9	0.0	0.0	2.8
10/24/2019 14:00	1.5	2.4	0.0	0.0	3.0
10/24/2019 15:00	1.5	2.0	0.0	0.0	3.0
10/24/2019 16:00	1.5	4.0	0.1	0.1	2.7
10/24/2019 17:00	1.4	4.0	0.0	0.0	2.6
10/24/2019 18:00	1.5	3.9	0.0	0.0	2.8
10/24/2019 19:00	1.5	2.0	0.0	0.0	3.2
10/24/2019 20:00	1.4	0.3	0.0	0.0	3.6
10/25/2019 08:00	1.5	2.1	0.0	0.0	2.6
10/25/2019 09:00	1.5	3.7	0.0	0.0	2.8
10/25/2019 10:00	1.4	2.8	0.0	0.0	2.6
10/25/2019 11:00	1.5	2.8	0.0	0.0	2.6
10/25/2019 12:00	1.5	3.3	0.0	0.0	2.5
10/25/2019 13:00	1.5	1.0	0.0	0.0	2.9
10/25/2019 17:00	1.5	1.0	0.0	0.0	2.1
10/25/2019 18:00	1.5	2.6	0.0	0.0	2.8
10/25/2019 19:00	1.5	0.3	0.0	0.0	3.6
10/26/2019 16:00	1.5	2.1	0.0	0.0	2.8
10/26/2019 17:00	1.5	2.4	0.0	0.0	3.1
10/26/2019 18:00	1.5	1.9	0.0	0.0	3.1
10/28/2019 17:00	1.4	4.1	0.4	0.7	2.5
10/28/2019 18:00	1.4	0.7	0.1	0.0	2.3
10/29/2019 05:00	1.8	1.6	0.0	0.0	3.4
10/29/2019 06:00	0.8	0.2	0.0	0.0	3.8
10/29/2019 16:00	1.4	0.3	0.2	0.0	2.7
10/29/2019 17:00	1.5	4.0	0.1	0.2	2.4
10/29/2019 18:00	1.6	1.7	0.0	0.0	3.0
10/30/2019 05:00	1.5	2.6	0.2	0.3	3.7
10/30/2019 06:00	1.6	2.9	0.2	0.3	3.1
10/30/2019 17:00	1.4	2.3	0.7	0.7	3.2
10/30/2019 18:00	1.5	2.4	0.0	0.0	3.4
10/30/2019 19:00	1.5	2.2	0.0	0.0	3.9
10/30/2019 20:00	1.5	0.4	0.0	0.0	4.0
10/31/2019 05:00	1.6	2.1	0.3	0.3	3.8
10/31/2019 06:00	1.5	2.7	0.3	0.4	2.8
10/31/2019 17:00	1.6	1.1	0.0	0.0	3.3
10/31/2019 18:00	1.5	0.4	0.0	0.0	4.2
11/01/2019 05:00	1.8	1.4	0.0	0.0	3.2
11/01/2019 06:00	1.3	1.5	0.4	0.4	3.4
11/01/2019 16:00	1.2	0.9	0.8	0.3	3.9
11/01/2019 17:00	1.6	1.3	0.0	0.0	3.4
11/01/2019 18:00	1.5	0.3	0.0	0.0	2.9
11/02/2019 05:00	1.6	0.5	0.0	0.0	3.3
11/02/2019 06:00	1.5	3.3	0.0	0.0	3.2
11/02/2019 07:00	1.5	3.8	0.2	0.5	3.0
11/02/2019 08:00	1.5	2.2	0.0	0.0	3.0
11/02/2019 20:00	1.4	3.0	0.0	0.0	3.4
11/03/2019 07:00	1.4	2.9	0.0	0.0	3.2
11/03/2019 08:00	1.5	3.3	0.0	0.1	2.7
11/03/2019 09:00	1.5	2.1	0.0	0.0	3.3
11/03/2019 10:00	1.5	2.1	0.0	0.0	3.3
11/03/2019 11:00	1.5	2.1	0.0	0.0	3.3
11/03/2019 12:00	1.5	2.7	0.0	0.0	2.8
11/03/2019 13:00	1.5	0.3	0.0	0.0	3.4
11/04/2019 06:00	1.5	3.0	0.1	0.1	3.0
11/04/2019 07:00	1.4	1.4	0.0	0.0	3.5
11/04/2019 11:00	2.4	0.1	0.0	0.0	2.7
11/04/2019 12:00	1.3	2.0	0.2	0.2	3.0

Period Start:	Average	Average	Average	Average	Average
	9NOxCorOP1 ppm	9NOX#OP1HR LBS	9COCorOP1 ppm	9CO#OP1HR LBS	9NH3CorOP1 ppm
11/04/2019 13:00	1.5	3.2	0.1	0.3	3.3
11/04/2019 14:00	1.5	4.2	0.1	0.2	3.0
11/04/2019 15:00	1.5	3.3	0.0	0.1	3.6
11/04/2019 16:00	1.5	4.3	0.0	0.1	3.1
11/04/2019 17:00	1.6	3.5	0.0	0.0	2.9
11/04/2019 18:00	1.5	2.2	0.0	0.0	3.5
11/04/2019 19:00	1.4	4.3	0.1	0.2	3.2
11/04/2019 20:00	1.4	2.1	0.0	0.0	2.9
11/05/2019 16:00	1.5	3.1	0.0	0.1	3.4
11/05/2019 17:00	1.5	2.2	0.0	0.0	3.4
11/05/2019 18:00	1.5	1.2	0.0	0.0	3.4
11/06/2019 16:00	1.5	1.4	0.0	0.0	3.5
11/06/2019 17:00	1.6	2.1	0.0	0.0	3.5
11/07/2019 15:00	1.0	0.9	0.1	0.1	3.8
11/07/2019 16:00	1.5	3.4	0.1	0.2	3.4
11/07/2019 17:00	1.5	4.6	0.1	0.1	3.0
11/07/2019 18:00	1.6	3.4	0.1	0.2	3.3
11/07/2019 19:00	1.4	1.2	0.0	0.0	3.4
11/07/2019 20:00	1.5	1.0	0.0	0.0	3.6
11/12/2019 17:00	1.5	1.2	0.0	0.0	3.5
11/15/2019 16:00	1.5	1.8	0.0	0.0	2.8
11/17/2019 15:00	1.6	0.5	0.0	0.0	2.6
11/17/2019 16:00	1.5	2.8	0.0	0.0	3.3
11/17/2019 17:00	1.6	2.5	0.0	0.0	3.2
11/17/2019 18:00	1.4	1.8	0.0	0.0	4.1
11/18/2019 16:00	1.5	3.0	0.0	0.0	3.8
11/18/2019 17:00	1.5	1.9	0.0	0.0	3.7
11/18/2019 20:00	1.5	2.4	0.0	0.0	2.8
11/18/2019 21:00	1.2	0.7	0.0	0.0	3.8
11/20/2019 19:00	1.6	0.6	0.0	0.0	3.1
11/20/2019 20:00	1.4	0.7	0.0	0.0	3.1
11/21/2019 17:00	1.5	2.3	0.0	0.0	3.4
11/22/2019 06:00	1.6	1.7	0.0	0.0	3.3
11/22/2019 07:00	1.5	2.9	0.0	0.1	3.9
11/22/2019 08:00	1.5	0.9	0.0	0.0	3.6
11/22/2019 17:00	1.5	1.5	0.0	0.0	3.7
11/24/2019 18:00	1.4	2.9	0.1	0.2	2.4
11/24/2019 19:00	1.6	0.6	0.0	0.0	2.7
11/26/2019 06:00	1.6	0.9	0.0	0.0	4.1
11/26/2019 07:00	1.9	0.7	0.0	0.0	4.2
11/27/2019 08:00	1.5	1.7	0.0	0.0	3.5
11/27/2019 09:00	1.5	3.6	0.2	0.5	3.1
11/27/2019 10:00	1.5	2.6	0.0	0.0	3.4
11/27/2019 11:00	1.4	2.8	0.3	0.4	2.8
11/27/2019 12:00	1.5	4.9	0.1	0.2	2.8
11/27/2019 13:00	1.5	4.3	0.1	0.2	2.6
11/27/2019 14:00	1.5	3.7	0.0	0.1	2.2
11/27/2019 15:00	1.5	3.8	0.1	0.1	2.3
11/27/2019 16:00	1.5	3.0	0.0	0.0	2.9
11/27/2019 17:00	1.5	1.9	0.0	0.0	3.6
11/28/2019 16:00	1.5	1.5	0.0	0.0	3.2
11/28/2019 17:00	1.5	2.2	0.0	0.0	3.4
11/28/2019 18:00	1.5	2.4	0.0	0.0	3.1
11/28/2019 19:00	1.7	0.5	0.0	0.0	3.4
11/29/2019 08:00	1.5	1.9	0.0	0.0	3.1
11/29/2019 09:00	1.5	1.5	0.0	0.0	2.6
11/29/2019 16:00	1.5	3.0	0.1	0.1	2.6
11/29/2019 17:00	1.5	2.3	0.0	0.1	3.0
11/29/2019 18:00	1.5	2.3	0.0	0.0	3.2
11/30/2019 16:00	1.6	0.8	0.1	0.0	3.6
11/30/2019 17:00	1.5	1.9	0.0	0.0	3.6
11/30/2019 21:00	1.6	1.5	0.0	0.0	3.5
12/01/2019 09:00	2.0	0.1	0.0	0.0	3.1
12/01/2019 10:00	1.4	5.0	0.2	0.4	2.6
12/01/2019 11:00	1.5	4.7	0.1	0.2	2.8
12/01/2019 12:00	1.4	2.1	0.0	0.0	2.7
12/01/2019 13:00	1.5	2.5	0.0	0.0	3.0
12/01/2019 14:00	1.6	0.5	0.0	0.0	2.2
12/01/2019 17:00	1.5	1.4	0.0	0.0	2.8
12/02/2019 06:00	1.1	0.7	0.1	0.0	2.8
12/02/2019 07:00	1.5	2.6	0.1	0.1	2.7
12/02/2019 11:00	1.4	1.8	0.0	0.0	3.1

Period Start:	Average	Average	Average	Average	Average
	9NOxCorOP1 ppm	9NOx#OP1HR LBS	9COCorOP1 ppm	9CO#OP1HR LBS	9NH3CorOP1 ppm
12/02/2019 12:00	1.6	2.1	0.0	0.0	3.6
12/02/2019 13:00	1.5	2.3	0.0	0.0	3.1
12/02/2019 14:00	1.4	2.1	0.2	0.2	2.5
12/02/2019 15:00	1.5	3.0	0.0	0.0	2.7
12/02/2019 16:00	1.5	2.3	0.0	0.0	3.0
12/02/2019 17:00	1.5	1.9	0.0	0.0	4.0
12/02/2019 18:00	1.5	1.9	0.0	0.0	3.8
12/02/2019 19:00	1.5	0.4	0.0	0.0	3.7
12/02/2019 21:00	1.6	1.4	0.0	0.0	3.7
12/02/2019 22:00	1.5	2.1	0.0	0.0	3.6
12/03/2019 08:00	1.4	3.8	0.1	0.2	2.9
12/03/2019 09:00	1.5	4.8	0.1	0.2	2.4
12/03/2019 10:00	1.5	4.9	0.1	0.2	2.6
12/03/2019 11:00	1.5	2.5	0.0	0.0	2.5
12/03/2019 16:00	1.6	0.4	0.0	0.0	3.0
12/03/2019 17:00	1.5	2.5	0.0	0.0	3.0
12/03/2019 18:00	1.5	2.5	0.0	0.0	3.5
12/03/2019 19:00	1.5	2.1	0.0	0.0	3.7
12/03/2019 20:00	1.5	2.7	0.0	0.0	3.3
12/03/2019 21:00	1.5	2.1	0.0	0.0	3.0
12/04/2019 09:00	1.4	1.9	0.1	0.1	3.2
12/04/2019 10:00	1.5	5.6	0.1	0.2	2.9
12/04/2019 11:00	1.4	5.2	0.0	0.0	2.9
12/04/2019 12:00	1.5	5.4	0.0	0.1	2.9
12/04/2019 13:00	1.5	5.4	0.1	0.1	2.9
12/04/2019 14:00	1.5	5.4	0.1	0.2	2.9
12/04/2019 15:00	1.5	4.5	0.1	0.2	2.7
12/04/2019 16:00	1.5	5.2	0.1	0.2	2.9
12/04/2019 17:00	1.5	5.5	0.1	0.2	2.9
12/04/2019 18:00	1.5	5.4	0.1	0.2	2.9
12/04/2019 19:00	1.5	5.5	0.1	0.1	2.8
12/04/2019 20:00	1.5	5.5	0.1	0.1	2.8
12/04/2019 21:00	1.5	5.3	0.1	0.2	2.9
12/04/2019 22:00	1.4	0.1	0.2	0.0	3.6
12/05/2019 06:00	1.9	0.6	0.0	0.0	3.3
12/05/2019 07:00	1.4	4.8	0.1	0.2	3.1
12/05/2019 08:00	1.5	5.3	0.1	0.2	2.8
12/05/2019 09:00	1.5	5.4	0.1	0.3	2.9
12/05/2019 10:00	1.5	5.6	0.1	0.2	2.8
12/05/2019 11:00	1.5	5.4	0.2	0.4	3.0
12/05/2019 12:00	1.5	4.7	0.1	0.1	3.3
12/05/2019 13:00	1.5	4.4	0.3	0.4	3.1
12/05/2019 14:00	1.5	5.6	0.1	0.2	3.3
12/05/2019 15:00	1.5	5.6	0.1	0.2	3.3
12/05/2019 16:00	1.5	5.4	0.1	0.3	3.1
12/05/2019 17:00	1.5	5.5	0.1	0.3	3.1
12/05/2019 18:00	1.5	5.7	0.1	0.2	3.1
12/05/2019 19:00	1.5	5.5	0.1	0.1	3.3
12/05/2019 20:00	1.5	5.2	0.1	0.1	3.1
12/05/2019 21:00	1.6	3.6	0.0	0.1	3.4
12/05/2019 22:00	1.2	0.4	0.0	0.0	3.7
12/06/2019 06:00	1.6	2.5	0.0	0.0	3.3
12/06/2019 07:00	1.4	4.8	0.1	0.3	2.7
12/06/2019 08:00	1.6	1.2	0.0	0.0	3.0
12/06/2019 13:00	1.4	2.2	0.1	0.1	2.8
12/06/2019 14:00	1.5	4.2	0.0	0.0	3.2
12/06/2019 15:00	1.5	2.4	0.0	0.0	3.8
12/06/2019 16:00	1.5	2.7	0.0	0.0	3.4
12/06/2019 17:00	1.5	3.9	0.1	0.2	3.1
12/06/2019 18:00	1.5	2.6	0.0	0.0	3.1
12/06/2019 19:00	1.5	1.7	0.1	0.0	3.8
12/06/2019 20:00	1.5	2.7	0.0	0.0	3.3
12/06/2019 21:00	1.5	2.0	0.0	0.0	3.8
12/07/2019 09:00	1.2	0.8	0.4	0.2	3.1
12/07/2019 10:00	1.5	3.8	0.1	0.1	2.3
12/07/2019 11:00	1.5	3.0	0.0	0.1	2.7
12/07/2019 12:00	1.5	2.3	0.0	0.0	3.3
12/07/2019 13:00	1.5	2.3	0.0	0.0	3.4
12/07/2019 14:00	1.5	4.3	0.2	0.4	3.0
12/07/2019 15:00	1.4	2.1	0.0	0.0	3.4
12/07/2019 16:00	1.5	2.1	0.0	0.0	3.8
12/07/2019 17:00	1.5	2.1	0.0	0.0	3.7

Period Start:	Average	Average	Average	Average	Average
	9NOxCorOP1 ppm	9NOx#OP1HR LBS	9COCorOP1 ppm	9CO#OP1HR LBS	9NH3CorOP1 ppm
12/07/2019 18:00	1.5	2.2	0.0	0.0	3.6
12/07/2019 19:00	1.5	3.8	0.1	0.2	3.0
12/07/2019 20:00	1.5	4.6	0.2	0.4	2.8
12/07/2019 21:00	1.5	3.7	0.1	0.2	2.3
12/09/2019 06:00	1.5	1.6	0.0	0.0	2.7
12/09/2019 07:00	1.5	3.4	0.1	0.2	2.6
12/09/2019 08:00	1.4	3.6	0.2	0.3	2.7
12/09/2019 09:00	1.6	1.4	0.3	0.2	2.8
12/09/2019 11:00	1.5	3.4	0.2	0.3	2.2
12/09/2019 12:00	1.5	3.9	0.1	0.2	2.2
12/09/2019 13:00	1.5	3.4	0.1	0.1	2.4
12/09/2019 14:00	1.4	3.7	0.1	0.2	2.5
12/09/2019 15:00	1.6	2.4	0.0	0.0	2.8
12/09/2019 16:00	1.5	3.5	0.1	0.2	2.8
12/09/2019 17:00	1.5	4.4	0.2	0.4	2.6
12/09/2019 18:00	1.5	4.4	0.2	0.4	2.2
12/09/2019 19:00	1.5	5.0	0.2	0.5	2.9
12/09/2019 20:00	1.5	4.9	0.2	0.4	2.5
12/09/2019 21:00	1.5	4.9	0.2	0.4	2.6
12/09/2019 22:00	1.5	2.6	0.1	0.2	2.5
12/10/2019 08:00	1.4	3.2	0.2	0.4	2.4
12/10/2019 09:00	1.5	4.9	0.3	0.5	2.3
12/10/2019 10:00	1.5	5.1	0.2	0.6	2.7
12/10/2019 11:00	1.5	4.7	0.3	0.5	2.3
12/10/2019 12:00	1.5	2.8	0.0	0.0	2.6
12/10/2019 13:00	1.5	3.3	0.1	0.2	2.2
12/10/2019 14:00	1.6	2.3	0.3	0.2	2.6
12/10/2019 15:00	1.5	3.9	0.2	0.3	2.5
12/10/2019 16:00	1.5	2.4	0.0	0.0	3.3
12/10/2019 17:00	1.4	3.2	0.1	0.1	2.6
12/10/2019 18:00	1.5	1.0	0.0	0.0	3.9
12/11/2019 15:00	1.5	0.4	0.0	0.0	2.5
12/11/2019 16:00	1.5	3.0	0.1	0.2	2.6
12/11/2019 17:00	1.5	4.7	0.3	0.6	2.1
12/11/2019 18:00	1.5	4.7	0.3	0.5	2.3
12/11/2019 19:00	1.5	4.9	0.2	0.5	2.6
12/11/2019 20:00	1.5	4.0	0.2	0.3	2.3
12/11/2019 21:00	1.5	3.9	0.2	0.3	2.3
12/12/2019 06:00	1.5	1.7	0.0	0.0	3.5
12/12/2019 07:00	1.4	4.1	0.3	0.5	2.6
12/12/2019 08:00	1.5	3.2	0.1	0.2	3.3
12/12/2019 09:00	1.5	2.5	0.1	0.1	3.1
12/12/2019 10:00	1.5	2.3	0.0	0.0	3.2
12/12/2019 11:00	1.5	2.1	0.0	0.0	3.9
12/12/2019 12:00	1.5	1.3	0.2	0.1	3.1
12/12/2019 13:00	1.5	2.1	0.0	0.0	3.2
12/12/2019 14:00	1.5	2.1	0.0	0.0	3.1
12/12/2019 15:00	1.5	2.1	0.0	0.0	3.6
12/12/2019 16:00	1.5	2.1	0.0	0.0	3.3
12/12/2019 17:00	1.5	2.5	0.1	0.1	2.9
12/12/2019 18:00	1.5	2.1	0.0	0.0	3.9
12/13/2019 09:00	1.6	1.7	0.0	0.0	2.9
12/13/2019 10:00	1.4	3.6	0.2	0.3	2.6
12/13/2019 11:00	1.5	3.8	0.2	0.3	2.3
12/13/2019 12:00	1.5	3.4	0.1	0.2	2.5
12/13/2019 13:00	1.5	4.3	0.2	0.4	2.0
12/13/2019 14:00	1.5	4.4	0.3	0.4	1.9
12/13/2019 15:00	1.5	4.3	0.3	0.5	2.0
12/13/2019 16:00	1.5	4.5	0.2	0.3	2.4
12/13/2019 17:00	1.5	4.3	0.2	0.3	2.5
12/13/2019 18:00	1.5	4.2	0.2	0.3	2.5
12/13/2019 19:00	1.5	4.1	0.2	0.3	2.5
12/14/2019 10:00	1.6	1.0	0.3	0.1	3.0
12/14/2019 11:00	1.4	4.1	0.3	0.6	2.6
12/14/2019 12:00	1.5	4.8	0.4	0.8	2.3
12/14/2019 13:00	1.5	4.7	0.3	0.7	2.2
12/14/2019 14:00	1.5	4.5	0.3	0.7	2.2
12/14/2019 15:00	1.5	4.7	0.3	0.6	2.2
12/14/2019 16:00	1.5	4.7	0.3	0.6	2.2
12/14/2019 17:00	1.5	4.8	0.3	0.5	2.4
12/14/2019 18:00	1.5	4.7	0.3	0.6	2.2
12/14/2019 19:00	1.5	4.6	0.3	0.5	2.1

Period Start:	Average 9NOxCorOP1 ppm	Average 9NOX#OP1HR LBS	Average 9COCorOP1 ppm	Average 9CO#OP1HR LBS	Average 9NH3CorOP1 ppm
12/15/2019 16:00	1.6	0.4	0.0	0.0	2.5
12/15/2019 17:00	1.5	1.0	0.0	0.0	2.4
12/16/2019 06:00	1.9	0.5	0.0	0.0	3.1
12/16/2019 07:00	1.4	2.4	0.0	0.0	3.2
12/16/2019 08:00	1.4	3.5	0.2	0.3	2.6
12/16/2019 09:00	1.5	3.5	0.3	0.4	2.3
12/16/2019 10:00	1.5	2.2	0.2	0.2	2.7
12/16/2019 17:00	1.5	1.5	0.0	0.0	3.4
12/16/2019 18:00	1.5	2.6	0.1	0.1	3.1
12/16/2019 19:00	1.5	1.4	0.2	0.1	3.1
12/16/2019 20:00	1.4	3.5	0.2	0.4	2.7
12/16/2019 21:00	1.6	1.8	0.0	0.0	3.4
12/17/2019 10:00	1.5	2.0	0.1	0.1	2.9
12/17/2019 11:00	1.5	3.4	0.2	0.3	2.7
12/17/2019 12:00	1.5	2.0	0.0	0.0	3.6
12/17/2019 17:00	1.5	1.6	0.0	0.0	3.5
12/18/2019 08:00	1.3	3.3	0.4	0.6	2.7
12/18/2019 09:00	1.5	5.2	0.5	1.0	2.4
12/18/2019 10:00	1.5	5.2	0.6	1.3	2.4
12/18/2019 11:00	1.5	5.4	0.4	0.8	2.4
12/18/2019 12:00	1.5	5.2	0.4	0.9	2.4
12/18/2019 13:00	1.5	5.3	0.3	0.7	2.3
12/18/2019 14:00	1.5	5.1	0.4	0.9	2.6
12/18/2019 15:00	1.5	4.5	0.3	0.5	2.1
12/18/2019 16:00	1.5	3.4	0.5	0.6	2.4
12/18/2019 17:00	1.5	5.7	0.3	0.7	2.3
12/18/2019 18:00	1.5	5.1	0.3	0.6	2.6
12/18/2019 19:00	1.5	4.5	0.3	0.5	2.3
12/18/2019 20:00	1.5	4.0	0.3	0.4	2.4
12/18/2019 21:00	1.5	1.0	0.0	0.0	3.1
12/19/2019 06:00	1.5	0.4	0.0	0.0	3.1
12/19/2019 07:00	1.4	2.7	0.1	0.2	2.7
12/19/2019 08:00	1.5	3.3	0.3	0.4	2.4
12/19/2019 09:00	1.5	3.1	0.3	0.4	2.4
12/19/2019 10:00	1.5	3.1	0.2	0.3	2.5
12/19/2019 11:00	1.5	3.0	0.2	0.3	2.4
12/19/2019 12:00	1.5	3.0	0.2	0.3	2.3
12/19/2019 13:00	1.5	3.0	0.3	0.3	2.5
12/19/2019 14:00	1.5	3.0	0.3	0.3	2.6
12/19/2019 15:00	1.5	3.4	0.3	0.4	2.6
12/19/2019 16:00	1.4	3.8	0.3	0.5	2.6
12/19/2019 17:00	1.5	4.2	0.3	0.5	2.4
12/19/2019 18:00	1.5	3.9	0.3	0.5	2.4
12/19/2019 19:00	1.5	4.2	0.3	0.5	2.4
12/19/2019 20:00	1.5	0.5	0.1	0.0	3.1
12/20/2019 17:00	1.5	1.2	0.4	0.2	2.4
12/20/2019 18:00	1.5	2.8	0.1	0.1	3.4
12/20/2019 19:00	1.6	1.0	0.0	0.0	3.2
12/26/2019 17:00	1.5	1.4	0.1	0.1	3.4
12/26/2019 18:00	1.4	3.7	0.3	0.6	3.2
12/26/2019 19:00	1.5	5.1	0.5	1.0	2.3
12/26/2019 20:00	1.5	5.3	0.5	1.0	2.6
12/26/2019 21:00	1.5	3.4	0.3	0.4	2.7
12/26/2019 22:00	1.3	1.9	0.4	0.4	3.1
12/30/2019 17:00	1.5	1.4	0.0	0.0	3.4
12/30/2019 18:00	1.5	2.1	0.0	0.0	3.5
12/30/2019 19:00	1.5	2.0	0.0	0.0	3.1
12/31/2019 17:00	1.5	1.3	0.0	0.0	3.7
Final Average*	1.5	2.8	0.1	0.1	3.0
Maximum*	4.6	5.8	0.8	1.3	4.2
	10/22/2019	10/22/2019	11/01/2019	12/18/2019	11/26/2019
	5:00	5:00	16:00	10:00	7:00
Minimum*	0.8	0.1	0.0	0.0	1.9
	10/29/2019	12/04/2019	12/31/2019	12/31/2019	12/13/2019
	6:00	22:00	17:00	17:00	14:00

* Does not include Invalid Averaging Periods ("N/A")

Average Values Report
Generated: 1/21/2020 12:41

Company: NRG Carlsbad
Plant: 4600 Carlsbad Blvd
City/St: Carlsbad, CA 92008
Source: 10

Period Start: 10/1/2019 00:00
Period End: 12/31/2019 23:59
Validation Type: 1/60 min
Averaging Period: 1 hr
Type: Block Avg

Period Start:	Average 10NOxCrOP1 ppm	Average 10NOX#OP1H LBS	Average 10COCOrOP1 ppm	Average 10CO#OP1HR LBS	Average 10NH3CrNS1 ppm
10/01/2019 18:00	1.5	3.7	0.4	0.8	2.8
10/01/2019 19:00	1.5	2.1	0.0	0.0	3.6
10/01/2019 20:00	1.4	0.9	0.0	0.0	3.8
10/06/2019 17:00	1.5	1.6	0.1	0.1	3.1
10/06/2019 18:00	1.5	2.1	0.1	0.1	3.2
10/07/2019 16:00	1.5	1.7	0.1	0.1	3.3
10/07/2019 17:00	1.5	2.0	0.1	0.1	2.8
10/07/2019 19:00	1.6	0.8	0.1	0.0	3.3
10/08/2019 17:00	1.5	1.6	0.1	0.0	2.8
10/08/2019 18:00	1.5	2.3	0.0	0.0	2.5
10/08/2019 19:00	1.5	2.5	0.1	0.1	3.3
10/11/2019 16:00	1.5	2.6	0.4	0.6	3.4
10/11/2019 17:00	1.5	2.3	0.0	0.0	2.8
10/11/2019 18:00	1.5	1.5	0.0	0.0	2.8
10/12/2019 12:00	1.4	0.5	0.0	0.0	3.0
10/12/2019 13:00	1.6	1.0	0.0	0.0	3.4
10/13/2019 17:00	1.5	1.1	0.0	0.0	3.2
10/13/2019 18:00	1.4	0.4	0.0	0.0	3.6
10/17/2019 17:00	1.3	1.0	1.9	1.0	4.8
10/17/2019 18:00	1.3	0.8	0.0	0.0	3.3
10/19/2019 17:00	1.4	0.5	0.1	0.0	2.9
10/19/2019 18:00	1.5	0.9	0.1	0.0	3.4
10/20/2019 18:00	1.9	0.6	0.5	0.1	2.9
10/20/2019 19:00	1.5	2.3	0.2	0.2	3.6
10/21/2019 13:00	1.5	1.6	0.2	0.2	3.4
10/21/2019 14:00	1.5	2.2	0.3	0.2	3.4
10/21/2019 15:00	1.5	2.1	0.3	0.3	3.0
10/21/2019 18:00	1.4	1.4	0.1	0.1	3.4
10/22/2019 15:00	1.5	1.6	0.2	0.1	3.2
10/22/2019 16:00	1.5	2.4	0.2	0.2	3.1
10/22/2019 17:00	1.5	2.2	0.2	0.2	2.7
10/22/2019 18:00	1.6	3.3	0.6	1.0	3.3
10/22/2019 19:00	1.5	3.7	0.9	1.8	3.6
10/22/2019 20:00	1.5	2.5	0.1	0.1	3.5
10/23/2019 11:00	1.4	1.0	0.1	0.0	3.0
10/23/2019 12:00	1.7	0.4	0.1	0.0	3.0
10/23/2019 17:00	1.4	1.3	0.2	0.1	2.9
10/23/2019 18:00	1.6	2.4	0.0	0.0	3.4
10/24/2019 10:00	1.5	1.0	0.0	0.0	3.3
10/24/2019 11:00	1.5	1.9	0.0	0.0	3.6
10/24/2019 16:00	1.5	1.7	0.0	0.0	3.5
10/24/2019 17:00	1.5	2.1	0.0	0.0	3.7
10/24/2019 18:00	1.5	2.9	0.2	0.3	3.6
10/24/2019 19:00	1.6	3.4	0.3	0.7	3.5
10/24/2019 20:00	1.4	2.0	0.0	0.0	3.7
10/25/2019 05:00	1.5	1.6	0.0	0.0	3.5
10/25/2019 06:00	1.6	2.4	0.0	0.0	3.9
10/25/2019 07:00	1.5	2.2	0.0	0.0	3.7
10/25/2019 08:00	1.5	2.3	0.1	0.1	3.7
10/25/2019 13:00	1.5	2.0	0.6	0.5	3.1
10/25/2019 14:00	1.4	4.5	0.4	0.9	3.0
10/25/2019 15:00	1.5	4.3	0.3	0.6	2.8
10/25/2019 16:00	1.5	4.0	0.4	0.6	2.8
10/25/2019 17:00	1.4	1.6	0.4	0.3	3.1
10/28/2019 06:00	1.5	1.9	0.0	0.0	3.7
10/28/2019 07:00	1.6	2.5	0.0	0.0	3.8
10/28/2019 08:00	1.4	2.3	0.0	0.0	4.0
10/28/2019 09:00	1.5	3.2	0.2	0.2	3.1
10/28/2019 10:00	1.5	2.9	0.1	0.2	3.3
10/28/2019 11:00	1.5	3.2	0.2	0.2	3.1
10/28/2019 12:00	1.5	3.4	0.2	0.3	3.1
10/28/2019 13:00	1.6	3.9	0.3	0.5	2.8
10/28/2019 14:00	1.5	4.3	1.5	2.8	3.4

Period Start:	Average 10NOxCrOP1 ppm	Average 10NOX#OP1H LBS	Average 10COCoOP1 ppm	Average 10CO#OP1HR LBS	Average 10NH3CrNS1 ppm
10/28/2019 16:00	1.4	1.2	1.5	0.9	4.4
10/28/2019 17:00	1.7	5.0	1.5	3.0	3.7
10/29/2019 05:00	1.4	1.7	0.0	0.0	4.3
10/29/2019 06:00	1.5	2.1	0.4	0.5	3.1
10/29/2019 07:00	1.4	3.1	0.5	0.9	4.0
10/29/2019 09:00	1.5	2.3	0.1	0.1	3.2
10/29/2019 10:00	1.4	4.2	1.6	3.3	3.5
10/29/2019 11:00	1.5	4.3	2.3	4.4	3.1
10/29/2019 12:00	1.5	3.7	0.5	0.9	2.9
10/29/2019 13:00	1.5	4.7	2.0	4.0	3.1
10/29/2019 14:00	1.5	4.6	1.4	3.0	3.6
10/29/2019 15:00	1.5	4.8	1.6	3.3	3.8
10/29/2019 16:00	1.6	4.6	1.3	2.7	3.8
10/29/2019 17:00	1.4	3.0	0.4	0.9	4.1
10/29/2019 18:00	1.5	2.0	0.0	0.0	3.3
10/30/2019 05:00	2.2	3.1	1.1	1.2	3.0
10/30/2019 06:00	1.8	2.7	1.9	1.8	3.7
10/30/2019 16:00	1.2	0.9	1.9	1.0	4.8
10/30/2019 17:00	1.4	2.1	0.0	0.0	3.4
10/30/2019 18:00	1.5	2.2	0.0	0.0	3.5
10/30/2019 19:00	1.5	0.9	0.0	0.0	3.8
10/31/2019 05:00	3.4	2.8	1.5	0.8	3.3 Invalid Hour (<16 Minutes
10/31/2019 06:00	1.8	2.6	1.7	1.5	3.6
11/01/2019 06:00	1.5	0.7	0.3	0.1	3.2
11/01/2019 10:00	1.7	3.0	2.4	2.6	3.2
11/01/2019 11:00	1.8	6.8	2.0	4.3	2.8
11/01/2019 12:00	1.7	3.8	1.7	2.2	2.9
11/04/2019 06:00	1.8	3.2	0.4	0.5	3.5
11/04/2019 07:00	2.0	6.6	1.9	4.1	3.2
11/04/2019 08:00	1.2	2.1	1.0	1.3	4.0
11/04/2019 10:00	1.6	1.0	0.3	0.1	3.0
11/04/2019 11:00	1.6	5.5	2.1	4.3	3.4
11/04/2019 12:00	1.5	5.7	1.5	3.3	3.5
11/04/2019 13:00	1.5	5.1	1.4	2.9	3.6
11/04/2019 14:00	1.8	6.3	1.0	2.2	3.7
11/04/2019 15:00	1.4	2.7	0.5	0.9	3.9
11/04/2019 16:00	1.5	3.7	0.7	1.5	3.8
11/04/2019 17:00	1.4	2.2	0.0	0.0	3.3
11/04/2019 18:00	1.5	2.3	0.0	0.0	3.3
11/04/2019 19:00	1.6	3.5	0.6	1.1	3.4
11/04/2019 20:00	1.7	2.7	1.8	1.7	3.9
11/05/2019 16:00	1.5	0.9	0.1	0.1	3.0
11/05/2019 17:00	1.5	2.9	0.2	0.3	3.4
11/05/2019 18:00	1.5	0.9	0.1	0.0	3.2
11/06/2019 16:00	1.4	1.6	0.0	0.0	3.1
11/06/2019 17:00	1.5	2.3	0.0	0.0	3.4
11/07/2019 16:00	1.5	2.1	0.2	0.3	3.8
11/07/2019 17:00	1.6	4.9	1.3	2.8	4.1
11/07/2019 18:00	1.5	3.2	0.4	0.7	4.0
11/07/2019 19:00	1.4	0.8	0.0	0.0	3.5
11/08/2019 16:00	1.4	0.5	0.0	0.0	3.4
11/08/2019 17:00	1.5	2.2	0.0	0.0	3.8
11/08/2019 18:00	1.5	2.0	0.0	0.0	3.8
11/11/2019 17:00	1.4	1.9	0.0	0.0	3.7
11/12/2019 11:00	1.7	1.3	0.3	0.1	3.3
11/12/2019 12:00	1.4	2.0	0.1	0.1	3.8
11/12/2019 13:00	1.5	0.3	0.1	0.0	3.8
11/12/2019 17:00	1.5	1.5	0.1	0.1	3.3
11/13/2019 14:00	1.5	2.3	0.1	0.1	3.6
11/13/2019 15:00	1.7	0.3	0.1	0.0	4.0
11/14/2019 06:00	1.4	2.4	0.5	0.7	3.7
11/14/2019 07:00	2.0	0.9	0.6	0.2	4.9
11/14/2019 14:00	1.5	2.1	0.1	0.1	3.7
11/14/2019 15:00	1.5	2.0	0.2	0.1	3.9
11/14/2019 17:00	1.5	1.5	0.1	0.0	3.8
11/15/2019 17:00	1.4	1.8	0.1	0.1	4.0
11/18/2019 15:00	1.6	0.1	0.3	0.0	3.5
11/18/2019 16:00	1.6	2.4	0.4	0.4	4.1
11/18/2019 17:00	1.4	2.1	0.4	0.3	3.8
11/18/2019 19:00	1.5	1.4	0.2	0.1	3.7
11/19/2019 06:00	1.6	1.6	0.2	0.1	3.2
11/19/2019 17:00	1.5	1.4	0.1	0.0	3.5

Period Start:	Average 10NOxCrOP1	Average 10NOX#OP1H	Average 10COCoOP1	Average 10CO#OP1HR	Average 10NH3CrNS1
	ppm	LBS	ppm	LBS	ppm
11/20/2019 06:00	1.5	1.8	0.1	0.1	3.8
11/20/2019 17:00	1.5	2.3	0.1	0.1	3.7
11/20/2019 18:00	1.4	0.2	0.1	0.0	4.2
12/02/2019 17:00	1.5	1.5	0.4	0.2	3.2
12/02/2019 18:00	1.5	1.1	0.4	0.2	3.1
12/02/2019 19:00	1.6	0.4	0.3	0.0	3.5
12/02/2019 20:00	1.6	0.3	0.3	0.0	3.4
12/03/2019 17:00	1.5	2.0	0.2	0.2	3.3
12/04/2019 08:00	1.5	3.3	1.8	2.7	3.6
12/04/2019 09:00	1.6	5.4	1.7	3.7	3.6
12/04/2019 10:00	1.7	5.9	1.6	3.6	3.5
12/04/2019 11:00	1.7	6.0	1.6	3.5	3.4
12/04/2019 12:00	1.4	4.1	1.0	2.1	3.9
12/04/2019 13:00	1.6	5.3	1.5	3.3	3.4
12/04/2019 14:00	1.6	5.9	1.7	3.7	3.4
12/04/2019 15:00	1.5	5.0	1.5	3.1	3.9
12/04/2019 16:00	1.4	3.7	0.9	1.8	3.8
12/04/2019 17:00	1.4	4.7	1.3	2.6	3.3
12/04/2019 18:00	1.6	4.1	0.7	1.4	3.3
12/04/2019 19:00	1.5	3.3	1.4	2.1	3.9
12/05/2019 06:00	1.4	2.6	0.8	1.0	3.6
12/05/2019 07:00	1.4	2.6	0.4	0.5	3.4
12/05/2019 08:00	1.6	3.9	1.9	3.0	3.6
12/05/2019 16:00	2.0	0.5	2.3	0.3	3.7
12/05/2019 17:00	1.5	3.7	1.6	2.5	3.4
12/05/2019 18:00	1.5	4.8	1.4	2.9	3.5
12/05/2019 19:00	1.5	5.4	1.3	2.8	3.4
12/05/2019 20:00	1.5	5.2	1.5	3.2	3.4
12/05/2019 21:00	1.4	4.7	1.2	2.5	3.4
12/05/2019 22:00	1.5	1.1	0.2	0.1	3.5
12/06/2019 09:00	1.5	2.5	0.5	0.4	4.1
12/06/2019 10:00	1.6	2.7	0.3	0.3	3.4
12/06/2019 11:00	1.4	3.0	0.5	0.6	3.6
12/06/2019 12:00	1.5	4.2	0.8	1.4	2.9
12/06/2019 13:00	1.5	5.1	1.6	3.3	3.2
12/06/2019 14:00	1.5	5.5	1.8	3.9	3.4
12/06/2019 15:00	1.5	3.0	0.5	0.9	3.5
12/06/2019 16:00	1.5	3.9	0.9	1.8	3.5
12/06/2019 17:00	1.5	4.4	0.8	1.5	2.9
12/06/2019 18:00	1.5	5.2	1.5	3.3	3.3
12/06/2019 19:00	1.5	1.3	1.3	0.7	3.4
12/09/2019 17:00	1.7	2.8	2.2	2.1	3.4
12/09/2019 18:00	1.8	6.7	1.7	3.8	3.3
12/09/2019 19:00	1.3	3.0	1.4	2.0	3.8
12/09/2019 20:00	1.4	4.2	1.1	2.4	3.9
12/09/2019 21:00	1.8	6.2	1.6	3.6	3.7
12/09/2019 22:00	1.4	3.5	0.9	1.8	3.9
12/10/2019 07:00	1.4	3.3	2.0	3.0	3.5
12/10/2019 08:00	1.5	4.1	2.2	3.5	3.6
12/10/2019 10:00	1.6	5.4	1.9	3.9	3.6
12/10/2019 11:00	1.7	6.1	1.9	4.3	3.3
12/10/2019 12:00	1.7	6.1	1.9	4.3	3.3
12/10/2019 13:00	1.7	6.0	1.9	4.4	3.3
12/10/2019 14:00	1.4	4.4	1.4	2.9	4.1
12/11/2019 07:00	1.3	1.9	2.0	1.8	3.0
12/11/2019 08:00	1.5	5.1	2.5	5.4	2.8
12/11/2019 09:00	1.7	6.3	2.1	4.6	2.7
12/11/2019 10:00	1.8	6.5	1.9	4.1	2.6
12/11/2019 11:00	1.8	6.1	1.9	4.2	2.6
12/11/2019 12:00	1.6	3.6	0.8	1.3	2.4
12/11/2019 13:00	1.5	1.9	0.8	0.8	2.8
12/11/2019 14:00	1.5	3.5	1.1	2.2	3.1
12/11/2019 15:00	1.4	2.3	0.3	0.4	2.7
12/11/2019 16:00	1.6	2.8	0.5	0.8	2.8
12/11/2019 17:00	1.7	4.9	1.3	2.7	2.9
12/11/2019 18:00	1.3	2.8	0.8	1.3	3.5
12/17/2019 07:00	1.3	1.6	0.6	0.7	3.2
12/17/2019 08:00	1.4	4.3	1.9	4.0	3.0
12/17/2019 09:00	1.5	4.3	2.6	5.2	2.9
12/17/2019 12:00	1.5	2.2	0.2	0.2	2.6
12/17/2019 13:00	1.5	2.8	0.5	0.7	2.6
12/17/2019 14:00	1.6	1.1	0.1	0.1	2.5

Period Start:	Average 10NOxCrOP1 ppm	Average 10NOX#OP1H LBS	Average 10COCOrOP1 ppm	Average 10CO#OP1HR LBS	Average 10NH3CrNS1 ppm
12/30/2019 17:00	1.5	1.5	0.5	0.3	2.8
Final Average*	1.5	2.8	0.7	1.2	3.4
Maximum*	3.4	6.8	2.6	5.4	4.9
10/31/2019 5:00	11/01/2019 11:00	12/17/2019 9:00	12/11/2019 8:00	11/14/2019 7:00	
Minimum*	1.2	0.1	0.0	0.0	2.4
11/04/2019 8:00	11/18/2019 15:00	11/11/2019 17:00	12/02/2019 20:00	12/11/2019 12:00	

* Does not include Invalid Averaging Periods ("N/A")

Attachment E CEMS Startup/Shutdown Report:

AQ-40: NO_x, CO, and VOC Pound Per Startup Summary

AQ-41: NO_x, CO, and VOC Pound Per Shutdown
Summary

Startup / ShutDown Report
 Generated: 1/29/2020 08:00
 StartUp/ShutDown Event Report NRG Carlsbad Unit 6
 Carlsbad Unit 6

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Unit Name: Unit6

Events	Time	Duration (min)	CO Lbs	Nox Lbs
START_UP	10/01/2019 04:50 ~ 10/01/2019 05:14	25	2.6	3.3
SHUT_DOWN	10/01/2019 06:55 ~ 10/01/2019 07:07	13	0.0	0.2
START_UP	10/02/2019 17:36 ~ 10/02/2019 18:00	25	1.3	5.5
SHUT_DOWN	10/02/2019 19:10 ~ 10/02/2019 19:22	13	0.0	0.2
START_UP	10/03/2019 04:51 ~ 10/03/2019 05:15	25	3.1	3.2
SHUT_DOWN	10/03/2019 06:12 ~ 10/03/2019 06:24	13	0.0	0.2
START_UP	10/03/2019 17:21 ~ 10/03/2019 17:45	25	2.4	3.8
SHUT_DOWN	10/03/2019 18:40 ~ 10/03/2019 18:52	13	0.0	0.2
START_UP	10/04/2019 05:21 ~ 10/04/2019 05:45	25	2.6	3.8
SHUT_DOWN	10/04/2019 06:25 ~ 10/04/2019 06:37	13	0.0	0.2
START_UP	10/06/2019 15:46 ~ 10/06/2019 16:10	25	1.3	3.6
SHUT_DOWN	10/06/2019 18:56 ~ 10/06/2019 19:08	13	0.0	0.2
START_UP	10/07/2019 16:36 ~ 10/07/2019 17:00	25	2.1	5.8
SHUT_DOWN	10/07/2019 18:55 ~ 10/07/2019 19:07	13	0.0	0.2
START_UP	10/08/2019 15:51 ~ 10/08/2019 16:15	25	1.3	3.6
SHUT_DOWN	10/08/2019 18:55 ~ 10/08/2019 19:07	13	0.0	0.2
START_UP	10/09/2019 16:46 ~ 10/09/2019 17:10	25	1.7	4.6
SHUT_DOWN	10/09/2019 18:56 ~ 10/09/2019 19:08	13	0.0	0.1
START_UP	10/10/2019 17:46 ~ 10/10/2019 18:10	25	1.5	4.1
SHUT_DOWN	10/10/2019 18:55 ~ 10/10/2019 19:07	13	0.0	0.1
START_UP	10/11/2019 09:52 ~ 10/11/2019 10:16	25	2.9	5.4
SHUT_DOWN	10/11/2019 18:54 ~ 10/11/2019 19:06	13	0.0	0.2
START_UP	10/12/2019 08:31 ~ 10/12/2019 08:55	25	1.6	5.8
SHUT_DOWN	10/12/2019 13:55 ~ 10/12/2019 14:07	13	0.0	0.2
START_UP	10/12/2019 16:53 ~ 10/12/2019 17:17	25	2.5	2.3
SHUT_DOWN	10/12/2019 18:55 ~ 10/12/2019 19:07	13	0.0	0.2
START_UP	10/13/2019 16:35 ~ 10/13/2019 16:59	25	2.9	3.4
SHUT_DOWN	10/13/2019 18:54 ~ 10/13/2019 19:06	13	0.0	0.2
START_UP	10/20/2019 16:35 ~ 10/20/2019 16:59	25	2.8	5.0
SHUT_DOWN	10/20/2019 17:40 ~ 10/20/2019 17:52	13	0.0	0.2
START_UP	10/21/2019 18:51 ~ 10/21/2019 19:15	25	2.9	3.5
SHUT_DOWN	10/21/2019 19:55 ~ 10/21/2019 20:07	13	0.0	0.3
START_UP	10/22/2019 05:41 ~ 10/22/2019 06:05	25	2.2	3.4
SHUT_DOWN	10/22/2019 06:54 ~ 10/22/2019 07:06	13	0.0	0.3

START_UP	10/22/2019	10:34	~	10/22/2019	10:58	25	1.6	2.5
SHUT_DOWN	10/22/2019	19:54	~	10/22/2019	20:06	13	0.0	0.2
START_UP	10/23/2019	13:15	~	10/23/2019	13:39	25	2.5	3.6
SHUT_DOWN	10/23/2019	14:55	~	10/23/2019	15:07	13	0.0	0.3
START_UP	10/24/2019	11:50	~	10/24/2019	12:14	25	1.9	3.5
SHUT_DOWN	10/24/2019	15:10	~	10/24/2019	15:22	13	0.0	0.2
START_UP	10/24/2019	18:49	~	10/24/2019	19:13	25	2.1	2.9
SHUT_DOWN	10/24/2019	21:24	~	10/24/2019	21:36	13	0.0	0.3
START_UP	10/25/2019	17:16	~	10/25/2019	17:40	25	2.8	4.5
SHUT_DOWN	10/25/2019	21:25	~	10/25/2019	21:37	13	0.0	0.3
START_UP	10/26/2019	15:46	~	10/26/2019	16:10	25	2.3	4.1
SHUT_DOWN	10/26/2019	18:55	~	10/26/2019	19:07	13	0.0	0.2
START_UP	10/28/2019	16:31	~	10/28/2019	16:55	25	3.0	4.9
SHUT_DOWN	10/28/2019	18:10	~	10/28/2019	18:22	13	0.0	0.2
START_UP	10/29/2019	05:05	~	10/29/2019	05:29	25	1.6	3.3
SHUT_DOWN	10/29/2019	06:09	~	10/29/2019	06:21	13	0.0	0.3
START_UP	10/29/2019	16:31	~	10/29/2019	16:55	25	2.5	4.6
SHUT_DOWN	10/29/2019	18:40	~	10/29/2019	18:52	13	0.0	0.2
START_UP	10/30/2019	04:50	~	10/30/2019	05:14	25	1.2	3.1
SHUT_DOWN	10/30/2019	06:40	~	10/30/2019	06:52	13	0.0	0.2
START_UP	10/30/2019	17:06	~	10/30/2019	17:30	25	1.9	5.5
SHUT_DOWN	10/30/2019	20:10	~	10/30/2019	20:22	13	0.0	0.4
START_UP	10/31/2019	05:05	~	10/31/2019	05:29	25	1.5	3.4
SHUT_DOWN	10/31/2019	06:40	~	10/31/2019	06:52	13	0.0	0.4
START_UP	10/31/2019	17:05	~	10/31/2019	17:29	25	1.8	3.0
SHUT_DOWN	10/31/2019	18:10	~	10/31/2019	18:22	13	0.0	0.3
START_UP	11/01/2019	05:06	~	11/01/2019	05:30	25	2.5	3.5
SHUT_DOWN	11/01/2019	06:25	~	11/01/2019	06:37	13	0.0	0.4
START_UP	11/01/2019	16:20	~	11/01/2019	16:44	25	2.5	3.5
SHUT_DOWN	11/01/2019	18:09	~	11/01/2019	18:21	13	0.0	0.3
START_UP	11/02/2019	07:31	~	11/02/2019	07:55	25	2.9	4.0
SHUT_DOWN	11/02/2019	08:55	~	11/02/2019	09:07	13	0.0	0.3
START_UP	11/04/2019	05:50	~	11/04/2019	06:14	25	1.4	4.1
SHUT_DOWN	11/04/2019	07:24	~	11/04/2019	07:36	13	0.0	0.3
START_UP	11/04/2019	14:20	~	11/04/2019	14:44	25	3.4	5.5
SHUT_DOWN	11/04/2019	20:26	~	11/04/2019	20:38	13	0.0	0.1
START_UP	11/05/2019	15:35	~	11/05/2019	15:59	25	1.5	3.3
SHUT_DOWN	11/05/2019	18:39	~	11/05/2019	18:51	13	0.0	0.2
START_UP	11/06/2019	15:50	~	11/06/2019	16:14	25	1.6	3.4
SHUT_DOWN	11/06/2019	17:54	~	11/06/2019	18:06	13	0.0	0.2
START_UP	11/07/2019	16:30	~	11/07/2019	16:54	25	1.8	3.8
SHUT_DOWN	11/07/2019	20:24	~	11/07/2019	20:36	13	0.0	0.2
START_UP	11/17/2019	16:35	~	11/17/2019	16:59	25	2.9	3.9
SHUT_DOWN	11/17/2019	17:53	~	11/17/2019	18:05	13	0.0	0.3
START_UP	11/18/2019	16:54	~	11/18/2019	17:18	25	1.9	3.5
SHUT_DOWN	11/18/2019	17:58	~	11/18/2019	18:10	13	0.0	0.2

START_UP	11/18/2019	19:54	~	11/18/2019	20:18	25	2.0	2.1
SHUT_DOWN	11/18/2019	21:14	~	11/18/2019	21:26	13	0.0	0.2
START_UP	11/22/2019	16:49	~	11/22/2019	17:13	25	2.0	3.9
SHUT_DOWN	11/22/2019	23:58	~	11/23/2019	00:10	13	0.0	0.3
START_UP	11/23/2019	16:54	~	11/23/2019	17:18	25	1.9	3.4
SHUT_DOWN	11/23/2019	17:59	~	11/23/2019	18:11	13	0.0	0.3
START_UP	11/24/2019	13:39	~	11/24/2019	14:03	25	2.0	3.6
SHUT_DOWN	11/24/2019	14:59	~	11/24/2019	15:11	13	0.0	0.2
START_UP	11/24/2019	16:39	~	11/24/2019	17:03	25	1.9	1.7
SHUT_DOWN	11/24/2019	19:13	~	11/24/2019	19:25	13	0.0	0.2
START_UP	11/25/2019	08:39	~	11/25/2019	09:03	25	1.5	3.6
SHUT_DOWN	11/25/2019	09:43	~	11/25/2019	09:55	13	0.0	0.3
START_UP	11/25/2019	13:53	~	11/25/2019	14:17	25	1.7	2.8
SHUT_DOWN	11/25/2019	14:58	~	11/25/2019	15:10	13	0.0	0.2
START_UP	11/26/2019	06:09	~	11/26/2019	06:33	25	1.9	3.7
SHUT_DOWN	11/26/2019	07:14	~	11/26/2019	07:26	13	0.0	0.4
START_UP	11/26/2019	08:54	~	11/26/2019	09:18	25	2.0	1.3
SHUT_DOWN	11/26/2019	10:14	~	11/26/2019	10:26	13	0.0	0.3
START_UP	11/27/2019	06:39	~	11/27/2019	07:03	25	1.7	4.4
SHUT_DOWN	11/27/2019	17:58	~	11/27/2019	18:10	13	0.0	0.3
START_UP	11/28/2019	15:54	~	11/28/2019	16:18	25	2.1	3.5
SHUT_DOWN	11/28/2019	19:13	~	11/28/2019	19:25	13	0.0	0.3
START_UP	11/29/2019	07:54	~	11/29/2019	08:18	25	1.8	3.3
SHUT_DOWN	11/29/2019	09:32	~	11/29/2019	09:44	13	0.0	0.4
START_UP	11/29/2019	11:24	~	11/29/2019	11:48	25	2.6	1.2
SHUT_DOWN	11/29/2019	12:29	~	11/29/2019	12:41	13	0.0	0.3
START_UP	11/29/2019	15:54	~	11/29/2019	16:18	25	1.3	2.9
SHUT_DOWN	11/29/2019	18:58	~	11/29/2019	19:10	13	0.0	0.3
START_UP	11/30/2019	09:40	~	11/30/2019	10:04	25	1.0	4.4
SHUT_DOWN	11/30/2019	12:29	~	11/30/2019	12:41	13	0.0	0.3
START_UP	11/30/2019	15:48	~	11/30/2019	16:12	25	1.9	2.6
SHUT_DOWN	11/30/2019	17:58	~	11/30/2019	18:10	13	0.0	0.3
START_UP	12/01/2019	08:09	~	12/01/2019	08:33	25	1.8	4.6
SHUT_DOWN	12/01/2019	14:12	~	12/01/2019	14:24	13	0.0	0.3
START_UP	12/02/2019	06:24	~	12/02/2019	06:48	25	1.5	4.2
SHUT_DOWN	12/02/2019	09:59	~	12/02/2019	10:11	13	0.0	0.2
START_UP	12/02/2019	10:54	~	12/02/2019	11:18	25	0.2	1.2
SHUT_DOWN	12/02/2019	19:14	~	12/02/2019	19:26	13	0.0	0.3
START_UP	12/02/2019	20:53	~	12/02/2019	21:17	25	1.8	1.2
SHUT_DOWN	12/02/2019	22:58	~	12/02/2019	23:10	13	0.0	0.3
START_UP	12/03/2019	06:39	~	12/03/2019	07:03	25	1.5	3.7
SHUT_DOWN	12/03/2019	12:58	~	12/03/2019	13:10	13	0.0	0.3
START_UP	12/03/2019	16:23	~	12/03/2019	16:47	25	1.7	2.7
SHUT_DOWN	12/03/2019	20:28	~	12/03/2019	20:40	13	0.0	0.2
START_UP	12/04/2019	07:39	~	12/04/2019	08:03	25	1.6	4.3
SHUT_DOWN	12/04/2019	22:00	~	12/04/2019	22:12	13	0.0	0.2

START_UP	12/05/2019	06:24	~	12/05/2019	06:48	25	2.3	3.3
SHUT_DOWN	12/05/2019	11:38	~	12/05/2019	11:50	13	0.0	0.2
START_UP	12/07/2019	20:49	~	12/07/2019	21:13	25	2.7	6.4
SHUT_DOWN	12/07/2019	21:59	~	12/07/2019	22:11	13	0.0	0.2
START_UP	12/09/2019	05:54	~	12/09/2019	06:18	25	1.9	3.7
SHUT_DOWN	12/09/2019	22:43	~	12/09/2019	22:55	13	0.0	0.3
START_UP	12/10/2019	07:49	~	12/10/2019	08:13	25	1.8	3.9
SHUT_DOWN	12/10/2019	19:43	~	12/10/2019	19:55	13	0.0	0.3
START_UP	12/11/2019	15:24	~	12/11/2019	15:48	25	3.0	3.4
SHUT_DOWN	12/11/2019	22:00	~	12/11/2019	22:12	13	0.0	0.2
START_UP	12/13/2019	08:54	~	12/13/2019	09:18	25	1.5	3.6
SHUT_DOWN	12/13/2019	19:59	~	12/13/2019	20:11	13	0.0	0.2
START_UP	12/14/2019	09:51	~	12/14/2019	10:15	25	2.3	4.6
SHUT_DOWN	12/14/2019	20:00	~	12/14/2019	20:12	13	0.0	0.2
START_UP	12/15/2019	16:24	~	12/15/2019	16:48	25	1.1	3.4
SHUT_DOWN	12/15/2019	17:28	~	12/15/2019	17:40	13	0.0	0.3
START_UP	12/16/2019	06:24	~	12/16/2019	06:48	25	1.3	3.5
SHUT_DOWN	12/16/2019	11:59	~	12/16/2019	12:11	13	0.0	0.3
START_UP	12/16/2019	16:53	~	12/16/2019	17:17	25	1.7	2.8
SHUT_DOWN	12/16/2019	20:28	~	12/16/2019	20:40	13	0.0	0.4
START_UP	12/17/2019	16:49	~	12/17/2019	17:13	25	1.3	3.6
SHUT_DOWN	12/17/2019	17:58	~	12/17/2019	18:10	13	0.0	0.3
START_UP	12/18/2019	07:50	~	12/18/2019	08:14	25	1.8	4.6
SHUT_DOWN	12/18/2019	21:28	~	12/18/2019	21:40	13	0.0	0.3
START_UP	12/19/2019	06:24	~	12/19/2019	06:48	25	1.2	3.2
SHUT_DOWN	12/19/2019	20:13	~	12/19/2019	20:25	13	0.0	0.3
START_UP	12/20/2019	07:24	~	12/20/2019	07:48	25	2.7	3.5
SHUT_DOWN	12/20/2019	18:18	~	12/20/2019	18:30	13	0.0	0.3
START_UP	12/26/2019	16:54	~	12/26/2019	17:18	25	1.7	3.8
SHUT_DOWN	12/26/2019	22:29	~	12/26/2019	22:41	13	0.0	0.3
START_UP	12/27/2019	14:54	~	12/27/2019	15:18	25	1.0	3.4
SHUT_DOWN	12/27/2019	17:43	~	12/27/2019	17:55	13	0.0	0.3
START_UP	12/28/2019	11:54	~	12/28/2019	12:18	25	1.1	3.6
SHUT_DOWN	12/28/2019	12:58	~	12/28/2019	13:10	13	0.0	0.3
START_UP	12/29/2019	10:50	~	12/29/2019	11:14	25	1.5	4.9
SHUT_DOWN	12/29/2019	11:58	~	12/29/2019	12:10	13	0.0	0.3
START_UP	12/29/2019	16:23	~	12/29/2019	16:47	25	1.6	2.8
SHUT_DOWN	12/29/2019	17:43	~	12/29/2019	17:55	13	0.0	0.3
START_UP	12/30/2019	16:54	~	12/30/2019	17:18	25	1.3	3.7
SHUT_DOWN	12/30/2019	19:58	~	12/30/2019	20:10	13	0.0	0.3
START_UP	12/31/2019	16:54	~	12/31/2019	17:18	25	3.2	3.5
SHUT_DOWN	12/31/2019	17:58	~	12/31/2019	18:10	13	0.0	0.3

Startup / ShutDown Report
 Generated: 1/29/2020 08:00
 StartUp/ShutDown Event Report NRG Carlsbad Unit 7
 Carlsbad Unit 7

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Unit Name: Unit7

Events	Time	Duration (min)	CO Lbs	Nox Lbs
START_UP	10/01/2019 04:50 ~ 10/01/2019 05:14	25	3.2	4.4
SHUT_DOWN	10/01/2019 06:55 ~ 10/01/2019 07:07	13	0.0	0.2
START_UP	10/02/2019 17:36 ~ 10/02/2019 18:00	25	1.3	6.5
SHUT_DOWN	10/02/2019 19:10 ~ 10/02/2019 19:22	13	0.0	0.1
START_UP	10/03/2019 04:51 ~ 10/03/2019 05:15	25	3.3	4.6
SHUT_DOWN	10/03/2019 05:23 ~ 10/03/2019 05:35	13	0.0	0.5
START_UP	10/03/2019 17:21 ~ 10/03/2019 17:45	25	3.4	5.0
SHUT_DOWN	10/03/2019 18:40 ~ 10/03/2019 18:52	13	0.0	0.1
START_UP	10/06/2019 15:46 ~ 10/06/2019 16:10	25	1.5	4.7
SHUT_DOWN	10/06/2019 18:56 ~ 10/06/2019 19:08	13	0.0	0.1
START_UP	10/07/2019 16:36 ~ 10/07/2019 17:00	25	2.6	6.7
SHUT_DOWN	10/07/2019 18:56 ~ 10/07/2019 19:08	13	0.0	0.1
START_UP	10/08/2019 15:51 ~ 10/08/2019 16:15	25	1.2	4.5
SHUT_DOWN	10/08/2019 18:55 ~ 10/08/2019 19:07	13	0.0	0.2
START_UP	10/09/2019 16:46 ~ 10/09/2019 17:10	25	2.3	5.4
SHUT_DOWN	10/09/2019 18:56 ~ 10/09/2019 19:08	13	0.0	0.1
START_UP	10/10/2019 17:46 ~ 10/10/2019 18:10	25	1.7	5.1
SHUT_DOWN	10/10/2019 18:55 ~ 10/10/2019 19:07	13	0.0	0.1
START_UP	10/11/2019 13:15 ~ 10/11/2019 13:39	25	4.1	5.6
SHUT_DOWN	10/11/2019 18:55 ~ 10/11/2019 19:07	13	0.0	0.1
START_UP	10/12/2019 08:31 ~ 10/12/2019 08:55	25	1.3	6.7
SHUT_DOWN	10/12/2019 13:55 ~ 10/12/2019 14:07	13	0.0	0.1
START_UP	10/12/2019 16:53 ~ 10/12/2019 17:17	25	0.9	2.6
SHUT_DOWN	10/12/2019 18:56 ~ 10/12/2019 19:08	13	0.0	0.2
START_UP	10/13/2019 16:35 ~ 10/13/2019 16:59	25	3.2	4.5
SHUT_DOWN	10/13/2019 18:55 ~ 10/13/2019 19:07	13	0.0	0.1
START_UP	10/21/2019 16:36 ~ 10/21/2019 17:00	25	4.2	4.5
SHUT_DOWN	10/21/2019 17:40 ~ 10/21/2019 17:52	13	0.0	0.1
START_UP	10/21/2019 18:50 ~ 10/21/2019 19:14	25	0.3	1.4
SHUT_DOWN	10/21/2019 19:55 ~ 10/21/2019 20:07	13	0.0	0.2
START_UP	10/22/2019 12:45 ~ 10/22/2019 13:09	25	2.0	5.8
SHUT_DOWN	10/22/2019 19:54 ~ 10/22/2019 20:06	13	0.0	0.2
START_UP	10/23/2019 13:15 ~ 10/23/2019 13:39	25	3.2	4.5
SHUT_DOWN	10/23/2019 14:55 ~ 10/23/2019 15:07	13	0.0	0.2

START_UP	10/24/2019	07:50	~	10/24/2019	08:14	25	2.1	4.6
SHUT_DOWN	10/24/2019	08:54	~	10/24/2019	09:06	13	0.0	0.2
START_UP	10/25/2019	20:16	~	10/25/2019	20:40	25	3.5	6.4
SHUT_DOWN	10/25/2019	21:25	~	10/25/2019	21:37	13	0.0	0.2
START_UP	10/28/2019	16:31	~	10/28/2019	16:55	25	2.0	5.8
SHUT_DOWN	10/28/2019	18:10	~	10/28/2019	18:22	13	0.0	0.1
START_UP	10/29/2019	05:05	~	10/29/2019	05:29	25	1.9	4.6
SHUT_DOWN	10/29/2019	06:09	~	10/29/2019	06:21	13	0.0	0.1
START_UP	10/29/2019	16:31	~	10/29/2019	16:55	25	3.7	5.3
SHUT_DOWN	10/29/2019	18:40	~	10/29/2019	18:52	13	0.0	0.1
START_UP	10/30/2019	04:50	~	10/30/2019	05:14	25	1.2	4.6
SHUT_DOWN	10/30/2019	06:40	~	10/30/2019	06:52	13	0.0	0.1
START_UP	10/30/2019	17:06	~	10/30/2019	17:30	25	3.1	7.4
SHUT_DOWN	10/30/2019	20:10	~	10/30/2019	20:22	13	0.0	0.2
START_UP	10/31/2019	05:05	~	10/31/2019	05:29	25	1.7	4.7
SHUT_DOWN	10/31/2019	06:40	~	10/31/2019	06:52	13	0.0	0.2
START_UP	10/31/2019	17:05	~	10/31/2019	17:29	25	2.2	4.2
SHUT_DOWN	10/31/2019	18:10	~	10/31/2019	18:22	13	0.0	0.2
START_UP	11/01/2019	05:06	~	11/01/2019	05:30	25	0.8	5.0
SHUT_DOWN	11/01/2019	06:25	~	11/01/2019	06:37	13	0.0	0.3
START_UP	11/01/2019	16:20	~	11/01/2019	16:44	25	3.8	4.8
SHUT_DOWN	11/01/2019	18:09	~	11/01/2019	18:21	13	0.0	0.2
START_UP	11/02/2019	07:31	~	11/02/2019	07:55	25	3.5	5.4
SHUT_DOWN	11/02/2019	22:55	~	11/02/2019	23:07	13	0.0	0.2
START_UP	11/04/2019	05:50	~	11/04/2019	06:14	25	1.3	5.0
SHUT_DOWN	11/04/2019	07:24	~	11/04/2019	07:36	13	0.0	0.2
START_UP	11/04/2019	14:20	~	11/04/2019	14:44	25	2.9	6.5
SHUT_DOWN	11/04/2019	20:26	~	11/04/2019	20:38	13	0.0	0.1
START_UP	11/05/2019	15:35	~	11/05/2019	15:59	25	1.7	4.4
SHUT_DOWN	11/05/2019	18:39	~	11/05/2019	18:51	13	0.0	0.1
START_UP	11/06/2019	15:50	~	11/06/2019	16:14	25	1.5	4.4
SHUT_DOWN	11/06/2019	17:54	~	11/06/2019	18:06	13	0.0	0.1
START_UP	11/07/2019	16:30	~	11/07/2019	16:54	25	2.6	4.9
SHUT_DOWN	11/07/2019	20:24	~	11/07/2019	20:36	13	0.0	0.2
START_UP	11/16/2019	11:30	~	11/16/2019	11:54	25	3.0	4.6
SHUT_DOWN	11/16/2019	12:56	~	11/16/2019	13:08	13	0.0	0.1
START_UP	11/16/2019	15:20	~	11/16/2019	15:44	25	1.8	1.7
SHUT_DOWN	11/16/2019	15:45	~	11/16/2019	15:57	13	0.0	0.1
START_UP	11/17/2019	16:35	~	11/17/2019	16:59	25	1.0	4.1
SHUT_DOWN	11/17/2019	17:54	~	11/17/2019	18:06	13	0.0	0.2
START_UP	11/18/2019	16:54	~	11/18/2019	17:18	25	2.2	4.6
SHUT_DOWN	11/18/2019	17:59	~	11/18/2019	18:11	13	0.0	0.2
START_UP	11/18/2019	19:54	~	11/18/2019	20:18	25	2.5	2.1
SHUT_DOWN	11/18/2019	21:14	~	11/18/2019	21:26	13	0.0	0.1
START_UP	11/22/2019	16:49	~	11/22/2019	17:13	25	0.0	0.0
SHUT_DOWN	11/22/2019	18:12	~	11/22/2019	18:24	13	0.0	0.1

START_UP	11/24/2019	17:49	~	11/24/2019	18:13	25	3.7	5.2	
SHUT_DOWN	11/24/2019	19:13	~	11/24/2019	19:25	13	0.0	0.2	
START_UP	11/26/2019	06:09	~	11/26/2019	06:33	25	2.1	5.2	
SHUT_DOWN	11/26/2019	07:14	~	11/26/2019	07:26	13	0.0	0.2	
START_UP	11/27/2019	09:04	~	11/27/2019	09:28	25	1.8	7.6	
SHUT_DOWN	11/27/2019	17:58	~	11/27/2019	18:10	13	0.0	0.2	
START_UP	11/29/2019	15:55	~	11/29/2019	16:14	20	1.0	4.1	
SHUT_DOWN	11/29/2019	16:02	~	11/29/2019	16:14	13	0.0	1.4	Breakdown 0071
START_UP	12/07/2019	09:24	~	12/07/2019	09:48	25	4.7	4.9	
SHUT_DOWN	12/07/2019	21:59	~	12/07/2019	22:11	13	0.0	0.1	
START_UP	12/08/2019	06:39	~	12/08/2019	07:03	25	1.9	4.1	
SHUT_DOWN	12/08/2019	07:43	~	12/08/2019	07:55	13	0.0	0.2	
START_UP	12/09/2019	05:54	~	12/09/2019	06:18	25	1.9	4.8	
SHUT_DOWN	12/09/2019	22:44	~	12/09/2019	22:56	13	0.0	0.2	
START_UP	12/10/2019	06:39	~	12/10/2019	07:03	25	2.3	4.8	
SHUT_DOWN	12/10/2019	14:13	~	12/10/2019	14:25	13	0.0	0.2	
START_UP	12/10/2019	15:34	~	12/10/2019	15:58	25	1.1	1.7	
SHUT_DOWN	12/10/2019	19:44	~	12/10/2019	19:56	13	0.0	0.2	
START_UP	12/11/2019	07:39	~	12/11/2019	08:03	25	1.3	5.2	
SHUT_DOWN	12/11/2019	22:00	~	12/11/2019	22:12	13	0.0	0.1	
START_UP	12/12/2019	05:54	~	12/12/2019	06:18	25	1.2	4.0	
SHUT_DOWN	12/12/2019	18:58	~	12/12/2019	19:10	13	0.0	0.2	
START_UP	12/12/2019	20:53	~	12/12/2019	21:17	25	1.4	1.0	
SHUT_DOWN	12/12/2019	23:28	~	12/12/2019	23:40	13	0.0	0.2	
START_UP	12/13/2019	08:54	~	12/13/2019	09:18	25	1.3	4.4	
SHUT_DOWN	12/13/2019	20:00	~	12/13/2019	20:12	13	0.0	0.1	
START_UP	12/14/2019	08:39	~	12/14/2019	09:03	25	2.3	4.3	
SHUT_DOWN	12/14/2019	20:00	~	12/14/2019	20:12	13	0.0	0.1	
START_UP	12/15/2019	16:24	~	12/15/2019	16:48	25	1.1	4.5	
SHUT_DOWN	12/15/2019	17:28	~	12/15/2019	17:40	13	0.0	0.2	
START_UP	12/16/2019	06:24	~	12/16/2019	06:48	25	0.9	4.8	
SHUT_DOWN	12/16/2019	09:14	~	12/16/2019	09:26	13	0.0	0.2	
START_UP	12/16/2019	16:54	~	12/16/2019	17:18	25	1.2	4.0	
SHUT_DOWN	12/16/2019	20:28	~	12/16/2019	20:40	13	0.0	0.2	
START_UP	12/17/2019	06:39	~	12/17/2019	07:03	25	0.9	4.8	
SHUT_DOWN	12/17/2019	11:43	~	12/17/2019	11:55	13	0.0	0.2	
START_UP	12/17/2019	15:38	~	12/17/2019	16:02	25	1.3	3.3	
SHUT_DOWN	12/17/2019	17:58	~	12/17/2019	18:10	13	0.0	0.2	
START_UP	12/18/2019	06:39	~	12/18/2019	07:03	25	3.5	5.1	
SHUT_DOWN	12/18/2019	21:28	~	12/18/2019	21:40	13	0.0	0.2	
START_UP	12/19/2019	06:24	~	12/19/2019	06:48	25	0.9	4.3	
SHUT_DOWN	12/19/2019	16:29	~	12/19/2019	16:41	13	0.0	0.2	
START_UP	12/20/2019	07:24	~	12/20/2019	07:48	25	3.6	4.7	
SHUT_DOWN	12/20/2019	18:18	~	12/20/2019	18:30	13	0.0	0.2	
START_UP	12/21/2019	19:09	~	12/21/2019	19:33	25	4.1	5.0	
SHUT_DOWN	12/21/2019	20:13	~	12/21/2019	20:25	13	0.0	0.2	

START_UP	12/22/2019	08:39	~	12/22/2019	09:03	25	1.2	4.8
SHUT_DOWN	12/22/2019	21:58	~	12/22/2019	22:10	13	0.0	0.2
START_UP	12/23/2019	09:54	~	12/23/2019	10:18	25	1.5	5.0
SHUT_DOWN	12/23/2019	11:36	~	12/23/2019	11:48	13	0.0	0.2
START_UP	12/24/2019	13:54	~	12/24/2019	14:18	25	1.4	4.8
SHUT_DOWN	12/24/2019	14:58	~	12/24/2019	15:10	13	0.0	0.2
START_UP	12/26/2019	10:39	~	12/26/2019	11:03	25	1.9	5.6
SHUT_DOWN	12/26/2019	11:43	~	12/26/2019	11:55	13	0.0	0.2
START_UP	12/26/2019	16:53	~	12/26/2019	17:17	25	1.3	4.2
SHUT_DOWN	12/26/2019	22:29	~	12/26/2019	22:41	13	0.0	0.2
START_UP	12/28/2019	09:39	~	12/28/2019	10:03	25	1.3	5.0
SHUT_DOWN	12/28/2019	10:58	~	12/28/2019	11:10	13	0.0	0.2
START_UP	12/29/2019	07:54	~	12/29/2019	08:18	25	1.1	4.8
SHUT_DOWN	12/29/2019	11:58	~	12/29/2019	12:10	13	0.0	0.2
START_UP	12/29/2019	16:23	~	12/29/2019	16:47	25	1.4	3.7
SHUT_DOWN	12/29/2019	17:43	~	12/29/2019	17:55	13	0.0	0.2
START_UP	12/30/2019	16:54	~	12/30/2019	17:18	25	0.7	4.8
SHUT_DOWN	12/30/2019	19:58	~	12/30/2019	20:10	13	0.0	0.2
START_UP	12/31/2019	16:54	~	12/31/2019	17:18	25	1.0	4.8
SHUT_DOWN	12/31/2019	17:58	~	12/31/2019	18:10	13	0.0	0.2

Startup / ShutDown Report
 Generated: 1/29/2020 08:01
 StartUp/ShutDown Event Report NRG Carlsbad Unit 8
 Carlsbad Unit 8

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Unit Name: Unit8

Events	Time	Duration (min)	CO Lbs	Nox LBs
START_UP	10/01/2019 04:50 ~ 10/01/2019 05:14	25	1.9	4.4
SHUT_DOWN	10/01/2019 06:55 ~ 10/01/2019 07:07	13	0.0	0.2
START_UP	10/01/2019 08:35 ~ 10/01/2019 08:59	25	2.3	1.5
SHUT_DOWN	10/01/2019 09:40 ~ 10/01/2019 09:52	13	0.0	0.1
START_UP	10/02/2019 04:51 ~ 10/02/2019 05:15	25	2.9	4.9
SHUT_DOWN	10/02/2019 06:10 ~ 10/02/2019 06:22	13	0.0	0.1
START_UP	10/02/2019 16:20 ~ 10/02/2019 16:44	25	2.4	4.7
SHUT_DOWN	10/02/2019 19:10 ~ 10/02/2019 19:22	13	0.0	0.1
START_UP	10/03/2019 15:50 ~ 10/03/2019 16:14	25	2.5	4.3
SHUT_DOWN	10/03/2019 18:40 ~ 10/03/2019 18:52	13	0.0	0.2
START_UP	10/04/2019 05:21 ~ 10/04/2019 05:45	25	1.0	5.1
SHUT_DOWN	10/04/2019 06:25 ~ 10/04/2019 06:37	13	0.0	0.1
START_UP	10/04/2019 16:51 ~ 10/04/2019 17:15	25	3.4	4.2
SHUT_DOWN	10/04/2019 17:55 ~ 10/04/2019 18:07	13	0.0	0.1
START_UP	10/04/2019 18:50 ~ 10/04/2019 19:14	25	0.4	2.0
SHUT_DOWN	10/04/2019 19:55 ~ 10/04/2019 20:07	13	0.0	0.2
START_UP	10/05/2019 15:51 ~ 10/05/2019 16:15	25	1.3	4.7
SHUT_DOWN	10/05/2019 19:55 ~ 10/05/2019 20:07	13	0.0	0.2
START_UP	10/06/2019 11:51 ~ 10/06/2019 12:15	25	1.2	4.7
SHUT_DOWN	10/06/2019 12:55 ~ 10/06/2019 13:07	13	0.0	0.1
START_UP	10/06/2019 15:45 ~ 10/06/2019 16:09	25	1.9	2.7
SHUT_DOWN	10/06/2019 18:56 ~ 10/06/2019 19:08	13	0.0	0.1
START_UP	10/07/2019 07:36 ~ 10/07/2019 08:00	25	1.4	4.7
SHUT_DOWN	10/07/2019 09:55 ~ 10/07/2019 10:07	13	0.0	0.1
START_UP	10/07/2019 14:51 ~ 10/07/2019 15:15	25	2.8	3.9
SHUT_DOWN	10/07/2019 18:55 ~ 10/07/2019 19:07	13	0.0	0.2
START_UP	10/08/2019 14:21 ~ 10/08/2019 14:45	25	1.3	4.7
SHUT_DOWN	10/08/2019 18:55 ~ 10/08/2019 19:07	13	0.0	0.2
START_UP	10/09/2019 15:06 ~ 10/09/2019 15:30	25	3.5	4.5
SHUT_DOWN	10/09/2019 18:56 ~ 10/09/2019 19:08	13	0.0	0.1
START_UP	10/10/2019 04:51 ~ 10/10/2019 05:15	25	1.1	4.3
SHUT_DOWN	10/10/2019 06:11 ~ 10/10/2019 06:23	13	0.0	0.1
START_UP	10/10/2019 07:35 ~ 10/10/2019 07:59	25	1.1	1.5
SHUT_DOWN	10/10/2019 15:11 ~ 10/10/2019 15:23	13	0.0	0.2

START_UP	10/11/2019	05:05	~	10/11/2019	05:29	25	1.9	4.8
SHUT_DOWN	10/11/2019	06:20	~	10/11/2019	06:32	13	0.0	0.2
START_UP	10/11/2019	09:45	~	10/11/2019	09:47	3	0.9	0.5
START_UP	10/11/2019	13:15	~	10/11/2019	13:39	25	1.5	5.9
SHUT_DOWN	10/11/2019	14:55	~	10/11/2019	15:07	13	0.0	0.2
START_UP	10/11/2019	16:17	~	10/11/2019	16:41	25	0.4	2.5
SHUT_DOWN	10/11/2019	18:55	~	10/11/2019	19:07	13	0.0	0.2
START_UP	10/12/2019	05:35	~	10/12/2019	05:59	25	1.6	6.9
SHUT_DOWN	10/12/2019	13:55	~	10/12/2019	14:07	13	0.0	0.1
START_UP	10/12/2019	16:53	~	10/12/2019	17:17	25	4.6	2.8
SHUT_DOWN	10/12/2019	18:55	~	10/12/2019	19:07	13	0.0	0.2
START_UP	10/13/2019	12:20	~	10/13/2019	12:44	25	2.6	5.8
SHUT_DOWN	10/13/2019	15:41	~	10/13/2019	15:53	13	0.0	0.1
START_UP	10/13/2019	16:35	~	10/13/2019	16:59	25	0.4	1.2
SHUT_DOWN	10/13/2019	18:55	~	10/13/2019	19:07	13	0.0	0.1
START_UP	10/17/2019	16:35	~	10/17/2019	16:59	25	2.2	6.0
SHUT_DOWN	10/17/2019	17:55	~	10/17/2019	18:07	13	0.0	0.1
START_UP	10/18/2019	16:50	~	10/18/2019	17:14	25	3.6	4.7
SHUT_DOWN	10/18/2019	17:55	~	10/18/2019	18:07	13	0.0	0.1
START_UP	10/19/2019	16:36	~	10/19/2019	17:00	25	4.0	5.4
SHUT_DOWN	10/19/2019	17:55	~	10/19/2019	18:07	13	0.0	0.1
START_UP	10/21/2019	18:51	~	10/21/2019	19:15	25	4.1	4.8
SHUT_DOWN	10/21/2019	19:55	~	10/21/2019	20:07	13	0.0	0.2
START_UP	10/22/2019	04:50	~	10/22/2019	05:14	25	1.4	4.3
SHUT_DOWN	10/22/2019	05:19	~	10/22/2019	05:31	13	0.0	0.0
START_UP	10/22/2019	15:15	~	10/22/2019	15:39	25	1.8	6.0
SHUT_DOWN	10/22/2019	19:54	~	10/22/2019	20:06	13	0.0	0.2
START_UP	10/23/2019	05:50	~	10/23/2019	06:14	25	1.3	4.9
SHUT_DOWN	10/23/2019	06:55	~	10/23/2019	07:07	13	0.0	0.2
START_UP	10/23/2019	13:15	~	10/23/2019	13:39	25	2.1	4.0
SHUT_DOWN	10/23/2019	18:54	~	10/23/2019	19:06	13	0.0	0.1
START_UP	10/24/2019	05:20	~	10/24/2019	05:44	25	1.9	6.1
SHUT_DOWN	10/24/2019	06:39	~	10/24/2019	06:51	13	0.0	0.2
START_UP	10/24/2019	13:15	~	10/24/2019	13:39	25	1.7	4.3
SHUT_DOWN	10/24/2019	20:08	~	10/24/2019	20:20	13	0.0	0.2
START_UP	10/25/2019	05:36	~	10/25/2019	06:00	25	1.0	4.3
SHUT_DOWN	10/25/2019	06:55	~	10/25/2019	07:07	13	0.0	0.2
START_UP	10/25/2019	09:50	~	10/25/2019	10:14	25	1.5	3.8
SHUT_DOWN	10/25/2019	19:10	~	10/25/2019	19:22	13	0.0	0.2
START_UP	10/26/2019	12:35	~	10/26/2019	12:59	25	2.1	4.2
SHUT_DOWN	10/26/2019	17:46	~	10/26/2019	17:58	13	0.0	0.1
START_UP	10/28/2019	05:20	~	10/28/2019	05:44	25	1.6	5.6
SHUT_DOWN	10/28/2019	09:09	~	10/28/2019	09:21	13	0.0	0.1
START_UP	10/28/2019	15:20	~	10/28/2019	15:44	25	1.1	3.7
SHUT_DOWN	10/28/2019	18:10	~	10/28/2019	18:22	13	0.0	0.1
START_UP	10/29/2019	05:05	~	10/29/2019	05:29	25	1.6	4.5

SHUT_DOWN	10/29/2019	06:09	~	10/29/2019	06:21	13	0.0	0.2
START_UP	10/29/2019	15:20	~	10/29/2019	15:44	25	1.4	4.7
SHUT_DOWN	10/29/2019	18:40	~	10/29/2019	18:52	13	0.0	0.2
START_UP	10/30/2019	04:50	~	10/30/2019	05:14	25	1.2	4.3
SHUT_DOWN	10/30/2019	06:40	~	10/30/2019	06:52	13	0.0	0.2
START_UP	10/30/2019	15:35	~	10/30/2019	15:59	25	1.1	4.4
SHUT_DOWN	10/30/2019	20:10	~	10/30/2019	20:22	13	0.0	0.2
START_UP	10/31/2019	05:05	~	10/31/2019	05:29	25	1.5	4.3
SHUT_DOWN	10/31/2019	06:40	~	10/31/2019	06:52	13	0.0	0.3
START_UP	10/31/2019	17:05	~	10/31/2019	17:29	25	1.9	4.0
SHUT_DOWN	10/31/2019	18:10	~	10/31/2019	18:22	13	0.0	0.2
START_UP	11/01/2019	05:06	~	11/01/2019	05:30	25	2.7	4.9
SHUT_DOWN	11/01/2019	06:25	~	11/01/2019	06:37	13	0.0	0.2
START_UP	11/01/2019	16:20	~	11/01/2019	16:44	25	2.7	4.6
SHUT_DOWN	11/01/2019	18:09	~	11/01/2019	18:21	13	0.0	0.2
START_UP	11/02/2019	07:31	~	11/02/2019	07:55	25	2.3	5.5
SHUT_DOWN	11/02/2019	08:55	~	11/02/2019	09:07	13	0.0	0.2
START_UP	11/02/2019	12:45	~	11/02/2019	13:09	25	1.1	3.6
SHUT_DOWN	11/02/2019	20:56	~	11/02/2019	21:08	13	0.0	0.1
START_UP	11/04/2019	05:50	~	11/04/2019	06:14	25	1.3	5.3
SHUT_DOWN	11/04/2019	07:25	~	11/04/2019	07:37	13	0.0	0.2
START_UP	11/04/2019	15:36	~	11/04/2019	16:00	25	3.9	5.0
SHUT_DOWN	11/04/2019	20:26	~	11/04/2019	20:38	13	0.0	0.1
START_UP	11/05/2019	15:35	~	11/05/2019	15:59	25	1.5	4.4
SHUT_DOWN	11/05/2019	18:39	~	11/05/2019	18:51	13	0.0	0.2
START_UP	11/06/2019	15:50	~	11/06/2019	16:14	25	1.7	4.6
SHUT_DOWN	11/06/2019	17:54	~	11/06/2019	18:06	13	0.0	0.1
START_UP	11/07/2019	16:30	~	11/07/2019	16:54	25	2.1	5.0
SHUT_DOWN	11/07/2019	20:24	~	11/07/2019	20:36	13	0.0	0.2
START_UP	11/12/2019	16:50	~	11/12/2019	17:14	25	1.6	4.8
SHUT_DOWN	11/12/2019	17:54	~	11/12/2019	18:06	13	0.0	0.1
START_UP	11/17/2019	16:35	~	11/17/2019	16:59	25	1.0	4.8
SHUT_DOWN	11/17/2019	17:54	~	11/17/2019	18:06	13	0.0	0.2
START_UP	11/18/2019	16:54	~	11/18/2019	17:18	25	2.1	4.7
SHUT_DOWN	11/18/2019	17:58	~	11/18/2019	18:10	13	0.0	0.2
START_UP	11/18/2019	19:54	~	11/18/2019	20:18	25	2.4	2.3
SHUT_DOWN	11/18/2019	21:14	~	11/18/2019	21:26	13	0.0	0.1
START_UP	11/20/2019	19:26	~	11/20/2019	19:50	25	3.5	6.1
SHUT_DOWN	11/20/2019	20:30	~	11/20/2019	20:42	13	0.0	0.1
START_UP	11/21/2019	16:40	~	11/21/2019	17:04	25	3.2	4.7
SHUT_DOWN	11/21/2019	17:59	~	11/21/2019	18:11	13	0.0	0.2
START_UP	11/21/2019	21:38	~	11/21/2019	22:02	25	2.1	3.5
SHUT_DOWN	11/21/2019	23:59	~	11/22/2019	00:11	13	0.0	0.2
START_UP	11/22/2019	07:09	~	11/22/2019	07:33	25	0.8	5.0
SHUT_DOWN	11/22/2019	18:05	~	11/22/2019	18:17	13	0.0	0.2
START_UP	11/23/2019	16:54	~	11/23/2019	17:18	25	1.5	4.6

SHUT_DOWN	11/23/2019	17:59	~	11/23/2019	18:11	13	0.0	0.2	
START_UP	11/24/2019	17:49	~	11/24/2019	18:13	25	2.7	5.2	
SHUT_DOWN	11/24/2019	19:14	~	11/24/2019	19:26	13	0.0	0.2	
START_UP	11/26/2019	06:09	~	11/26/2019	06:33	25	2.0	5.3	
SHUT_DOWN	11/26/2019	07:17	~	11/26/2019	07:29	13	0.0	0.8	Breakdown 0070
START_UP	11/27/2019	07:49	~	11/27/2019	08:13	25	1.9	6.3	
SHUT_DOWN	11/27/2019	17:58	~	11/27/2019	18:10	13	0.0	0.2	
START_UP	11/28/2019	15:54	~	11/28/2019	16:18	25	1.9	4.8	
SHUT_DOWN	11/28/2019	19:14	~	11/28/2019	19:26	13	0.0	0.2	
START_UP	11/29/2019	07:54	~	11/29/2019	08:18	25	2.1	4.6	
SHUT_DOWN	11/29/2019	09:33	~	11/29/2019	09:45	13	0.0	0.2	
START_UP	11/29/2019	15:55	~	11/29/2019	16:19	25	3.3	4.7	
SHUT_DOWN	11/29/2019	18:58	~	11/29/2019	19:10	13	0.0	0.2	
START_UP	11/30/2019	10:50	~	11/30/2019	11:14	25	1.5	6.6	
SHUT_DOWN	11/30/2019	17:59	~	11/30/2019	18:11	13	0.0	0.2	
START_UP	12/01/2019	09:34	~	12/01/2019	09:58	25	1.4	5.6	
SHUT_DOWN	12/01/2019	16:00	~	12/01/2019	16:12	13	0.0	0.2	
START_UP	12/01/2019	16:53	~	12/01/2019	17:17	25	1.1	1.2	
SHUT_DOWN	12/01/2019	17:58	~	12/01/2019	18:10	13	0.0	0.2	
START_UP	12/02/2019	06:24	~	12/02/2019	06:48	25	1.3	5.7	
SHUT_DOWN	12/02/2019	07:34	~	12/02/2019	07:46	13	0.0	0.2	
START_UP	12/02/2019	10:53	~	12/02/2019	11:17	25	2.1	3.5	
SHUT_DOWN	12/02/2019	19:14	~	12/02/2019	19:26	13	0.0	0.2	
START_UP	12/02/2019	20:53	~	12/02/2019	21:17	25	1.7	1.4	
SHUT_DOWN	12/02/2019	22:59	~	12/02/2019	23:11	13	0.0	0.2	
START_UP	12/03/2019	07:49	~	12/03/2019	08:13	25	1.6	5.5	
SHUT_DOWN	12/03/2019	11:44	~	12/03/2019	11:56	13	0.0	0.1	
START_UP	12/03/2019	16:23	~	12/03/2019	16:47	25	1.5	3.8	
SHUT_DOWN	12/03/2019	21:43	~	12/03/2019	21:55	13	0.0	0.1	
START_UP	12/04/2019	08:49	~	12/04/2019	09:13	25	1.3	5.9	
SHUT_DOWN	12/04/2019	22:00	~	12/04/2019	22:12	13	0.0	0.2	
START_UP	12/05/2019	06:24	~	12/05/2019	06:48	25	2.0	4.5	
SHUT_DOWN	12/05/2019	22:13	~	12/05/2019	22:25	13	0.0	0.2	
START_UP	12/06/2019	05:54	~	12/06/2019	06:18	25	1.5	4.2	
SHUT_DOWN	12/06/2019	08:28	~	12/06/2019	08:40	13	0.0	0.2	
START_UP	12/06/2019	09:38	~	12/06/2019	10:02	25	1.3	1.6	
SHUT_DOWN	12/06/2019	20:14	~	12/06/2019	20:26	13	0.0	0.2	
START_UP	12/07/2019	09:24	~	12/07/2019	09:48	25	3.1	5.2	
SHUT_DOWN	12/07/2019	21:59	~	12/07/2019	22:11	13	0.0	0.1	
START_UP	12/08/2019	11:24	~	12/08/2019	11:48	25	1.6	4.3	
SHUT_DOWN	12/08/2019	12:28	~	12/08/2019	12:40	13	0.0	0.2	
START_UP	12/09/2019	05:54	~	12/09/2019	06:18	25	1.7	5.1	
SHUT_DOWN	12/09/2019	09:35	~	12/09/2019	09:47	13	0.0	0.2	
START_UP	12/09/2019	10:51	~	12/09/2019	11:15	25	1.2	2.4	
SHUT_DOWN	12/09/2019	14:13	~	12/09/2019	14:25	13	0.0	0.2	
START_UP	12/09/2019	16:37	~	12/09/2019	17:01	25	2.6	2.4	

SHUT_DOWN	12/09/2019	22:43	~	12/09/2019	22:55	13	0.0	0.2
START_UP	12/10/2019	07:49	~	12/10/2019	08:13	25	1.5	5.2
SHUT_DOWN	12/10/2019	18:28	~	12/10/2019	18:40	13	0.0	0.2
START_UP	12/11/2019	08:53	~	12/11/2019	09:17	25	3.4	7.2
SHUT_DOWN	12/11/2019	10:56	~	12/11/2019	11:08	13	0.0	0.2
START_UP	12/11/2019	15:24	~	12/11/2019	15:48	25	0.8	3.4
SHUT_DOWN	12/11/2019	22:00	~	12/11/2019	22:12	13	0.0	0.2
START_UP	12/12/2019	05:54	~	12/12/2019	06:18	25	1.3	4.2
SHUT_DOWN	12/12/2019	18:58	~	12/12/2019	19:10	13	0.0	0.2
START_UP	12/13/2019	08:54	~	12/13/2019	09:18	25	1.4	4.5
SHUT_DOWN	12/13/2019	20:00	~	12/13/2019	20:12	13	0.0	0.2
START_UP	12/14/2019	08:39	~	12/14/2019	09:03	25	1.8	4.1
SHUT_DOWN	12/14/2019	20:00	~	12/14/2019	20:12	13	0.0	0.1
START_UP	12/15/2019	16:24	~	12/15/2019	16:48	25	1.2	4.3
SHUT_DOWN	12/15/2019	17:28	~	12/15/2019	17:40	13	0.0	0.2
START_UP	12/16/2019	06:24	~	12/16/2019	06:48	25	1.0	4.7
SHUT_DOWN	12/16/2019	10:46	~	12/16/2019	10:58	13	0.0	0.2
START_UP	12/16/2019	16:54	~	12/16/2019	17:18	25	1.0	3.7
SHUT_DOWN	12/16/2019	21:43	~	12/16/2019	21:55	13	0.0	0.3
START_UP	12/17/2019	07:49	~	12/17/2019	08:13	25	1.2	6.9
SHUT_DOWN	12/17/2019	12:58	~	12/17/2019	13:10	13	0.0	0.2
START_UP	12/17/2019	16:48	~	12/17/2019	17:12	25	1.3	3.2
SHUT_DOWN	12/17/2019	17:58	~	12/17/2019	18:10	13	0.0	0.2
START_UP	12/18/2019	07:50	~	12/18/2019	08:14	25	1.3	6.0
SHUT_DOWN	12/18/2019	21:28	~	12/18/2019	21:40	13	0.0	0.2
START_UP	12/19/2019	06:24	~	12/19/2019	06:48	25	3.3	4.4
SHUT_DOWN	12/19/2019	20:13	~	12/19/2019	20:25	13	0.0	0.2
START_UP	12/20/2019	16:49	~	12/20/2019	17:13	25	1.3	5.8
SHUT_DOWN	12/20/2019	18:19	~	12/20/2019	18:31	13	0.0	0.2
START_UP	12/26/2019	16:54	~	12/26/2019	17:18	25	1.4	4.9
SHUT_DOWN	12/26/2019	22:29	~	12/26/2019	22:41	13	0.0	0.2
START_UP	12/30/2019	16:54	~	12/30/2019	17:18	25	3.1	4.7
SHUT_DOWN	12/30/2019	19:58	~	12/30/2019	20:10	13	0.0	0.2
START_UP	12/31/2019	16:54	~	12/31/2019	17:18	25	0.8	4.9
SHUT_DOWN	12/31/2019	17:58	~	12/31/2019	18:10	13	0.0	0.2

Startup / ShutDown Report
 Generated: 1/29/2020 08:01
 StartUp/ShutDown Event Report NRG Carlsbad Unit 9
 Carlsbad Unit 9

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Unit Name: Unit9

Events	Time	Duration (min)	CO Lbs	Nox Lbs
START_UP	10/01/2019 04:50 ~ 10/01/2019 05:14	25	2.6	4.3
SHUT_DOWN	10/01/2019 06:55 ~ 10/01/2019 07:07	13	0.0	0.2
START_UP	10/02/2019 17:36 ~ 10/02/2019 18:00	25	1.7	6.1
SHUT_DOWN	10/02/2019 19:10 ~ 10/02/2019 19:22	13	0.0	0.2
START_UP	10/03/2019 04:50 ~ 10/03/2019 05:14	25	3.8	4.3
SHUT_DOWN	10/03/2019 05:35 ~ 10/03/2019 05:47	13	0.0	0.4
START_UP	10/03/2019 17:19 ~ 10/03/2019 17:43	25	2.7	4.8
SHUT_DOWN	10/03/2019 18:40 ~ 10/03/2019 18:52	13	0.0	0.2
START_UP	10/04/2019 05:21 ~ 10/04/2019 05:45	25	1.6	4.8
SHUT_DOWN	10/04/2019 06:25 ~ 10/04/2019 06:37	13	0.0	0.2
START_UP	10/04/2019 16:51 ~ 10/04/2019 17:15	25	2.7	4.2
SHUT_DOWN	10/04/2019 17:56 ~ 10/04/2019 18:08	13	0.0	0.2
START_UP	10/05/2019 15:51 ~ 10/05/2019 16:15	25	3.8	4.5
SHUT_DOWN	10/05/2019 19:55 ~ 10/05/2019 20:07	13	0.0	0.2
START_UP	10/06/2019 14:36 ~ 10/06/2019 15:00	25	2.0	4.2
SHUT_DOWN	10/06/2019 18:56 ~ 10/06/2019 19:08	13	0.0	0.1
START_UP	10/07/2019 08:46 ~ 10/07/2019 09:10	25	2.3	5.1
SHUT_DOWN	10/07/2019 09:55 ~ 10/07/2019 10:07	13	0.0	0.2
START_UP	10/07/2019 16:36 ~ 10/07/2019 17:00	25	1.8	5.6
SHUT_DOWN	10/07/2019 18:55 ~ 10/07/2019 19:07	13	0.0	0.2
START_UP	10/08/2019 15:51 ~ 10/08/2019 16:15	25	2.0	4.3
SHUT_DOWN	10/08/2019 18:55 ~ 10/08/2019 19:07	13	0.0	0.2
START_UP	10/09/2019 16:46 ~ 10/09/2019 17:10	25	2.5	5.2
SHUT_DOWN	10/09/2019 18:55 ~ 10/09/2019 19:07	13	0.0	0.2
START_UP	10/10/2019 04:51 ~ 10/10/2019 05:15	25	1.6	4.2
SHUT_DOWN	10/10/2019 06:11 ~ 10/10/2019 06:23	13	0.0	0.2
START_UP	10/10/2019 13:21 ~ 10/10/2019 13:45	25	1.5	4.3
SHUT_DOWN	10/10/2019 18:55 ~ 10/10/2019 19:07	13	0.0	0.1
START_UP	10/11/2019 05:05 ~ 10/11/2019 05:29	25	2.1	4.3
SHUT_DOWN	10/11/2019 14:56 ~ 10/11/2019 15:08	13	0.0	0.2
START_UP	10/11/2019 17:31 ~ 10/11/2019 17:55	25	3.1	1.6
SHUT_DOWN	10/11/2019 18:55 ~ 10/11/2019 19:07	13	0.0	0.2
START_UP	10/12/2019 06:45 ~ 10/12/2019 07:09	25	2.3	6.2
SHUT_DOWN	10/12/2019 13:55 ~ 10/12/2019 14:07	13	0.0	0.1

START_UP	10/12/2019	16:53	~	10/12/2019	17:17	25	3.5	2.6
SHUT_DOWN	10/12/2019	18:55	~	10/12/2019	19:07	13	0.0	0.2
START_UP	10/13/2019	16:35	~	10/13/2019	16:59	25	3.0	4.1
SHUT_DOWN	10/13/2019	18:55	~	10/13/2019	19:07	13	0.0	0.2
START_UP	10/18/2019	16:51	~	10/18/2019	17:15	25	2.8	4.6
SHUT_DOWN	10/18/2019	17:55	~	10/18/2019	18:07	13	0.0	0.2
START_UP	10/21/2019	18:51	~	10/21/2019	19:15	25	3.5	4.9
SHUT_DOWN	10/21/2019	19:55	~	10/21/2019	20:07	13	0.0	0.2
START_UP	10/22/2019	04:50	~	10/22/2019	05:14	25	1.8	4.3
SHUT_DOWN	10/22/2019	06:54	~	10/22/2019	07:06	13	0.0	0.2
START_UP	10/22/2019	15:15	~	10/22/2019	15:39	25	2.1	5.1
SHUT_DOWN	10/22/2019	19:54	~	10/22/2019	20:06	13	0.0	0.2
START_UP	10/23/2019	09:35	~	10/23/2019	09:59	25	1.9	4.6
SHUT_DOWN	10/23/2019	18:54	~	10/23/2019	19:06	13	0.0	0.2
START_UP	10/24/2019	05:20	~	10/24/2019	05:44	25	2.2	5.4
SHUT_DOWN	10/24/2019	06:40	~	10/24/2019	06:52	13	0.0	0.2
START_UP	10/24/2019	13:15	~	10/24/2019	13:39	25	2.1	3.9
SHUT_DOWN	10/24/2019	20:08	~	10/24/2019	20:20	13	0.0	0.3
START_UP	10/25/2019	07:51	~	10/25/2019	08:15	25	2.5	4.6
SHUT_DOWN	10/25/2019	13:25	~	10/25/2019	13:37	13	0.0	0.2
START_UP	10/25/2019	17:16	~	10/25/2019	17:40	25	1.3	3.4
SHUT_DOWN	10/25/2019	19:08	~	10/25/2019	19:20	13	0.0	0.2
START_UP	10/26/2019	15:46	~	10/26/2019	16:10	25	3.8	4.5
SHUT_DOWN	10/26/2019	18:55	~	10/26/2019	19:07	13	0.0	0.2
START_UP	10/28/2019	16:31	~	10/28/2019	16:55	25	3.1	5.0
SHUT_DOWN	10/28/2019	18:10	~	10/28/2019	18:22	13	0.0	0.2
START_UP	10/29/2019	05:05	~	10/29/2019	05:29	25	1.7	4.4
SHUT_DOWN	10/29/2019	06:10	~	10/29/2019	06:22	13	0.0	0.2
START_UP	10/29/2019	16:31	~	10/29/2019	16:55	25	2.3	5.2
SHUT_DOWN	10/29/2019	18:40	~	10/29/2019	18:52	13	0.0	0.2
START_UP	10/30/2019	04:50	~	10/30/2019	05:14	25	1.8	4.3
SHUT_DOWN	10/30/2019	06:41	~	10/30/2019	06:53	13	0.0	0.2
START_UP	10/30/2019	17:06	~	10/30/2019	17:30	25	2.3	6.6
SHUT_DOWN	10/30/2019	20:10	~	10/30/2019	20:22	13	0.0	0.3
START_UP	10/31/2019	05:05	~	10/31/2019	05:29	25	1.9	4.6
SHUT_DOWN	10/31/2019	06:41	~	10/31/2019	06:53	13	0.0	0.4
START_UP	10/31/2019	17:05	~	10/31/2019	17:29	25	2.6	4.0
SHUT_DOWN	10/31/2019	18:10	~	10/31/2019	18:22	13	0.0	0.2
START_UP	11/01/2019	05:06	~	11/01/2019	05:30	25	3.5	5.1
SHUT_DOWN	11/01/2019	06:25	~	11/01/2019	06:37	13	0.0	0.4
START_UP	11/01/2019	16:20	~	11/01/2019	16:44	25	2.7	4.4
SHUT_DOWN	11/01/2019	18:09	~	11/01/2019	18:21	13	0.0	0.2
START_UP	11/02/2019	05:21	~	11/02/2019	05:45	25	3.2	4.9
SHUT_DOWN	11/02/2019	08:55	~	11/02/2019	09:07	13	0.0	0.2
START_UP	11/02/2019	19:45	~	11/02/2019	20:09	25	4.1	6.3
SHUT_DOWN	11/02/2019	20:56	~	11/02/2019	21:08	13	0.0	0.2

START_UP	11/03/2019	06:35	~	11/03/2019	06:59	25	1.5	5.1
SHUT_DOWN	11/03/2019	13:09	~	11/03/2019	13:21	13	0.0	0.2
START_UP	11/04/2019	05:50	~	11/04/2019	06:14	25	1.6	5.0
SHUT_DOWN	11/04/2019	07:25	~	11/04/2019	07:37	13	0.0	0.3
START_UP	11/04/2019	11:34	~	11/04/2019	11:58	25	1.7	3.8
SHUT_DOWN	11/04/2019	20:26	~	11/04/2019	20:38	13	0.0	0.2
START_UP	11/05/2019	15:35	~	11/05/2019	15:59	25	2.2	4.0
SHUT_DOWN	11/05/2019	18:39	~	11/05/2019	18:51	13	0.0	0.2
START_UP	11/06/2019	15:50	~	11/06/2019	16:14	25	1.9	4.2
SHUT_DOWN	11/06/2019	17:54	~	11/06/2019	18:06	13	0.0	0.1
START_UP	11/07/2019	15:20	~	11/07/2019	15:44	25	2.0	4.8
SHUT_DOWN	11/07/2019	20:24	~	11/07/2019	20:36	13	0.0	0.2
START_UP	11/12/2019	16:50	~	11/12/2019	17:14	25	2.0	4.3
SHUT_DOWN	11/12/2019	17:54	~	11/12/2019	18:06	13	0.0	0.2
START_UP	11/15/2019	15:35	~	11/15/2019	15:59	25	1.8	4.3
SHUT_DOWN	11/15/2019	16:54	~	11/15/2019	17:06	13	0.0	0.2
START_UP	11/17/2019	15:20	~	11/17/2019	15:44	25	1.9	4.1
SHUT_DOWN	11/17/2019	18:54	~	11/17/2019	19:06	13	0.0	0.2
START_UP	11/18/2019	15:39	~	11/18/2019	16:03	25	2.3	4.0
SHUT_DOWN	11/18/2019	17:59	~	11/18/2019	18:11	13	0.0	0.2
START_UP	11/18/2019	19:54	~	11/18/2019	20:18	25	2.6	2.0
SHUT_DOWN	11/18/2019	21:14	~	11/18/2019	21:26	13	0.0	0.1
START_UP	11/20/2019	19:24	~	11/20/2019	19:48	25	3.3	5.1
SHUT_DOWN	11/20/2019	20:37	~	11/20/2019	20:49	13	0.0	0.2
START_UP	11/21/2019	16:39	~	11/21/2019	17:03	25	2.8	4.2
SHUT_DOWN	11/21/2019	17:59	~	11/21/2019	18:11	13	0.0	0.2
START_UP	11/22/2019	05:54	~	11/22/2019	06:18	25	1.7	4.4
SHUT_DOWN	11/22/2019	08:28	~	11/22/2019	08:40	13	0.0	0.2
START_UP	11/22/2019	16:49	~	11/22/2019	17:13	25	1.7	3.7
SHUT_DOWN	11/22/2019	18:00	~	11/22/2019	18:12	13	0.0	0.2
START_UP	11/24/2019	17:49	~	11/24/2019	18:13	25	2.4	4.9
SHUT_DOWN	11/24/2019	19:14	~	11/24/2019	19:26	13	0.0	0.2
START_UP	11/26/2019	06:09	~	11/26/2019	06:33	25	2.2	4.7
SHUT_DOWN	11/26/2019	07:14	~	11/26/2019	07:26	13	0.0	0.3
START_UP	11/27/2019	07:49	~	11/27/2019	08:13	25	2.3	5.4
SHUT_DOWN	11/27/2019	17:59	~	11/27/2019	18:11	13	0.0	0.2
START_UP	11/28/2019	15:54	~	11/28/2019	16:18	25	2.3	4.1
SHUT_DOWN	11/28/2019	19:13	~	11/28/2019	19:25	13	0.0	0.2
START_UP	11/29/2019	07:54	~	11/29/2019	08:18	25	2.2	4.2
SHUT_DOWN	11/29/2019	09:32	~	11/29/2019	09:44	13	0.0	0.4
START_UP	11/29/2019	15:54	~	11/29/2019	16:18	25	2.7	4.2
SHUT_DOWN	11/29/2019	18:59	~	11/29/2019	19:11	13	0.0	0.3
START_UP	11/30/2019	15:49	~	11/30/2019	16:13	25	1.8	4.7
SHUT_DOWN	11/30/2019	17:59	~	11/30/2019	18:11	13	0.0	0.2
START_UP	11/30/2019	20:38	~	11/30/2019	21:02	25	1.9	2.7
SHUT_DOWN	11/30/2019	21:43	~	11/30/2019	21:55	13	0.0	0.3

START_UP	12/01/2019	09:34	~	12/01/2019	09:58	25	1.9	5.2
SHUT_DOWN	12/01/2019	14:13	~	12/01/2019	14:25	13	0.0	0.2
START_UP	12/01/2019	16:53	~	12/01/2019	17:17	25	1.8	1.3
SHUT_DOWN	12/01/2019	17:59	~	12/01/2019	18:11	13	0.0	0.2
START_UP	12/02/2019	06:24	~	12/02/2019	06:48	25	1.7	5.0
SHUT_DOWN	12/02/2019	07:34	~	12/02/2019	07:46	13	0.0	0.2
START_UP	12/02/2019	10:53	~	12/02/2019	11:17	25	2.4	3.2
SHUT_DOWN	12/02/2019	19:14	~	12/02/2019	19:26	13	0.0	0.2
START_UP	12/02/2019	20:53	~	12/02/2019	21:17	25	1.8	1.4
SHUT_DOWN	12/02/2019	22:59	~	12/02/2019	23:11	13	0.0	0.2
START_UP	12/03/2019	07:49	~	12/03/2019	08:13	25	1.7	4.8
SHUT_DOWN	12/03/2019	11:44	~	12/03/2019	11:56	13	0.0	0.2
START_UP	12/03/2019	16:23	~	12/03/2019	16:47	25	2.0	3.4
SHUT_DOWN	12/03/2019	21:44	~	12/03/2019	21:56	13	0.0	0.2
START_UP	12/04/2019	08:49	~	12/04/2019	09:13	25	1.8	5.2
SHUT_DOWN	12/04/2019	22:01	~	12/04/2019	22:13	13	0.0	0.1
START_UP	12/05/2019	06:24	~	12/05/2019	06:48	25	2.3	4.0
SHUT_DOWN	12/05/2019	22:13	~	12/05/2019	22:25	13	0.0	0.3
START_UP	12/06/2019	05:54	~	12/06/2019	06:18	25	1.8	4.0
SHUT_DOWN	12/06/2019	08:28	~	12/06/2019	08:40	13	0.0	0.2
START_UP	12/06/2019	13:08	~	12/06/2019	13:32	25	1.6	4.3
SHUT_DOWN	12/06/2019	21:32	~	12/06/2019	21:44	13	0.0	0.2
START_UP	12/07/2019	09:24	~	12/07/2019	09:48	25	2.2	4.2
SHUT_DOWN	12/07/2019	21:59	~	12/07/2019	22:11	13	0.0	0.2
START_UP	12/09/2019	05:54	~	12/09/2019	06:18	25	2.0	4.0
SHUT_DOWN	12/09/2019	09:42	~	12/09/2019	09:54	13	0.0	0.2
START_UP	12/09/2019	10:51	~	12/09/2019	11:15	25	0.7	2.1
SHUT_DOWN	12/09/2019	22:44	~	12/09/2019	22:56	13	0.0	0.2
START_UP	12/10/2019	07:49	~	12/10/2019	08:13	25	1.7	4.3
SHUT_DOWN	12/10/2019	18:29	~	12/10/2019	18:41	13	0.0	0.2
START_UP	12/11/2019	15:24	~	12/11/2019	15:48	25	2.5	3.8
SHUT_DOWN	12/11/2019	22:00	~	12/11/2019	22:12	13	0.0	0.2
START_UP	12/12/2019	05:54	~	12/12/2019	06:18	25	1.5	3.6
SHUT_DOWN	12/12/2019	18:58	~	12/12/2019	19:10	13	0.0	0.2
START_UP	12/13/2019	08:54	~	12/13/2019	09:18	25	1.7	3.8
SHUT_DOWN	12/13/2019	20:00	~	12/13/2019	20:12	13	0.0	0.2
START_UP	12/14/2019	09:51	~	12/14/2019	10:15	25	2.1	4.9
SHUT_DOWN	12/14/2019	20:00	~	12/14/2019	20:12	13	0.0	0.2
START_UP	12/15/2019	16:24	~	12/15/2019	16:48	25	1.4	3.9
SHUT_DOWN	12/15/2019	17:29	~	12/15/2019	17:41	13	0.0	0.2
START_UP	12/16/2019	06:24	~	12/16/2019	06:48	25	2.6	4.2
SHUT_DOWN	12/16/2019	10:46	~	12/16/2019	10:58	13	0.0	0.3
START_UP	12/16/2019	16:54	~	12/16/2019	17:18	25	2.3	3.4
SHUT_DOWN	12/16/2019	21:43	~	12/16/2019	21:55	13	0.0	0.3
START_UP	12/17/2019	09:49	~	12/17/2019	10:13	25	1.7	5.9
SHUT_DOWN	12/17/2019	12:59	~	12/17/2019	13:11	13	0.0	0.2

START_UP	12/17/2019	16:48	~	12/17/2019	17:12	25	1.6	2.9
SHUT_DOWN	12/17/2019	17:58	~	12/17/2019	18:10	13	0.0	0.3
START_UP	12/18/2019	07:50	~	12/18/2019	08:14	25	1.4	5.6
SHUT_DOWN	12/18/2019	21:29	~	12/18/2019	21:41	13	0.0	0.3
START_UP	12/19/2019	06:24	~	12/19/2019	06:48	25	2.4	3.9
SHUT_DOWN	12/19/2019	20:13	~	12/19/2019	20:25	13	0.0	0.2
START_UP	12/20/2019	16:49	~	12/20/2019	17:13	25	1.7	5.0
SHUT_DOWN	12/20/2019	19:28	~	12/20/2019	19:40	13	0.0	0.2
START_UP	12/26/2019	16:54	~	12/26/2019	17:18	25	1.9	4.4
SHUT_DOWN	12/26/2019	22:29	~	12/26/2019	22:41	13	0.0	0.3
START_UP	12/30/2019	16:54	~	12/30/2019	17:18	25	2.7	4.1
SHUT_DOWN	12/30/2019	19:58	~	12/30/2019	20:10	13	0.0	0.3
START_UP	12/31/2019	16:54	~	12/31/2019	17:18	25	2.7	4.2
SHUT_DOWN	12/31/2019	17:58	~	12/31/2019	18:10	13	0.0	0.2

Startup / ShutDown Report
 Generated: 1/29/2020 07:59
 StartUp/ShutDown Event Report NRG Carlsbad Unit 10
 Carlsbad Unit 10

Company: NRG Carlsbad
 Plant: 4600 Carlsbad Blvd
 City/St: Carlsbad, CA 92008

Period Start: 10/1/2019 00:00
 Period End: 12/31/2019 23:59
 Unit Name: Unit10

Events	Time	Duration (min)	CO Lbs	Nox Lbs
START_UP	10/01/2019 17:36 ~ 10/01/2019 18:00	25	1.2	6.2
SHUT_DOWN	10/01/2019 20:25 ~ 10/01/2019 20:37	13	0.0	0.2
START_UP	10/06/2019 16:53 ~ 10/06/2019 17:17	25	2.0	5.0
SHUT_DOWN	10/06/2019 18:56 ~ 10/06/2019 19:08	13	0.0	0.1
START_UP	10/07/2019 15:51 ~ 10/07/2019 16:15	25	1.4	5.2
SHUT_DOWN	10/07/2019 17:56 ~ 10/07/2019 18:08	13	0.0	0.1
START_UP	10/07/2019 18:50 ~ 10/07/2019 19:14	25	0.1	1.6
SHUT_DOWN	10/07/2019 19:56 ~ 10/07/2019 20:08	13	0.0	0.2
START_UP	10/08/2019 16:51 ~ 10/08/2019 17:15	25	1.2	4.9
SHUT_DOWN	10/08/2019 19:55 ~ 10/08/2019 20:07	13	0.0	0.1
START_UP	10/11/2019 15:50 ~ 10/11/2019 16:14	25	2.2	7.2
SHUT_DOWN	10/11/2019 18:40 ~ 10/11/2019 18:52	13	0.0	0.2
START_UP	10/12/2019 12:20 ~ 10/12/2019 12:44	25	2.2	4.9
SHUT_DOWN	10/12/2019 13:25 ~ 10/12/2019 13:37	13	0.0	0.1
START_UP	10/13/2019 16:35 ~ 10/13/2019 16:59	25	2.3	4.9
SHUT_DOWN	10/13/2019 18:25 ~ 10/13/2019 18:37	13	0.0	0.2
START_UP	10/17/2019 17:20 ~ 10/17/2019 17:44	25	2.0	5.7
SHUT_DOWN	10/17/2019 18:25 ~ 10/17/2019 18:37	13	0.0	0.1
START_UP	10/19/2019 17:21 ~ 10/19/2019 17:45	25	3.4	4.9
SHUT_DOWN	10/19/2019 18:25 ~ 10/19/2019 18:37	13	0.0	0.2
START_UP	10/20/2019 17:51 ~ 10/20/2019 18:15	25	1.1	4.5
SHUT_DOWN	10/20/2019 19:55 ~ 10/20/2019 20:07	13	0.0	0.1
START_UP	10/21/2019 12:50 ~ 10/21/2019 13:14	25	1.7	4.6
SHUT_DOWN	10/21/2019 15:55 ~ 10/21/2019 16:07	13	0.0	0.1
START_UP	10/21/2019 17:50 ~ 10/21/2019 18:14	25	2.4	1.7
SHUT_DOWN	10/21/2019 18:55 ~ 10/21/2019 19:07	13	0.0	0.2
START_UP	10/22/2019 14:50 ~ 10/22/2019 15:14	25	1.5	4.5
SHUT_DOWN	10/22/2019 20:58 ~ 10/22/2019 21:10	13	0.0	0.2
START_UP	10/23/2019 11:05 ~ 10/23/2019 11:29	25	1.2	4.6
SHUT_DOWN	10/23/2019 12:10 ~ 10/23/2019 12:22	13	0.0	0.2
START_UP	10/23/2019 16:49 ~ 10/23/2019 17:13	25	1.6	4.6
SHUT_DOWN	10/23/2019 18:56 ~ 10/23/2019 19:08	13	0.0	0.1
START_UP	10/24/2019 10:06 ~ 10/24/2019 10:30	25	1.1	4.6
SHUT_DOWN	10/24/2019 11:54 ~ 10/24/2019 12:06	13	0.0	0.2
START_UP	10/24/2019 15:49 ~ 10/24/2019 16:13	25	1.3	3.4
SHUT_DOWN	10/24/2019 20:54 ~ 10/24/2019 21:06	13	0.0	0.2
START_UP	10/25/2019 04:51 ~ 10/25/2019 05:15	25	1.8	4.4

SHUT_DOWN	10/25/2019	08:55	~	10/25/2019	09:07	13	0.0	0.2
START_UP	10/25/2019	12:50	~	10/25/2019	13:14	25	2.6	4.5
SHUT_DOWN	10/25/2019	17:25	~	10/25/2019	17:37	13	0.0	0.1
START_UP	10/28/2019	05:50	~	10/28/2019	06:14	25	1.8	5.7
SHUT_DOWN	10/28/2019	14:55	~	10/28/2019	15:07	13	0.0	0.2
START_UP	10/28/2019	16:19	~	10/28/2019	16:43	25	1.8	2.4
SHUT_DOWN	10/28/2019	17:55	~	10/28/2019	18:07	13	0.0	0.1
START_UP	10/29/2019	04:50	~	10/29/2019	05:14	25	1.3	5.7
SHUT_DOWN	10/29/2019	07:55	~	10/29/2019	08:07	13	0.0	0.2
START_UP	10/29/2019	08:49	~	10/29/2019	09:13	25	0.1	1.7
SHUT_DOWN	10/29/2019	18:55	~	10/29/2019	19:07	13	0.0	0.2
START_UP	10/30/2019	05:05	~	10/30/2019	05:29	25	1.1	4.5
SHUT_DOWN	10/30/2019	06:25	~	10/30/2019	06:37	13	0.0	0.2
START_UP	10/30/2019	16:20	~	10/30/2019	16:44	25	1.9	5.7
SHUT_DOWN	10/30/2019	19:25	~	10/30/2019	19:37	13	0.0	0.4
START_UP	10/31/2019	05:20	~	10/31/2019	05:44	25	1.3	5.0
SHUT_DOWN	10/31/2019	06:25	~	10/31/2019	06:37	13	0.0	0.3
START_UP	11/01/2019	05:25	~	11/01/2019	05:49	25	3.0	5.1
SHUT_DOWN	11/01/2019	06:25	~	11/01/2019	06:37	13	0.0	0.4
START_UP	11/01/2019	10:05	~	11/01/2019	10:29	25	2.3	5.4
SHUT_DOWN	11/01/2019	12:39	~	11/01/2019	12:51	13	0.0	0.1
START_UP	11/04/2019	05:50	~	11/04/2019	06:14	25	1.5	5.0
SHUT_DOWN	11/04/2019	08:39	~	11/04/2019	08:51	13	0.0	0.2
START_UP	11/04/2019	10:19	~	11/04/2019	10:43	25	1.0	2.5
SHUT_DOWN	11/04/2019	20:26	~	11/04/2019	20:38	13	0.0	0.1
START_UP	11/05/2019	15:50	~	11/05/2019	16:14	25	1.3	4.5
SHUT_DOWN	11/05/2019	18:24	~	11/05/2019	18:36	13	0.0	0.2
START_UP	11/06/2019	15:50	~	11/06/2019	16:14	25	1.2	5.0
SHUT_DOWN	11/06/2019	17:55	~	11/06/2019	18:07	13	0.0	0.2
START_UP	11/07/2019	15:50	~	11/07/2019	16:14	25	1.3	4.7
SHUT_DOWN	11/07/2019	19:24	~	11/07/2019	19:36	13	0.0	0.2
START_UP	11/08/2019	16:20	~	11/08/2019	16:44	25	1.6	4.5
SHUT_DOWN	11/08/2019	18:54	~	11/08/2019	19:06	13	0.0	0.2
START_UP	11/11/2019	16:35	~	11/11/2019	16:59	25	3.2	4.9
SHUT_DOWN	11/11/2019	17:54	~	11/11/2019	18:06	13	0.0	0.2
START_UP	11/12/2019	10:50	~	11/12/2019	11:14	25	1.6	6.9
SHUT_DOWN	11/12/2019	13:09	~	11/12/2019	13:21	13	0.0	0.2
START_UP	11/12/2019	16:49	~	11/12/2019	17:13	25	1.1	3.5
SHUT_DOWN	11/12/2019	17:54	~	11/12/2019	18:06	13	0.0	0.2
START_UP	11/13/2019	13:35	~	11/13/2019	13:59	25	2.1	5.8
SHUT_DOWN	11/13/2019	15:09	~	11/13/2019	15:21	13	0.0	0.1
START_UP	11/14/2019	05:50	~	11/14/2019	06:14	25	1.6	5.2
SHUT_DOWN	11/14/2019	07:10	~	11/14/2019	07:22	13	0.0	0.2
START_UP	11/14/2019	13:35	~	11/14/2019	13:59	25	2.4	4.0
SHUT_DOWN	11/14/2019	15:54	~	11/14/2019	16:06	13	0.0	0.2
START_UP	11/14/2019	16:49	~	11/14/2019	17:13	25	0.1	1.5
SHUT_DOWN	11/14/2019	17:55	~	11/14/2019	18:07	13	0.0	0.2
START_UP	11/15/2019	16:35	~	11/15/2019	16:59	25	1.2	4.9
SHUT_DOWN	11/15/2019	17:54	~	11/15/2019	18:06	13	0.0	0.2

START_UP	11/18/2019	15:24	~	11/18/2019	15:48	25	2.0	4.8
SHUT_DOWN	11/18/2019	17:44	~	11/18/2019	17:56	13	0.0	0.2
START_UP	11/18/2019	18:54	~	11/18/2019	19:18	25	0.4	1.5
SHUT_DOWN	11/18/2019	19:59	~	11/18/2019	20:11	13	0.0	0.2
START_UP	11/19/2019	05:54	~	11/19/2019	06:18	25	1.3	4.7
SHUT_DOWN	11/19/2019	06:59	~	11/19/2019	07:11	13	0.0	0.3
START_UP	11/19/2019	16:39	~	11/19/2019	17:03	25	2.0	4.1
SHUT_DOWN	11/19/2019	17:44	~	11/19/2019	17:56	13	0.0	0.1
START_UP	11/20/2019	05:54	~	11/20/2019	06:18	25	1.4	5.2
SHUT_DOWN	11/20/2019	06:58	~	11/20/2019	07:10	13	0.0	0.2
START_UP	11/20/2019	16:40	~	11/20/2019	17:04	25	1.6	4.3
SHUT_DOWN	11/20/2019	18:07	~	11/20/2019	18:19	13	0.0	0.2
START_UP	12/02/2019	16:54	~	12/02/2019	17:18	25	2.0	5.0
SHUT_DOWN	12/02/2019	18:29	~	12/02/2019	18:41	13	0.0	0.2
START_UP	12/02/2019	19:26	~	12/02/2019	19:50	25	1.3	1.5
SHUT_DOWN	12/02/2019	20:29	~	12/02/2019	20:41	13	0.0	0.2
START_UP	12/03/2019	16:39	~	12/03/2019	17:03	25	2.1	5.3
SHUT_DOWN	12/03/2019	17:58	~	12/03/2019	18:10	13	0.0	0.2
START_UP	12/04/2019	07:54	~	12/04/2019	08:18	25	2.0	6.4
SHUT_DOWN	12/04/2019	19:44	~	12/04/2019	19:56	13	0.0	0.2
START_UP	12/05/2019	05:54	~	12/05/2019	06:18	25	1.2	4.3
SHUT_DOWN	12/05/2019	08:44	~	12/05/2019	08:56	13	0.0	0.1
START_UP	12/05/2019	16:24	~	12/05/2019	16:48	25	1.8	4.8
SHUT_DOWN	12/05/2019	22:28	~	12/05/2019	22:40	13	0.0	0.2
START_UP	12/06/2019	08:54	~	12/06/2019	09:18	25	1.4	4.2
SHUT_DOWN	12/06/2019	19:16	~	12/06/2019	19:28	13	0.0	0.1
START_UP	12/09/2019	17:09	~	12/09/2019	17:33	25	2.3	5.9
SHUT_DOWN	12/09/2019	22:58	~	12/09/2019	23:10	13	0.0	0.2
START_UP	12/10/2019	06:54	~	12/10/2019	07:18	25	2.3	6.4
SHUT_DOWN	12/10/2019	08:44	~	12/10/2019	08:56	13	0.0	0.2
START_UP	12/10/2019	09:38	~	12/10/2019	10:02	25	1.1	2.6
SHUT_DOWN	12/10/2019	14:59	~	12/10/2019	15:11	13	0.0	0.1
START_UP	12/11/2019	07:09	~	12/11/2019	07:33	25	2.2	6.7
SHUT_DOWN	12/11/2019	18:59	~	12/11/2019	19:11	13	0.0	0.2
START_UP	12/17/2019	06:54	~	12/17/2019	07:18	25	2.0	8.0
SHUT_DOWN	12/17/2019	09:59	~	12/17/2019	10:11	13	0.0	0.2
START_UP	12/17/2019	11:38	~	12/17/2019	12:02	25	0.7	1.6
SHUT_DOWN	12/17/2019	14:28	~	12/17/2019	14:40	13	0.0	0.2
START_UP	12/30/2019	16:54	~	12/30/2019	17:18	25	2.8	4.9
SHUT_DOWN	12/30/2019	17:58	~	12/30/2019	18:10	13	0.0	0.3

Attachment F 40 CFR Part 60, Subpart KKKK Report:

AQ-34: Rolling Four-Unit Operating Pound Per Mega Watt
Hour Summary

AQ-88: Part 60, KKKK Semiannual Report Summary

**Summary Report
Gaseous Excess Emission and Monitoring System Performance
Version 43.0**

Reporting dates 7/1/2019 00:00 through 12/31/2019 23:59
Generated: 1/21/2020 12:03

Pollutant: NOx
Emission Limit: SubPart KKKK, 15 ppmc @ 15% O2 4 Hour Rolling

Company Name: Carlsbad Energy Center
Address: 4950 Avenida Encinas, Carlsbad, CA
Model: Teledyne T200

Description: Unit 6

Date of Latest CEMS Certification or Audit: December 10, 2019

Total source operating time in reporting period: **858.0 hours**

Emission Data Summary(note 1)	CEMS Downtime Summary(note 1)
1. Duration of excess emissions in period due to:	1. Duration of CEMS downtime in period due to:
a. Start Up/Shut Down..... 0.0	a. Monitoring Equipment Malfunction..... 0.0
b. Control Equipment Failure..... 0.0	b. Non-Monitoring Equipment Malfunction..... 0.0
c. Process Problems..... 0.0	c. Quality Assurance..... 0.0
d. Other Known Excess Emissions Cause..... 0.0	d. Other Known Monitor Downtime Cause..... 0.0
e. Unknown Excess Emissions Cause..... 0.0	e. UnKnown Monitor Downtime Cause..... 0.0
2. Total duration of excess emission..... 0.0	2. Total duration of CEMS downtime..... 0.0
3. Excess emission duration (%)..... 0.00%	3. CEMS downtime (%)..... 0.00%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

Note(s):

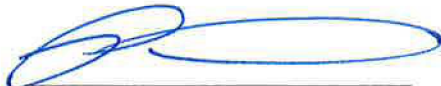
- 1 For opacity, record all times in minutes. For gases, record all times in hours.
- 2 For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CEMS downtime is 5% or greater of the total operating time, both this summary report and the excess emissions report described in 40CFR60.7(c) shall be submitted.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statment(s) made in this document or its attachments may be punishable as a criminal offense."

On a separate page, describe any changes since last quarter in CEMS, process or controls.

Name:

Signature:



Title: General Manager

Date:

1/28/20

**Summary Report
Gaseous Excess Emission and Monitoring System Performance
Version 43.0**

**Reporting dates 7/1/2019 00:00 through 12/31/2019 23:59
Generated: 1/21/2020 12:03**

**Pollutant: NOx
Emission Limit: SubPart KKKK, 15 ppmc @ 15% O2 4 Hour Rolling**

Company Name: Carlsbad Energy Center
Address: 4950 Avenida Encinas, Carlsbad, CA
Model: Teledyne T200

Description: Unit 7

Date of Latest CEMS Certification or Audit: December 10, 2019

Total source operating time in reporting period: **786.0 hours**

Emission Data Summary(note 1)	CEMS Downtime Summary(note 1)
1. Duration of excess emissions in period due to:	1. Duration of CEMS downtime in period due to:
a. Start Up/Shut Down..... 0.0	a. Monitoring Equipment Malfunction..... 0.0
b. Control Equipment Failure..... 0.0	b. Non-Monitoring Equipment Malfunction... 0.0
c. Process Problems..... 0.0	c. Quality Assurance..... 0.0
d. Other Known Excess Emissions Cause..... 0.0	d. Other Known Monitor Downtime Cause..... 0.0
e. Unknown Excess Emissions Cause..... 0.0	e. UnKnown Monitor Downtime Cause..... 0.0
2. Total duration of excess emission..... 0.0	2. Total duration of CEMS downtime..... 0.0
3. Excess emission duration (%)..... 0.00%	3. CEMS downtime (%)..... 0.00%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

Note(s):

- 1 For opacity, record all times in minutes. For gases, record all times in hours.
- 2 For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CEMS downtime is 5% or greater of the total operating time, both this summary report and the excess emissions report described in 40CFR60.7(c) shall be submitted.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

On a separate page, describe any changes since last quarter in CEMS, process or controls.

Name:

Signature:



Title: General Manager

Date:

1/28/21

**Summary Report
Gaseous Excess Emission and Monitoring System Performance
Version 43.0**

Reporting dates 7/1/2019 00:00 through 12/31/2019 23:59
Generated: 1/21/2020 12:03

Pollutant: NOx
Emission Limit: SubPart KKKK, 15 ppmc @ 15% O2 4 Hour Rolling

Company Name: Carlsbad Energy Center
Address: 4950 Avenida Encinas, Carlsbad, CA
Model: Teledyne T200

Description: Unit 8

Date of Latest CEMS Certification or Audit: December 10, 2019

Total source operating time in reporting period: **1075.0 hours**

Emission Data Summary(note 1)		CEMS Downtime Summary(note 1)	
1. Duration of excess emissions in period due to:		1. Duration of CEMS downtime in period due to:	
a. Start Up/Shut Down.....	0.0	a. Monitoring Equipment Malfunction.....	0.0
b. Control Equipment Failure.....	0.0	b. Non-Monitoring Equipment Malfunction...	0.0
c. Process Problems.....	0.0	c. Quality Assurance.....	0.0
d. Other Known Excess Emissions Cause.....	0.0	d. Other Known Monitor Downtime Cause.....	1.0
e. Unknown Excess Emissions Cause.....	0.0	e. UnKnown Monitor Downtime Cause.....	0.0
2. Total duration of excess emission.....	0.0	2. Total duration of CEMS downtime.....	1.0
3. Excess emission duration (%).....	0.00%	3. CEMS downtime (%).....	0.09%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

Note(s):

- ¹ For opacity, record all times in minutes. For gases, record all times in hours.
- ² For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CEMS downtime is 5% or greater of the total operating time, both this summary report and the excess emissions report described in 40CFR60.7(c) shall be submitted.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

On a separate page, describe any changes since last quarter in CEMS, process or controls.

Name:

Signature:



Title: General Manager

Date:

1/28/20

**Summary Report
Gaseous Excess Emission and Monitoring System Performance
Version 43.0**

**Reporting dates 7/1/2019 00:00 through 12/31/2019 23:59
Generated: 1/21/2020 12:03**

**Pollutant: NOx
Emission Limit: SubPart KKKK, 15 ppmc @ 15% O2 4 Hour Rolling**

Company Name: Carlsbad Energy Center
Address: 4950 Avenida Encinas, Carlsbad, CA
Model: Teledyne T200

Description: Unit 9

Date of Latest CEMS Certification or Audit: December 10, 2019

Total source operating time in reporting period: **948.0 hours**

Emission Data Summary(note 1)	CEMS Downtime Summary(note 1)
1. Duration of excess emissions in period due to:	1. Duration of CEMS downtime in period due to:
a. Start Up/Shut Down..... 0.0	a. Monitoring Equipment Malfunction..... 0.0
b. Control Equipment Failure..... 0.0	b. Non-Monitoring Equipment Malfunction... 0.0
c. Process Problems..... 0.0	c. Quality Assurance..... 0.0
d. Other Known Excess Emissions Cause..... 0.0	d. Other Known Monitor Downtime Cause..... 0.0
e. Unknown Excess Emissions Cause..... 0.0	e. UnKnown Monitor Downtime Cause..... 0.0
2. Total duration of excess emission..... 0.0	2. Total duration of CEMS downtime..... 0.0
3. Excess emission duration (%)..... 0.00%	3. CEMS downtime (%)..... 0.00%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

Note(s):

- ¹ For opacity, record all times in minutes. For gases, record all times in hours.
- ² For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CEMS downtime is 5% or greater of the total operating time, both this summary report and the excess emissions report described in 40CFR60.7(c) shall be submitted.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

On a separate page, describe any changes since last quarter in CEMS, process or controls.

Name:

Signature:



Title: General Manager

Date:

1/28/20

**Summary Report
Gaseous Excess Emission and Monitoring System Performance
Version 43.0**

**Reporting dates 7/1/2019 00:00 through 12/31/2019 23:59
Generated: 1/21/2020 12:03**

**Pollutant: NOx
Emission Limit: SubPart KKKK, 15 ppmc @ 15% O2 4 Hour Rolling**

Company Name: Carlsbad Energy Center
Address: 4950 Avenida Encinas, Carlsbad, CA
Model: Teledyne T200

Description: Unit 10

Date of Latest CEMS Certification or Audit: December 10, 2019

Total source operating time in reporting period: **594.0 hours**

Emission Data Summary(note 1)	CEMS Downtime Summary(note 1)
1. Duration of excess emissions in period due to:	1. Duration of CEMS downtime in period due to:
a. Start Up/Shut Down..... 0.0	a. Monitoring Equipment Malfunction..... 2.0
b. Control Equipment Failure..... 0.0	b. Non-Monitoring Equipment Malfunction... 0.0
c. Process Problems..... 0.0	c. Quality Assurance..... 0.0
d. Other Known Excess Emissions Cause..... 0.0	d. Other Known Monitor Downtime Cause..... 3.0
e. Unknown Excess Emissions Cause..... 0.0	e. UnKnown Monitor Downtime Cause..... 0.0
2. Total duration of excess emission..... 0.0	2. Total duration of CEMS downtime..... 5.0
3. Excess emission duration (%)..... 0.00%	3. CEMS downtime (%)..... 0.84%

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

Note(s):

- 1 For opacity, record all times in minutes. For gases, record all times in hours.
- 2 For the reporting period: If the total duration of excess emissions is 1% or greater of the total operating time or the total CEMS downtime is 5% or greater of the total operating time, both this summary report and the excess emissions report described in 40CFR60.7(c) shall be submitted.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statment(s) made in this document or its attachments may be punishable as a criminal offense."

On a separate page, describe any changes since last quarter in CEMS, process or controls.

Name:

Signature:



Title: General Manager

Date:

1/28/20

Attachment G Air Pollution Control District Monthly Report:

AQ-46: NO_x and PM₁₀ Annual Emissions Summary

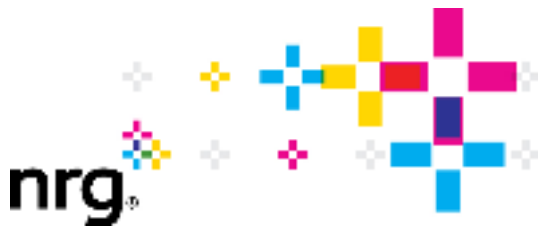
AQ-48: Monthly and Rolling 12-Month Calculated NO_x,
CO, VOCs, PM₁₀, and SO_x Emissions Summary

Attachment H VOC Statement:

AQ-29: Calculated VOC Corrected 2.0 PPM 1-Hour
Average Data

AQ-40: VOC Portion Only

AQ-41: VOC Portion Only



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

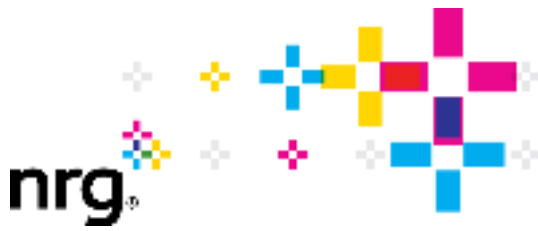
Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – VOLATILE ORGANIC COMPOUNDS COMPLIANCE STATEMENT

The San Diego Air Pollution Control District has not established a surrogate calculation for volatile organic compounds. The following conditions cannot be fulfilled until such a surrogate is established:

- AQ-29
- AQ-40: Only VOC Element
- AQ-41: Only VOC Element

Attachment I Encina Power Station Operations Statement:

AQ-47: Encina Emissions Summary Following CECP
Startup



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – ENCINA POWER STATION OPERATIONS COMPLIANCE STATEMENT

Encina Power Station ceased operations on December 11, 2018 and no longer operable. The following condition is fulfilled due to Encina no longer generating emissions:

- AQ-47

Attachment J Noncompliance Statement:

AQ-76: CEMS Emissions Exceedance Summary

AQ-78: DAHS Programming Compliance Summary



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – NONCOMPLIANCE STATEMENT

Carlsbad Energy Center had no permit exceedances in post-commercial operations in the fourth quarter of 2019 that did not qualify as breakdowns. In addition, no Data Acquisition Handling System (DAHS) programming changes were made in the fourth quarter of 2019. The following conditions are fulfilled:

- AQ-76
- AQ-78

Attachment K Diesel Fire Pump Operations Logs:

AQ-95: Fire Pump Hour Limit

AQ-105: Fire Pump Operating Log



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – Diesel Statement

Attached are operator logs for the diesel test runs in 4Q2019. The logs show that the diesel has run for a total of 14.5 hours so far this year. The diesel engine currently has 22.3 hours logged on it in total.

All Entries

<p>12/30/2019 15:39 PST</p>	<p>B Miller</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by b13mil on 12/30/2019 15:40 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 22.3; Diesel data before Start Diesel tank level (decimal entry): 0.75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1435; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1505; Ensure Diesel stops at 30 minutes Date: 12/30/19; Diesel data after the run Engine hours: 22.7; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	<p>Complete</p>
<p>12/30/2019 14:35 PST</p>	<p>B Miller</p>	<p>Category: BOP Fire Protection System Diesel Firepump</p> <p>Personnel: Reilly, Shawn</p> <p>Comment: Start test run of diesel fire pump.</p> <p>Appended Comments:</p> <ul style="list-style-type: none"> ▪ 1505: Diesel Pump Auto shutdown at end of test. (B13MIL, 12/30/2019 15:05 PST) 	<p>Test</p>
<p>12/24/2019 11:33 PST</p>	<p>K Campbell</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by kcampbell01 on 12/24/2019 11:37 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 21.9; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1050; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1120; Ensure Diesel stops at 30 minutes Date: 12/24/19; Diesel data after the run Engine hours: 22.3; Diesel data after the run Diesel tank level (Decimal): .75</p>	<p>Complete</p>
<p>12/16/2019 11:18 PST</p>	<p>G Munsell</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by g13mun on 12/16/2019 12:29 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 21.5; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1038; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1108; Ensure Diesel stops at 30 minutes Date: 12/16/19; Diesel data after the run Engine hours: 21.9; Diesel data after the run Diesel tank level (Decimal): .75</p>	<p>Complete</p>
<p>12/16/2019 10:39 PST</p>	<p>C Lobo</p>	<p>Category: BOP Fire Protection System Diesel Firepump</p>	<p>PM</p>

		<p>Personnel: Munsell, Gregory</p> <p>Comment: Started for weekly test</p>	
12/09/2019 17:21 PST	R Haman	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by r13ham on 12/09/2019 17:22 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 21.1; Diesel data before Start Diesel tank level (decimal entry): 75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1111; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1141; Ensure Diesel stops at 30 minutes Date: 12/9/2019; Diesel data after the run Engine hours: 21.5; Diesel data after the run Diesel tank level (Decimal): 75</p>	Complete
12/05/2019 12:18 PST	S Reilly	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by s13rei on 12/05/2019 12:17 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 20.9; Diesel data before Start Diesel tank level (decimal entry): 0.75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 954; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1007; Ensure Diesel stops at 30 minutes Date: 12/5/19; Diesel data after the run Engine hours: 21.1; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	Complete
12/05/2019 10:44 PST	S Reilly	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by s13rei on 12/05/2019 10:44 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 20.5; Diesel data before Start Diesel tank level (decimal entry): 0.75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 0935; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1005; Ensure Diesel stops at 30 minutes Date: 12-2-19; Diesel data after the run Engine hours: 20.9; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	Complete
12/05/2019 09:54 PST	B Miller	<p>Category: BOP Fire Protection System Diesel Firepump</p> <p>Comment: Diesel Fire Pump Running Alarm came in.</p> <p>Appended Comments:</p> <ul style="list-style-type: none"> ▪ 1006: Pump off. (B13MIL, 12/05/2019 10:08 PST) ▪ Diesel Pump testing complete, they are moving to the Electric Fire Pump. (B13MIL, 12/05/2019 10:19 PST) 	Test
12/03/2019	B Miller		Test

<p>12/02/2019 09:05 PST</p>	<p>B Miller</p>	<p>Category: BOP Fire Protection System Diesel Firepump Personnel: Reilly, Shawn Comment: Test Run Diesel Fire Pump. Appended Comments:</p> <ul style="list-style-type: none"> ▪ Test complete (B13MIL, 12/02/2019 09:37 PST) 	<p>test</p>
<p>11/30/2019 17:02 PST</p>	<p>M Kristie</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by m13kri on 11/30/2019 17:03 PST Round: Weekly Diesel Firepump Details: Diesel data before Start Engine hours: 20.1; Diesel data before Start Diesel tank level (decimal entry): 75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 0950; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1020; Ensure Diesel stops at 30 minutes Date: 11/30/19; Diesel data after the run Engine hours: 20.5; Diesel data after the run Diesel tank level (Decimal): 75</p>	<p>Complete</p>
<p>11/30/2019 09:58 PST</p>	<p>A Siegel</p>	<p>Category: BOP Fire Protection System Diesel Firepump Personnel: Kristie, Matt Comment: Running diesel for weekly PM</p>	<p>PM</p>
<p>11/21/2019 10:18 PST</p>	<p>C Lobo</p>	<p>Category: BOP Fire Protection System Diesel Firepump Diesel Engine Personnel: Kristie, Matt Comment: running pump after annual PM to check for fuel or oil leaks</p>	<p>Approval</p>
<p>11/21/2019 05:20 PST</p>	<p>K Campbell</p>	<p>*Data: Shift Time: Dayshift; Oncoming Control Operator: Lobo, Craig; Offgoing Control Operator: Campbell, Kyle; Oncoming Outside Operator: Kristie, Matt; Offgoing Outside Operator: Burton, Rob; Extra Operator / Trainee: Munsell, Greg; Extra Operator / Trainee: Siegel, Aaron; Carlsbad 1 Status: Fully Available; Carlsbad 2 Status: Fully Available; Gas Turbine 6 Status: Offline, Unit Fully Available; Gas Turbine 7 Status: Offline, Unit Fully Available; Gas Turbine 8 Status: Offline, Unit Fully Available; Gas Turbine 9 Status: Offline, Unit Fully Available; Gas Turbine 10 Status: Offline, Unit Fully Available; Safety/Environmental/Security concerns?: N/A; Activities Conducted During Shift: Ran units 8,9,10. Pumped to Bioswale, Hung Diesel firepump loto, rounds, Training; Upcoming Activities: Make demin water, Monitor Bioswale, rounds, training; Any Abnormal Alarms to Review: N/A; Temporary Changes To Control Setpoints / Bias in Effect?: N/A; Equipment In / Out of Service: N/A; Currently In COMA: NO; Nightshift has Verified CEMS Daily Calibrations have completed successfully: <input checked="" type="checkbox"/>; Oncoming Shift Checked DCS Supressed Alarms: <input checked="" type="checkbox"/>; Oncoming Shift Performed DCS Audible Alarm Test: <input checked="" type="checkbox"/>; Oncoming Shift Verified Audible Alarms Enabled on ADS Computer: <input checked="" type="checkbox"/>; Oncoming Shift Verified Audible Alarms Enabled on DAHS Computer: <input checked="" type="checkbox"/>; Oncoming CO Shift Acknowledgement: <input checked="" type="checkbox"/> The CO has ascertained the plant status through the shift turnover, review of the log and a check of the indications and alarms in the control room per CPUC General Order 167.; Oncoming OO Shift Acknowledgement <input type="checkbox"/> The OO has ascertained the plant status through the shift turnover, review of the log and a check of the indications and alarms in the control room per CPUC General Order 167. Comment: U7 has a failed daily calibration all channels, wood has been notified and he will contact Haman.</p>	<p>Shift Turnover</p>

		<p>Appended Comments:</p> <ul style="list-style-type: none"> Haman and Siegel were able to manually cal each channel to successfully pass cal. (CLogo1, 11/21/2019 07:32 PST) 	
11/21/2019 01:17 PST	K Campbell	<p>Data: LOTO Name: Diesel Firepump; Equipment: Diesel Firepump; Scope of work: Vallen to Perform Annual Inspection.</p> <p>LOTO: 1236</p> <p>Appended Comments:</p> <ul style="list-style-type: none"> Released and restored (CLogo1, 11/21/2019 10:41 PST) 	LOTO
11/18/2019 15:21 PST	C Lobo	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by clogo1 on 11/18/2019 15:22 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 19.7; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1435; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1505; Ensure Diesel stops at 30 minutes Date: 11/18/19; Diesel data after the run Engine hours: 20.1; Diesel data after the run Diesel tank level (Decimal): 75</p>	Complete
11/11/2019 13:20 PST	R Haman	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by r13ham on 11/11/2019 13:20 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 19.3; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1234; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1304; Ensure Diesel stops at 30 minutes Date: 11/11/19; Diesel data after the run Engine hours: 19.7; Diesel data after the run Diesel tank level (Decimal): .75</p>	Complete
11/04/2019 15:49 PST	B Miller	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by b13mil on 11/04/2019 15:52 PST</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 18.9; Diesel data before Start Diesel tank level (decimal entry): 0.75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1505; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1535; Ensure Diesel stops at 30 minutes Date: 11/04/19; Diesel data after the run Engine hours: 19.3; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	Complete
11/03/2019	B Miller		Complete

<p>10/28/2019 15:39 PDT</p>	<p>B Miller</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by b13mil on 10/28/2019 15:42 PDT</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 18.5; Diesel data before Start Diesel tank level (decimal entry): 0.75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1411; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1441; Ensure Diesel stops at 30 minutes Date: 10/28/19; Diesel data after the run Engine hours: 18.9; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	<p>Complete</p>
<p>10/23/2019 10:21 PDT</p>	<p>A Siegel</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by asiegel on 10/23/2019 10:22 PDT</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 18.1; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 0928; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 0958; Ensure Diesel stops at 30 minutes Date: 10/23/19; Diesel data after the run Engine hours: 18.5; Diesel data after the run Diesel tank level (Decimal): .75</p>	<p>Complete</p>
<p>10/23/2019 09:28 PDT</p>	<p>C Lobo</p>	<p>Category: BOP Fire Protection System Diesel Firepump</p> <p>Personnel: Siegel, Aaron</p> <p>Comment: Weekly test per PM</p>	<p>PM</p>
<p>10/15/2019 12:56 PDT</p>	<p>C Lobo</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by clob1 on 10/15/2019 12:55 PDT</p> <p>Round: Weekly Diesel Firepump</p> <p>Details: Diesel data before Start Engine hours: 17.7; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1218; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1248; Ensure Diesel stops at 30 minutes Date: 10/15/19; Diesel data after the run Engine hours: 18.1; Diesel data after the run Diesel tank level (Decimal): .75</p>	<p>Complete</p>
<p>10/07/2019 13:44 PDT</p>	<p>A Siegel</p>	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by asiegel on 10/07/2019 13:44 PDT</p> <p>Round: Weekly Diesel Firepump</p>	<p>Complete</p>

		<p>Details: Diesel data before Start Engine hours: 17.3; Diesel data before Start Diesel tank level (decimal entry): .75; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 1300; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 1330; Ensure Diesel stops at 30 minutes Date: 10/7/19; Diesel data after the run Engine hours: 17.7; Diesel data after the run Diesel tank level (Decimal): 0.75</p>	
10/07/2019 13:06 PDT	B Miller	<p>Category: BOP Fire Protection System Diesel Firepump Personnel: Siegel, Aaron Comment: Start</p>	Test
10/01/2019 00:12 PDT	A Siegel	<p>LOG ENTRY SHARED FROM 'Carlsbad Energy Center Rounds' by asiegel on 10/01/2019 00:15 PDT Round: Weekly Diesel Firepump Details: Diesel data before Start Engine hours: 16.9; Diesel data before Start Diesel tank level (decimal entry): .8; Start Diesel Fire Pump Normal Startup?: Normal; Start Diesel Fire Pump Normal Startup? Comment: N/A; Start Diesel Fire Pump Start time: 2127; Diesel Running Parameters normal(Leakoff, pressure etc.): OK; Diesel Running Parameters normal(Leakoff, pressure etc.) Comment: N/A; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK?: OK; Ensure Diesel stops at 30 minutes Did Diesel run and stop OK? Comment: N/A ; Ensure Diesel stops at 30 minutes Stop time: 2157; Ensure Diesel stops at 30 minutes Date: 9/30/19; Diesel data after the run Engine hours: 17.3; Diesel data after the run Diesel tank level (Decimal): .75</p>	Complete

Attachment L Diesel Generator Conditions:

AQ-110: Diesel Engine Run Hours

AQ-120: Diesel Engine Operation Logs

AQ-121: Diesel Engine District Notification



Carlsbad Energy Center LLC
4950 Avenida Encinas
Carlsbad, CA 92008
Phone: 760-710-3970

January 30, 2020

Subject: CARLSBAD ENERGY CENTER AQ-SC8 REPORT – Diesel Generator Statement

Carlsbad Energy Center does not currently have a diesel generator as one was not installed during construction. The determination of future installation is pending.

Attachment M Annual Operating Summary:

AQ-49: Annual Operating Hours Summary

AQ-50: Annual Starts Per Turbine Summary

Daily Operating Report - Carlsbad Energy Center

for
12/31/2019

Availability - Capacity - Generation

Plant status at 0600 Hours:

Unit 1	
<input type="checkbox"/> Operating	
<input checked="" type="checkbox"/> Available	
<input type="checkbox"/> Not Available	

Unit 2	
<input type="checkbox"/> Operating	
<input checked="" type="checkbox"/> Available	
<input type="checkbox"/> Not Available	

Previous 24 Hours

Unit 1		
Operating Hours:	1:05	Hrs:Min
(0001-2400) Total Online Hours		
Net Generation:	141.1	MWhr
(0001-2400) Total Net Generation		

Unit 2		
Operating Hours:	0:00	Hrs:Min
(0001-2400) Total Online Hours		
Net Generation:	0.0	MWhr
(0001-2400) Total Net Generation		

Project

Total Availability:	100.0%
((Online Hr + Offline Available Hr)/120)	
Total Capacity:	100.0%
((MW Generated/MW Scheduled) x 100)	
Total Generation:	141.1 MWhr
Total Net Generation (Unit 1 Net + Unit 2 Net)	

Annual Limits	Starts	Op. Hours
	400 Limit	2700 Limit
Carlsbad 1 - GT 6	393	1514.68
Carlsbad 1 - GT 7	384	1513.85
Carlsbad 1 - GT 8	394	1514.10
Carlsbad 1 - GT 9	395	1578.35
Carlsbad 2 - GT 10	396	1177.88

Period Availability (Updated Monthly) - Last updated 9/1/19

Unit 1	
M(onth)TD Availability	100%
MTD (Online Hr + MTD Offline Avl Hr)/MTD Hr	
P(eak)TD Availability	99.86%
(PTD Online Hr + PTD Offline Avl Hr)/PTD Hr	

Unit 2	
M(onth)TD Availability	100%
MTD (Online Hr + MTD Offline Avl Hr)/MTD Hr	
P(eak)TD Availability	99.97%
(PTD Online Hr + PTD Offline Avl Hr)/PTD Hr	

Significant Events

<input checked="" type="checkbox"/> No significant events, generation losses, major equipment out of service, accidents, injuries or operating abnormalities
--

OR

Describe:	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">Losses of generation (Include Date/Time Offline; Date/Time Online, Brief narrative of event)</td> </tr> <tr> <td style="text-align: center;">List Major Equipment Out of Service</td> </tr> <tr> <td style="text-align: center;">Briefly Describe any Accidents or Injuries</td> </tr> <tr> <td style="text-align: center;">Describe any Operating Anomalies</td> </tr> </table>	Losses of generation (Include Date/Time Offline; Date/Time Online, Brief narrative of event)	List Major Equipment Out of Service	Briefly Describe any Accidents or Injuries	Describe any Operating Anomalies
Losses of generation (Include Date/Time Offline; Date/Time Online, Brief narrative of event)					
List Major Equipment Out of Service					
Briefly Describe any Accidents or Injuries					
Describe any Operating Anomalies					

Attachment N Verifications Not Included:

AQ-51: Commissioning Starts Per Turbine Summary

AQ-90: Initial Startup Notification