

## **DOCKETED**

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<b>Project Title:</b>	El Segundo Power Redevelopment Project Compliance
<b>TN #:</b>	203294
<b>Document Title:</b>	Units 5 and 7 Startup/Restart Information
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October 31, 2014

VIA E-FILING

EI Segundo Energy Center Petition to Amend (00-AFC-14C)  
Craig Hoffman, Project Manager  
California Energy Commission  
1516 Ninth Street  
Sacramento, CA 95814-5512

Re: EI Segundo Energy Center Petition to Amend (00-AFC-14C)  
Units 5 and 7 Startup/Restart Information

Dear Mr. Hoffman:

EI Segundo Energy Center LLC submits the enclosed Units 5 and 7 startup/restart information regarding the Petition to Amend the EI Segundo Energy Center project (00-AFC-14C). Please contact me or if there are questions about the enclosure.

Locke Lord LLP

By: \_\_\_\_\_

  
John A. McKinsey  
Attorneys for EI Segundo Energy Center LLC

JAM:dh

Enclosure

**Questions From CEC Staff Regarding ESEC Units 5 and 7 Startup/Restart Issue  
(October 7, 2014 Email From CEC Staff)**

1. Staff is not able to find the definition of startup in the approved conditions for Units 5 and 7. Please provide additional language to define the term startup. The startup definition should be approved by SCAQMD and consistent with other SCAQMD projects.

**Response:** The CEC Conditions of Certification for ESEC Units 5 and 7 do not include a definition of startup because the SCAQMD FDOC/final facility permit for the units does not include such a definition. While SCAQMD permits typically do not include startup definitions, the August 26, 2014 FDOC for the El Segundo Power Facility Modification Project does include the following definition<sup>1</sup>:

*The beginning of startup occurs at initial fire in the combustor and the end of startup occurs when the BACT levels are achieved.*

With the above definition, a startup/restart would be considered a single startup event because the unit would need to undergo a startup, shutdown, and restart in order for the emission control system to reach full control. ESEC LLC would have no objection to the above definition being added to the SCAQMD permit/COCs for Units 5 and 7.

2. The petition includes CEMS data for one typical startup/restart event of each unit. The petition also states the startup/restart events have occurred approximately 10 times per unit in 2014. Staff would like to know if the emissions provided in the petition are the worst case emissions from the previous startup/restart events. If not, please provide worst case emissions from the previous startup/restart events after the commissioning of the units in 2013.

**Response:** Based on a review of startups for the period from 1/1/14 to 10/15/14, , ESEC Unit 5 experienced four startup/restart events and Unit 7 experienced two of these events. The minute-by-minute CEMS data for these startups/restarts are included in Attachments 2-1 to 2-7. As shown in the following summary table, the maximum rolling 60-minute emissions during these events range from 222 to 872 lbs/hr for CO and 19 to 55 lbs/hr for NOx.

The number of startup/restart events referenced in the petition (about 10 per unit) was a projection based on the frequency of failed starts experienced in 2014 prior to the filing of petition, then prorated through 12/31/2014. During closer inspection of the 2014 data, we have concluded that there have been six total failed starts through 10/15/2014.

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<sup>1</sup> SCAQMD Final Determination of Compliance for the El Segundo Power Facility Modification Project, August 26, 2014, Section H, Condition C1.7.

Table 2-1  
Emission Summary  
ESEC Units 5 and 7 Startup/Restart Events During 2014

Unit	Date	Maximum CO Emissions Rolling 60-Min. Avg. (lbs/hr)	Maximum NOx Emissions Rolling 60-Min. Avg. (lbs/hr)
5	02/01/2014	583	39
5	04/14/2014	872	43
5	05/07/2014	753	55
5	07/30/2014	474	19
7	06/20/2014	222	19
7	09/23/2014	352	30

In the 2010 SCAQMD engineering evaluation for Units 5 and 7, the maximum annual NOx and CO emissions for Units 5 and 7 were based on 200 startups per year per unit with corresponding annual average hourly NOx and CO emission rates of 56.03 lbs/hr and 417.42 lbs/hr, respectively.<sup>2</sup> With the exception of the maximum hourly CO emissions for Unit 5, it appears that the actual maximum hourly NOx/CO emissions during a startup/restart are below the annual average hourly startup/shutdown emission levels analyzed by the SCAQMD during the permitting of Units 5 and 7. While the maximum hourly CO emissions during the startup/restart of Unit 5 were above the annual average hourly startup emission level analyzed by the SCAQMD for purposes of calculating annual emissions, this emission level is similar to the worst-case short-term CO emission level of 823.3 lbs/hr for the startup/shutdown case analyzed for modeling purposes in the 2007 permit application package for the project.<sup>3</sup> In addition, this emission rate is well below the maximum hourly CO emission rate of approximately 3,812 lbs/hr during the commissioning phase of the project that was also analyzed for modeling purposes in the 2007 permit application package.<sup>4</sup> The CO modeling results in the 2007 permit application are reflected in the 2010 CEC Staff

<sup>2</sup> SCAQMD Engineering Evaluation for the El Segundo Power Redevelopment Project, Appendix C, May 18, 2010.

<sup>3</sup> September 15, 2014 letter to the SCAQMD, see Attachment 3.

<sup>4</sup> Application for a Determination of Compliance and Permit to Construct for the El Segundo Power Redevelopment Project, June 21, 2007, Appendix P, Table D.

- Analysis<sup>5</sup> for the project and show that the maximum impacts are well below the most stringent ambient air quality standards.
3. Please clarify how the emission factors in the highlighted cells of the CEMS data (in Attachment 1 and Attachment 2) are calculated. Staff noticed on page 4 of 6 in Attachment 1, the emission factors of Unit 5 vary from minute to minute from 03:47 to 03:58 (lbs/MMBtu); on page 5 of 6 in Attachment 1, the emission factors of Unit 5 are kept the same from 05:18 to 05:41 (lbs/MMBtu). The CEMS data for Unit 7 in Attachment 2 show similar pattern. In addition, please explain why the constant parts of the emission factors for Unit 5 (from 05:18 to 05:41) are different from those used for Unit 7 (from 09:34 to 09:58).

Response: The emission factors in the highlighted cells were calculated based on minute-by-minute NOx/CO ppm levels and F-Factor calculations<sup>6</sup>. In Attachment 1 (CEMS data for Unit 5), for the period from 03:47 to 03:58 the minute-by-minute CO lbs/hr values were manually calculated (due to missing values in those cells) based on minute-by-minute fuel flow/heat input and CO emission factors (manually calculated based on the minute-by-minute CO ppm levels). For the period from 05:18 to 05:41 the CEMS was in calibration mode, so the NOx and CO emission factors were manually calculated with the NOx and CO ppm levels set at the levels shown just prior to the start of the calibration period. That is why the NOx/CO emission factors remain constant during the CEMS calibration period<sup>7</sup>. A similar approach was used for the manually calculated values in Attachment 2 (CEMS data for Unit 7).

4. Please provide data to show the VOC emissions during startup/restart events would also be below the worst case VOC emissions analyzed for the permitting of Units 5 and 7.

Response: Because the CEMS does not measure VOC emissions, there are no VOC emissions data available for ESEC Units 5 and 7 startup/restart events. In addition, there are no startup and/or shutdown compliance testing data available for the units (no startup/shutdown testing required). VOC emissions during a startup/restart event should be similar to the VOC emissions for a worst-case startup/shutdown event (occurs over a 60-min period) analyzed as part of the 2007 permit application for the ESEC project. Since VOC emissions during a startup

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<sup>5</sup> El Segundo Power Redevelopment Project (00-AFC-14C), Revised Staff Analysis of the Proposed Change to Dry Cooling and Other Project Changes, June 14, 2010, Air Quality Table 7.

<sup>6</sup> The following is the F-Factor equation used by the SCAQMD for emission calculations: Emission Factor (lb/MMBTU) = (ppmvd)\*(MW)\*(1/SMV)\*(20.9/5.9)\*(Fd)\*(1/1E6)  
where,

controlled ppmvd =controlled concentration corrected to 15% O<sub>2</sub>

MW = molecular weight (lb/lb-mol)

SMV =specific molar volume at 68 degrees Fahrenheit =385.3 dscf/lb-mol

Fd =dry oxygen F-factor for natural gas =8,710 dscf/MMBTU at 68 degrees Fahrenheit

<sup>7</sup> For example for Unit 5 at minute 05:18 using the above equation and minute 05:17 CO and NOx ppm @ 15% O<sub>2</sub> levels of 0.16 and 0.87, respectively, the CO and NOx emission factors are:

CO = (0.16)\*(28)\*(1/385.3)\*(20.9/5.9)\*(8,710)\*(1/10<sup>6</sup>) = 0.0004 lbs/MMBtu

NOx = (0.87)\*(46)\*(1/385.3)\*(20.9/5.9)\*(8,710)\*(1/10<sup>6</sup>) = 0.0032 lbs/MMBtu

are typically assumed to roughly track CO emissions, and since we do not anticipate (and are not seeking) a change to maximum allowable CO emissions during a startup/restart event, we do not anticipate (and are not seeking) a change to maximum allowable VOC emissions at this time. The 2007 permit application for the ESEC project included a worst case short-term VOC emission level of 21.67 lbs/hr for a startup/shutdown case<sup>8</sup>.

5. Please explain what conditions lead to the need to abort a startup and then restart. What can be done to reduce or eliminate the number of times this occurs? Will there be times when the start/restart will take more than one hour?

**Response:** Summarized below are the various causes (along with the associated corrections) of the startup/restart events that have occurred to date in 2014.

- A mismatch in the monitored exhaust temperatures of the combustors (16 combustors on each unit) has resulted in aborted startups. A couple of these events were caused by faulty thermocouples. These thermocouples have been replaced with improved versions which are expected to decrease the number of these events in the future.
- A generator ground detector warning has resulted in aborted startups. Heaters have been added to the gas turbine generator cable collectors to remove condensate. This change is expected to decrease the number of these events in the future.
- Activating the offline compressor blade water wash system just prior to a startup resulted in an aborted startup. A gas turbine control system logic change has been made to minimize these events in the future.
- An inlet fuel flow monitoring mismatch with the expected fuel flow rate for the gas turbine has resulted in aborted startups. A gas turbine control system logic change has been made to minimize these events in the future.

With regard to whether the startup/restart events will take more than an hour, for five of the six events the duration from the beginning of the initial startup to meeting the NOx/CO BACT ppm levels following the restart ranged from 35 to 46 minutes. For the sixth event (Unit 7, 9/23/2014), the duration was 88 minutes due to extended purging prior to the restart (47 minutes passed between the end of the initial startup and initiation of restart). While, a typical startup/restart event is expected to occur within 60 minutes (from initial startup to meeting BACT following restart), as demonstrated by of the six restart events, we would seek consideration that this start/restart of Unit 7 on September 23 also be treated as a single start. The extended purge of Unit 7 was an isolated occurrence and the corresponding U7 start/restart emissions were below the averages represented in the attachments.

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<sup>8</sup> See October 3, 2014 PTA for ESEC Units 5 and 7, attached September 15, 2014 letter from Sierra Research to the SCAQMD, Attachment 3.

**ATTACHMENT 2-1**

**SUMMARY FOR UNITS 5 AND 7**  
**(START/RESTART)**

Summary of CEMS Data - ESEC Units 5 and 7 Startups/Restarts During 2014

Unit	Date	Maximum CO Emissions	Maximum NOx Emissions	Duration from Beginning of Initial Startup To Meeting BACT Limits Following Restart (min)		Duration of Purge Cycle/Downtime (min)
		Rolling 60-Min. Avg. (lbs/hr)	Rolling 60-Min. Avg. (lbs/hr)			
5	2/1/2014	583	39	38		9
5	4/14/2014	872	43	46		10
5	5/7/2014	753	55	46		10
5	7/30/2014	474	19	35		11
7	6/20/2014	222	19	38		12
7	9/23/2014	352	30	88		47

**ATTACHMENT 2-2**

**SUMMARY OF CEMS DATA FOR UNIT 5 ON 02/01/14  
(START/RESTART)**

## Average Values Report

Company: NRG El Segundo  
 Plant: 301 Vista Del Mar  
 City/St: El Segundo, CA 90245  
 Source: stack5

Period Start: 2/1/2014 00:00  
 Period End: 2/1/2014 23:59  
 Validation Type: 1/1 min  
 Averaging Period: 1 min  
 Type: Block Avg

Period Start:	Average 5_GasFlow hscfh	Average 5_CO_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
02/01/2014 03:55	0	0.00	0.00	0				0.0	0.0			
02/01/2014 03:56	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 03:57	0	0.00	0.00	0				0.0	0.0			
02/01/2014 03:58	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 03:59	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:00	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:01	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:02	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:03	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:04	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:05	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:06	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:07	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:08	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:09	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:10	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:11	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:12	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:13	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:14	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:15	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:16	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:17	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:18	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:19	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:20	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:21	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:22	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:23	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:24	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:25	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:26	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:27	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:28	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:29	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:30	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:31	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:32	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:33	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:34	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:35	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:36	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:37	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:38	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:39	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:40	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:41	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:42	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:43	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:44	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:45	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:46	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:47	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:48	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:49	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:50	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:51	-10	0.00	0.00	0				0.0	0.0			
02/01/2014 04:52	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:53	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:54	0	0.00	0.00	0				0.0	0.0			
02/01/2014 04:55	80	0.00	0.00	0				0.0	0.0			
02/01/2014 04:56	1900	0.00	0.00	1				0.0	0.0		0.0	0.0
02/01/2014 04:57	2730	1.12	26.52	1				0.0	0.4		0.0	0.4
02/01/2014 04:58	3820	11.55	1103.81	1	389.64	2.8329	0.0288	0.2	18.4		0.2	18.8
02/01/2014 04:59	6210	43.43	2510.64	1	633.42	3.9636	0.0666	0.7	41.8		0.9	60.7
02/01/2014 05:00	6470	85.20	3316.94	1	659.94	5.0261	0.1254	1.4	55.3		2.4	116.0
02/01/2014 05:01	7340	126.47	4806.68	1	748.68	6.4202	0.1641	2.1	80.1		4.5	196.1
02/01/2014 05:02	8160	158.25	4577.06	1	832.32	5.4992	0.1847	2.6	76.3		7.1	272.4
02/01/2014 05:03	9290	180.86	3584.45	1	947.58	3.7827	0.1854	3.0	59.7		10.1	332.1
02/01/2014 05:04	10610	194.52	3839.10	1	1082.22	3.5474	0.1745	3.2	64.0		13.4	396.1

Period Start:	Average 5_GasFlow hscfh	Average 5_NOx_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
02/01/2014 05:05	11380	185.93	5804.07	1	1160.76	5.0002	0.1556	3.1	96.7	16.5	492.8	
02/01/2014 05:06	12330	194.59	4197.66	1	1257.66	3.3377	0.1503	3.2	70.0	19.7	562.8	
02/01/2014 05:07	13210	199.60	1112.57	1	1347.42	0.8257	0.1438	3.3	18.5	23.0	581.3	
02/01/2014 05:08	13880	121.40	61.36	1				2.0	1.0	25.0	582.3	
02/01/2014 05:09	14040	99.07	11.20	1				1.7	0.2	26.7	582.5	
02/01/2014 05:10	14010	71.64	5.15	1				1.2	0.1	27.9	582.6	
02/01/2014 05:11	14000	43.51	3.53	1				0.7	0.1	28.6	582.7	
02/01/2014 05:12	13880	40.37	3.35	1				0.7	0.1	29.3	582.7	
02/01/2014 05:13	13880	43.58	2.77	1				0.7	0.0	30.0	582.8	
02/01/2014 05:14	10430	0.00	0.00	1	1063.86	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:15	-10	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:16	-10	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:17	0	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:18	-10	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:19	0	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:20	0	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:21	0	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:22	-10	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:23	-10	0.00	0.00	0	0.00	0.0000	0.0000	0.0	0.0	30.0	582.8	
02/01/2014 05:24	1750	N/A	N/A	1	178.50	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:25	2220	N/A	N/A	1	226.44	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:26	3750	N/A	N/A	1	382.50	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:27	5500	N/A	N/A	1	561.00	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:28	6450	N/A	N/A	1	657.90	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:29	8390	N/A	N/A	1	855.78	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:30	10830	N/A	N/A	1	1104.66	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:31	12730	N/A	N/A	1	1298.46	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:32	13870	N/A	N/A	1	1414.74	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:33	15010	N/A	N/A	1	1531.02	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:34	16040	N/A	N/A	1	1636.08	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:35	16140	N/A	N/A	1	1646.28	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:36	16140	N/A	N/A	1	1646.28	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:37	16120	N/A	N/A	1	1644.24	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:38	16110	N/A	N/A	1	1643.22	N/A	N/A	N/A	N/A	N/A	N/A	
02/01/2014 05:39	16100	58.32	1.01	1				1.0	0.0	31.0	582.8	
02/01/2014 05:40	16120	56.03	1.02	1				0.9	0.0	31.9	582.8	
02/01/2014 05:41	16130	50.13	1.02	1				0.8	0.0	32.8	582.8	
02/01/2014 05:42	16120	39.61	1.02	1				0.7	0.0	33.4	582.8	
02/01/2014 05:43	16130	30.15	0.68	1				0.5	0.0	33.9	582.9	
02/01/2014 05:44	16530	24.47	1.04	1				0.4	0.0	34.3	582.9	
02/01/2014 05:45	16700	41.91	0.70	1				0.7	0.0	35.0	582.9	
02/01/2014 05:46	16730	32.15	0.70	1				0.5	0.0	35.6	582.9	
02/01/2014 05:47	16740	20.21	0.70	1				0.3	0.0	35.9	582.9	
02/01/2014 05:48	16720	12.99	0.70	1				0.2	0.0	36.1	582.9	
02/01/2014 05:49	16710	10.88	0.70	1				0.2	0.0	36.3	582.9	
02/01/2014 05:50	16720	9.66	0.70	1				0.2	0.0	36.5	582.9	
02/01/2014 05:51	16740	8.79	0.70	1				0.1	0.0	36.6	583.0	
02/01/2014 05:52	16710	8.25	0.70	1				0.1	0.0	36.7	583.0	
02/01/2014 05:53	16710	7.72	0.70	1				0.1	0.0	36.9	583.0	
02/01/2014 05:54	15750	7.11	0.66	1				0.1	0.0	37.0	583.0	
02/01/2014 05:55	15850	9.99	1.00	1				0.2	0.0	37.2	583.0	
02/01/2014 05:56	18060	9.48	1.14	1				0.2	0.0	37.3	583.0	
02/01/2014 05:57	19710	8.90	0.83	1				0.1	0.0	37.5	583.0	
02/01/2014 05:58	19770	11.00	0.83	1				0.2	0.0	37.6	583.1	
02/01/2014 05:59	19820	7.28	0.83	1				0.1	0.0	37.8	583.1	
02/01/2014 06:00	19820	6.04	0.83	1				0.1	0.0	37.9	583.1	
02/01/2014 06:01	19830	5.21	0.83	1				0.1	0.0	38.0	583.1	
02/01/2014 06:02	19830	5.00	0.83	1				0.1	0.0	38.0	583.1	
02/01/2014 06:03	19790	4.78	0.83	1				0.1	0.0	38.1	583.1	
02/01/2014 06:04	19770	4.57	0.83	1				0.1	0.0	38.2	583.1	
02/01/2014 06:05	19790	4.57	0.83	1				0.1	0.0	38.3	583.2	
02/01/2014 06:06	19770	4.57	0.83	1				0.1	0.0	38.3	583.2	
02/01/2014 06:07	19770	4.57	0.42	1				0.1	0.0	38.4	583.2	
02/01/2014 06:08	19760	4.56	0.83	1				0.1	0.0	38.5	583.2	
02/01/2014 06:09	19740	4.56	0.83	1				0.1	0.0	38.6	583.2	
02/01/2014 06:10	19740	4.56	0.83	1				0.1	0.0	38.7	583.2	
02/01/2014 06:11	19750	4.56	0.41	1				0.1	0.0	38.7	583.2	
02/01/2014 06:12	19740	4.56	0.83	1				0.1	0.0	38.8	582.8	
02/01/2014 06:13	19730	4.76	0.41	1				0.1	0.0	38.7	564.4	
02/01/2014 06:14	19700	4.96	0.41	1				0.1	0.0	38.0	522.6	
02/01/2014 06:15	19680	5.17	0.41	1				0.1	0.0	36.7	467.3	
02/01/2014 06:16	19700	5.38	0.41	1				0.1	0.0	34.7	387.2	
02/01/2014 06:17	19710	5.59	0.41	1				0.1	0.0	32.1	310.9	
02/01/2014 06:18	19670	5.58	0.41	1				0.1	0.0	29.2	251.2	
02/01/2014 06:19	19670	5.99	0.41	1				0.1	0.0	26.1	187.2	
02/01/2014 06:20	19530	6.15	0.41	1				0.1	0.0	23.1	90.5	
02/01/2014 06:21	19530	6.36	0.41	1				0.1	0.0	19.9	20.5	
02/01/2014 06:22	19560	6.57	0.41	1				0.1	0.0	16.7	2.0	

Period Start:	Average 5_GasFlow hscfh	Average 5_NOx_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated Rolling-60 min Avg.	Calculated CO (lbs/hr)
02/01/2014 06:23	19600	7.20	0.41	1				0.1	0.0	14.8		1.0
02/01/2014 06:24	19660	7.64	0.41	1				0.1	0.0	13.3		0.8
02/01/2014 06:25	19650	8.05	0.41	1				0.1	0.0	12.2		0.7
02/01/2014 06:26	19680	8.27	0.41	1				0.1	0.0	11.6		0.7
02/01/2014 06:27	19620	8.65	0.41	1				0.1	0.0	11.1		0.6
02/01/2014 06:28	19660	8.88	0.41	1				0.1	0.0	10.5		0.6
02/01/2014 06:29	19650	8.87	0.41	1				0.1	0.0	10.7		0.6
02/01/2014 06:30	19650	8.87	0.41	1				0.1	0.0	10.8		0.6
02/01/2014 06:31	19660	9.29	0.41	1				0.2	0.0	11.0		0.6
02/01/2014 06:32	19650	9.28	0.41	1				0.2	0.0	11.1		0.6
02/01/2014 06:33	19630	9.48	0.41	1				0.2	0.0	11.3		0.6
02/01/2014 06:34	19620	9.27	0.41	1				0.2	0.0	11.5		0.6
02/01/2014 06:35	19650	12.38	1.03	1				0.2	0.0	11.7		0.6
02/01/2014 06:36	19620	8.24	1.65	1				0.1	0.0	11.8		0.7
02/01/2014 06:37	19630	9.48	0.41	1				0.2	0.0	12.0		0.7
02/01/2014 06:38	19640	9.90	0.41	1				0.2	0.0	12.1		0.7
02/01/2014 06:39	19650	10.11	0.41	1				0.2	0.0	11.3		0.7
02/01/2014 06:40	19630	10.10	0.41	1				0.2	0.0	10.6		0.6
02/01/2014 06:41	19600	10.29	0.41	1				0.2	0.0	9.9		0.6
02/01/2014 06:42	19620	10.51	0.41	1				0.2	0.0	9.4		0.6
02/01/2014 06:43	19610	10.50	0.41	1				0.2	0.0	9.1		0.6
02/01/2014 06:44	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	8.8		0.6
02/01/2014 06:45	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	8.3		0.6
02/01/2014 06:46	19630	10.10	0.36	1	2002.26	0.0002	0.0050	0.2	0.0	7.9		0.6
02/01/2014 06:47	19630	10.10	0.36	1	2002.26	0.0002	0.0050	0.2	0.0	7.8		0.6
02/01/2014 06:48	19640	10.11	0.36	1	2003.28	0.0002	0.0050	0.2	0.0	7.7		0.6
02/01/2014 06:49	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.7		0.6
02/01/2014 06:50	19630	10.10	0.36	1	2002.26	0.0002	0.0050	0.2	0.0	7.7		0.6
02/01/2014 06:51	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.7		0.6
02/01/2014 06:52	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.8		0.6
02/01/2014 06:53	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	7.8		0.6
02/01/2014 06:54	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.9		0.6
02/01/2014 06:55	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	7.9		0.5
02/01/2014 06:56	19600	10.09	0.36	1	1999.20	0.0002	0.0050	0.2	0.0	7.9		0.5
02/01/2014 06:57	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	7.9		0.5
02/01/2014 06:58	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.9		0.5
02/01/2014 06:59	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	7.9		0.5
02/01/2014 07:00	19670	10.13	0.36	1	2006.34	0.0002	0.0050	0.2	0.0	8.0		0.5
02/01/2014 07:01	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	8.1		0.5
02/01/2014 07:02	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	8.2		0.5
02/01/2014 07:03	19620	10.10	0.36	1	2001.24	0.0002	0.0050	0.2	0.0	8.2		0.5
02/01/2014 07:04	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	8.3		0.5
02/01/2014 07:05	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	8.4		0.4
02/01/2014 07:06	19610	10.09	0.36	1	2000.22	0.0002	0.0050	0.2	0.0	8.5		0.4
02/01/2014 07:07	19600	10.09	0.36	1	1999.20	0.0002	0.0050	0.2	0.0	8.6		0.4
02/01/2014 07:08	19570	10.07	0.36	1	1996.14	0.0002	0.0050	0.2	0.0	8.7		0.4
02/01/2014 07:09	19570	10.89	0.82	1				0.2	0.0	8.8		0.4
02/01/2014 07:10	19580	10.49	0.82	1				0.2	0.0	8.9		0.4
02/01/2014 07:11	19570	9.45	0.82	1				0.2	0.0	9.0		0.4
02/01/2014 07:12	19570	8.43	0.82	1				0.1	0.0	9.1		0.4
02/01/2014 07:13	19580	7.81	0.82	1				0.1	0.0	9.1		0.5
02/01/2014 07:14	19610	7.62	0.82	1				0.1	0.0	9.2		0.5
02/01/2014 07:15	19590	7.41	0.82	1				0.1	0.0	9.2		0.5
02/01/2014 07:16	19620	7.42	0.82	1				0.1	0.0	9.2		0.5
02/01/2014 07:17	19600	7.61	0.82	1				0.1	0.0	9.3		0.5
02/01/2014 07:18	19580	8.02	0.41	1				0.1	0.0	9.3		0.5
02/01/2014 07:19	19570	7.81	0.41	1				0.1	0.0	9.3		0.5
02/01/2014 07:20	19560	8.01	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:21	19600	8.03	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:22	19580	8.63	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:23	19600	8.64	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:24	19580	8.63	0.41	1				0.1	0.0	9.5		0.5
02/01/2014 07:25	19560	8.83	0.41	1				0.1	0.0	9.5		0.5
02/01/2014 07:26	19580	9.05	0.41	1				0.2	0.0	9.5		0.5
02/01/2014 07:27	19560	9.24	0.41	1				0.2	0.0	9.5		0.5
02/01/2014 07:28	19580	9.25	0.41	1				0.2	0.0	9.5		0.5
02/01/2014 07:29	19610	9.88	0.41	1				0.2	0.0	9.5		0.5
02/01/2014 07:30	19610	10.09	0.41	1				0.2	0.0	9.5		0.5
02/01/2014 07:31	19630	10.31	0.41	1				0.2	0.0	9.6		0.5
02/01/2014 07:32	19620	11.95	0.41	1				0.2	0.0	9.6		0.5
02/01/2014 07:33	19640	12.99	0.41	1				0.2	0.0	9.7		0.5
02/01/2014 07:34	19610	12.35	0.41	1				0.2	0.0	9.7		0.5
02/01/2014 07:35	19630	10.92	0.41	1				0.2	0.0	9.7		0.5
02/01/2014 07:36	19590	9.46	0.41	1				0.2	0.0	9.7		0.5
02/01/2014 07:37	19590	8.23	0.41	1				0.1	0.0	9.7		0.5
02/01/2014 07:38	19610	7.62	0.41	1				0.1	0.0	9.7		0.5
02/01/2014 07:39	19600	7.41	0.41	1				0.1	0.0	9.6		0.5
02/01/2014 07:40	19630	7.42	0.41	1				0.1	0.0	9.6		0.5

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
02/01/2014 07:41	19600	7.41	0.41	1				0.1	0.0	9.5		0.5
02/01/2014 07:42	19650	8.05	0.41	1				0.1	0.0	9.5		0.5
02/01/2014 07:43	19650	8.87	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:44	19630	9.07	0.41	1				0.2	0.0	9.4		0.5
02/01/2014 07:45	19610	8.65	0.41	1				0.1	0.0	9.4		0.5
02/01/2014 07:46	19610	9.06	0.41	1				0.2	0.0	9.4		0.5
02/01/2014 07:47	19590	9.26	0.41	1				0.2	0.0	9.4		0.5
02/01/2014 07:48	19590	9.05	0.41	1				0.2	0.0	9.4		0.5
02/01/2014 07:49	19600	9.06	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:50	19600	9.06	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:51	19590	9.26	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:52	19590	9.46	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:53	19580	9.66	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:54	19590	9.87	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:55	19600	10.08	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:56	19600	9.88	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:57	19580	10.49	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:58	19580	10.49	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 07:59	19610	10.30	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 08:00	19590	9.46	0.41	1				0.2	0.0	9.3		0.5
02/01/2014 08:01	19590	8.43	0.41	1				0.1	0.0	9.3		0.5
02/01/2014 08:02	19570	8.01	0.41	1				0.1	0.0	9.2		0.5
02/01/2014 08:03	19580	7.81	0.41	1				0.1	0.0	9.2		0.5
02/01/2014 08:04	19590	7.61	0.41	1				0.1	0.0	9.1		0.5
02/01/2014 08:05	19600	7.61	0.41	1				0.1	0.0	9.1		0.5
02/01/2014 08:06	19580	8.02	0.41	1				0.1	0.0	9.1		0.5
02/01/2014 08:07	19580	8.43	0.41	1				0.1	0.0	9.0		0.5
02/01/2014 08:08	19580	8.22	0.41	1				0.1	0.0	9.0		0.5
02/01/2014 08:09	19570	8.63	0.41	1				0.1	0.0	9.0		0.5
02/01/2014 08:10	19600	8.85	0.41	1				0.1	0.0	8.9		0.5
02/01/2014 08:11	19610	9.06	0.41	1				0.2	0.0	8.9		0.5
02/01/2014 08:12	19580	9.25	0.41	1				0.2	0.0	9.0		0.4
02/01/2014 08:13	19570	9.25	0.41	1				0.2	0.0	9.0		0.4

Maximum =38.8583.2**Notes:**

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in lbs/hr cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.

\*\*\* "N/A" appears in the data fields during the period from 5:28 to 5:38 due to an automatic daily calibration that began prior to the restart.

**ATTACHMENT 2-3**

**SUMMARY OF CEMS DATA FOR UNIT 5 ON 04/14/14  
(START/RESTART)**

Average Values Report										Period Start: 4/14/2014 00:00	Period End: 4/14/2014 23:59	Validation Type: 1/l min	Averaging Period: 1 min	Type: Block Avg
Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn l=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)	Calculated CO (lbs/hr)	
04/14/2014 02:25	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:26	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:27	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:28	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:29	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:30	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:31	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:32	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:33	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:34	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:35	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:36	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:37	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:38	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:39	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:40	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:41	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:42	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:43	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:44	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:45	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:46	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:47	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:48	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:49	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:50	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:51	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:52	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:53	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:54	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:55	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:56	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 02:57	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:58	0	0.00	0.00	0				0.0	0.0					
04/14/2014 02:59	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:00	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:01	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:02	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:03	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:04	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:05	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:06	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:07	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:08	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:09	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:10	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 03:11	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 03:12	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:13	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:14	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 03:15	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:16	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:17	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:18	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:19	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:20	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 03:21	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:22	-10	0.00	0.00	0				0.0	0.0					
04/14/2014 03:23	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:24	0	0.00	0.00	0				0.0	0.0					
04/14/2014 03:25	80	0.00	0.00	1				0.0	0.0					
04/14/2014 03:26	1600	0.00	0.00	1				0.0	0.0					
04/14/2014 03:27	2440	0.46	7.07	1				0.0	0.1	0.0			0.1	

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
04/14/2014 03:28	3700	6.84	573.74	1	377.40	1.5202	0.0176	0.1	9.6	0.1	9.7	
04/14/2014 03:29	4920	24.13	1869.79	1	501.84	3.7259	0.0467	0.4	31.2	0.5	40.8	
04/14/2014 03:30	5880	52.91	2519.10	1	599.76	4.2002	0.0856	0.9	42.0	1.4	82.8	
04/14/2014 03:31	5770	73.98	3629.19	1	588.54	6.1664	0.1221	1.2	60.5	2.6	143.3	
04/14/2014 03:32	5720	78.44	3747.36	1	583.44	6.4229	0.1306	1.3	62.5	3.9	205.8	
04/14/2014 03:33	5640	81.61	3687.20	1	575.28	6.4094	0.1378	1.4	61.5	5.3	267.2	
04/14/2014 03:34	5250	0.00	0.00	1				0.0	0.0	5.3	267.2	
04/14/2014 03:35	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:36	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:37	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:38	0	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:39	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:40	0	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:41	0	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:42	0	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:43	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:44	-10	0.00	0.00	0				0.0	0.0	5.3	267.2	
04/14/2014 03:45	1550	0.00	0.00	1				0.0	0.0	5.3	267.2	
04/14/2014 03:46	2340	22.26	122.56	1				0.4	2.0	5.7	269.3	
04/14/2014 03:47	3680	21.79	671.65	1	375.36	1.7894	0.0564	0.4	11.2	6.0	280.5	
04/14/2014 03:48	5350	42.47	2161.93	1	545.70	3.9618	0.0756	0.7	36.0	6.7	316.5	
04/14/2014 03:49	6330	88.21	3249.60	1	645.66	5.0330	0.1327	1.5	54.2	8.2	370.7	
04/14/2014 03:50	7130	127.95	4658.59	1	727.26	6.4057	0.1709	2.1	77.6	10.4	448.3	
04/14/2014 03:51	7550	148.17	4785.95	1	770.10	6.2147	0.1869	2.5	79.8	12.8	528.1	
04/14/2014 03:52	8180	161.64	4312.09	1	834.36	5.1681	0.1882	2.7	71.9	15.5	599.9	
04/14/2014 03:53	8940	164.84	3281.71	1	911.88	3.5988	0.1756	2.7	54.7	18.3	654.6	
04/14/2014 03:54	10070	170.24	2416.32	1	1027.14	2.3525	0.1610	2.8	40.3	21.1	694.9	
04/14/2014 03:55	10660	159.16	5330.82	1	1087.32	4.9027	0.1421	2.7	88.8	23.8	783.7	
04/14/2014 03:56	11360	152.56	3945.16	1	1158.72	3.4048	0.1279	2.5	65.8	26.3	849.5	
04/14/2014 03:57	12280	146.86	1111.56	1	1252.56	0.8874	0.1139	2.4	18.5	28.7	868.0	
04/14/2014 03:58	13260	134.08	144.94	1				2.2	2.4	31.0	870.4	
04/14/2014 03:59	14210	94.60	23.13	1				1.6	0.4	32.6	870.8	
04/14/2014 04:00	14530	83.61	6.71	1				1.4	0.1	33.9	870.9	
04/14/2014 04:01	14540	73.43	4.12	1				1.2	0.1	35.2	871.0	
04/14/2014 04:02	14460	67.72	3.04	1				1.1	0.1	36.3	871.1	
04/14/2014 04:03	14460	59.37	2.88	1				1.0	0.0	37.3	871.1	
04/14/2014 04:04	14470	58.65	2.89	1				1.0	0.0	38.3	871.2	
04/14/2014 04:05	14420	54.81	2.88	1				0.9	0.0	39.2	871.2	
04/14/2014 04:06	14420	40.58	2.57	1				0.7	0.0	39.9	871.2	
04/14/2014 04:07	14440	28.66	2.27	1				0.5	0.0	40.3	871.3	
04/14/2014 04:08	14420	22.11	2.27	1				0.4	0.0	40.7	871.3	
04/14/2014 04:09	14420	17.71	1.97	1				0.3	0.0	41.0	871.4	
04/14/2014 04:10	14400	14.21	1.66	1				0.2	0.0	41.2	871.4	
04/14/2014 04:11	14420	12.26	1.67	1				0.2	0.0	41.4	871.4	
04/14/2014 04:12	14400	11.04	1.66	1				0.2	0.0	41.6	871.4	
04/14/2014 04:13	14400	9.98	1.66	1				0.2	0.0	41.8	871.5	
04/14/2014 04:14	14410	9.23	1.36	1				0.2	0.0	41.9	871.5	
04/14/2014 04:15	14390	8.46	1.36	1				0.1	0.0	42.1	871.5	
04/14/2014 04:16	14380	7.85	1.36	1				0.1	0.0	42.2	871.5	
04/14/2014 04:17	14370	7.39	1.36	1				0.1	0.0	42.3	871.6	
04/14/2014 04:18	14390	6.95	1.36	1				0.1	0.0	42.5	871.6	
04/14/2014 04:19	14410	6.51	1.36	1				0.1	0.0	42.6	871.6	
04/14/2014 04:20	14400	6.05	1.36	1				0.1	0.0	42.7	871.6	
04/14/2014 04:21	14390	5.59	1.36	1				0.1	0.0	42.8	871.6	
04/14/2014 04:22	14400	5.44	1.21	1				0.1	0.0	42.8	871.7	
04/14/2014 04:23	14380	5.13	1.21	1				0.1	0.0	42.9	871.7	
04/14/2014 04:24	14370	4.98	1.21	1				0.1	0.0	43.0	871.7	
04/14/2014 04:25	14380	4.68	1.21	1				0.1	0.0	43.1	871.7	
04/14/2014 04:26	14360	4.67	1.21	1				0.1	0.0	43.2	871.7	
04/14/2014 04:27	14340	4.67	1.20	1				0.1	0.0	43.2	871.6	
04/14/2014 04:28	14620	4.30	1.23	1				0.1	0.0	43.2	862.1	
04/14/2014 04:29	15300	4.02	1.29	1				0.1	0.0	42.9	831.0	
04/14/2014 04:30	15230	3.68	0.96	1				0.1	0.0	42.0	789.0	
04/14/2014 04:31	14910	3.44	0.94	1				0.1	0.0	40.9	728.5	
04/14/2014 04:32	14780	3.41	0.93	1				0.1	0.0	39.6	666.1	
04/14/2014 04:33	14750	3.41	0.93	1				0.1	0.0	38.3	604.6	
04/14/2014 04:34	14730	3.56	0.93	1				0.1	0.0	38.4	604.7	
04/14/2014 04:35	14730	3.56	0.93	1				0.1	0.0	38.4	604.7	
04/14/2014 04:36	14740	3.56	0.93	1				0.1	0.0	38.5	604.7	
04/14/2014 04:37	14730	3.71	0.93	1				0.1	0.0	38.6	604.7	
04/14/2014 04:38	14730	3.87	0.93	1				0.1	0.0	38.6	604.7	

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
04/14/2014 04:39	14740	4.02	0.93	1				0.1	0.0	38.7	604.7
04/14/2014 04:40	14740	4.02	0.93	1				0.1	0.0	38.8	604.8
04/14/2014 04:41	14730	4.18	0.93	1				0.1	0.0	38.8	604.8
04/14/2014 04:42	14730	4.33	0.93	1				0.1	0.0	38.9	604.8
04/14/2014 04:43	14720	4.48	0.93	1				0.1	0.0	39.0	604.8
04/14/2014 04:44	14700	4.63	0.93	1				0.1	0.0	39.0	604.8
04/14/2014 04:45	14670	4.62	0.92	1				0.1	0.0	39.1	604.8
04/14/2014 04:46	14510	4.72	0.91	1				0.1	0.0	38.8	602.8
04/14/2014 04:47	14360	4.82	0.90	1				0.1	0.0	38.5	591.6
04/14/2014 04:48	14150	5.35	0.89	1				0.1	0.0	37.9	555.6
04/14/2014 04:49	13860	5.38	0.87	1				0.1	0.0	36.5	501.5
04/14/2014 04:50	13530	5.40	0.85	1				0.1	0.0	34.5	423.8
04/14/2014 04:51	13260	5.43	0.84	1				0.1	0.0	32.1	344.1
04/14/2014 04:52	12920	5.43	1.09	1				0.1	0.0	29.5	272.2
04/14/2014 04:53	12850	5.26	1.35	1				0.1	0.0	26.9	217.6
04/14/2014 04:54	13140	5.93	1.38	1				0.1	0.0	24.1	177.3
04/14/2014 04:55	14890	7.04	1.56	1				0.1	0.0	21.6	88.5
04/14/2014 04:56	17170	6.67	1.98	1				0.1	0.0	19.2	22.8
04/14/2014 04:57	19000	12.37	0.80	1				0.2	0.0	16.9	4.3
04/14/2014 04:58	18710	11.79	0.79	1				0.2	0.0	14.9	1.9
04/14/2014 04:59	18600	7.42	0.78	1				0.1	0.0	13.4	1.5
04/14/2014 05:00	18560	6.82	0.78	1				0.1	0.0	12.1	1.4
04/14/2014 05:01	18490	5.82	0.78	1				0.1	0.0	11.0	1.3
04/14/2014 05:02	18590	5.66	0.78	1				0.1	0.0	10.0	1.3
04/14/2014 05:03	19070	5.81	0.80	1				0.1	0.0	9.1	1.3
04/14/2014 05:04	19360	5.29	0.81	1				0.1	0.0	8.2	1.2
04/14/2014 05:05	19330	5.28	0.81	1				0.1	0.0	7.4	1.2
04/14/2014 05:06	19280	5.47	0.81	1				0.1	0.0	6.8	1.2
04/14/2014 05:07	19320	5.27	0.81	1				0.1	0.0	6.4	1.1
04/14/2014 05:08	19380	5.49	0.81	1				0.1	0.0	6.1	1.1
04/14/2014 05:09	19380	5.70	0.81	1				0.1	0.0	5.9	1.1
04/14/2014 05:10	19410	5.71	0.82	1				0.1	0.0	5.8	1.1
04/14/2014 05:11	19410	6.11	0.82	1				0.1	0.0	5.7	1.1
04/14/2014 05:12	19430	6.32	0.82	1				0.1	0.0	5.6	1.0
04/14/2014 05:13	19390	6.52	0.81	1				0.1	0.0	5.5	1.0
04/14/2014 05:14	19430	6.53	0.82	1				0.1	0.0	5.5	1.0
04/14/2014 05:15	19400	6.72	0.81	1				0.1	0.0	5.5	1.0
04/14/2014 05:16	19390	6.92	0.81	1				0.1	0.0	5.5	1.0
04/14/2014 05:17	19400	6.71	0.75	1	1978.80	0.0004	0.0034	0.1	0.0	5.4	1.0
04/14/2014 05:18	19380	6.70	0.75	1	1976.76	0.0004	0.0034	0.1	0.0	5.4	1.0
04/14/2014 05:19	19370	6.70	0.75	1	1975.74	0.0004	0.0034	0.1	0.0	5.4	1.0
04/14/2014 05:20	19350	6.69	0.75	1	1973.70	0.0004	0.0034	0.1	0.0	5.5	1.0
04/14/2014 05:21	19320	6.68	0.75	1	1970.64	0.0004	0.0034	0.1	0.0	5.5	1.0
04/14/2014 05:22	19310	6.67	0.75	1	1969.62	0.0004	0.0034	0.1	0.0	5.5	0.9
04/14/2014 05:23	19310	6.67	0.75	1	1969.62	0.0004	0.0034	0.1	0.0	5.5	0.9
04/14/2014 05:24	19320	6.68	0.75	1	1970.64	0.0004	0.0034	0.1	0.0	5.5	0.9
04/14/2014 05:25	19320	6.68	0.75	1	1970.64	0.0004	0.0034	0.1	0.0	5.6	0.9
04/14/2014 05:26	19310	6.67	0.75	1	1969.62	0.0004	0.0034	0.1	0.0	5.6	0.9
04/14/2014 05:27	19300	6.67	0.75	1	1968.60	0.0004	0.0034	0.1	0.0	5.6	0.9
04/14/2014 05:28	19270	6.66	0.75	1	1965.54	0.0004	0.0034	0.1	0.0	5.7	0.9
04/14/2014 05:29	19290	6.67	0.75	1	1967.58	0.0004	0.0034	0.1	0.0	5.7	0.9
04/14/2014 05:30	19290	6.67	0.75	1	1967.58	0.0004	0.0034	0.1	0.0	5.8	0.9
04/14/2014 05:31	19290	6.67	0.75	1	1967.58	0.0004	0.0034	0.1	0.0	5.8	0.9
04/14/2014 05:32	19280	6.66	0.75	1	1966.56	0.0004	0.0034	0.1	0.0	5.9	0.9
04/14/2014 05:33	19290	6.67	0.75	1	1967.58	0.0004	0.0034	0.1	0.0	5.9	0.9
04/14/2014 05:34	19280	6.66	0.75	1	1966.56	0.0004	0.0034	0.1	0.0	6.0	0.9
04/14/2014 05:35	19290	6.67	0.75	1	1967.58	0.0004	0.0034	0.1	0.0	6.0	0.9
04/14/2014 05:36	19280	6.66	0.75	1	1966.56	0.0004	0.0034	0.1	0.0	6.1	0.9
04/14/2014 05:37	19280	6.66	0.75	1	1966.56	0.0004	0.0034	0.1	0.0	6.1	0.9
04/14/2014 05:38	19280	6.66	0.75	1	1966.56	0.0004	0.0034	0.1	0.0	6.2	0.9
04/14/2014 05:39	19260	6.66	0.75	1	1964.52	0.0004	0.0034	0.1	0.0	6.2	0.9
04/14/2014 05:40	19270	6.66	0.75	1	1965.54	0.0004	0.0034	0.1	0.0	6.3	0.9
04/14/2014 05:41	19270	6.66	0.75	1	1965.54	0.0004	0.0034	0.1	0.0	6.3	0.9
04/14/2014 05:42	19270	8.09	0.81	1				0.1	0.0	6.4	0.9
04/14/2014 05:43	19280	7.90	0.81	1				0.1	0.0	6.4	0.8
04/14/2014 05:44	19270	7.69	0.81	1				0.1	0.0	6.5	0.8
04/14/2014 05:45	19290	7.09	0.81	1				0.1	0.0	6.5	0.8
04/14/2014 05:46	19270	6.68	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:47	19280	6.48	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:48	19270	6.27	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:49	19260	6.27	0.81	1				0.1	0.0	6.6	0.8

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
04/14/2014 05:50	19270	6.47	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:51	19250	6.67	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:52	19260	6.67	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:53	19260	6.67	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:54	19260	6.88	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:55	19260	6.88	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:56	19270	7.08	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 05:57	19260	7.28	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:58	19250	7.28	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 05:59	19260	7.28	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 06:00	19240	7.47	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 06:01	19260	7.48	0.81	1				0.1	0.0	6.6	0.8
04/14/2014 06:02	19290	8.51	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 06:03	19270	8.90	0.81	1				0.1	0.0	6.7	0.8
04/14/2014 06:04	19260	9.30	0.81	1				0.2	0.0	6.8	0.8
04/14/2014 06:05	19250	9.30	0.81	1				0.2	0.0	6.8	0.8
04/14/2014 06:06	19290	9.52	0.81	1				0.2	0.0	6.9	0.8
04/14/2014 06:07	19260	9.50	0.81	1				0.2	0.0	7.0	0.8
04/14/2014 06:08	19260	9.71	0.81	1				0.2	0.0	7.0	0.8
04/14/2014 06:09	19280	9.72	0.81	1				0.2	0.0	7.1	0.8
04/14/2014 06:10	19240	8.69	0.81	1				0.1	0.0	7.2	0.8
04/14/2014 06:11	19260	6.88	0.81	1				0.1	0.0	7.2	0.8
04/14/2014 06:12	19260	6.27	0.81	1				0.1	0.0	7.2	0.8
04/14/2014 06:13	19260	5.86	0.81	1				0.1	0.0	7.2	0.8
04/14/2014 06:14	19250	5.86	0.81	1				0.1	0.0	7.2	0.8
04/14/2014 06:15	19270	6.07	0.81	1				0.1	0.0	7.1	0.8
04/14/2014 06:16	19250	6.06	0.81	1				0.1	0.0	7.1	0.8
04/14/2014 06:17	19220	6.05	0.40	1				0.1	0.0	7.1	0.8
04/14/2014 06:18	19240	6.26	0.40	1				0.1	0.0	7.1	0.8
04/14/2014 06:19	19220	6.26	0.40	1				0.1	0.0	7.1	0.8
04/14/2014 06:20	19240	6.46	0.40	1				0.1	0.0	7.1	0.8
04/14/2014 06:21	19240	6.67	0.40	1				0.1	0.0	7.1	0.8
04/14/2014 06:22	19240	6.87	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:23	19200	6.85	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:24	19240	7.07	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:25	19230	7.07	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:26	19230	7.27	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:27	19200	7.46	0.40	1				0.1	0.0	7.1	0.7
04/14/2014 06:28	19220	7.67	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:29	19230	7.67	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:30	19210	7.46	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:31	19230	7.07	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:32	19220	6.66	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:33	19220	6.46	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:34	19240	6.46	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:35	19240	8.69	1.62	1				0.1	0.0	7.2	0.7
04/14/2014 06:36	19220	4.84	1.41	1				0.1	0.0	7.2	0.7
04/14/2014 06:37	19250	6.47	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:38	19220	6.66	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:39	19210	7.06	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:40	19240	6.87	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:41	19230	6.87	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:42	19230	7.07	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:43	19250	7.07	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:44	19240	7.07	0.40	1				0.1	0.0	7.2	0.7
04/14/2014 06:45	19190	7.05	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:46	19190	7.05	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:47	19230	7.07	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:48	19190	7.25	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:49	19210	7.26	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:50	19210	7.26	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:51	19230	7.27	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:52	19190	7.66	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:53	19230	7.87	0.40	1				0.1	0.0	7.3	0.6
04/14/2014 06:54	19200	7.66	0.40	1				0.1	0.0	7.3	0.6
04/14/2014 06:55	19220	7.06	0.40	1				0.1	0.0	7.3	0.6
04/14/2014 06:56	19220	6.66	0.40	1				0.1	0.0	7.3	0.6
04/14/2014 06:57	19220	6.26	0.40	1				0.1	0.0	7.3	0.6
04/14/2014 06:58	19200	6.25	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 06:59	19200	6.25	0.40	1				0.1	0.0	7.2	0.6
04/14/2014 07:00	19200	6.45	0.40	1				0.1	0.0	7.2	0.5

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
04/14/2014 07:01	19220	6.66	0.40	1				0.1	0.0	7.2	0.5
04/14/2014 07:02	19200	6.65	0.40	1				0.1	0.0	7.2	0.5
04/14/2014 07:03	19170	6.64	0.40	1				0.1	0.0	7.1	0.5
04/14/2014 07:04	19200	6.85	0.40	1				0.1	0.0	7.1	0.5
04/14/2014 07:05	19200	6.85	0.40	1				0.1	0.0	7.0	0.5
04/14/2014 07:06	19180	6.85	0.40	1				0.1	0.0	7.0	0.5
04/14/2014 07:07	19170	6.84	0.40	1				0.1	0.0	7.0	0.5
04/14/2014 07:08	19200	7.06	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:09	19160	7.44	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:10	19150	7.64	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:11	19180	7.45	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:12	19180	7.25	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:13	19160	7.04	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:14	19170	6.84	0.40	1				0.1	0.0	6.9	0.5
04/14/2014 07:15	19170	6.64	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:16	19190	6.45	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:17	19140	6.23	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:18	19180	6.44	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:19	19170	6.44	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:20	19140	6.63	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:21	19120	6.42	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:22	19160	6.64	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:23	19160	6.84	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:24	19150	6.84	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:25	19150	6.84	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:26	19170	6.84	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:27	19140	7.03	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:28	19130	7.03	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:29	19170	7.45	0.40	1				0.1	0.0	6.9	0.4
04/14/2014 07:30	19150	7.64	0.40	1				0.1	0.0	6.9	0.4

**Notes:**

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in lbs/hr cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.

Maximum =43.2871.7

**ATTACHMENT 2-4**

**SUMMARY OF CEMS DATA FOR UNIT 5 ON 05/07/14  
(START/RESTART)**

## Average Values Report

Company: NRG El Segundo  
 Plant: 301 Vista Del Mar  
 City/St: El Segundo, CA 90245  
 Source: stack5

Period Start: 5/7/2014 00:00  
 Period End: 5/7/2014 23:59  
 Validation Type: 1/l min  
 Averaging Period: 1 min  
 Type: Block Avg

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
05/07/2014 02:27	0	0.00	0.00	0							
05/07/2014 02:28	0	0.00	0.00	0							
05/07/2014 02:29	0	0.00	0.00	0							
05/07/2014 02:30	-10	0.00	0.00	0							
05/07/2014 02:31	0	0.00	0.00	0							
05/07/2014 02:32	0	0.00	0.00	0							
05/07/2014 02:33	0	0.00	0.00	0							
05/07/2014 02:34	-10	0.00	0.00	0							
05/07/2014 02:35	0	0.00	0.00	0							
05/07/2014 02:36	0	0.00	0.00	0							
05/07/2014 02:37	-10	0.00	0.00	0							
05/07/2014 02:38	-10	0.00	0.00	0							
05/07/2014 02:39	-10	0.00	0.00	0							
05/07/2014 02:40	-10	0.00	0.00	0							
05/07/2014 02:41	0	0.00	0.00	0							
05/07/2014 02:42	-10	0.00	0.00	0							
05/07/2014 02:43	-10	0.00	0.00	0							
05/07/2014 02:44	0	0.00	0.00	0							
05/07/2014 02:45	-10	0.00	0.00	0							
05/07/2014 02:46	0	0.00	0.00	0							
05/07/2014 02:47	0	0.00	0.00	0							
05/07/2014 02:48	-10	0.00	0.00	0							
05/07/2014 02:49	-10	0.00	0.00	0							
05/07/2014 02:50	-10	0.00	0.00	0							
05/07/2014 02:51	0	0.00	0.00	0							
05/07/2014 02:52	0	0.00	0.00	0							
05/07/2014 02:53	0	0.00	0.00	0							
05/07/2014 02:54	0	0.00	0.00	0							
05/07/2014 02:55	0	0.00	0.00	0							
05/07/2014 02:56	0	0.00	0.00	0							
05/07/2014 02:57	0	0.00	0.00	0							
05/07/2014 02:58	0	0.00	0.00	0							
05/07/2014 02:59	0	0.00	0.00	0							
05/07/2014 03:00	0	0.00	0.00	0							
05/07/2014 03:01	0	0.00	0.00	0							
05/07/2014 03:02	0	0.00	0.00	0							
05/07/2014 03:03	0	0.00	0.00	0							
05/07/2014 03:04	0	0.00	0.00	0							
05/07/2014 03:05	-10	0.00	0.00	0							
05/07/2014 03:06	0	0.00	0.00	0							
05/07/2014 03:07	0	0.00	0.00	0							
05/07/2014 03:08	0	0.00	0.00	0							
05/07/2014 03:09	0	0.00	0.00	0							
05/07/2014 03:10	-10	0.00	0.00	0							
05/07/2014 03:11	-10	0.00	0.00	0							
05/07/2014 03:12	0	0.00	0.00	0							
05/07/2014 03:13	0	0.00	0.00	0							
05/07/2014 03:14	0	0.00	0.00	0							
05/07/2014 03:15	0	0.00	0.00	0							
05/07/2014 03:16	0	0.00	0.00	0							
05/07/2014 03:17	0	0.00	0.00	0							
05/07/2014 03:18	0	0.00	0.00	0							
05/07/2014 03:19	0	0.00	0.00	0							
05/07/2014 03:20	0	0.00	0.00	0							
05/07/2014 03:21	-10	0.00	0.00	0							
05/07/2014 03:22	0	0.00	0.00	0							
05/07/2014 03:23	-10	0.00	0.00	0							
05/07/2014 03:24	0	0.00	0.00	0							
05/07/2014 03:25	0	0.00	0.00	0							
05/07/2014 03:26	0	0.00	0.00	0							
05/07/2014 03:27	-10	0.00	0.00	0							
05/07/2014 03:28	-10	0.00	0.00	0							
05/07/2014 03:29	-10	0.00	0.00	0							
05/07/2014 03:30	0	0.00	0.00	0							
05/07/2014 03:31	0	0.00	0.00	0							
05/07/2014 03:32	-10	0.00	0.00	0							
05/07/2014 03:33	0	0.00	0.00	0							
05/07/2014 03:34	-10	0.00	0.00	0							

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)
05/07/2014 03:35	0	0.00	0.00	0							
05/07/2014 03:36	0	0.00	0.00	0							
05/07/2014 03:37	0	0.00	0.00	0							
05/07/2014 03:38	0	0.00	0.00	0							
05/07/2014 03:39	0	0.00	0.00	0							
05/07/2014 03:40	0	0.00	0.00	0							
05/07/2014 03:41	0	0.00	0.00	0							
05/07/2014 03:42	-10	0.00	0.00	0							
05/07/2014 03:43	0	0.00	0.00	0							
05/07/2014 03:44	70	0.00	0.00	0							
05/07/2014 03:45	1560	0.00	0.00	1							
05/07/2014 03:46	2330	0.00	12.94	1							
05/07/2014 03:47	3670	5.13	521.64	1	374.34	1.3529	0.0133	0.1	8.7	0.1	8.7
05/07/2014 03:48	5090	24.64	1881.41	1	519.18	3.6238	0.0461	0.4	31.4	0.5	40.1
05/07/2014 03:49	6500	55.76	2848.30	1	663	4.2961	0.0817	0.9	47.5	1.4	87.5
05/07/2014 03:50	7220	84.98	4222.26	1	736.44	5.7333	0.1121	1.4	70.4	2.8	157.9
05/07/2014 03:51	7620	98.41	4392.15	1	777.24	5.6510	0.1230	1.6	73.2	4.5	231.1
05/07/2014 03:52	8230	120.38	3935.98	1	839.46	4.6887	0.1392	2.0	65.6	6.5	296.7
05/07/2014 03:53	8990	145.94	3184.66	1	916.98	3.4730	0.1546	2.4	53.1	8.9	349.8
05/07/2014 03:54	10100	172.76	3424.17	1	1030.2	3.3238	0.1629	2.9	57.1	11.8	406.8
05/07/2014 03:55	10620	173.29	6226.39	1	1083.24	5.7479	0.1554	2.9	103.8	14.7	510.6
05/07/2014 03:56	11130	171.21	5493.75	1	1135.26	4.8392	0.1465	2.9	91.6	17.5	602.2
05/07/2014 03:57	11760	179.91	4554.56	1	1199.52	3.7970	0.1456	3.0	75.9	20.5	678.1
05/07/2014 03:58	12320	182.66	1831.73	1	1256.64	1.4576	0.1412	3.0	30.5	23.6	708.6
05/07/2014 03:59	13030	166.92	176.22	1				2.8	2.9	26.4	711.6
05/07/2014 04:00	13550	100.31	38.27	1				1.7	0.6	28.0	712.2
05/07/2014 04:01	13640	90.09	7.73	1				1.5	0.1	29.5	712.3
05/07/2014 04:02	13610	76.46	5.29	1				1.3	0.1	30.8	712.4
05/07/2014 04:03	13500	58.83	4.68	1				1.0	0.1	31.8	712.5
05/07/2014 04:04	12300	55.92	3.62	1				0.9	0.1	32.7	712.5
05/07/2014 04:05	5490	38.68	19.02	1				0.6	0.3	33.4	712.9
05/07/2014 04:06	910	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:07	-10	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:08	-10	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:09	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:10	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:11	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:12	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:13	-10	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:14	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:15	0	0.00	0.00	0				0.0	0.0	33.4	712.9
05/07/2014 04:16	1700	248.29	550.52	1	173.4	3.1749	1.3909	4.1	9.2	37.5	722.0
05/07/2014 04:17	2340	5.28	7.81	1				0.1	0.1	37.6	722.2
05/07/2014 04:18	3680	19.40	13.68	1				0.3	0.2	37.9	722.4
05/07/2014 04:19	4920	39.36	58.17	1				0.7	1.0	38.6	723.4
05/07/2014 04:20	6090	84.03	126.81	1				1.4	2.1	40.0	725.5
05/07/2014 04:21	6520	116.86	222.15	1				1.9	3.7	41.9	729.2
05/07/2014 04:22	6670	123.27	307.48	1				2.1	5.1	44.0	734.3
05/07/2014 04:23	7530	127.38	336.52	1				2.1	5.6	46.1	739.9
05/07/2014 04:24	9390	128.97	275.29	1				2.1	4.6	48.3	744.5
05/07/2014 04:25	11600	120.22	243.48	1				2.0	4.1	50.3	748.6
05/07/2014 04:26	13280	109.46	195.49	1				1.8	3.3	52.1	751.8
05/07/2014 04:27	13550	52.22	17.93	1				0.9	0.3	53.0	752.1
05/07/2014 04:28	13610	32.30	3.29	1				0.5	0.1	53.5	752.2
05/07/2014 04:29	13500	21.69	3.12	1				0.4	0.1	53.9	752.2
05/07/2014 04:30	13470	12.02	2.83	1				0.2	0.0	54.1	752.3
05/07/2014 04:31	13460	8.06	2.83	1				0.1	0.0	54.2	752.3
05/07/2014 04:32	13440	6.49	2.68	1				0.1	0.0	54.3	752.4
05/07/2014 04:33	13430	5.64	2.68	1				0.1	0.0	54.4	752.4
05/07/2014 04:34	13420	5.07	2.68	1				0.1	0.0	54.5	752.5
05/07/2014 04:35	13410	4.79	2.39	1				0.1	0.0	54.6	752.5
05/07/2014 04:36	13410	4.65	2.39	1				0.1	0.0	54.6	752.5
05/07/2014 04:37	13390	4.50	2.11	1				0.1	0.0	54.7	752.6
05/07/2014 04:38	13400	4.50	2.11	1				0.1	0.0	54.8	752.6
05/07/2014 04:39	13400	4.36	2.11	1				0.1	0.0	54.9	752.6
05/07/2014 04:40	13390	4.36	2.11	1				0.1	0.0	54.9	752.7
05/07/2014 04:41	13330	4.34	2.10	1				0.1	0.0	55.0	752.7
05/07/2014 04:42	13320	4.34	2.10	1				0.1	0.0	55.1	752.7
05/07/2014 04:43	13340	4.48	2.10	1				0.1	0.0	55.1	752.8
05/07/2014 04:44	13560	4.70	2.14	1				0.1	0.0	55.2	752.8
05/07/2014 04:45	13610	4.72	2.14	1				0.1	0.0	55.3	752.9
05/07/2014 04:46	13610	4.86	1.86	1				0.1	0.0	55.4	752.9
05/07/2014 04:47	13630	5.15	1.86	1				0.1	0.0	55.4	744.2
05/07/2014 04:48	13640	5.30	1.58	1				0.1	0.0	55.1	712.9
05/07/2014 04:49	13630	5.44	1.57	1				0.1	0.0	54.2	665.4
05/07/2014 04:50	13670	5.60	1.58	1				0.1	0.0	52.9	595.1

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)
05/07/2014 04:51	13680	5.75	1.58	1				0.1	0.0	51.4	521.9
05/07/2014 04:52	13660	5.88	1.58	1				0.1	0.0	49.4	456.3
05/07/2014 04:53	13680	6.03	1.58	1				0.1	0.0	47.1	403.3
05/07/2014 04:54	13660	6.17	1.29	1				0.1	0.0	44.3	346.2
05/07/2014 04:55	13660	6.17	1.58	1				0.1	0.0	41.6	242.5
05/07/2014 04:56	14820	6.85	1.40	1				0.1	0.0	38.8	151.0
05/07/2014 04:57	17080	7.35	1.61	1				0.1	0.0	35.9	75.1
05/07/2014 04:58	19040	9.80	1.20	1				0.2	0.0	33.1	44.6
05/07/2014 04:59	19370	13.83	1.22	1				0.2	0.0	30.5	41.7
05/07/2014 05:00	19510	10.65	0.82	1				0.2	0.0	29.0	41.0
05/07/2014 05:01	19490	8.19	1.02	1				0.1	0.0	27.6	40.9
05/07/2014 05:02	19480	6.95	0.82	1				0.1	0.0	26.5	40.8
05/07/2014 05:03	19490	6.75	0.82	1				0.1	0.0	25.6	40.8
05/07/2014 05:04	19500	6.76	0.82	1				0.1	0.0	24.8	40.7
05/07/2014 05:05	19490	6.96	0.82	1				0.1	0.0	24.3	40.4
05/07/2014 05:06	19460	6.74	0.82	1				0.1	0.0	24.4	40.4
05/07/2014 05:07	19430	6.94	0.82	1				0.1	0.0	24.5	40.5
05/07/2014 05:08	19420	6.73	0.82	1				0.1	0.0	24.6	40.5
05/07/2014 05:09	19440	6.94	0.82	1				0.1	0.0	24.7	40.5
05/07/2014 05:10	19400	6.93	0.81	1				0.1	0.0	24.8	40.5
05/07/2014 05:11	19390	6.92	0.81	1				0.1	0.0	25.0	40.5
05/07/2014 05:12	19370	6.92	0.81	1				0.1	0.0	25.1	40.5
05/07/2014 05:13	19380	6.72	0.81	1				0.1	0.0	25.2	40.5
05/07/2014 05:14	19320	6.49	0.81	1				0.1	0.0	25.3	40.6
05/07/2014 05:15	19330	6.29	0.81	1				0.1	0.0	25.4	40.6
05/07/2014 05:16	19320	6.29	0.81	1				0.1	0.0	21.4	31.4
05/07/2014 05:17	19310	6.49	0.81	1				0.1	0.0	21.4	31.3
05/07/2014 05:18	19350	6.33	0.71	1	1973.7	0.0004	0.0032	0.1	0.0	21.2	31.1
05/07/2014 05:19	19290	6.31	0.71	1	1967.58	0.0004	0.0032	0.1	0.0	20.6	30.1
05/07/2014 05:20	19160	6.26	0.70	1	1954.32	0.0004	0.0032	0.1	0.0	19.3	28.0
05/07/2014 05:21	19120	6.25	0.70	1	1950.24	0.0004	0.0032	0.1	0.0	17.5	24.3
05/07/2014 05:22	19160	6.26	0.70	1	1954.32	0.0004	0.0032	0.1	0.0	15.5	19.2
05/07/2014 05:23	19370	6.33	0.71	1	1975.74	0.0004	0.0032	0.1	0.0	13.5	13.6
05/07/2014 05:24	19310	6.31	0.71	1	1969.62	0.0004	0.0032	0.1	0.0	11.5	9.0
05/07/2014 05:25	19320	6.32	0.71	1	1970.64	0.0004	0.0032	0.1	0.0	9.6	5.0
05/07/2014 05:26	19290	6.31	0.71	1	1967.58	0.0004	0.0032	0.1	0.0	7.8	1.7
05/07/2014 05:27	19310	6.31	0.71	1	1969.62	0.0004	0.0032	0.1	0.0	7.1	1.5
05/07/2014 05:28	19300	6.31	0.71	1	1968.6	0.0004	0.0032	0.1	0.0	6.6	1.4
05/07/2014 05:29	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.4	1.4
05/07/2014 05:30	19280	6.30	0.71	1	1966.56	0.0004	0.0032	0.1	0.0	6.3	1.3
05/07/2014 05:31	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.3	1.3
05/07/2014 05:32	19260	6.30	0.70	1	1964.52	0.0004	0.0032	0.1	0.0	6.3	1.3
05/07/2014 05:33	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.3	1.2
05/07/2014 05:34	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.3	1.2
05/07/2014 05:35	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.3	1.2
05/07/2014 05:36	19290	6.31	0.71	1	1967.58	0.0004	0.0032	0.1	0.0	6.3	1.1
05/07/2014 05:37	19290	6.31	0.71	1	1967.58	0.0004	0.0032	0.1	0.0	6.4	1.1
05/07/2014 05:38	19270	6.30	0.71	1	1965.54	0.0004	0.0032	0.1	0.0	6.4	1.1
05/07/2014 05:39	19250	6.29	0.70	1	1963.5	0.0004	0.0032	0.1	0.0	6.4	1.1
05/07/2014 05:40	19250	6.29	0.70	1	1963.5	0.0004	0.0032	0.1	0.0	6.5	1.1
05/07/2014 05:41	19250	6.29	0.70	1	1963.5	0.0004	0.0032	0.1	0.0	6.5	1.0
05/07/2014 05:42	19250	16.78	1.21	1				0.3	0.0	6.7	1.0
05/07/2014 05:43	19260	16.18	0.81	1				0.3	0.0	6.9	1.0
05/07/2014 05:44	19260	15.98	0.81	1				0.3	0.0	7.1	1.0
05/07/2014 05:45	19250	15.97	0.81	1				0.3	0.0	7.3	0.9
05/07/2014 05:46	19220	12.92	0.81	1				0.2	0.0	7.4	0.9
05/07/2014 05:47	19240	9.49	0.81	1				0.2	0.0	7.5	0.9
05/07/2014 05:48	19210	7.87	0.81	1				0.1	0.0	7.5	0.9
05/07/2014 05:49	19230	7.27	0.81	1				0.1	0.0	7.6	0.9
05/07/2014 05:50	19220	6.86	0.81	1				0.1	0.0	7.6	0.9
05/07/2014 05:51	19230	6.66	0.81	1				0.1	0.0	7.6	0.9
05/07/2014 05:52	19240	6.67	0.81	1				0.1	0.0	7.6	0.8
05/07/2014 05:53	19220	6.66	0.81	1				0.1	0.0	7.6	0.8
05/07/2014 05:54	19240	6.67	0.81	1				0.1	0.0	7.6	0.8
05/07/2014 05:55	19200	6.65	0.81	1				0.1	0.0	7.6	0.8
05/07/2014 05:56	19200	6.65	0.81	1				0.1	0.0	7.6	0.8
05/07/2014 05:57	19100	6.62	0.80	1				0.1	0.0	7.6	0.8
05/07/2014 05:58	18590	6.44	0.78	1				0.1	0.0	7.6	0.8
05/07/2014 05:59	18570	5.65	0.78	1				0.1	0.0	7.4	0.8
05/07/2014 06:00	18590	6.44	0.78	1				0.1	0.0	7.4	0.8
05/07/2014 06:01	18560	7.21	0.78	1				0.1	0.0	7.3	0.8
05/07/2014 06:02	18620	8.80	0.78	1				0.1	0.0	7.4	0.8
05/07/2014 06:03	18910	10.52	0.79	1				0.2	0.0	7.4	0.8
05/07/2014 06:04	19200	10.48	0.81	1				0.2	0.0	7.5	0.8
05/07/2014 06:05	18540	10.90	0.78	1				0.2	0.0	7.6	0.8
05/07/2014 06:06	16590	15.68	0.70	1				0.3	0.0	7.7	0.8

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)
05/07/2014 06:07	14880	24.69	0.62	1				0.4	0.0	8.0	0.8
05/07/2014 06:08	13360	19.36	1.68	1				0.3	0.0	8.2	0.8
05/07/2014 06:09	11990	19.64	2.27	1				0.3	0.0	8.4	0.8
05/07/2014 06:10	10790	21.75	31.16	1				0.4	0.5	8.7	1.3
05/07/2014 06:11	8990	54.56	153.68	1				0.9	2.6	9.5	3.9
05/07/2014 06:12	-10	0.00	0.00	0				0.0	0.0	9.4	3.8
05/07/2014 06:13	-10	0.00	0.00	0				0.0	0.0	9.2	3.8
05/07/2014 06:14	-10	0.00	0.00	0				0.0	0.0	9.1	3.8
05/07/2014 06:15	0	0.00	0.00	0				0.0	0.0	9.0	3.8
05/07/2014 06:16	0	0.00	0.00	0				0.0	0.0	8.9	3.8
05/07/2014 06:17	0	0.00	0.00	0				0.0	0.0	8.8	3.8
05/07/2014 06:18	0	0.00	0.00	0				0.0	0.0	8.7	3.8
05/07/2014 06:19	0	0.00	0.00	0				0.0	0.0	8.6	3.8
05/07/2014 06:20	0	0.00	0.00	0				0.0	0.0	8.5	3.7
05/07/2014 06:21	0	0.00	0.00	0				0.0	0.0	8.4	3.7

Maximum =

55.4752.9

## Notes:

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.

**ATTACHMENT 2-5**

**SUMMARY OF CEMS DATA FOR UNIT 5 ON 07/30/14  
(START/RESTART)**

Average Values Report

Company: NRG El Segundo  
 Plant: 301 Vista Del Mar  
 City/St: El Segundo, CA 90245  
 Source: stack5

Period Start: 7/30/2014 00:00  
 Period End: 7/30/2014 23:59  
 Validation Type: 1/1 min  
 Averaging Period: 1 min  
 Type: Block Avg

Period Start:	Average 5_GasFlow_hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)
07/30/2014 06:32	N/A	N/A	N/A	0							
07/30/2014 06:33	N/A	N/A	N/A	0							
07/30/2014 06:34	N/A	N/A	N/A	0							
07/30/2014 06:35	N/A	N/A	N/A	0							
07/30/2014 06:36	N/A	N/A	N/A	0							
07/30/2014 06:37	N/A	N/A	N/A	0							
07/30/2014 06:38	N/A	N/A	N/A	0							
07/30/2014 06:39	N/A	N/A	N/A	0							
07/30/2014 06:40	N/A	N/A	N/A	0							
07/30/2014 06:41	N/A	N/A	N/A	0							
07/30/2014 06:42	N/A	N/A	N/A	0							
07/30/2014 06:43	N/A	N/A	N/A	0							
07/30/2014 06:44	N/A	N/A	N/A	0							
07/30/2014 06:45	N/A	N/A	N/A	0							
07/30/2014 06:46	N/A	N/A	N/A	0							
07/30/2014 06:47	N/A	N/A	N/A	0							
07/30/2014 06:48	N/A	N/A	N/A	0							
07/30/2014 06:49	N/A	N/A	N/A	0							
07/30/2014 06:50	N/A	N/A	N/A	0							
07/30/2014 06:51	N/A	N/A	N/A	0							
07/30/2014 06:52	N/A	N/A	N/A	0							
07/30/2014 06:53	N/A	N/A	N/A	0							
07/30/2014 06:54	N/A	N/A	N/A	0							
07/30/2014 06:55	N/A	N/A	N/A	0							
07/30/2014 06:56	N/A	N/A	N/A	0							
07/30/2014 06:57	N/A	N/A	N/A	0							
07/30/2014 06:58	N/A	N/A	N/A	0							
07/30/2014 06:59	N/A	N/A	N/A	0							
07/30/2014 07:00	N/A	N/A	N/A	0							
07/30/2014 07:01	N/A	N/A	N/A	0							
07/30/2014 07:02	N/A	N/A	N/A	0							
07/30/2014 07:03	N/A	N/A	N/A	0							
07/30/2014 07:04	N/A	N/A	N/A	0							
07/30/2014 07:05	N/A	N/A	N/A	0							
07/30/2014 07:06	N/A	N/A	N/A	0							
07/30/2014 07:07	N/A	N/A	N/A	0							
07/30/2014 07:08	N/A	N/A	N/A	0							
07/30/2014 07:09	N/A	N/A	N/A	0							
07/30/2014 07:10	N/A	N/A	N/A	0							
07/30/2014 07:11	N/A	N/A	N/A	0							
07/30/2014 07:12	N/A	N/A	N/A	0							
07/30/2014 07:13	N/A	N/A	N/A	0							
07/30/2014 07:14	N/A	N/A	N/A	0							
07/30/2014 07:15	N/A	N/A	N/A	0							
07/30/2014 07:16	N/A	N/A	N/A	0							
07/30/2014 07:17	N/A	N/A	N/A	0							
07/30/2014 07:18	N/A	N/A	N/A	0							
07/30/2014 07:19	N/A	N/A	N/A	0							
07/30/2014 07:20	N/A	N/A	N/A	0							
07/30/2014 07:21	N/A	N/A	N/A	0							
07/30/2014 07:22	N/A	N/A	N/A	0							
07/30/2014 07:23	N/A	N/A	N/A	0							
07/30/2014 07:24	N/A	N/A	N/A	0							
07/30/2014 07:25	N/A	N/A	N/A	0							
07/30/2014 07:26	N/A	N/A	N/A	0							
07/30/2014 07:27	N/A	N/A	N/A	0							
07/30/2014 07:28	N/A	N/A	N/A	0							
07/30/2014 07:29	N/A	N/A	N/A	0							
07/30/2014 07:30	N/A	N/A	N/A	0							
07/30/2014 07:31	N/A	N/A	N/A	0							

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg.	Calculated Rolling-60 min Avg.
07/30/2014 07:32	N/A	N/A	N/A	0									
07/30/2014 07:33	N/A	N/A	N/A	0									
07/30/2014 07:34	N/A	N/A	N/A	0									
07/30/2014 07:35	N/A	N/A	N/A	0									
07/30/2014 07:36	N/A	N/A	N/A	0									
07/30/2014 07:37	N/A	N/A	N/A	0									
07/30/2014 07:38	N/A	N/A	N/A	0									
07/30/2014 07:39	N/A	N/A	N/A	0									
07/30/2014 07:40	N/A	N/A	N/A	0									
07/30/2014 07:41	N/A	N/A	N/A	0									
07/30/2014 07:42	N/A	N/A	N/A	0									
07/30/2014 07:43	N/A	N/A	N/A	0									
07/30/2014 07:44	N/A	N/A	N/A	0									
07/30/2014 07:45	N/A	N/A	N/A	0									
07/30/2014 07:46	N/A	N/A	N/A	0									
07/30/2014 07:47	N/A	N/A	N/A	0									
07/30/2014 07:48	N/A	N/A	N/A	0									
07/30/2014 07:49	N/A	N/A	N/A	0									
07/30/2014 07:50	N/A	N/A	N/A	0									
07/30/2014 07:51	N/A	N/A	N/A	0									
07/30/2014 07:52	N/A	N/A	N/A	0									
07/30/2014 07:53	N/A	N/A	N/A	1									
07/30/2014 07:54	1780	0.00	0.00	1									
07/30/2014 07:55	3430	1.40	14.34	1	349.86	0.0398	0.0039	0.0	0.2	0.0	0.2	0.2	
07/30/2014 07:56	4600	10.96	959.10	1	469.2	2.0441	0.0227	0.2	16.0	0.2	16.0	16.2	
07/30/2014 07:57	6040	47.95	2431.89	1	616.08	3.9474	0.0756	0.8	40.5	1.0	56.8		
07/30/2014 07:58	6370	87.96	4115.83	1	649.74	6.3346	0.1315	1.5	68.6	2.5	125.4		
07/30/2014 07:59	5760	93.80	4770.18	1	587.52	8.1192	0.1551	1.6	79.5	4.0	204.9		
07/30/2014 08:00	5590	89.17	4392.57	1	570.18	7.7038	0.1519	1.5	73.2	5.5	278.1		
07/30/2014 08:01	5570	84.23	4228.00	1	568.14	7.4418	0.1440	1.4	70.5	6.9	348.5		
07/30/2014 08:02	5560	81.97	3887.75	1	567.12	6.8553	0.1403	1.4	64.8	8.3	413.3		
07/30/2014 08:03	5510	75.10	2765.37	1	562.02	4.9204	0.1298	1.3	46.1	9.5	459.4		
07/30/2014 08:04	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:05	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:06	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:07	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:08	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:09	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:10	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:11	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:12	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:13	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:14	N/A	0.00	0.00	0				0.0	0.0	9.5	459.4		
07/30/2014 08:15	1580	0.00	0.00	1				0.0	0.0	9.5	459.4		
07/30/2014 08:16	3270	2.09	8.86	1				0.0	0.1	9.6	459.6		
07/30/2014 08:17	4320	7.48	27.49	1				0.1	0.5	9.7	460.0		
07/30/2014 08:18	6120	28.53	89.96	1				0.5	1.5	10.2	461.5		
07/30/2014 08:19	7920	62.45	183.62	1				1.0	3.1	11.2	464.6		
07/30/2014 08:20	10380	86.76	192.15	1				1.4	3.2	12.7	467.8		
07/30/2014 08:21	12300	89.50	267.34	1				1.5	4.5	14.2	472.2		
07/30/2014 08:22	13800	65.49	77.52	1				1.1	1.3	15.2	473.5		
07/30/2014 08:23	13950	31.20	7.76	1				0.5	0.1	15.8	473.7		
07/30/2014 08:24	13930	26.62	2.34	1				0.4	0.0	16.2	473.7		
07/30/2014 08:25	13870	19.95	1.60	1				0.3	0.0	16.5	473.7		
07/30/2014 08:26	13870	14.13	1.60	1				0.2	0.0	16.8	473.8		
07/30/2014 08:27	13850	11.63	1.60	1				0.2	0.0	17.0	473.8		
07/30/2014 08:28	13840	9.74	1.60	1				0.2	0.0	17.1	473.8		
07/30/2014 08:29	13830	8.13	1.60	1				0.1	0.0	17.3	473.8		
07/30/2014 08:30	13810	6.67	1.60	1				0.1	0.0	17.4	473.9		
07/30/2014 08:31	13810	5.66	1.60	1				0.1	0.0	17.5	473.9		
07/30/2014 08:32	13800	5.07	1.59	1				0.1	0.0	17.6	473.9		
07/30/2014 08:33	13810	4.93	1.31	1				0.1	0.0	17.6	473.9		
07/30/2014 08:34	13790	4.92	1.30	1				0.1	0.0	17.7	474.0		
07/30/2014 08:35	13780	4.92	1.30	1				0.1	0.0	17.8	474.0		
07/30/2014 08:36	13780	4.92	1.30	1				0.1	0.0	17.9	474.0		
07/30/2014 08:37	13780	4.92	1.30	1				0.1	0.0	18.0	474.0		
07/30/2014 08:38	13760	4.91	1.30	1				0.1	0.0	18.1	474.0		
07/30/2014 08:39	13770	4.92	1.45	1				0.1	0.0	18.1	474.1		

Period Start:	Average 5_GasFlow hscfh	Average 5_NOx LBHR #/hr	Average 5_CO LBHR #/hr	Average 5_ProcOn l=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
07/30/2014 08:40	13760	4.77	1.44	1				0.1	0.0	18.2		474.1
07/30/2014 08:41	13740	4.76	1.44	1				0.1	0.0	18.3		474.1
07/30/2014 08:42	13690	4.89	1.44	1				0.1	0.0	18.4		474.1
07/30/2014 08:43	13690	4.74	1.44	1				0.1	0.0	18.5		474.2
07/30/2014 08:44	13710	4.89	1.44	1				0.1	0.0	18.5		474.2
07/30/2014 08:45	13700	4.89	1.44	1				0.1	0.0	18.6		474.2
07/30/2014 08:46	13690	5.03	1.15	1				0.1	0.0	18.7		474.2
07/30/2014 08:47	13680	5.03	1.15	1				0.1	0.0	18.8		474.3
07/30/2014 08:48	13680	5.17	1.15	1				0.1	0.0	18.9		474.3
07/30/2014 08:49	13680	5.17	1.15	1				0.1	0.0	19.0		474.3
07/30/2014 08:50	13660	5.02	1.15	1				0.1	0.0	19.0		474.3
07/30/2014 08:51	13680	4.60	1.15	1				0.1	0.0	19.1		474.3
07/30/2014 08:52	13830	4.36	1.16	1				0.1	0.0	19.2		474.3
07/30/2014 08:53	13530	3.98	1.14	1				0.1	0.0	19.3		474.4
07/30/2014 08:54	13110	3.85	1.10	1				0.1	0.0	19.3		474.4
07/30/2014 08:55	13010	4.23	1.09	1				0.1	0.0	19.4		474.2
07/30/2014 08:56	13580	4.42	1.43	1				0.1	0.0	19.3		458.2
07/30/2014 08:57	13700	4.32	1.73	1				0.1	0.0	18.5		417.7
07/30/2014 08:58	13750	4.76	1.44	1				0.1	0.0	17.1		349.1
07/30/2014 08:59	13780	5.35	1.16	1				0.1	0.0	15.7		269.6
07/30/2014 09:00	13790	5.65	1.16	1				0.1	0.0	14.3		196.5
07/30/2014 09:01	13800	5.94	1.16	1				0.1	0.0	13.0		126.0
07/30/2014 09:02	13810	6.09	1.16	1				0.1	0.0	11.7		61.2
07/30/2014 09:03	13870	6.26	1.17	1				0.1	0.0	10.6		15.2
07/30/2014 09:04	13890	6.42	0.88	1				0.1	0.0	10.7		15.2
07/30/2014 09:05	13900	6.42	0.88	1				0.1	0.0	10.8		15.2
07/30/2014 09:06	13910	6.43	0.88	1				0.1	0.0	10.9		15.2
07/30/2014 09:07	13880	6.41	0.87	1				0.1	0.0	11.0		15.2
07/30/2014 09:08	13870	6.41	0.87	1				0.1	0.0	11.1		15.2
07/30/2014 09:09	13870	6.26	0.87	1				0.1	0.0	11.2		15.2
07/30/2014 09:10	13940	6.44	0.88	1				0.1	0.0	11.3		15.3
07/30/2014 09:11	14450	6.52	0.91	1				0.1	0.0	11.4		15.3
07/30/2014 09:12	14470	6.53	0.61	1				0.1	0.0	11.5		15.3
07/30/2014 09:13	14480	6.54	0.61	1				0.1	0.0	11.6		15.3
07/30/2014 09:14	14460	6.38	0.61	1				0.1	0.0	11.7		15.3
07/30/2014 09:15	14460	6.38	0.61	1				0.1	0.0	11.8		15.3
07/30/2014 09:16	14440	6.22	0.61	1				0.1	0.0	11.9		15.2
07/30/2014 09:17	14430	6.06	0.61	1				0.1	0.0	11.9		14.7
07/30/2014 09:18	14430	5.91	0.61	1				0.1	0.0	11.5		13.2
07/30/2014 09:19	14430	5.76	0.61	1				0.1	0.0	10.6		10.2
07/30/2014 09:20	14430	5.76	0.61	1				0.1	0.0	9.2		7.0
07/30/2014 09:21	14430	5.61	0.61	1				0.1	0.0	7.8		2.6
07/30/2014 09:22	14430	5.61	0.61	1				0.1	0.0	6.8		1.3
07/30/2014 09:23	14420	5.45	0.61	1				0.1	0.0	6.4		1.2
07/30/2014 09:24	14430	5.30	0.61	1				0.1	0.0	6.0		1.1
07/30/2014 09:25	14490	5.33	0.61	1				0.1	0.0	5.8		1.1
07/30/2014 09:26	15040	5.53	0.63	1				0.1	0.0	5.7		1.1
07/30/2014 09:27	15100	5.55	0.63	1				0.1	0.0	5.5		1.1
07/30/2014 09:28	15090	5.39	0.63	1				0.1	0.0	5.5		1.1
07/30/2014 09:29	15080	5.38	0.63	1				0.1	0.0	5.4		1.0
07/30/2014 09:30	14980	5.19	0.63	1				0.1	0.0	5.4		1.0
07/30/2014 09:31	14390	4.99	0.60	1				0.1	0.0	5.4		1.0
07/30/2014 09:32	14340	4.82	0.60	1				0.1	0.0	5.4		1.0
07/30/2014 09:33	14370	4.83	0.60	1				0.1	0.0	5.4		1.0
07/30/2014 09:34	14360	4.67	0.60	1				0.1	0.0	5.4		1.0
07/30/2014 09:35	14450	4.61	0.56	1	1473.9	0.0004	0.0031	0.1	0.0	5.4		1.0
07/30/2014 09:36	15050	4.81	0.59	1	1535.1	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:37	15100	4.82	0.59	1	1540.2	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:38	15080	4.82	0.59	1	1538.16	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:39	15080	4.82	0.59	1	1538.16	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:40	15050	4.81	0.59	1	1535.1	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:41	15030	4.80	0.58	1	1533.06	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:42	15020	4.80	0.58	1	1532.04	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:43	15020	4.80	0.58	1	1532.04	0.0004	0.0031	0.1	0.0	5.4		0.9
07/30/2014 09:44	15010	4.79	0.58	1	1531.02	0.0004	0.0031	0.1	0.0	5.4		0.8
07/30/2014 09:45	15100	4.82	0.59	1	1540.2	0.0004	0.0031	0.1	0.0	5.4		0.8
07/30/2014 09:46	16240	5.19	0.63	1	1656.48	0.0004	0.0031	0.1	0.0	5.4		0.8
07/30/2014 09:47	16510	5.27	0.64	1	1684.02	0.0004	0.0031	0.1	0.0	5.4		0.8

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn l=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg.	Calculated Rolling-60 min Avg.
07/30/2014 09:48	16470	5.26	0.64	1	1679.94	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:49	16430	5.25	0.64	1	1675.86	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:50	16400	5.24	0.64	1	1672.8	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:51	16380	5.23	0.64	1	1670.76	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:52	16340	5.22	0.64	1	1666.68	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:53	16310	5.21	0.63	1	1663.62	0.0004	0.0031	0.1	0.0	5.4	0.8		
07/30/2014 09:54	16320	5.21	0.63	1	1664.64	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 09:55	16240	5.19	0.63	1	1656.48	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 09:56	15700	5.01	0.61	1	1601.4	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 09:57	15610	4.99	0.61	1	1592.22	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 09:58	15610	4.99	0.61	1	1592.22	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 09:59	15610	4.99	0.61	1	1592.22	0.0004	0.0031	0.1	0.0	5.5	0.7		
07/30/2014 10:00	15710	2.47	0.66	1				0.0	0.0	5.4	0.7		
07/30/2014 10:01	16290	2.57	0.68	1				0.0	0.0	5.4	0.7		
07/30/2014 10:02	16330	2.57	0.69	1				0.0	0.0	5.3	0.7		
07/30/2014 10:03	16340	2.57	0.69	1				0.0	0.0	5.3	0.7		
07/30/2014 10:04	16350	2.58	0.69	1				0.0	0.0	5.2	0.6		
07/30/2014 10:05	16330	2.74	0.69	1				0.0	0.0	5.1	0.6		
07/30/2014 10:06	16320	2.74	0.69	1				0.0	0.0	5.1	0.6		
07/30/2014 10:07	16340	2.92	0.69	1				0.0	0.0	5.0	0.6		
07/30/2014 10:08	16320	3.08	0.69	1				0.1	0.0	5.0	0.6		
07/30/2014 10:09	16330	3.26	0.69	1				0.1	0.0	4.9	0.6		
07/30/2014 10:10	16330	3.43	0.69	1				0.1	0.0	4.9	0.6		
07/30/2014 10:11	16310	3.43	0.69	1				0.1	0.0	4.8	0.6		
07/30/2014 10:12	16320	3.60	0.69	1				0.1	0.0	4.8	0.6		
07/30/2014 10:13	16320	3.77	0.69	1				0.1	0.0	4.7	0.6		
07/30/2014 10:14	16290	3.93	0.68	1				0.1	0.0	4.7	0.6		
07/30/2014 10:15	16300	4.11	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:16	16290	4.45	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:17	16310	4.62	0.69	1				0.1	0.0	4.6	0.6		
07/30/2014 10:18	16290	4.79	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:19	16300	5.13	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:20	16300	5.31	0.68	1				0.1	0.0	4.5	0.6		
07/30/2014 10:21	16330	5.66	0.69	1				0.1	0.0	4.5	0.6		
07/30/2014 10:22	16290	5.64	0.68	1				0.1	0.0	4.5	0.6		
07/30/2014 10:23	16300	6.16	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:24	16300	6.50	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:25	16310	6.68	0.69	1				0.1	0.0	4.6	0.6		
07/30/2014 10:26	16290	6.50	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:27	16280	6.32	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:28	16250	6.14	0.68	1				0.1	0.0	4.6	0.6		
07/30/2014 10:29	16260	5.98	0.68	1				0.1	0.0	4.7	0.6		
07/30/2014 10:30	16230	5.79	0.68	1				0.1	0.0	4.7	0.6		
07/30/2014 10:31	16250	5.46	0.68	1				0.1	0.0	4.7	0.6		
07/30/2014 10:32	16260	5.46	0.68	1				0.1	0.0	4.7	0.6		
07/30/2014 10:33	16230	5.45	0.68	1				0.1	0.0	4.7	0.7		
07/30/2014 10:34	16250	5.29	0.68	1				0.1	0.0	4.7	0.7		
07/30/2014 10:35	16250	5.46	0.68	1				0.1	0.0	4.7	0.7		
07/30/2014 10:36	16260	5.80	0.68	1				0.1	0.0	4.7	0.7		
07/30/2014 10:37	16240	6.14	0.68	1				0.1	0.0	4.8	0.7		
07/30/2014 10:38	16290	6.33	0.68	1				0.1	0.0	4.8	0.7		
07/30/2014 10:39	16280	6.50	0.68	1				0.1	0.0	4.8	0.7		
07/30/2014 10:40	16260	6.49	0.68	1				0.1	0.0	4.8	0.7		
07/30/2014 10:41	16280	6.32	0.68	1				0.1	0.0	4.9	0.7		
07/30/2014 10:42	16240	6.14	0.68	1				0.1	0.0	4.9	0.7		
07/30/2014 10:43	16310	5.99	0.69	1				0.1	0.0	4.9	0.7		
07/30/2014 10:44	16260	5.98	0.68	1				0.1	0.0	4.9	0.7		
07/30/2014 10:45	16330	5.83	0.69	1				0.1	0.0	4.9	0.7		
07/30/2014 10:46	16930	5.69	0.71	1				0.1	0.0	4.9	0.7		
07/30/2014 10:47	17000	5.53	0.71	1				0.1	0.0	5.0	0.7		
07/30/2014 10:48	16950	5.34	0.71	1				0.1	0.0	5.0	0.7		
07/30/2014 10:49	17000	5.71	0.36	1				0.1	0.0	5.0	0.7		
07/30/2014 10:50	17030	6.08	0.72	1				0.1	0.0	5.0	0.7		
07/30/2014 10:51	17890	6.39	0.75	1				0.1	0.0	5.0	0.7		
07/30/2014 10:52	18050	6.44	0.76	1				0.1	0.0	5.0	0.7		
07/30/2014 10:53	18100	6.65	0.76	1				0.1	0.0	5.0	0.7		
07/30/2014 10:54	18130	7.42	0.38	1				0.1	0.0	5.1	0.7		
07/30/2014 10:55	18090	7.60	0.38	1				0.1	0.0	5.1	0.7		

Period Start:	Average 5_GasFlow hscfh	Average 5_NOX_LBHR #/hr	Average 5_CO_LBHR #/hr	Average 5_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg.	Calculated Rolling-60 min Avg.
07/30/2014 10:56	18070	7.59	0.38	1				0.1	0.0	5.2	0.7		
07/30/2014 10:57	18050	7.58	0.38	1				0.1	0.0	5.2	0.7		
07/30/2014 10:58	18050	7.20	0.38	1				0.1	0.0	5.2	0.7		
07/30/2014 10:59	18040	6.82	0.76	1				0.1	0.0	5.3	0.7		
07/30/2014 11:00	18060	6.64	0.38	1				0.1	0.0	5.3	0.7		
07/30/2014 11:01	18070	6.45	0.38	1				0.1	0.0	5.4	0.6		
07/30/2014 11:02	18060	6.26	0.38	1				0.1	0.0	5.5	0.6		
07/30/2014 11:03	18080	5.89	0.76	1				0.1	0.0	5.5	0.6		
07/30/2014 11:04	18080	5.89	0.76	1				0.1	0.0	5.6	0.6		
07/30/2014 11:05	18060	5.88	0.76	1				0.1	0.0	5.6	0.6		
07/30/2014 11:06	18060	6.07	0.38	1				0.1	0.0	5.7	0.6		
07/30/2014 11:07	18050	6.25	0.38	1				0.1	0.0	5.7	0.6		
07/30/2014 11:08	18040	6.63	0.38	1				0.1	0.0	5.8	0.6		
07/30/2014 11:09	18020	6.81	0.38	1				0.1	0.0	5.9	0.6		
07/30/2014 11:10	18050	7.01	0.38	1				0.1	0.0	5.9	0.6		
07/30/2014 11:11	18030	7.19	0.38	1				0.1	0.0	6.0	0.6		
07/30/2014 11:12	18030	7.19	0.38	1				0.1	0.0	6.0	0.6		
07/30/2014 11:13	18050	6.82	0.76	1				0.1	0.0	6.1	0.6		
07/30/2014 11:14	18030	6.63	0.38	1				0.1	0.0	6.1	0.6		
07/30/2014 11:15	18010	6.43	0.38	1				0.1	0.0	6.2	0.6		
07/30/2014 11:16	18040	6.25	0.76	1				0.1	0.0	6.2	0.6		
07/30/2014 11:17	18030	6.06	0.38	1				0.1	0.0	6.2	0.6		
07/30/2014 11:18	18040	6.06	0.38	1				0.1	0.0	6.2	0.6		
07/30/2014 11:19	18050	5.88	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:20	18060	5.88	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:21	18070	6.07	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:22	18060	6.45	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:23	18060	7.02	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:24	18070	7.02	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:25	18080	7.21	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:26	18060	6.83	0.38	1				0.1	0.0	6.3	0.6		
07/30/2014 11:27	18050	6.63	0.38	1				0.1	0.0	6.3	0.5		
07/30/2014 11:28	18040	6.44	0.38	1				0.1	0.0	6.3	0.5		
07/30/2014 11:29	18040	6.25	0.38	1				0.1	0.0	6.3	0.5		
07/30/2014 11:30	18060	5.88	0.38	1				0.1	0.0	6.3	0.5		
07/30/2014 11:31	18030	5.87	0.38	1				0.1	0.0	6.4	0.5		
07/30/2014 11:32	18050	5.88	0.38	1				0.1	0.0	6.4	0.5		
07/30/2014 11:33	18050	6.06	0.38	1				0.1	0.0	6.4	0.5		
07/30/2014 11:34	18010	6.24	0.38	1				0.1	0.0	6.4	0.5		

Maximum =19.4474.4**Notes:**

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.

**ATTACHMENT 2-6**

**SUMMARY OF CEMS DATA FOR UNIT 7 ON 06/20/14  
(START/RESTART)**

## Average Values Report

Period Start: 6/20/2014 00:00  
 Period End: 6/20/2014 23:59  
 Validation Type: 1/1 min  
 Averaging Period: 1 min  
 Type: Block Avg

Company: NRG El Segundo  
 Plant: 301 Vista Del Mar  
 City/St: El Segundo, CA 90245  
 Source: stack7

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProOn l=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg.	Calculated CO Rolling-60 min Avg.
06/20/2014 07:00	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:01	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:02	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:03	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:04	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:05	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:06	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:07	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:08	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:09	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:10	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:11	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:12	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:13	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:14	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:15	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:16	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:17	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:18	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:19	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:20	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:21	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:22	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:23	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:24	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:25	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:26	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:27	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:28	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:29	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:30	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:31	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:32	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:33	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:34	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:35	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:36	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:37	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:38	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:39	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:40	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:41	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:42	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:43	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:44	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:45	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:46	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:47	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:48	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:49	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:50	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:51	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:52	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:53	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:54	0	0.00	0.00	0				0.0	0.0				
06/20/2014 07:55	490	0.00	0.00	1				0.0	0.0			0.0	0.3
06/20/2014 07:56	430	0.00	0.00	1				0.0	0.0			0.1	9.0
06/20/2014 07:57	430	0.45	17.67	1				0.1	8.7			0.1	34.7
06/20/2014 07:58	1450	4.80	523.00	1				0.1	8.7			0.6	
06/20/2014 07:59	3730	30.51	1542.22	1	380.46	4.0536	0.0779	0.5	25.7			0.6	

Period Start:	Average	Average	Average	Average	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated	Calculated
	7_GasFlow hscfh	7_NOx_LBHR #/hr	7_CO_LBHR #/hr	7_Procon l=ON	Heat Input (MMBtu/hr)	CO Emiss. Factor (lbs/MMBtu)	NOx Emiss. Factor (lbs/MMBtu)	NOx (lbs/min)	CO (lbs/min)	NOx (lbs/min)	CO (lbs/hr)	NOx (lbs/hr)	CO (lbs/hr)
06/20/2014 08:00	3500	43.88	1941.24	1	357.00	5.4376	0.1194	0.7	32.4	1.3	1.3	67.1	67.1
06/20/2014 08:01	2190	0.00	0.00	1				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:02	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:03	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:04	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:05	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:06	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:07	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:08	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:09	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:10	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:11	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:12	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:13	N/A	0.00	0.00	0				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:14	540	0.00	0.00	1				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:15	430	0.00	0.00	1				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:16	430	0.66	1.48	1				0.0	0.0	1.3	1.3	67.1	67.1
06/20/2014 08:17	1970	6.99	31.22	1				0.1	0.5	1.5	1.5	67.6	67.6
06/20/2014 08:18	3470	26.27	522.94	1	353.94	1.4775	0.0721	0.4	8.7	1.9	1.9	76.3	76.3
06/20/2014 08:19	3790	49.23	1887.87	1	386.58	4.8935	0.1237	0.8	31.5	2.7	2.7	107.8	107.8
06/20/2014 08:20	4130	61.85	2295.99	1	421.26	5.4503	0.1426	1.0	38.3	3.7	3.7	146.1	146.1
06/20/2014 08:21	4560	68.42	2003.66	1	465.12	4.3078	0.1429	1.1	33.4	4.9	4.9	179.5	179.5
06/20/2014 08:22	5470	79.61	883.83	1	557.94	1.5841	0.1385	1.3	14.7	6.2	6.2	194.2	194.2
06/20/2014 08:23	6050	79.35	305.64	1				1.3	5.1	7.5	7.5	199.3	199.3
06/20/2014 08:24	7140	93.19	210.44	1				1.6	3.5	9.1	9.1	202.8	202.8
06/20/2014 08:25	7980	90.49	334.49	1				1.5	5.6	10.6	10.6	208.4	208.4
06/20/2014 08:26	8970	85.34	357.64	1				1.4	6.0	12.0	12.0	214.3	214.3
06/20/2014 08:27	10370	92.67	270.37	1				1.5	4.5	13.6	13.6	218.8	218.8
06/20/2014 08:28	11450	64.92	114.22	1				1.1	1.9	14.6	14.6	220.7	220.7
06/20/2014 08:29	12020	32.69	16.03	1				0.5	0.3	15.2	15.2	221.0	221.0
06/20/2014 08:30	12120	23.42	2.55	1				0.4	0.0	15.6	15.6	221.0	221.0
06/20/2014 08:31	12130	18.72	1.40	1				0.3	0.0	15.9	15.9	221.1	221.1
06/20/2014 08:32	12110	11.70	1.40	1				0.2	0.0	16.1	16.1	221.1	221.1
06/20/2014 08:33	12120	8.27	1.40	1				0.1	0.0	16.2	16.2	221.1	221.1
06/20/2014 08:34	12110	6.36	1.40	1				0.1	0.0	16.3	16.3	221.1	221.1
06/20/2014 08:35	12120	5.60	1.15	1				0.1	0.0	16.4	16.4	221.2	221.2
06/20/2014 08:36	12120	5.34	1.15	1				0.1	0.0	16.5	16.5	221.2	221.2
06/20/2014 08:37	12120	5.09	1.15	1				0.1	0.0	16.6	16.6	221.2	221.2
06/20/2014 08:38	12130	5.09	1.15	1				0.1	0.0	16.7	16.7	221.2	221.2
06/20/2014 08:39	12130	4.97	1.15	1				0.1	0.0	16.8	16.8	221.2	221.2
06/20/2014 08:40	12140	4.84	1.15	1				0.1	0.0	16.8	16.8	221.3	221.3
06/20/2014 08:41	12130	4.71	1.15	1				0.1	0.0	16.9	16.9	221.3	221.3
06/20/2014 08:42	12130	4.84	1.02	1				0.1	0.0	17.0	17.0	221.3	221.3
06/20/2014 08:43	12120	4.71	1.02	1				0.1	0.0	17.1	17.1	221.3	221.3
06/20/2014 08:44	12110	4.70	1.02	1				0.1	0.0	17.2	17.2	221.3	221.3
06/20/2014 08:45	12130	4.71	1.02	1				0.1	0.0	17.2	17.2	221.3	221.3
06/20/2014 08:46	12130	4.97	1.02	1				0.1	0.0	17.3	17.3	221.4	221.4
06/20/2014 08:47	12130	4.97	1.02	1				0.1	0.0	17.4	17.4	221.4	221.4
06/20/2014 08:48	12130	5.09	1.02	1				0.1	0.0	17.5	17.5	221.4	221.4
06/20/2014 08:49	12140	5.23	1.02	1				0.1	0.0	17.6	17.6	221.4	221.4
06/20/2014 08:50	12130	5.22	1.02	1				0.1	0.0	17.7	17.7	221.4	221.4
06/20/2014 08:51	12130	5.22	1.02	1				0.1	0.0	17.8	17.8	221.4	221.4
06/20/2014 08:52	12590	5.68	1.06	1				0.1	0.0	17.8	17.8	221.5	221.5
06/20/2014 08:53	13350	7.43	1.12	1				0.1	0.0	18.0	18.0	221.5	221.5
06/20/2014 08:54	13510	7.80	0.85	1				0.1	0.0	18.1	18.1	221.5	221.5
06/20/2014 08:55	13000	7.37	0.55	1				0.1	0.0	18.2	18.2	221.5	221.5
06/20/2014 08:56	11750	5.92	0.49	1				0.1	0.0	18.3	18.3	221.5	221.5
06/20/2014 08:57	11240	5.66	0.47	1				0.1	0.0	18.4	18.4	221.2	221.2
06/20/2014 08:58	11160	4.57	0.70	1				0.1	0.0	18.4	18.4	212.5	212.5
06/20/2014 08:59	11330	4.64	1.19	1				0.1	0.0	18.0	18.0	186.8	186.8
06/20/2014 09:00	11460	5.17	1.20	1				0.1	0.0	17.3	17.3	154.5	154.5
06/20/2014 09:01	11520	5.20	1.21	1				0.1	0.0	17.4	17.4	154.5	154.5
06/20/2014 09:02	11530	5.08	1.21	1				0.1	0.0	17.5	17.5	154.5	154.5
06/20/2014 09:03	11550	5.09	1.21	1				0.1	0.0	17.6	17.6	154.6	154.6
06/20/2014 09:04	11530	5.08	1.21	1				0.1	0.0	17.7	17.7	154.6	154.6
06/20/2014 09:05	11540	4.85	1.33	1				0.1	0.0	17.7	17.7	154.6	154.6
06/20/2014 09:06	11530	4.84	1.33	1				0.1	0.0	17.8	17.8	154.6	154.6
06/20/2014 09:07	11530	4.84	1.33	1				0.1	0.0	17.9	17.9	154.6	154.6

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_Procon l=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated NOx (lbs/hr)	Calculated CO (lbs/hr)	Calculated Rolling-60 min Avg. NOx	Calculated Rolling-60 min Avg. CO
06/20/2014 09:08	11540	4.85	1.33	1				0.1	0.0	18.0		154.7	
06/20/2014 09:09	11520	4.72	1.33	1				0.1	0.0	18.1		154.7	
06/20/2014 09:10	11500	4.71	1.57	1				0.1	0.0	18.1		154.7	
06/20/2014 09:11	11510	4.83	1.33	1				0.1	0.0	18.2		154.7	
06/20/2014 09:12	11510	4.83	1.57	1				0.1	0.0	18.3		154.8	
06/20/2014 09:13	11500	4.83	1.57	1				0.1	0.0	18.4		154.8	
06/20/2014 09:14	11510	4.83	1.57	1				0.1	0.0	18.5		154.8	
06/20/2014 09:15	11500	4.95	1.57	1				0.1	0.0	18.6		154.8	
06/20/2014 09:16	11500	4.95	1.57	1				0.1	0.0	18.6		154.8	
06/20/2014 09:17	11530	5.21	1.33	1				0.1	0.0	18.6		154.3	
06/20/2014 09:18	11510	5.20	1.33	1				0.1	0.0	18.2		145.7	
06/20/2014 09:19	11530	5.21	1.33	1				0.1	0.0	17.5		114.2	
06/20/2014 09:20	11540	5.57	1.33	1				0.1	0.0	16.6		76.0	
06/20/2014 09:21	11580	5.35	1.34	1				0.1	0.0	15.5		42.6	
06/20/2014 09:22	12890	5.68	1.76	1				0.1	0.0	14.3		27.9	
06/20/2014 09:23	13830	6.10	1.89	1				0.1	0.0	13.1		22.8	
06/20/2014 09:24	13800	6.81	0.87	1				0.1	0.0	11.6		19.3	
06/20/2014 09:25	13740	7.07	0.58	1				0.1	0.0	10.2		13.8	
06/20/2014 09:26	13830	7.26	0.58	1				0.1	0.0	8.9		7.8	
06/20/2014 09:27	15120	8.10	0.64	1				0.1	0.0	7.5		3.3	
06/20/2014 09:28	16770	9.33	0.35	1				0.2	0.0	6.6		1.4	
06/20/2014 09:29	16790	8.29	0.35	1				0.1	0.0	6.2		1.2	
06/20/2014 09:30	16800	7.41	0.35	1				0.1	0.0	5.9		1.1	
06/20/2014 09:31	16620	6.98	0.35	1				0.1	0.0	5.7		1.1	
06/20/2014 09:32	15040	6.00	0.32	1				0.1	0.0	5.6		1.1	
06/20/2014 09:33	13550	5.12	0.28	1				0.1	0.0	5.6		1.1	
06/20/2014 09:34	13420	4.94	0.25	1	1368.84	0.0002	0.0036	0.1	0.0	5.6		1.1	
06/20/2014 09:35	13470	4.96	0.25	1	1373.94	0.0002	0.0036	0.1	0.0	5.6		1.0	
06/20/2014 09:36	13600	5.01	0.25	1	1387.20	0.0002	0.0036	0.1	0.0	5.5		1.0	
06/20/2014 09:37	14200	5.23	0.26	1	1448.40	0.0002	0.0036	0.1	0.0	5.5		1.0	
06/20/2014 09:38	14310	5.27	0.26	1	1459.62	0.0002	0.0036	0.1	0.0	5.5		1.0	
06/20/2014 09:39	14350	5.28	0.26	1	1463.70	0.0002	0.0036	0.1	0.0	5.6		1.0	
06/20/2014 09:40	14330	5.28	0.26	1	1461.66	0.0002	0.0036	0.1	0.0	5.6		1.0	
06/20/2014 09:41	14410	5.31	0.26	1	1469.82	0.0002	0.0036	0.1	0.0	5.6		1.0	
06/20/2014 09:42	14960	5.51	0.27	1	1525.92	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:43	14990	5.52	0.27	1	1528.98	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:44	15020	5.53	0.27	1	1532.04	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:45	15000	5.52	0.27	1	1530.00	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:46	15030	5.53	0.27	1	1533.06	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:47	15640	5.76	0.29	1	1595.28	0.0002	0.0036	0.1	0.0	5.6		0.9	
06/20/2014 09:48	15680	5.77	0.29	1	1599.36	0.0002	0.0036	0.1	0.0	5.7		0.9	
06/20/2014 09:49	15670	5.77	0.29	1	1598.34	0.0002	0.0036	0.1	0.0	5.7		0.9	
06/20/2014 09:50	15670	5.77	0.29	1	1598.34	0.0002	0.0036	0.1	0.0	5.7		0.8	
06/20/2014 09:51	15580	5.74	0.29	1	1589.16	0.0002	0.0036	0.1	0.0	5.7		0.8	
06/20/2014 09:52	14460	5.32	0.26	1	1474.92	0.0002	0.0036	0.1	0.0	5.7		0.8	
06/20/2014 09:53	14160	5.21	0.26	1	1444.32	0.0002	0.0036	0.1	0.0	5.6		0.8	
06/20/2014 09:54	14170	5.22	0.26	1	1445.34	0.0002	0.0036	0.1	0.0	5.6		0.8	
06/20/2014 09:55	14210	5.23	0.26	1	1449.42	0.0002	0.0036	0.1	0.0	5.6		0.8	
06/20/2014 09:56	14190	5.22	0.26	1	1447.38	0.0002	0.0036	0.1	0.0	5.6		0.8	
06/20/2014 09:57	14190	5.22	0.26	1	1447.38	0.0002	0.0036	0.1	0.0	5.5		0.8	
06/20/2014 09:58	14250	5.25	0.26	1	1453.50	0.0002	0.0036	0.1	0.0	5.6		0.8	
06/20/2014 09:59	14280	2.10	0.60	1				0.0	0.0	5.5		0.8	
06/20/2014 10:00	14270	2.10	0.60	1				0.0	0.0	5.5		0.8	

Maximum =

18.6

221.5

## Notes:

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.

**ATTACHMENT 2-7**

**SUMMARY OF CEMS DATA FOR UNIT 7 ON 09/23/14  
(START/RESTART)**

Average Values Report

Company: NRG El Segundo  
 Plant: 301 Vista Del Mar  
 City/St: El Segundo, CA 90245  
 Source: stack7

Period Start: 9/23/2014 00:00  
 Period End: 9/23/2014 23:59  
 Validation Type: 1/1 min  
 Averaging Period: 1 min  
 Type: Block Avg

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr) Rolling-60 min Avg.
09/23/2014 08:31	N/A	N/A	N/A	0							
09/23/2014 08:32	N/A	N/A	N/A	0							
09/23/2014 08:33	N/A	N/A	N/A	0							
09/23/2014 08:34	N/A	N/A	N/A	0							
09/23/2014 08:35	N/A	N/A	N/A	0							
09/23/2014 08:36	N/A	N/A	N/A	0							
09/23/2014 08:37	N/A	N/A	N/A	0							
09/23/2014 08:38	N/A	N/A	N/A	0							
09/23/2014 08:39	N/A	N/A	N/A	0							
09/23/2014 08:40	N/A	N/A	N/A	0							
09/23/2014 08:41	N/A	N/A	N/A	0							
09/23/2014 08:42	N/A	N/A	N/A	0							
09/23/2014 08:43	N/A	N/A	N/A	0							
09/23/2014 08:44	N/A	N/A	N/A	0							
09/23/2014 08:45	N/A	N/A	N/A	0							
09/23/2014 08:46	N/A	N/A	N/A	0							
09/23/2014 08:47	N/A	N/A	N/A	0							
09/23/2014 08:48	N/A	N/A	N/A	0							
09/23/2014 08:49	N/A	N/A	N/A	0							
09/23/2014 08:50	N/A	N/A	N/A	0							
09/23/2014 08:51	N/A	N/A	N/A	0							
09/23/2014 08:52	N/A	N/A	N/A	0							
09/23/2014 08:53	N/A	N/A	N/A	0							
09/23/2014 08:54	N/A	N/A	N/A	0							
09/23/2014 08:55	N/A	N/A	N/A	0							
09/23/2014 08:56	N/A	N/A	N/A	0							
09/23/2014 08:57	N/A	N/A	N/A	0							
09/23/2014 08:58	N/A	N/A	N/A	0							
09/23/2014 08:59	N/A	N/A	N/A	0							
09/23/2014 09:00	N/A	N/A	N/A	0							
09/23/2014 09:01	N/A	N/A	N/A	0							
09/23/2014 09:02	N/A	N/A	N/A	0							
09/23/2014 09:03	N/A	N/A	N/A	0							
09/23/2014 09:04	N/A	N/A	N/A	0							
09/23/2014 09:05	N/A	N/A	N/A	0							
09/23/2014 09:06	N/A	N/A	N/A	0							
09/23/2014 09:07	N/A	N/A	N/A	0							
09/23/2014 09:08	N/A	N/A	N/A	0							
09/23/2014 09:09	N/A	N/A	N/A	0							
09/23/2014 09:10	N/A	N/A	N/A	0							
09/23/2014 09:11	N/A	N/A	N/A	0							
09/23/2014 09:12	N/A	N/A	N/A	0							
09/23/2014 09:13	N/A	N/A	N/A	0							
09/23/2014 09:14	N/A	N/A	N/A	0							
09/23/2014 09:15	N/A	N/A	N/A	0							
09/23/2014 09:16	N/A	N/A	N/A	0							
09/23/2014 09:17	N/A	N/A	N/A	0							
09/23/2014 09:18	N/A	N/A	N/A	0							
09/23/2014 09:19	N/A	N/A	N/A	0							
09/23/2014 09:20	N/A	N/A	N/A	0							
09/23/2014 09:21	N/A	N/A	N/A	0							
09/23/2014 09:22	N/A	N/A	N/A	0							
09/23/2014 09:23	N/A	N/A	N/A	0							
09/23/2014 09:24	N/A	N/A	N/A	0							
09/23/2014 09:25	N/A	N/A	N/A	0							
09/23/2014 09:26	N/A	N/A	N/A	0							
09/23/2014 09:27	N/A	N/A	N/A	0							
09/23/2014 09:28	N/A	N/A	N/A	0							
09/23/2014 09:29	N/A	N/A	N/A	0							
09/23/2014 09:30	N/A	N/A	N/A	0							
09/23/2014 09:31	N/A	N/A	N/A	0							

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated Nox (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
09/23/2014 09:32	N/A	N/A	N/A	0							
09/23/2014 09:33	N/A	N/A	N/A	0							
09/23/2014 09:34	N/A	N/A	N/A	0							
09/23/2014 09:35	N/A	N/A	N/A	0							
09/23/2014 09:36	N/A	N/A	N/A	0							
09/23/2014 09:37	N/A	N/A	N/A	0							
09/23/2014 09:38	N/A	N/A	N/A	0							
09/23/2014 09:39	N/A	N/A	N/A	0							
09/23/2014 09:40	N/A	N/A	N/A	0							
09/23/2014 09:41	N/A	N/A	N/A	0							
09/23/2014 09:42	N/A	N/A	N/A	0							
09/23/2014 09:43	N/A	N/A	N/A	0							
09/23/2014 09:44	N/A	N/A	N/A	1							
09/23/2014 09:45	320	0.00	0.00	1							
09/23/2014 09:46	340	0.08	6.53	1							
09/23/2014 09:47	1320	3.19	413.71	1							
09/23/2014 09:48	3650	18.55	1383.37	1	372.3	3.7157	0.0484	0.0	0.1	0.0	0.1
09/23/2014 09:49	4350	35.13	2024.38	1	443.7	4.5625	0.0769	0.3	6.9	0.1	7.0
09/23/2014 09:50	5530	57.02	2697.06	1	564.06	4.7815	0.0982	0.6	33.7	0.4	30.1
09/23/2014 09:51	6820	76.77	2564.48	1	695.64	3.6865	0.1072	1.0	45.0	0.9	63.8
09/23/2014 09:52	7970	93.57	2941.54	1	812.94	3.6184	0.1118	1.6	49.0	1.9	108.8
09/23/2014 09:53	9040	106.88	4077.55	1	922.08	4.4221	0.1126	1.8	68.0	4.7	151.5
09/23/2014 09:54	10490	135.15	2785.20	1	1069.98	2.6030	0.1226	2.3	46.4	8.8	200.5
09/23/2014 09:55	14140	183.21	791.16	1	1442.28	0.5486	0.1234	3.1	13.2	11.8	314.9
09/23/2014 09:56	14960	162.11	54.51	1				2.7	0.9	14.5	328.1
09/23/2014 09:57	15150	122.01	55.36	1				2.0	0.9	16.6	329.0
09/23/2014 09:58	15160	91.37	27.06	1				1.5	0.5	18.1	329.9
09/23/2014 09:59	13240	50.19	13.21	1				0.8	0.2	18.9	330.4
09/23/2014 10:00	5750	21.80	9.96	1				0.4	0.2	19.3	330.6
09/23/2014 10:01	5820	45.04	141.59	1				0.8	2.4	20.0	333.1
09/23/2014 10:02	5830	61.53	176.74	1				1.0	2.9	21.1	336.1
09/23/2014 10:03	5880	78.29	171.33	1				1.3	2.9	22.4	338.9
09/23/2014 10:04	5880	84.77	165.52	1				1.4	2.8	23.8	341.7
09/23/2014 10:05	5920	88.52	164.54	1				1.5	2.7	25.3	344.4
09/23/2014 10:06	5940	88.63	157.92	1				1.5	2.6	26.7	347.0
09/23/2014 10:07	5940	88.69	154.49	1				1.5	2.6	28.2	349.6
09/23/2014 10:08	5950	89.72	151.01	1				1.5	2.5	29.7	352.1
09/23/2014 10:09	0	0.00	0.00	1				0.0	0.0	29.7	352.1
09/23/2014 10:10	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:11	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:12	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:13	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:14	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:15	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:16	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:17	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:18	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:19	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:20	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:21	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:22	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:23	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:24	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:25	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:26	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:27	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:28	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:29	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:30	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:31	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:32	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:33	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:34	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:35	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:36	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:37	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:38	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:39	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:40	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated Nox (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
09/23/2014 10:41	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:42	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:43	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:44	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:45	N/A	0.00	0.00	0				0.0	0.0	29.7	352.1
09/23/2014 10:46	N/A	0.00	0.00	0				0.0	0.0	29.7	352.0
09/23/2014 10:47	N/A	0.00	0.00	0				0.0	0.0	29.6	345.1
09/23/2014 10:48	N/A	0.00	0.00	0				0.0	0.0	29.3	322.1
09/23/2014 10:49	N/A	0.00	0.00	0				0.0	0.0	28.8	288.3
09/23/2014 10:50	N/A	0.00	0.00	0				0.0	0.0	27.8	243.4
09/23/2014 10:51	N/A	0.00	0.00	0				0.0	0.0	26.5	200.6
09/23/2014 10:52	N/A	0.00	0.00	0				0.0	0.0	25.0	151.6
09/23/2014 10:53	N/A	0.00	0.00	0				0.0	0.0	23.2	83.7
09/23/2014 10:54	N/A	0.00	0.00	0				0.0	0.0	20.9	37.2
09/23/2014 10:55	N/A	0.00	0.00	0				0.0	0.0	17.9	24.1
09/23/2014 10:56	N/A	0.00	0.00	0				0.0	0.0	15.2	23.1
09/23/2014 10:57	N/A	0.00	0.00	1				0.0	0.0	13.1	22.2
09/23/2014 10:58	280	0.28	0.91	1				0.0	0.0	11.6	21.8
09/23/2014 10:59	280	1.25	0.47	1				0.0	0.0	10.8	21.6
09/23/2014 11:00	2650	17.42	19.54	1				0.3	0.3	10.7	21.7
09/23/2014 11:01	3450	37.86	43.66	1				0.6	0.7	10.6	20.1
09/23/2014 11:02	4270	56.05	75.91	1				0.9	1.3	10.5	18.4
09/23/2014 11:03	5870	85.49	110.34	1				1.4	1.8	10.6	17.4
09/23/2014 11:04	7580	106.65	123.68	1				1.8	2.1	11.0	16.7
09/23/2014 11:05	9090	111.39	168.09	1				1.9	2.8	11.4	16.8
09/23/2014 11:06	10880	126.69	126.69	1				2.1	2.1	12.0	16.2
09/23/2014 11:07	12070	96.96	21.42	1				1.6	0.4	12.2	14.0
09/23/2014 11:08	12460	68.69	2.22	1				1.1	0.0	11.8	11.5
09/23/2014 11:09	12510	31.53	1.97	1				0.5	0.0	12.3	11.6
09/23/2014 11:10	12510	17.47	1.44	1				0.3	0.0	12.6	11.6
09/23/2014 11:11	12500	10.24	1.44	1				0.2	0.0	12.8	11.6
09/23/2014 11:12	12500	8.01	1.18	1				0.1	0.0	12.9	11.6
09/23/2014 11:13	12930	7.06	1.22	1				0.1	0.0	13.1	11.7
09/23/2014 11:14	15090	7.29	1.11	1				0.1	0.0	13.2	11.7
09/23/2014 11:15	15120	6.99	1.11	1				0.1	0.0	13.3	11.7
09/23/2014 11:16	15130	6.67	1.27	1				0.1	0.0	13.4	11.7
09/23/2014 11:17	15100	6.18	1.27	1				0.1	0.0	13.5	11.7
09/23/2014 11:18	15100	6.18	1.27	1				0.1	0.0	13.6	11.8
09/23/2014 11:19	15080	6.02	1.27	1				0.1	0.0	13.7	11.8
09/23/2014 11:20	15060	5.85	0.95	1				0.1	0.0	13.8	11.8
09/23/2014 11:21	15060	5.69	0.95	1				0.1	0.0	13.9	11.8
09/23/2014 11:22	15080	5.54	0.95	1				0.1	0.0	14.0	11.8
09/23/2014 11:23	15090	5.55	0.95	1				0.1	0.0	14.1	11.9
09/23/2014 11:24	15090	5.55	0.95	1				0.1	0.0	14.2	11.9
09/23/2014 11:25	15100	5.55	0.95	1				0.1	0.0	14.3	11.9
09/23/2014 11:26	15070	5.70	0.95	1				0.1	0.0	14.4	11.9
09/23/2014 11:27	15060	5.69	0.95	1				0.1	0.0	14.5	11.9
09/23/2014 11:28	15070	5.85	0.95	1				0.1	0.0	14.6	11.9
09/23/2014 11:29	15080	6.02	0.95	1				0.1	0.0	14.7	11.9
09/23/2014 11:30	15060	6.01	0.95	1				0.1	0.0	14.8	12.0
09/23/2014 11:31	15060	5.69	0.95	1				0.1	0.0	14.9	12.0
09/23/2014 11:32	15070	5.22	0.63	1				0.1	0.0	14.9	12.0
09/23/2014 11:33	15050	4.58	0.63	1				0.1	0.0	15.0	12.0
09/23/2014 11:34	15080	4.43	0.63	1				0.1	0.0	15.1	12.0
09/23/2014 11:35	15060	4.59	0.63	1				0.1	0.0	15.2	12.0
09/23/2014 11:36	15060	4.59	0.63	1				0.1	0.0	15.2	12.0
09/23/2014 11:37	15060	4.74	0.63	1				0.1	0.0	15.3	12.0
09/23/2014 11:38	15040	4.90	0.63	1				0.1	0.0	15.4	12.1
09/23/2014 11:39	15070	5.06	0.63	1				0.1	0.0	15.5	12.1
09/23/2014 11:40	15070	5.22	0.63	1				0.1	0.0	15.6	12.1
09/23/2014 11:41	15070	5.54	0.63	1				0.1	0.0	15.7	12.1
09/23/2014 11:42	15050	5.69	0.63	1				0.1	0.0	15.8	12.1
09/23/2014 11:43	15070	6.01	0.63	1				0.1	0.0	15.9	12.1
09/23/2014 11:44	15090	6.18	0.63	1				0.1	0.0	16.0	12.1
09/23/2014 11:45	15080	6.49	0.63	1				0.1	0.0	16.1	12.1
09/23/2014 11:46	15070	6.65	0.63	1				0.1	0.0	16.2	12.1
09/23/2014 11:47	15070	6.80	0.63	1				0.1	0.0	16.3	12.1
09/23/2014 11:48	15070	7.12	0.63	1				0.1	0.0	16.4	12.2
09/23/2014 11:49	15050	7.27	0.63	1				0.1	0.0	16.5	12.2

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated Nox (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated CO (lbs/hr)
09/23/2014 11:50	15060	7.27	0.63	1				0.1	0.0	16.7	12.2
09/23/2014 11:51	15050	7.27	0.63	1				0.1	0.0	16.8	12.2
09/23/2014 11:52	15010	7.09	0.63	1				0.1	0.0	16.9	12.2
09/23/2014 11:53	15040	7.11	0.63	1				0.1	0.0	17.0	12.2
09/23/2014 11:54	15100	6.98	0.63	1				0.1	0.0	17.1	12.2
09/23/2014 11:55	15970	7.38	0.67	1				0.1	0.0	17.3	12.2
09/23/2014 11:56	15940	6.69	0.67	1				0.1	0.0	17.4	12.2
09/23/2014 11:57	15720	6.60	0.33	1				0.1	0.0	17.5	12.3
09/23/2014 11:58	15310	6.59	0.32	1				0.1	0.0	17.6	12.2
09/23/2014 11:59	14910	6.89	0.63	1				0.1	0.0	17.7	12.2
09/23/2014 12:00	14600	7.21	0.61	1				0.1	0.0	17.5	11.9
09/23/2014 12:01	14610	7.21	0.61	1				0.1	0.0	17.0	11.2
09/23/2014 12:02	14670	7.24	0.92	1				0.1	0.0	16.2	10.0
09/23/2014 12:03	14770	7.44	0.93	1				0.1	0.0	14.9	8.1
09/23/2014 12:04	14800	7.46	0.93	1				0.1	0.0	13.2	6.1
09/23/2014 12:05	14770	7.44	0.93	1				0.1	0.0	11.5	3.3
09/23/2014 12:06	14800	7.46	0.93	1				0.1	0.0	9.5	1.2
09/23/2014 12:07	14810	7.46	0.93	1				0.1	0.0	8.0	0.9
09/23/2014 12:08	14810	7.31	0.93	1				0.1	0.0	7.0	0.8
09/23/2014 12:09	14810	7.46	0.93	1				0.1	0.0	6.6	0.8
09/23/2014 12:10	14810	7.46	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:11	14810	7.31	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:12	14810	7.15	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:13	14810	7.15	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:14	14810	7.00	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:15	14810	7.00	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:16	14810	6.84	0.93	1				0.1	0.0	6.4	0.8
09/23/2014 12:17	14810	6.68	0.88	1	1510.62	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:18	14810	6.68	0.88	1	1510.62	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:19	14810	6.68	0.88	1	1510.62	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:20	14790	6.67	0.88	1	1508.58	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:21	14750	6.65	0.88	1	1504.5	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:22	14760	6.65	0.88	1	1505.52	0.0006	0.0044	0.1	0.0	6.4	0.8
09/23/2014 12:23	14760	6.65	0.88	1	1505.52	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:24	14740	6.65	0.88	1	1503.48	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:25	14750	6.65	0.88	1	1504.5	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:26	14740	6.65	0.88	1	1503.48	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:27	14750	6.65	0.88	1	1504.5	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:28	14720	6.64	0.88	1	1501.44	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:29	14730	6.64	0.88	1	1502.46	0.0006	0.0044	0.1	0.0	6.5	0.8
09/23/2014 12:30	14720	6.64	0.88	1	1501.44	0.0006	0.0044	0.1	0.0	6.6	0.8
09/23/2014 12:31	14730	6.64	0.88	1	1502.46	0.0006	0.0044	0.1	0.0	6.6	0.8
09/23/2014 12:32	14700	6.63	0.87	1	1499.4	0.0006	0.0044	0.1	0.0	6.6	0.8
09/23/2014 12:33	14710	6.63	0.87	1	1500.42	0.0006	0.0044	0.1	0.0	6.6	0.8
09/23/2014 12:34	14710	6.63	0.87	1	1500.42	0.0006	0.0044	0.1	0.0	6.7	0.8
09/23/2014 12:35	14690	6.62	0.87	1	1498.38	0.0006	0.0044	0.1	0.0	6.7	0.8
09/23/2014 12:36	14690	6.62	0.87	1	1498.38	0.0006	0.0044	0.1	0.0	6.7	0.8
09/23/2014 12:37	14680	6.62	0.87	1	1497.36	0.0006	0.0044	0.1	0.0	6.8	0.8
09/23/2014 12:38	14690	6.62	0.87	1	1498.38	0.0006	0.0044	0.1	0.0	6.8	0.8
09/23/2014 12:39	14690	6.62	0.87	1	1498.38	0.0006	0.0044	0.1	0.0	6.8	0.8
09/23/2014 12:40	14700	6.63	0.87	1	1499.4	0.0006	0.0044	0.1	0.0	6.8	0.8
09/23/2014 12:41	14700	6.63	0.87	1	1499.4	0.0006	0.0044	0.1	0.0	6.9	0.8
09/23/2014 12:42	14690	2.16	1.54	1				0.0	0.0	6.8	0.8
09/23/2014 12:43	14690	2.16	1.23	1				0.0	0.0	6.7	0.8
09/23/2014 12:44	14680	2.00	1.23	1				0.0	0.0	6.7	0.8
09/23/2014 12:45	14680	2.00	1.23	1				0.0	0.0	6.6	0.8
09/23/2014 12:46	14690	2.01	1.23	1				0.0	0.0	6.5	0.9
09/23/2014 12:47	14660	2.16	1.23	1				0.0	0.0	6.4	0.9
09/23/2014 12:48	14660	2.16	1.23	1				0.0	0.0	6.4	0.9
09/23/2014 12:49	14670	2.16	1.23	1				0.0	0.0	6.3	0.9
09/23/2014 12:50	14650	2.15	1.23	1				0.0	0.0	6.2	0.9
09/23/2014 12:51	14660	2.16	1.23	1				0.0	0.0	6.1	0.9
09/23/2014 12:52	14640	2.15	1.23	1				0.0	0.0	6.0	0.9
09/23/2014 12:53	14470	2.28	1.22	1				0.0	0.0	5.9	0.9
09/23/2014 12:54	14400	2.27	1.21	1				0.0	0.0	5.9	0.9
09/23/2014 12:55	14360	2.41	1.21	1				0.0	0.0	5.8	0.9
09/23/2014 12:56	14360	2.41	1.51	1				0.0	0.0	5.7	1.0
09/23/2014 12:57	14360	2.41	1.51	1				0.0	0.0	5.6	1.0
09/23/2014 12:58	14400	2.57	1.51	1				0.0	0.0	5.6	1.0

Period Start:	Average 7_GasFlow hscfh	Average 7_NOX_LBHR #/hr	Average 7_CO_LBHR #/hr	Average 7_ProcOn 1=ON	Calculated Heat Input (MMBtu/hr)	Calculated CO Emiss. Factor (lbs/MMBtu)	Calculated NOx Emiss. Factor (lbs/MMBtu)	Calculated NOx (lbs/min)	Calculated CO (lbs/min)	Calculated Rolling-60 min Avg. NOx (lbs/hr)	Calculated Rolling-60 min Avg. CO (lbs/hr)
09/23/2014 12:59	14390	2.57	1.51	1				0.0	0.0	5.5	1.0
09/23/2014 13:00	14390	2.57	1.51	1				0.0	0.0	5.4	1.0
09/23/2014 13:01	14370	2.72	1.51	1				0.0	0.0	5.3	1.0
09/23/2014 13:02	14300	2.85	1.50	1				0.0	0.0	5.3	1.0
09/23/2014 13:03	14320	2.86	1.80	1				0.0	0.0	5.2	1.1
09/23/2014 13:04	14310	3.01	1.80	1				0.1	0.0	5.1	1.1
09/23/2014 13:05	14270	3.00	1.50	1				0.1	0.0	5.0	1.1
09/23/2014 13:06	14220	3.14	1.79	1				0.1	0.0	5.0	1.1
09/23/2014 13:07	14210	3.13	1.49	1				0.1	0.0	4.9	1.1
09/23/2014 13:08	14280	3.30	1.50	1				0.1	0.0	4.8	1.1
09/23/2014 13:09	14290	3.45	1.80	1				0.1	0.0	4.8	1.1
09/23/2014 13:10	14280	3.60	1.50	1				0.1	0.0	4.7	1.1
09/23/2014 13:11	14290	3.60	1.50	1				0.1	0.0	4.6	1.2
09/23/2014 13:12	14290	3.60	1.50	1				0.1	0.0	4.6	1.2
09/23/2014 13:13	14280	3.75	1.50	1				0.1	0.0	4.5	1.2
09/23/2014 13:14	14290	3.75	1.80	1				0.1	0.0	4.5	1.2
09/23/2014 13:15	14290	3.75	1.80	1				0.1	0.0	4.4	1.2
09/23/2014 13:16	14260	3.89	1.80	1				0.1	0.0	4.4	1.2
09/23/2014 13:17	14270	3.90	1.80	1				0.1	0.0	4.3	1.2

Maximum =

29.7

352.1

Notes:

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

\*\* Yellow highlight cells are manually calculated emissions based on heat input and NOx and CO ppm levels to replace "N/A" in cells.

During daily calibrations when NOx/CO ppm values are shown as "N/A", the NOx/CO ppm value just prior to start of calibration was used to manually calculate emissions.