DOCKETED	
Docket Number:	85-AFC-01C
Project Title:	Compliance - Watson Cogeneration Company AFC
TN #:	262824
Document Title:	ANNUAL COMPLIANCE REPORT- 2024
Description:	ANNUAL COMPLIANCE REPORT- 2024
Filer:	Anwar Ali
Organization:	Watson Cogen Company
Submitter Role:	Commission Staff
Submission Date:	4/25/2025 4:50:05 PM
Docketed Date:	4/25/2025



Michael Milos Adv. Sr. Analyst 310.816.8815

April 7, 2025

Mr. Anwar Ali Compliance Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814

Subject: 2024 Annual Compliance Report Watson Cogeneration Project (85-AFC-01C)

Dear Mr. Ali,

Attached is the Annual Compliance Report for 2024 pursuant to the requirements of the California Energy Commission's Conditions of Certification for the Watson Cogeneration Company.

This report contains proprietary and trade secret information and is treated as confidential by this company. The disclosure of this information would result in competitive hardship by giving competitors and vendors sales information they can use to the disadvantage of the company. Therefore, pursuant to Public Resources Code § 25213, 25218(e), 25364 and Title 20, California Code of Regulations, section 1370, our company is requesting that all information submitted herein be kept confidential.

If you have any questions regarding this report, please contact me via telephone at (310) 816-8815 or via e-mail at <u>MJMilos@Marathonpetroleum.com</u>.

Sincerely,

Michael T. Milos

Michael Milos Adv. Sr. Analyst Watson Cogeneration Company

AIR QUALITY CONDITIONS OF CERTIFICATION

AQ-25 A continuous monitoring system must be installed and operated to monitor and record the fuel consumption and the mass ratio of steam-to-fuel for each fuel being fired in each gas Turbines 1, 2, 3, 4 and 5. This system must be accurate to within +5.0 percent and calibrated once every 12 months.

Verification: The owner/operator shall maintain records of continuous fuel consumption and the steam-to-fuel mass ratio monitoring. These records will be maintained on file for at least two years and shall be made available to the SCAQMD and CEC staff upon request. CEM Relative Accuracy Test report will be submitted to the CEC annually.

Response: Instrumentation is in place for the purpose of continuous monitoring and recording of fuel consumption and steam injection to each of the four gas turbines at the facility (#5 was never constructed). The systems undergo regular calibration. A summary of fuel consumption and steam injection to each of the turbines is included below.

AQ-25			Unit	91		Unit 92				
	NG/RFG	<u>Butane</u>	Total Fuel	DeNOx Steam	Steam : Fuel	NG/RFG	<u>Butane</u>	Total Fuel	DeNOx Steam	Steam : Fuel
	lb/sec	lb/sec	<u>lb/sec</u>	<u>lb/sec</u>	<u>Ratio</u>	<u>lb/sec</u>	lb/sec	<u>lb/sec</u>	<u>lb/sec</u>	<u>Ratio</u>
Jan-24	10.783	0.123	10.906	16.346	1.497	9.610	0.557	10.167	13.918	1.368
Feb-24	7.995	1.724	9.720	13.817	1.419	9.172	0.567	9.739	13.092	1.343
Mar-24	7.767	0.126	7.893	11.364	1.716	9.277	0.573	9.850	13.578	1.374
Apr-24	8.860	0.133	8.993	12.878	1.428	8.586	0.554	9.140	12.234	1.338
May-24	10.956	0.258	11.214	17.306	1.539	0.903	0.173	1.076	1.596	1.960
Jun-24	10.909	0.252	11.161	17.243	1.546	0.661	0.146	0.807	1.377	2.746
Jul-24	9.215	0.086	9.301	13.895	1.489	9.043	0.533	9.576	13.396	1.398
Aug-24	9.578	0.154	9.732	14.728	1.505	8.416	0.498	8.913	12.542	1.449
Sep-24	8.746	0.116	8.862	12.928	1.455	8.838	0.494	9.332	12.878	1.377
Oct-24	8.652	0.111	8.763	12.630	1.441	8.770	0.517	9.287	12.814	1.379
Nov-24	9.599	0.104	9.703	14.700	1.508	9.724	0.581	10.305	14.580	1.408
Dec-24	9.052	0.075	9.128	13.513	1.478	9.038	0.586	9.623	13.007	1.355
	Unit 93									
			Unit	93				Unit	94	
	NG/RFG	Butane	Unit Total Fuel	93 DeNOx Steam	Steam : Fuel	<u>NG/RFG</u>	<u>Butane</u>	Unit Total Fuel	94 DeNOx Steam	Steam : Fuel
	<u>NG/RFG</u> <u>lb/sec</u>	<u>Butane</u> Ib/sec	Unit Total Fuel <u>Ib/sec</u>	93 DeNOx Steam <u>lb/sec</u>	<u>Steam : Fuel</u> <u>Ratio</u>	<u>NG/RFG</u> <u>lb/sec</u>	<u>Butane</u> Ib/sec	Unit Total Fuel <u>lb/sec</u>	94 DeNOx Steam <u>lb/sec</u>	<u>Steam : Fuel</u> <u>Ratio</u>
Jan-24	<u>NG/RFG</u> <u>Ib/sec</u> 9.035	<u>Butane</u> <u>Ib/sec</u> 0.324	Unit Total Fuel <u>Ib/sec</u> 9.359	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180	<u>Steam : Fuel</u> <u>Ratio</u> 1.408	<u>NG/RFG</u> <u>lb/sec</u> 7.100	Butane Ib/sec 0.232	Unit Total Fuel <u>Ib/sec</u> 7.332	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295	<u>Steam : Fuel</u> <u>Ratio</u> 1.509
Jan-24 Feb-24	<u>NG/RFG</u> <u>lb/sec</u> 9.035 7.534	<u>Butane</u> <u>lb/sec</u> 0.324 0.240	Unit <u>Total Fuel</u> <u>lb/sec</u> 9.359 7.775	93 <u>DeNOx Steam</u> <u>lb/sec</u> 13.180 10.832	<u>Steam : Fuel</u> <u>Ratio</u> 1.408 2.584	<u>NG/RFG</u> <u>lb/sec</u> 7.100 9.370	<u>Butane</u> <u>Ib/sec</u> 0.232 0.300	Unit <u>Total Fuel</u> <u>lb/sec</u> 7.332 9.670	94 <u>DeNOx Steam</u> <u>lb/sec</u> 10.295 13.266	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371
Jan-24 Feb-24 Mar-24	<u>NG/RFG</u> <u>lb/sec</u> 9.035 7.534 9.418	Butane lb/sec 0.324 0.240 0.352	Unit <u>Total Fuel</u> <u>lb/sec</u> 9.359 7.775 9.770	93 <u>DeNOx Steam</u> <u>lb/sec</u> 13.180 10.832 13.875	<u>Steam : Fuel</u> <u>Ratio</u> 1.408 2.584 1.415	NG/RFG lb/sec 7.100 9.370 8.644	Butane Ib/sec 0.232 0.300 0.336	Unit <u>Total Fuel</u> <u>lb/sec</u> 7.332 9.670 8.981	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490
Jan-24 Feb-24 Mar-24 Apr-24	<u>NG/RFG</u> <u>lb/sec</u> 9.035 7.534 9.418 8.755	<u>Butane</u> <u>lb/sec</u> 0.324 0.240 0.352 0.309	Unit <u>Total Fuel</u> <u>lb/sec</u> 9.359 7.775 9.770 9.065	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509	<u>Steam : Fuel</u> <u>Ratio</u> 1.408 2.584 1.415 1.380	<u>NG/RFG</u> <u>lb/sec</u> 7.100 9.370 8.644 8.785	Butane lb/sec 0.232 0.300 0.336 0.261	Unit <u>Total Fuel</u> <u>lb/sec</u> 7.332 9.670 8.981 9.046	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511 12.593	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392
Jan-24 Feb-24 Mar-24 Apr-24 May-24	NG/RFG <u> b/sec</u> 9.035 7.534 9.418 8.755 10.892	Butane b/sec 0.324 0.240 0.352 0.309 0.438	Unit <u>Total Fuel</u> <u> b/sec</u> 9.359 7.775 9.770 9.065 11.330	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271	<u>Steam : Fuel</u> <u>Ratio</u> 1.408 2.584 1.415 1.380 1.523	NG/RFG lb/sec 7.100 9.370 8.644 8.785 11.058	Butane b/sec 0.232 0.300 0.336 0.261 0.328	Unit <u>Total Fuel</u> <u>Ib/sec</u> 7.332 9.670 8.981 9.046 11.387	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511 12.593 17.585	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392 1.542
Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24	NG/RFG b/sec 9.035 7.534 9.418 8.755 10.892 10.915	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461	Unit <u>Total Fuel</u> <u> b/sec</u> 9.359 7.775 9.770 9.065 11.330 11.376	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654	<u>Steam : Fuel</u> <u>Ratio</u> 1.408 2.584 1.415 1.380 1.523 1.463	NG/RFG <u>lb/sec</u> 7.100 9.370 8.644 8.785 11.058 11.107	Butane 1b/sec 0.232 0.300 0.336 0.261 0.328 0.309	Unit <u>Total Fuel</u> <u>Ib/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392 1.542 1.509
Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24	NG/RFG b/sec 9.035 7.534 9.418 8.755 10.892 10.915 9.767	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461 0.312	Unit Total Fuel b/sec 9.359 7.775 9.770 9.065 11.330 11.376 10.079	93 <u>DeNOx Steam</u> <u>lb/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654 14.303	Steam : Fuel Ratio 1.408 2.584 1.415 1.380 1.523 1.463 1.419	NG/RFG b/sec 7.100 9.370 8.644 8.785 11.058 11.107 8.150	Butane b/sec 0.232 0.300 0.336 0.261 0.328 0.309 0.182	Unit <u>Total Fuel</u> <u> b/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417 8.332	94 <u>DeNOx Steam</u> <u>lb/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245 11.867	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392 1.542 1.509 2.341
Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24	NG/RFG 9.035 7.534 9.418 8.755 10.892 10.915 9.767 9.681	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461 0.312 0.369	Unit Total Fuel b/sec 9.359 7.775 9.770 9.065 11.330 11.376 10.079 10.049	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654 14.303 14.534	Steam : Fuel Ratio 1.408 2.584 1.415 1.380 1.523 1.463 1.419 1.438	NG/RFG b/sec 7.100 9.370 8.644 8.785 11.058 11.107 8.150 6.554	Butane b/sec 0.232 0.300 0.336 0.261 0.328 0.309 0.182 0.195	Unit <u>Total Fuel</u> <u>Ib/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417 8.332 6.749	94 <u>DeNOx Steam</u> <u>lb/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245 11.867 9.791	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392 1.542 1.509 2.341 3.537
Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jul-24 Aug-24 Sep-24	NG/RFG lb/sec 9.035 7.534 9.418 8.755 10.892 10.915 9.767 9.681 8.911	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461 0.312 0.369 0.228	Unit Total Fuel 9.359 7.775 9.770 9.065 11.330 11.376 10.079 10.049 9.140	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654 14.303 14.534 13.038	Steam : Fuel Ratio 1.408 2.584 1.415 1.380 1.523 1.463 1.419 1.438 1.423	NG/RFG b/sec 7.100 9.370 8.644 8.785 11.058 11.107 8.150 6.554 9.040	Butane b/sec 0.232 0.300 0.336 0.261 0.328 0.309 0.182 0.195 0.219	Unit <u>Total Fuel</u> <u>1b/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417 8.332 6.749 9.259	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245 11.867 9.791 13.301	<u>Steam : Fuel</u> <u>Ratio</u> 1.509 1.371 1.490 1.392 1.542 1.509 2.341 3.537 1.433
Jan-24 Feb-24 Mar-24 Apr-24 May-24 Jun-24 Jun-24 Jun-24 Sep-24 Oct-24	NG/RFG lb/sec 9.035 7.534 9.418 8.755 10.892 10.915 9.767 9.681 8.911 8.851	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461 0.312 0.369 0.228	Unit Total Fuel 1b/sec 9.359 7.775 9.770 9.065 11.330 11.376 10.079 10.049 9.140 9.080	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654 14.303 14.534 13.038 12.751	Steam : Fuel Ratio 1.408 2.584 1.415 1.380 1.523 1.463 1.419 1.438 1.423 1.404	NG/RFG 1b/sec 7.100 9.370 8.644 8.785 11.058 11.107 8.150 6.554 9.040 8.913	Butane lb/sec 0.232 0.300 0.336 0.261 0.328 0.309 0.182 0.195 0.219 0.214	Unit <u>Total Fuel</u> <u>1b/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417 8.332 6.749 9.259 9.128	94 <u>DeNOx Steam</u> <u>lb/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245 11.867 9.791 13.301 12.781	Steam : Fuel Ratio 1.509 1.371 1.490 1.392 1.542 1.509 2.341 3.537 1.433 1.400
Jan-24 Feb-24 Mar-24 Apr-24 Jun-24 Jun-24 Jun-24 Aug-24 Sep-24 Oct-24 Nov-24	NG/RFG lb/sec 9.035 7.534 9.418 8.755 10.892 10.915 9.767 9.681 8.911 8.851 9.402	Butane b/sec 0.324 0.240 0.352 0.309 0.438 0.461 0.312 0.369 0.228 0.228 0.308	Unit <u>Total Fuel</u> 9.359 7.775 9.770 9.065 11.330 11.376 10.079 10.049 9.140 9.140 9.080 9.709	93 <u>DeNOx Steam</u> <u>Ib/sec</u> 13.180 10.832 13.875 12.509 17.271 16.654 14.303 14.534 13.038 12.751 14.105	Steam : Fuel Ratio 1.408 2.584 1.415 1.380 1.523 1.463 1.419 1.438 1.423 1.404	NG/RFG 1b/sec 7.100 9.370 8.644 8.785 11.058 11.107 8.150 6.554 9.040 8.913 5.780	Butane b/sec 0.232 0.300 0.336 0.261 0.328 0.309 0.182 0.195 0.219 0.214 0.115	Unit <u>Total Fuel</u> <u>Ib/sec</u> 7.332 9.670 8.981 9.046 11.387 11.417 8.332 6.749 9.259 9.128 5.895	94 <u>DeNOx Steam</u> <u>Ib/sec</u> 10.295 13.266 12.511 12.593 17.585 17.245 17.245 11.867 9.791 13.301 12.781 8.518	Steam : Fuel Ratio 1.509 1.371 1.490 1.392 1.542 1.509 2.341 3.537 1.433 1.400 2.761

AQ-42 No more than one of the cogeneration units 1, 2, 3, 4 or 5 shall startup or shutdown in any one day. For Turbine Trains 1, 2, 3 and 4, start up shall not exceed 8 hours and shutdown shall not exceed 4 hours. For Turbine Train 5, neither start up nor shutdown shall exceed 4 hours in duration.

Verification: The owner/operator shall maintain an operation log for the facility which, at a minimum, will identify startup and shutdown occurrences for each cogeneration unit. The owner/operator shall submit in its Annual Compliance Report to the CEC a summary of the operational log demonstrating compliance with this condition 5. (97-0924-4; 88-0525-18b)

Response: In the 2024 calendar year, APPC/Watson had 15 startups and 15 shutdowns. No startups exceeded an 8-hour duration and no shutdowns exceeded a 4-hour duration. Startup and shutdown dates shown in the tables below.

AQ-4	2: Shutdowr	n Summary 2024	AQ-42: Startup Summary 2024					
Unit	Date	Duration < 4 Hours	Unit	Date	Duration < 8 Hours			
94	1/24/2024	Yes	94	1/30/2024	Yes			
93	2/18/2024	Yes	93	2/22/2024	Yes			
94	3/16/2024	Yes	94	3/18/2024	Yes			
91	3/24/2024	Yes	91	3/28/2024	Yes			
91	5/1/2024	Yes	91	5/1/2024	Yes			
92	5/3/2024	Yes	92	6/18/2024	Yes			
92	6/19/2024	Yes	92	6/29/2024	Yes			
91	6/28/2024	Yes	91	6/28/2024	Yes			
92	7/22/2024	Yes	92	7/23/2024	Yes			
94	7/28/2024	Yes	94	8/3/2024	Yes			
94	8/5/2024	Yes	94	8/11/2024	Yes			
92	8/18/2024	Yes	92	8/22/2024	Yes			
93	11/5/2024	Yes	93	11/6/2024	Yes			
94	11/11/2024	Yes	94	11/22/2024	Yes			
94	12/16/2024	Yes	94	12/17/2024	Yes			

AQ-43 The duct burner of the cogeneration units 1, 2, 3, 4 and 5 shall not be fired during the startup mode of operation.

Verification: The owner/operator shall maintain an operation log for the facility which, at minimum will identify the hours of operation of the duct burners. The owner/operator shall submit in its Annual Compliance Report to the CEC a summary of the operational log demonstrating compliance with this condition.

Response: During the 2024 calendar year, APPC/Watson had 15 startups. Duct burners were not fired during the startup mode of operation for any of the 15 startup events. Startup dates shown in the table below.

AQ-43: Sta	AQ-43: Startup Summary 2024								
		Duct Fuel After							
Unit	Date	Startup							
94	1/30/2024	Yes							
93	2/22/2024	Yes							
94	3/18/2024	Yes							
91	3/28/2024	Yes							
91	5/1/2024	Yes							
92	6/18/2024	Yes							
92	6/29/2024	Yes							
91	6/28/2024	Yes							
92	7/23/2024	Yes							
94	8/3/2024	Yes							
94	8/11/2024	Yes							
92	8/22/2024	Yes							
93	11/6/2024	Yes							
94	11/22/2024	Yes							
94	12/17/2024	Yes							

BIOLOGICAL RESOURCES CONDITIONS OF CERTIFICATION

BIO-3 APPC shall monitor daily the zinc content, total volume and duration of all discharges from the ARCO Watson Refinery into the Dominguez Channel, which contain commingled cogeneration project cooling tower blowdown. The initial period of monitoring shall cover the first three years during which water is discharged into the Dominguez Channel. The need for subsequent monitoring will be determined by the CEC based on an evaluation of the zinc content of samples collected during the first three years of discharge. APPC shall take remedial action if monitored zinc levels exceed the EPA standard for salt water aquatic life.

Verification: APPC shall notify the CEC within 30 days of any discharge which exceeds EPA levels for zinc describing the cause of the exceedance and action taken to prevent similar occurrences. APPC shall submit written reports for the first three years during which APPC discharges to Dominguez Channel. The report shall contain the date, time, volume, duration and zinc content of the discharge. These reports can be appended to the annual compliance report for the years during which discharges to Dominguez Channel occurred. The reports shall be Submitted to the CEC and the Port of Los Angeles.

Response:

APPC does not have its own NPDES Permit. Low Volume Waste (LVW; boiler blowdown) from the Cogen are authorized to be discharged to the Dominguez Channel under the Tesoro Los Angeles Refinery – Carson Operations NPDES permit (Order No. R4-2015-0259, NPDES No. CA0000680). Zinc is listed in the permit with an effluent limitation; therefore, a discharge would be analyzed for zinc. A copy of the annual NPDES report is attached to this submittal.

COGENERATION CONDITIONS OF CERTIFICATION

COG-1 ARCO Petroleum Products Company (APPC) shall operate the facility as a cogeneration system in accordance with the definition of cogeneration contained in PRC Section 25134(a) and (b) and Title 18 CFR, Section 292.205(a)(1) and (a)(2)(i)(B).

Verification: APPC shall file with the CEC during each calendar year an annual report in which monthly average values of the following plant operating parameters will be given:

- a. Gas turbine, MW (gross) at the generator terminals for each unit
- b. Gas turbine operating hours for each unit
- c. For each CTG and each HRSG duct burner provide fuel input including:
 - type, natural gas, refinery gas or butane
 - rate, lb/hr
 - heating value (low), Btu/lb
 - firing hours
- d. Inlet air flow, lb/hr
- e. Combustion turbine exhaust gas temperature, Deg F
- f. NOx steam injection rate, lb/hr
- g. Stack exiting flue gas temperature, Deg F
- h. Steam turbine, MW (gross)
- i. Steam turbine operating hours
- j. Plant auxiliary load, MW (total)
- k. For the process steam:
 - process steam demand, lb/hr
 - demand hours
 - process steam temperature (Deg F), quality (%), pressure (PSIA)and enthalpy (Btu/lb) at plant boundary
- I. Feedwater rate (lb/hr), temperature (Deg F)
- m. Condensate return rate (lb/hr), temperature (Deg F)
- n. Process steam from auxiliary boilers, lb/hr; auxiliary boiler's operating hours

Or APPC may, with CEC concurrence, submit the following operating parameters:

- o. Monthly fuel use (includes quantity and Btu value) as evidenced by an invoice from the gas supplier
- p. Monthly electrical sales (includes kWh) as evidenced by an invoice to Southern California Edison Company
- q. Monthly steam sales (includes quantity and Btu value) as evidenced by an invoice (or equivalent) to APPC
- r. If the rate of items o, p, or q above differs by more than +5, +15, and +10 percent, respectively, from rated conditions, APPC shall provide, at the specific written request of the CEC Staff, an explanation of such anomaly
- s. Feedwater rate (lb/hr) and temperature (Deg F)
- t. Condensate return rate (lbs/hr) and temperature (Deg F)
- u. Process steam from auxiliary boilers, lb/hr; auxiliary boiler's operating hours.

Not less than thirty (30) days prior to the scheduled date for the CEC Decision on the AFC, APPC shall notify the CEC of APPC's preference for either conditions a-n, or o-u.

This report shall also provide information for each month on any partial or total power and/or process steam production curtailment, including duration of curtailment and reasons for curtailment. The report shall be certified by the plant manager.

Response: Monthly average values of the above listed plant operating parameters are included in the tables below. Please note that parameter n. (auxiliary boilers) is not applicable, as there

are	no	auxiliary	boilers	at th	is loo	cation.

COG-1 (a-n)	Unit 91													
Subsection:	а	b					с				d	е	f	g
				-	GTG	-			HRSG	-	Inlet	GTG	DeNOx	Stack
			NG/RFG	Butane	Total	HHV	Firing	NG/RFG	HHV	Firing	Air Flow	Exhaust	Steam	Exhaust
	MW	Op Hours	<u>lb/hr</u>	<u>lb/hr</u>	<u>lb/hr</u>	BTU/lb	Hours	lb/hr	BTU/Ib	Hours	<u>lb/hr</u>	deg F	lb/sec	deg F
Jan-24	80.6	744	38817	444	39261	19799	744	114812	19799	744	2293699	1018	16.3	331
Feb-24	68.0	696	28784	6207	34991	20295	696	325087	20295	696	2293699	1032	13.8	323
Mar-24	54.1	641	27960	455	28416	20715	641	577588	20715	640	2293699	921	11.4	289
Apr-24	62.7	720	31897	479	32376	20923	720	830101	20923	720	2293699	1039	12.9	320
May-24	82.0	738	39441	929	40370	20528	738	1631031	20528	737	2293699	1015	17.3	331
Jun-24	82.5	708	39274	905	40180	19837	708	1860060	19837	707	2293699	1021	17.2	334
Jul-24	65.2	744	33174	310	33484	20305	744	1449799	20305	744	2293699	1036	13.9	328
Aug-24	69.1	744	34480	555	35035	20297	744	2296554	20297	744	2293699	1043	14.7	326
Sep-24	61.4	720	31487	418	31905	20062	720	2019842	20062	720	2293699	1046	12.9	323
Oct-24	60.6	744	31146	400	31545	19673	744	2204530	19673	744	2293699	1045	12.6	322
Nov-24	70.7	720	34556	376	34932	20280	720	2906088	20280	720	2293699	1028	14.7	328
Dec-24	63.7	743	32588	271	32859	18995	743	2782746	18995	743	2293699	1035	13.5	324
COC(1/2n)							lln	:+ 07						
COG-1 (a-II)	2	h					011	11. 52			d		£	
Subsection.	a	0			GTG			<u> </u>	HRSG		Inlet	GTG	DeNOv	5 Stack
			NG/REG	Butane	Total	нну	Firing	NG/REG	нну	Firing	Air Flow	Evhaust	Steam	Evhaust
	N/N/	On Hours	lh/hr	lh/hr	lh/hr	BTU/lb	Hours	lh/hr	BTU/lb	Hours	lh/hr		lh/sec	
Jan-24	60.3	744	3/50/	2007	36601	10700	744	117662	10700	744	2202600	008	12.0	336
5a11-24 Feb-24	65.0	696	33019	2007	35062	20295	696	329513	20295	696	2293099	998	13.3	333
Mar-24	66.1	7/3	33397	2045	35/159	20235	7/3	725216	20235	7/3	2293699	1002	13.1	333
Anr-24	59.7	720	30909	1995	32904	20713	720	834541	20923	745	2293699	998	12.0	330
May-24	7.0	69	3249	623	3872	20525	69	54340	20525	69	2293699	171	1.6	104
lun-24	2.7	48	2380	527	2906	19837	48	16716	19837	45	2293699	166	1.0	138
Jul-24	64.7	727	32554	1920	34475	20305	727	1390860	20305	726	2293699	983	13.4	333
Aug-24	60.9	658	30296	1792	32088	20297	658	1937251	20297	657	2293699	917	12.5	312
Sep-24	63.0	720	31816	1779	33594	20062	720	2042334	20062	720	2293699	1010	12.9	329
Oct-24	62.5	744	31573	1862	33435	19673	744	2224341	19673	744	2293699	1004	12.8	328
Nov-24	72.6	720	35006	2093	37100	20280	720	2927151	20280	720	2293699	1006	14.6	335
Dec-24	64.3	743	32536	2108	34644	18995	743	2787843	18995	743	2293699	984	13.0	332
COG-1 (a-n)							Un	it 93						
Subsection:	а	b					c				d	е	f	g
					GTG				HRSG		Inlet	GTG	DeNOx	Stack
			NG/RFG	Butane	Total	HHV	Firing	NG/RFG	HHV	Firing	Air Flow	Exhaust	Steam	Exhaust
	MW	Op Hours	<u>lb/hr</u>	<u>lb/hr</u>	<u>lb/hr</u>	BTU/lb	<u>Hours</u>	<u>lb/hr</u>	BTU/Ib	<u>Hours</u>	<u>lb/hr</u>	<u>deg F</u>	<u>lb/sec</u>	<u>deg F</u>
Jan-24	63.0	744	32527	1165	33692	19799	744	115444	19799	744	2293699	1002	13.2	338
Feb-24	51.3	598	27124	865	27989	20295	598	245942	20295	596	2293699	872	10.8	308
Mar-24	66.0	743	33906	1268	35174	20715	743	722537	20715	743	2293699	1008	13.9	339
Apr-24	60.4	720	31519	1114	32633	20923	720	830044	20923	720	2293699	1014	12.5	336
May-24	79.7	744	39211	1577	40788	20528	744	1646634	20528	744	2293699	1010	17.3	347
Jun-24	78.2	720	39295	1661	40955	19837	720	1919044	19837	720	2293699	1026	16.7	348
Jul-24	67.9	744	35162	1122	36284	20305	744	1452600	20305	744	2293699	1023	14.3	346
Aug-24	68.4	744	34851	1327	36178	20297	744	2302033	20297	744	2293699	1036	14.5	341
Sep-24	61.7	720	32081	822	32903	20062	720	2019617	20062	720	2293699	1036	13.0	339
Oct-24	61.0	744	31865	822	32687	19673	744	2204801	19673	744	2293699	1034	12.8	338
Nov-24	67.6	/00	33846	1108	34954	20280	/00	2/81284	20280	698	2293699	991	14.1	341
Dec-24	63.6	743	33127	903	34030	18995	743	2781644	18995	743	2293699	1005	13.1	341

COG-1 (a-n)		Unit 94												
Subsection:	а	b					с				d	е	f	g
					GTG				HRSG		Inlet	GTG	DeNOx	Stack
			NG/RFG	Butane	Total	HHV	Firing	NG/RFG	HHV	Firing	Air Flow	Exhaust	Steam	Exhaust
	MW	Op Hours	<u>lb/hr</u>	lb/hr	<u>lb/hr</u>	BTU/Ib	Hours	<u>lb/hr</u>	BTU/Ib	Hours	lb/hr	deg F	lb/sec	<u>deg F</u>
Jan-24	48.6	599	25559	837	26396	19799	599	69703	19799	600	2293699	794	10.3	292
Feb-24	65.2	695	33733	1081	34814	20295	695	327847	20295	696	2293699	988	13.3	340
Mar-24	60.1	692	31120	1211	32331	20715	692	664574	20715	690	2293699	933	12.5	328
Apr-24	60.6	720	31626	940	32566	20923	720	830348	20923	720	2293699	990	12.6	337
May-24	80.4	744	39810	1182	40992	20528	744	1655595	20528	744	2293699	1014	17.6	347
Jun-24	81.2	720	39986	1114	41100	19837	720	1921737	19837	720	2293699	1032	17.2	347
Jul-24	58.6	660	29339	656	29995	20305	660	1164595	20305	660	2293699	928	11.9	317
Aug-24	44.7	529	23593	702	24295	20297	529	1503055	20297	526	2293699	755	9.8	272
Sep-24	62.8	720	32544	787	33331	20062	720	2019933	20062	720	2293699	1024	13.3	338
Oct-24	61.6	744	32088	771	32859	19673	744	2206990	19673	744	2293699	1014	12.8	338
Nov-24	39.3	454	20808	414	21222	20280	454	1576996	20280	458	2293699	669	8.5	251
Dec-24	60.3	720	31374	886	32260	18995	720	2655390	18995	718	2293699	961	12.5	339
COG-1 (a-n)	9	STG 1		STG 2	Plant	Load		600# Stea	m			150# St	eam	

	31	01	31	02	Fiant Luau	000# Steam			150# Steam				
Subsection:	h	i	h	i	j		k				k		
	MW	Hours	MW	Hours	MW	<u>mlb/hr</u>	<u>Hours</u>	<u>PSIG</u>	<u>deg F</u>	mlb/hr	<u>Hours</u>	PSIG	<u>deg F</u>
Jan-24	22	743	0	0	71	1077	744	620	750	1.820	744	152	411
Feb-24	21	695	0	0	64	1022	696	620	749	2.396	696	152	401
Mar-24	17	638	0	0	83	1180	744	620	750	0.146	744	152	433
Apr-24	17	618	0	0	85	1159	720	621	749	0.142	720	152	427
May-24	20	742	0	0	89	1149	744	620	749	0.134	744	152	429
Jun-24	20	699	0	0	88	1102	720	620	749	1.975	720	152	439
Jul-24	22	744	0	0	91	1112	744	619	750	0.128	744	152	416
Aug-24	22	743	0	0	90	1168	744	620	750	0.363	744	152	409
Sep-24	4	131	15	604	91	1158	720	621	750	0.225	720	152	413
Oct-24	1	29	18	741	90	1124	744	621	750	0.989	744	152	433
Nov-24	0	0	17	718	81	1100	720	621	749	7.784	720	153	440
Dec-24	0	0	16	691	19	1121	744	621	749	0.687	744	152	399

COG-1 (a-					
n)	Total Fee	dwater	Total Con	Aux	
Subsection:	l I	- I	m	m	n
	<u>mlb/hr</u>	<u>deg F</u>	<u>mlb/hr</u>	<u>deg F</u>	
Jan-24	1580	250	287	-	N/A
Feb-24	1524	250	260	-	N/A
Mar-24	1644	250	432	-	N/A
Apr-24	1615	250	422	-	N/A
May-24	1590	250	454	-	N/A
Jun-24	1583	250	407	-	N/A
Jul-24	1612	250	456	-	N/A
Aug-24	1645	250	482	-	N/A
Sep-24	1678	250	452	-	N/A
Oct-24	1637	250	461	-	N/A
Nov-24	1617	250	464	-	N/A
Dec-24	1635	250	464	-	N/A

DEMAND CONFORMANCE CONDITIONS OF CERTIFICATION

DC-1 Applicant shall enter into an amendment to its power purchase contract with SCE, which contains substantially the same provisions as the dispatchability Memorandum of Understanding presented in this case. (See Appendix D).

Verification: The Applicant shall submit to the CEC a copy of the final agreement specified in Condition 1 prior to the start of operation. The Applicant shall also submit to the CEC a copy of any future amendments to the power purchase agreement, including agreements affecting project ownership.

- **Response:** A copy of SCE Power Purchase Agreement Amendment Number 2 entered on September 20, 2024 is attached with submission of this report.
- **DC-2** The Energy Commission shall retain jurisdiction to require ARCO to periodically report on the performance of its facility and the payments made by SCE to purchase power from the facility.

Verification: On an annual basis following construction, ARCO shall report the monthly generation provided to SCE and the monthly payments received from SCE. Payments shall be disaggregated by capacity (firm and as-available), start-up and energy. ARCO shall provide the CEC a copy of the Prescribed Dispatch Schedule for the facility.

Response: Monthly values for generation provided to SCE and monthly payments disaggregated by capacity (firm and as-available) are included in the table below. Watson no longer follows a Prescribed Dispatch Schedule from SCE but is dispatched via CAISO ADS (Automated Dispatch System) call signals. A summary of the CAISO ADS DOT (Dispatch Operating Target) values for ARCOGN_2_UNITS for 2024 are provided.

	SCE Sales	Energy	Capacity Payment	Capacity Payment -
Month	Volume	Payment	Firm	As Available
	MWh	\$	\$	\$
Jan-24	149,876	\$9,716,348.75	\$899,750.00	\$0.00
Feb-24	136,872	\$5,637,366.67	\$899,750.00	\$0.00
Mar-24	127,115	\$5,361,558.60	\$899,750.00	\$0.00
Apr-24	120,725	\$4,020,628.14	\$899,750.00	\$0.00
May-24	126,362	\$4,645,134.96	\$2,522,350.00	\$0.00
Jun-24	120,841	\$5,961,291.53	\$2,522,350.00	\$0.00
Jul-24	132,470	\$6,806,586.07	\$2,522,350.00	\$0.00
Aug-24	124,391	\$5,351,715.89	\$2,522,350.00	\$0.00
Sep-24	123,686	\$6,186,480.70	\$2,522,350.00	\$0.00
Oct-24	124,966	\$5,950,057.82	\$2,607,750.00	\$0.00
Nov-24	124,756	\$4,393,293.49	\$899,750.00	\$0.00
Dec-24	<u>132,892</u>	\$7,987,421.48	\$899,750.00	<u>\$0.00</u>
Total	1,544,951	\$72,017,884.10	\$20,618,000.00	\$0.00

PUBLIC HEALTH CONDITIONS OF CERTIFICATION

PH-2 APPC shall comply with all emission regulations established by the U.S. Environmental Protection Agency (EPA), South Coast Air Quality Management District (SCAQMD), and the California Air Resources Board (CARB) regarding the use of a non-chromium treatment method as an anti-fouling/corrosive agent in the cooling towers, and the prohibition of Hexavalent Chromium additives.

Verification: APPC shall submit to the CEC, within the Annual Compliance Report, documentation of their compliance with all EPA, SCAQMD, and CARB emission regulations for use of antifouling/corrosive agents in the cooling towers.

Response: In compliance with EPA, SCAQMD and CARB emission regulations for the use of antifouling/corrosive agents in cooling towers, APPC/Watson does not use any chemical products that contain chromium in its cooling towers. It is currently using Solenis Performax CC6203, Performax SR8315, Biosperse CN5500 & Biosperse CN2150, all non-chromium products, as anti-fouling agents in its cooling towers.

POWER PLANT RELIABILITY CONDITIONS OF CERTIFICATION

RELI-3 APPC shall file with the CEC an annual report documenting the plant availability and capacity factors achieved.

Verification: Beginning with commercial operation, APPC shall file an annual report containing the following:

- a. Operating hours, outage hours, cause of outage and downtime for each piece of major equipment including the following:
 - Combustion turbine/generators Heat recovery steam generators
 - Feedwater pumps
 - Steam turbine/generators
 - Condensers
 - Condensate pumps
 - Cooling water pumps
 - Controls
- b. For each forced outage, a precise identification of the equipment whose failure resulted in the forced outage and the resulting forced outage hours.
- c. Identification of equipment or other causes (such as curtailment) for which planned outage was instituted in any given month.
- d. Annual plant availability and capacity factors, per EPRI definitions.

Response: Information regarding operating hours, outage causes, downtime and annual plant availability and capacity factors are shown in the two tables below.

CEC Generator L	Event Type	Start Date	End Date	Duration	Cause Code
GN96	RS - Reserve Shutdown	01/01/2024 00:00 PPT	09/05/2024 19:44 PPT	5970:44:00	0000 - Reserve shutdown
GN94	U2 - Forced - Delayed	01/24/2024 08:49 PPT	01/30/2024 08:30 PPT	143:41:00	5108 - High engine exhaust temperature A
GN93	U2 - Forced - Delayed	02/18/2024 12:00 PPT	02/22/2024 16:10 PPT	100:10:00	5442 - Fuel nozzles/vanes A
GN95	U1 - Forced - Immediate	03/16/2024 06:19 PPT	03/20/2024 13:48 PPT	103:29:00	3521 - HP Extraction steam valves
GN94	U1 - Forced - Immediate	03/16/2024 06:19 PPT	03/18/2024 09:58 PPT	51:39:00	3980 - Programmable Logic Controller (PLC)
GN91	U2 - Forced - Delayed	03/24/2024 12:00 PPT	03/28/2024 17:32 PPT	101:32:00	6090 - Other HRSG tube Problems
GN95	U2 - Forced - Delayed	04/08/2024 10:00 PPT	04/12/2024 14:32 PPT	100:32:00	3529 - Other HP extraction steam system problems
GN91	U2 - Forced - Delayed	05/01/2024 09:10 PPT	05/01/2024 15:30 PPT	6:20	3982 - PLC - hardware problems (including card failure)
GN92	PO - Planned	05/03/2024 21:12 PPT	06/18/2024 19:25 PPT	1102:13:00	4400 - Major turbine overhaul (720 hrs or longer) (use for non-specific
GN92	U2 - Forced - Delayed	06/19/2024 18:12 PPT	06/29/2024 23:32 PPT	245:20:00	4535 - Stator; General
GN91	U1 - Forced - Immediate	06/28/2024 11:40 PPT	06/28/2024 23:42 PPT	12:02	3982 - PLC - hardware problems (including card failure)
GN92	U1 - Forced - Immediate	07/22/2024 20:49 PPT	07/23/2024 14:50 PPT	18:01	3982 - PLC - hardware problems (including card failure)
GN94	U2 - Forced - Delayed	07/28/2024 11:30 PPT	08/03/2024 11:00 PPT	143:30:00	6090 - Other HRSG tube Problems
GN94	U2 - Forced - Delayed	08/05/2024 09:20 PPT	08/11/2024 22:20 PPT	157:00:00	6090 - Other HRSG tube Problems
GN92	U2 - Forced - Delayed	08/18/2024 23:00 PPT	08/22/2024 13:54 PPT	86:54:00	4700 - Generator voltage control
GN95	RS - Reserve Shutdown	09/06/2024 12:10 PPT	10/14/2024 15:25 PPT	915:15:00	0000 - Reserve shutdown
GN95	RS - Reserve Shutdown	10/15/2024 21:05 PPT	01/01/2025 00:00 PPT	1851:55:00	0000 - Reserve shutdown
GN93	U2 - Forced - Delayed	11/05/2024 21:54 PPT	11/06/2024 20:08 PPT	22:14	3982 - PLC - hardware problems (including card failure)
GN94	PO - Planned	11/11/2024 12:00 PPT	11/22/2024 14:53 PPT	266:53:00	5269 - Combustion inspection (CI)
GN94	U2 - Forced - Delayed	12/16/2024 22:10 PPT	12/17/2024 22:00 PPT	23:50	5509 - Other exhaust problems (including high exhaust temperature not a

CEC Generator Unit ID	2024 Operating Hours	2024 Availability
GN91	8,665	98.7%
GN92	7,334	83.5%
GN93	8,665	98.6%
GN94	8,088	92.1%
GN95	6,269	71.5%
GN96	2,814	100.0%
2024 Annual Pla	ant Availability	90.70%
2024 Capacity F	actor	64.97%

PUBLIC AND WORKER SAFETY CONDITIONS OF CERTIFICATION

SAFETY-11 APPC and the Los Angeles County Fire Department shall annually reexamine the fire protection program.

Verification: APPC shall note and summarize the joint re-examination to the fire protection program in its annual compliance report to the CEC.

Response: APPC/Watson's fire protection program is covered by a permit issued by the County of Los Angeles Fire Department and follows their standard review/renewal cycle. This review/renewal process is jointly conducted with the on-site Fire Chief responsible for the APPC/Watson facility. Fire protection equipment at the facility is inspected, tested and maintained in accordance with NFPA, ANSI and OSHA standards.

SAFETY-13 APPC shall facilitate onsite worker safety inspections conducted by Cal/DOSH during construction and operation of the facility when an employee complaint has been received.

Verification: APPC shall request Cal/DOSH to notify the CEC in writing in the event of a violation that will involve Cal/DOSH action affecting the construction and operation schedule and shall notify the CEC of the necessary corrective action. APPC shall note any Cal/DOSH inspections and actions in its periodic compliance reports.

Response: In the calendar year of 2024, APPC/Watson Cogen has not had any violations and has not received any complaints that would warrant reporting to Cal/DOSH.

TRAFFIC AND TRANSPORTATION CONDITIONS OF CERTIFICAT

TRANS-1 ARCO Petroleum Products Corporation (APPC) shall comply with the California Department of Transportation (Caltrans) and Los Angeles County restrictions on oversize or overweight vehicles using state, county and City of Carson roadways. APPC shall obtain overload permits, as necessary, from Caltrans and the County of Los Angeles.

Verification: APPC shallow in its annual compliance report, notify the California Energy Commission (CEC) of any overload permits obtained from Caltrans and the County of Los Angeles.

Response: In the 2024 calendar year, APPC/Watson is not aware of any overload permits being obtained from Caltrans and the County of Los Angeles.

TRANS-2 APPC shall comply with the City of Carson encroachment and excavation permit and franchise requirements for installation of utility services (transmission line, natural gas pipeline) of the proposed project in or over city-owned rights-of-way.

Verification: APPC shall, in its annual compliance report, notify the CEC that the requirements for obtaining encroachment and excavation permits from the City of Carson have been satisfied. APPC shall file any required or requested information with the City of Carson.

Response: In the 2024 calendar year, APPC/Watson obtained excavation permits from the City of Carson for construction activities associated with Watson Cogeneration Project – Switch Gear Building, GSU Transformers.

WASTE MANAGEMENT CONDITIONS OF CERTIFICATION

WASTE-5 If APPC intends to store hazardous wastes on-site for more than 90 days, it shall obtain a determination from DHS that the requirements of a hazardous waste facility have been satisfied. Storage of such wastes shall be in accordance with DHS regulations. APPC shall file any required or requested information with the Los Angeles County Fire Department, Hazardous Materials Unit.

Verification: APPC shall notify the CEC in the Annual Compliance Report if APPC applies for, or obtains, a Hazardous Waste Facility permit.

Response: APPC/Watson does not store bulk hazardous waste onsite for more than 90 days and therefore does not require a Hazardous Waste Facility Permit.

WASTE-6 APPC shall ensure that hazardous wastes are hauled by a permitted hazardous wastes hauler and disposed of in a proper manner at a site permitted by DHS and the Regional Water Quality Control Board, Los Angeles Region, for the disposal of hazardous wastes.

Verification: In the Annual Compliance Report, APPC shall submit to the CEC a verification that hazardous wastes have been transported by a DHS-licensed hazardous waste hauler, and that the wastes were disposed of at appropriate sites.

Response: Hazardous waste generated by APPC/Watson is transported by a DTSC licensed hazardous waste hauler and is disposed of in a proper manner at permitted hazardous waste facilities.

WATER QUALITY CONDITIONS OF CERTIFICATION

WQ-4 The project owner shall provide a copy of the revised or new National Pollutant Discharge Elimination System Permit for the Watson Cogeneration Project and the ARCO Los Angeles Refinery approved by the Los Angeles Regional Water Quality Control Board to the CEC Compliance Project Manager. The project owner shall also provide a copy of the annual monitoring report required by the NPDES Permit for all wastewater, with the exception of stormwater runoff, that is commingled with cooling tower blowdown from the Watson Cogeneration Plant and discharged to the Dominguez Channel.

Verification: The project owner shall provide a copy of the new NPDES Permit to the CEC Compliance Project Manager within one month of its approval by the Los Angeles Regional Water Quality Control Board. Annual NPDES Permit monitoring reports shall be provided to the CEC Compliance Project Manager with the annual compliance report.

Response: Annual NPDES reports for the Carson facility are submitted electronically on the California Integrated Water Quality System (CIWQS). A copy of the annual report is attached to this submittal. A copy of the updated NPDES permit can be provided if requested by the CEC.

WATER RESOURCES CONDITIONS OF CERTIFICATION

WATER-3 The project owner will demonstrate that all feasible and practical measures to reduce additional water demand have been incorporated into the design of the fifth train. The measures may include, but are not limited to, recycling and reuse.

Verification: The project owner shall submit a report discussing all measures, whether adopted or not, considered to reduce project water demand. This report shall be contained in the first annual compliance report following the start of operation of the fifth train.

Response: Water-3 is not applicable as APPC/Watson did not construct a fifth train.