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Project Title:	El Segundo Power Redevelopment Project Compliance
TN #:	202998
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<b>Description:</b>	N/A
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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

	Equipment	ID	Connected	RECLAIM	<b>Emissions</b> *	Conditions
		No.	To	Source Type/	<b>And Requirements</b>	
				<b>Monitoring Unit</b>		
Process 1: INTERNAL COMBUSTION						

<sup>\* (1) (1</sup>A) (1B) Denotes RECLAIM emission factor

<sup>(3)</sup> Denotes RECLAIM concentration limit

<sup>(5) (5</sup>A) (5B) Denotes command and control emission limit

<sup>(7)</sup> Denotes NSR applicability limit

<sup>(9)</sup> See App B for Emission Limits

<sup>(2) (2</sup>A) (2B) Denotes RECLAIM emission rate

<sup>(4)</sup> Denotes BACT emission limit

<sup>(6)</sup> Denotes air toxic control rule limit

<sup>(8) (8</sup>A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

<sup>(10)</sup> See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL C	OMBUSTI	ON	<b>.</b>		
GAS TURBINE, UNIT NO. 9, NATURAL GAS, GENERAL ELECTRIC, MODEL 7FA.05 FAST START, COMBINED CYCLE, 2,168 MMBTU/HR AT 41 DEGREES F, WITH DRY LOW NOX COMBUSTORS WITH A/N:	D90	D95 C96	NOX: MAJOR SOURCE**	CH2O: 0.091 PPMV NATURAL GAS (8) [40CFR 63 Subpart YYYY, 4-20-2006]; CO: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]; NOX: 9.42 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 30.88 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5B) [RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5C) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 9.5 LBS/HR NATURAL GAS (5) [RULE 1303(b)(2)-Offset, RULE 1303(b)(2)-Offset,	A63.3, A99.12, A99.13, A195.12, A195.13, A195.14, A195.18, A327.1, B61.2, C1.7, D29.10, D29.11, D29.12, D82.6, D82.7, E193.2, E193.5, E193.6, E448.3, I297.3, K40.5, K67.6

ĸ	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8)(8A)(8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions			
Process 1: INTERNAL COM								
				72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)				
GENERATOR, HRSG  GENERATOR, SERVING UNIT NO.				-BACT, 12-6-2002]				
9, 222 GROSS MW AT 41 DEGREES F								
STEAM TURBINE, GENERAL ELECTRIC MODEL SC								
GENERATOR, SERVING STEAM TURBINE, 112 GROSS MW AT 41 DEGREES F								

<sup>\* (1) (1</sup>A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate (3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit (5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit (7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) (9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - D82.6, D82 PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]; NOX: 9.42 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 30.88 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5C) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1	Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
268 MMBTU/HR AT 41 DEGREES F, LOCATED IN THE HRSG OF TURBINE NO. 9 A/N:  SOURCE**  NATURAL GAS (8) [40CFR   63 Subpart YYYY,   4-20-2006]; CO: 2 PPMV   A195.12, A195.13, A195.14, A195.12, A195	Process 1: INTERNAL CO	OMBUST	ION			
GRAINS/SCF NATURAL GAS (5B) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM10: 9.5 LBS/HR NATURAL GAS (5) [RULE 1303(b)(2)-Offset, 5-10-1996;	BURNER, DUCT, NATURAL GAS, 268 MMBTU/HR AT 41 DEGREES F, LOCATED IN THE HRSG OF TURBINE NO. 9		ı		NATURAL GAS (8) [40CFR 63 Subpart YYYY, 4-20-2006]; CO: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]; NOX: 9.42 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 30.88 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5C) [RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5B) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5A) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.5 LBS/HR NATURAL GAS (5) [RULE	A99.13, A195.12, A195.13, A195.14, A327.1, B61.2, C1.7, D29.10, D29.11, D29.12, D82.6, D82.7, E193.2, E193.5, K40.5,

~	(1) (1A) (1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8) (8A) (8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	MBUST	ION			
				72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8A) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996]	
CO OXIDATION CATALYST, UNIT NO. 9, BASF, 290 FEET OF TOTAL CATALYST VOLUME A/N:	C96	D90 C97			
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 9, CORMETECH, 2050 CU.FT.; WIDTH: 29 FT 8 IN; HEIGHT: 70 FT 5 IN; LENGTH: 1 FT 9 IN WITH A/N:	C97	C96 S99		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	D12.14, D12.15, D12.16, E179.7, E179.8, E193.2, E193.7
AMMONIA INJECTION, AQUEOUS AMMONIA  STACK, SERVING UNIT NO. 9, HEIGHT: 210 FT; DIAMETER: 20 FT A/N:	S99	C97			

(3) Denotes RECLAIM concentration limit

(4) Denotes BACT emission limit

(5) (5A) (5B) Denotes command and control emission limit

(6) Denotes air toxic control rule limit

(7) Denotes NSR applicability limit

(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

<sup>(1) (1</sup>A) (1B) Denotes RECLAIM emission factor

<sup>(2) (2</sup>A) (2B) Denotes RECLAIM emission rate

<sup>(9)</sup> See App B for Emission Limits

<sup>(10)</sup> See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	MBUSTI	ION			
GAS TURBINE, UNIT NO. 11, NATURAL GAS, ROLLS ROYCE, MODEL TRENT 60, SIMPLE CYCLE, 516 MMBTU/HR AT 78 DEGREES F, WITH WATER INJECTION WITH A/N:	D100	C102	NOX: MAJOR SOURCE**	CH2O: 0.091 PPMV NATURAL GAS (8) [40CFR 63 Subpart YYYY, 4-20-2006]; CO: 4 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]; NOX: 16.16 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 96.58 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5C) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.5 LBS/HR NATURAL GAS (5) [RULE 1303(b)(2)-Offset, 12-6-2002]; SO2: (9) [40CFR	A63.4, A99.14, A99.15, A195.15, A195.16, A195.17, A327.1, B61.2, C1.8, D29.10, D29.11, D29.12, D82.6, D82.7, E193.2, E193.8, E448.2, I297.4, K40.5, K67.6

(1) (111) (111)	Benotes RECEATIVI chinssion factor	(2)(2H)(2D)	Denotes RECEATIVI emission rate
(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
(7)	Denotes NSR applicability limit	(8) (8A) (8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	MBUST	ION			
				72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	
GENERATOR, 57.4 GROSS MW AT 78 DEGREES F					
CO OXIDATION CATALYST, UNIT NO. 11, PEERLESS, CATALYST VOLUME: 420 CUBIC FEET A/N:	C102	D100 C103			
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 11, PEERLESS, 1272 CU.FT.; WIDTH: 19 FT 6 IN; HEIGHT: 33 FT; LENGTH: 2 FT 6 IN WITH A/N:	C103	C102 S105		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(b)(2) -Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]	D12.17, D12.18, D12.19, E179.9, E179.10, E193.2, E193.7
AMMONIA INJECTION, AQUEOUS AMMONIA					
STACK, SERVING UNIT NO. 11, HEIGHT: 150 FT; DIAMETER: 11 FT 1 IN A/N:	S105	C103			

*	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8)(8A)(8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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## **FACILITY PERMIT TO OPERATE** EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	MBUST	ION			
GAS TURBINE, UNIT NO. 12, NATURAL GAS, ROLLS ROYCE, MODEL TRENT 60, SIMPLE CYCLE, 516 MMBTU/HR AT 78 DEGREES F, WITH WATER INJECTION WITH A/N:	D106	C108	NOX: MAJOR SOURCE**	CH2O: 0.091 PPMV NATURAL GAS (8) [40CFR 63 Subpart YYYY, 4-20-2006]; CO: 4 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2.5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]; NOX: 16.16 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 25 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 96.58 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5C) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; PM: 0.5 LBS/HR NATURAL GAS (5) [RULE 1303(b)(2)-Offset, 12-6-2002]; SO2: (9) [40CFR	A63.4, A99.14, A99.15, A195.15, A195.16, A195.17, A327.1, B61.2, C1.8, D29.10, D29.11, D29.12, D82.6, D82.7, E193.2, E193.8, E448.2, I297.5, K40.5, K67.6

(1)(1A)(1B)	Denotes	RECL	AIM emissi	on :	facto	r
	_					

Denotes RECLAIM concentration limit (3) (5) (5A) (5B) Denotes command and control emission limit

Denotes BACT emission limit (4)

<sup>(6)</sup> Denotes air toxic control rule limit

Denotes NSR applicability limit (7) (9) See App B for Emission Limits

<sup>(8) (8</sup>A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.) (10)See section J for NESHAP/MACT requirements

Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL COM	<b>IBUST</b>	ON			
				72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; VOC: 2 PPMV NATURAL GAS (4) [RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2) -Offset, 12-6-2002]	
GENERATOR, 57.4 GROSS MW AT 78 DEGREES F					
CO OXIDATION CATALYST, UNIT NO. 12, PEERLESS, WITH 420 CUBIC FEET OF TOTAL CATALYST VOLUME A/N:	C108	D106 C109			
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 12, PEERLESS, 1272 CU.FT.; WIDTH: 19 FT 6 IN; HEIGHT: 33 FT; LENGTH: 2 FT 6 IN WITH A/N:	C109	C108 S111		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(b)(2) -Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]	D12.17, D12.18, D12.19, E179.9, E179.10, E193.2, E193.7
AMMONIA INJECTION, AQUEOUS AMMONIA					
STACK, SERVING UNIT NO. 12, HEIGHT: 150 FT; DIAMETER: 11 FT A/N:	S111	C109			

*	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8)(8A)(8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

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The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	OMBUST	ION			
GAS TURBINE, UNIT NO.5, NATURAL GAS, SIEMENS, MODEL SGT6-5000F RAPID-RESPONSE, COMBINED CYCLE, 2,096 MMBTU/HR AT 78 DEGREES F, WITH DRY LOW-NOX COMBUSTORS WITH A/N: 470652 Permit to Construct Issued: 07/13/10	D67	C75	NOX: MAJOR SOURCE**	CO: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; NOX: 8.66 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 16.55 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart	A63.2, A99.7, A99.8, A99.9, A99.10, A99.11, A195.8, A195.9, A195.10, A327.1, A433.1, B61.2, C1.6, D12.10, D29.7, D29.8, D29.9, D82.4, D82.5, E193.2, E193.3, I297.1, K40.4, K67.5

(1)(1A)(1B)	Denotes RECLAIM emission factor
(3)	Denotes RECLAIM concentration lin

(2) (2A) (2B) Denotes RECLAIM emission rate(4) Denotes BACT emission limit

(5) (5A) (5B) Denotes command and control emission limit

(6) Denotes air toxic control rule limit

(8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
 (10) See section J for NESHAP/MACT requirements

 <sup>(7)</sup> Denotes NSR applicability limit
 (9) See App B for Emission Limits

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/	Emissions* And Requirements	Conditions
			Monitoring Unit		
<b>Process 1: INTERNAL COM</b>	MBUST	ION			
				PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	
GENERATOR, HEAT RECOVERY STEAM, UNFIRED					
TURBINE, STEAM, 67.7 MW					
GENERATOR, 219 MW					
CO OXIDATION CATALYST, UNIT NO. 5, BASF, 290 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 470653 Permit to Construct Issued: 07/13/10	C75	D67 C76			
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 5, CORMETECH, MODEL CM21HT, WITH 2,050 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT; HEIGHT: 70 FT; LENGTH: 24 FT 3 IN WITH A/N:	C76	C75 S78		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.11, D12.11, D12.12, D12.13, E179.5, E179.6
AMMONIA INJECTION, GRID  STACK, NO. 5, HEIGHT: 210 FT;  DIAMETER: 20 FT 11 IN  A/N: 470652  Permit to Construct Issued: 07/13/10	S78	C76			

*	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8) (8A) (8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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## **FACILITY PERMIT TO OPERATE** EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	OMBUSTI	ION	Wontoring Chit		
GAS TURBINE, UNIT NO.7, NATURAL GAS, SIEMENS, MODEL SGT6-5000F RAPID-RESPONSE, COMBINED CYCLE, 2,096 MMBTU/HR AT 78 DEGREES F, WITH DRY LOW-NOX COMBUSTORS WITH A/N: 470656 Permit to Construct Issued: 07/13/10	D68	C79	NOX: MAJOR SOURCE**	CO: 2 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 2 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; NOX: 8.66 LBS/MMSCF NATURAL GAS (1A) [RULE 2012, 5-6-2005]; NOX: 15 PPMV NATURAL GAS (8) [40CFR 60 Subpart KKKK, 7-6-2006]; NOX: 16.55 LBS/MMSCF NATURAL GAS (1) [RULE 2012, 5-6-2005]; PM: 0.01 GRAINS/SCF NATURAL GAS (5) [RULE 475, 8-7-1978]; PM: 0.1 GRAINS/SCF NATURAL GAS (5A) [RULE 409, 8-7-1981]; PM: 11 LBS/HR NATURAL GAS (5B) [RULE 475, 10-8-1976; RULE 475, 8-7-1978]; SO2: (9) [40CFR 72 - Acid Rain Provisions, 11-24-1997]; SOX: 0.06 LBS/MMBTU NATURAL GAS (8) [40CFR 60 Subpart	A63.2, A99.7, A99.8, A99.9, A99.10, A99.11, A195.8, A195.9, A195.10, A327.1, A433.1, B61.2, C1.6, D12.10, D29.7, D29.8, D29.9, D82.4, D82.5, E193.2, E193.3, 1297.2, K40.4, K67.5

(1)(1A)(1B)	) Denotes RECLAIM emission factor
(3)	Denotes RECLAIM concentration limit

<sup>(5) (5</sup>A) (5B) Denotes command and control emission limit

(7)

Denotes NSR applicability limit (9) See App B for Emission Limits

<sup>(2) (2</sup>A) (2B) Denotes RECLAIM emission rate

<sup>(4)</sup> Denotes BACT emission limit

<sup>(6)</sup> Denotes air toxic control rule limit

<sup>(8) (8</sup>A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)

<sup>(10)</sup> See section J for NESHAP/MACT requirements

Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 1: INTERNAL CO	MBUST	ION			
				PPMV NATURAL GAS (4) [RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1) -BACT, 12-6-2002]	
GENERATOR, HEAT RECOVERY STEAM, UNFIRED					
TURBINE, STEAM, 67.7 MW					
GENERATOR, 219 MW					
CO OXIDATION CATALYST, UNIT NO. 7, BASF, 290 CUBIC FEET OF TOTAL CATALYST VOLUME A/N: 470654 Permit to Construct Issued: 07/13/10	C79	D68 C80			
SELECTIVE CATALYTIC REDUCTION, UNIT NO. 7, CORMETECH, MODEL CM21HT, WITH 2,050 CUBIC FEET OF TOTAL CATALYST VOLUME, WIDTH: 25 FT; HEIGHT: 70 FT; LENGTH: 24 FT 3 IN WITH A/N:	C80	C79 S82		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	A195.11, D12.11, D12.12, D12.13, E179.5, E179.6
AMMONIA INJECTION, GRID STACK, NO. 7, HEIGHT: 210 FT; DIAMETER: 20 FT 11 IN A/N: 470656 Permit to Construct Issued: 07/13/10	S82	C80			

*	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3) Denotes RECLAIM concentration limit		(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8)(8A)(8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: EXTERNAL CO	<b>DMBUST</b>	ION			
BOILER, AUXILIARY, NATURAL GAS, CLEAVER BROOKS, MODEL NB-100D-40, WATER TUBE, WITH LOW NOX BURNER, 36 MMBTU/HR WITH A/N:	D112	C114	NOX: LARGE SOURCE**	CO: 50 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]; CO: 2000 PPMV NATURAL GAS (5) [RULE 407, 4-2-1982]; NOX: 5 PPMV NATURAL GAS (4) [RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2012, 5-6-2005]; PM: 0.1 GRAINS/SCF NATURAL GAS (5) [RULE 409, 8-7-1981]	A63.5, B61.2, C1.9, D29.13, E193.2, E193.9, I297.6, K40.5
BURNER, NATURAL GAS, WITH LOW NOX BURNER, 36 MMBTU/HR	C113				
SELECTIVE CATALYTIC REDUCTION, HALDOR-TOPSOE, MODEL NO. DNX929, SERVING AUXILIARY BOILER, 28 FEET OF TOTAL CATALYST VOLUME, WIDTH: 4 FT 6 IN; HEIGHT: 4 FT 6 IN; LENGTH: 2 FT 2 IN WITH A/N:	C114	D112		NH3: 5 PPMV NATURAL GAS (4) [RULE 1303(a)(1) -BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]	D12.20, D12.21, D12.22, E179.11, E179.12, E193.2, E193.7
AMMONIA INJECTION, AQUEOUS AMMONIA					

*	(1)(1A)(1B)	Denotes RECLAIM emission factor	(2)(2A)(2B)	Denotes RECLAIM emission rate
	(3)	Denotes RECLAIM concentration limit	(4)	Denotes BACT emission limit
	(5)(5A)(5B)	Denotes command and control emission limit	(6)	Denotes air toxic control rule limit
	(7)	Denotes NSR applicability limit	(8) (8A) (8B)	Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
	(9)	See App B for Emission Limits	(10)	See section J for NESHAP/MACT requirements

<sup>\*\*</sup> Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

**SECTION H: DEVICE ID INDEX** 

The following sub-section provides an index to the devices that make up the facility description sorted by device ID.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

## **SECTION H: DEVICE ID INDEX**

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Device ID	Section H Page No.	Process	System	
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D68	13	1	2	
C75	11	1	2	
C76	11	1	2	
S78	11	1	2	
C79	13	1	2	
C80	13	1	2	
S82	13	1	2	
D90	3	1	0	
D95	5	1	0	
C96	5	1	0	
C97	5	1	0	
S99	5	1	0	
D100	7	1	0	
C102	7	1	0	
C103	7	1	0	
S105	7	1	0	
D106	9	1	0	
C108	9	1	0	
C109	9	1	0	
S111	9	1	0	
D112	14	2	0	
C113	14	2	0	
C114	14	2	0	

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

#### **FACILITY CONDITIONS**

F2.1 The operator shall limit emissions from this facility as follows:

CONTAMINANT	EMISSIONS LIMIT
PM	Less than 100 TONS IN ANY ONE YEAR

For the purpose of this condition, the PM emission limit shall be applicable to particulate matter with aerodynamic diameter less than 2.5 microns

The operator shall not operate any of the new gas turbines #9, 11, and 12 or the auxiliary boiler unless it demonstrates compliance with this limit

The operator shall calculate the emissions by using the calendar monthly fuel use data and the following emission factors: PM2.5: 4.09 lb/mmscf for GE 7FA combined cycle gas turbine; 9.98 lb/mmscf for Trent 60 simple cycle gas turbines; 8.82 lb/mmscf for auxiliary boiler.

For the purpose of this condition any one year shall be defined as a period of twelve (12) consecutive months determined on a rolling basis with a new 12 month period beginning on the first day of each calendar month.

#### [40CFR 51 Subpart S, 3-8-2007]

- F9.1 Except for open abrasive blasting operations, the operator shall not discharge into the atmosphere from any single source of emissions whatsoever any air contaminant for a period or periods aggregating more than three minutes in any one hour which is:
  - (a) As dark or darker in shade as that designated No.1 on the Ringelmann Chart, as published by the United States Bureau of Mines; or
  - (b) Of such opacity as to obscure an observer's view to a degree equal to or greater than does smoke described in subparagraph (a) of this condition.

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

[RULE 401, 3-2-1984; RULE 401, 11-9-2001]

F14.1 The operator shall not use fuel oil containing sulfur compounds in excess of 0.05 percent by weight.

[RULE 431.2, 5-4-1990; RULE 431.2, 9-15-2000]

F14.2 The operator shall not purchase fuel oil containing sulfur compounds in excess of 15 ppm by weight as supplied by the supplier.

This condition shall become effective on or after June 1, 2004.

[RULE 431.2, 9-15-2000]

F16.1 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

purchase records of fuel oil and sulfur content of the fuel

## [RULE 3004(a)(4)-Periodic Monitoring, 8-11-1995; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997]

F18.1 Acid Rain SO2 Allowance Allocation for affected units are as follows:

Device ID	Boiler ID	Contaminant	Tons in any year
7	Boiler No. 1	SO2	437
9	Boiler No. 2	SO2	90
11	Boiler No. 3	SO2	182
13	Boiler No. 4	SO2	370

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### FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

- a). The allowance allocation(s) shall apply to calendar years 2000 through 2009.
- The number of allowances allocated to Phase II affected units by U.S. EPA b). may change in a 1998 revision to 40CFR73 Tables 2,3, and 4. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitate a revision to the unit SO2 allowance allocations identified in this permit (see 40 CFR 72.84)

#### [40CFR 73 Subpart B, 1-11-1993]

- F24.1 Accidental release prevention requirements of Section 112(r)(7):
  - a). The operator shall comply with the accidental release prevention requirements pursuant to 40 CFR Part 68 and shall submit to the Executive Officer, as a part of an annual compliance certification, a statement that certifies compliance with all of the requirements of 40 CFR Part 68, including the registration and submission of a risk management plan (RMP).
  - The operator shall submit any additional relevant information requested by the b). Executive Officer or designated agency.

#### [40CFR 68 - Accidental Release Prevention, 5-24-1996]

F52 1 This facility is subject to the applicable requirements of the following rules or regulation(s):

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

The facility shall submit a detailed retirement plan for the permanent shutdown of Boiler #4 (Device D13) describing in detail the steps and schedule that will be taken to render Boiler #4 permanently in operable. The retirement plan shall be submitted to SCAQMD within 60 days after the permits to construct for Gas Turbine Units 9, 11, and 12 are issued.

The retirement plan must be approved in writing by SCAQMD. El Segundo Power, LLC shall not commence any construction of the ESPFM Project including Gas Turbine Units 9,11, and 12, Steam Turbine Unit 10, SCR/CO Catalysts for Gas Turbines 9, 11, and 12, and the Auxiliary Boiler before the retirement plan is approved in writing by SCAQMD. If SCAQMD notified El Segundo Power, LLC that the plan is not approvable, El Segundo Power, LLC shall submit a revised plan addressing SCAQMD's concerns within 30 days.

El Segundo Power, LLC shall provide SCAQMD by December 31, 2015 with a notarized statement that Boiler #4 is permanently shut down and that any re-start or operation of the unit shall require new Permit to Construct and be subject to all requirements of nonattainment new source review and the prevention of significant deterioration program.

El Segundo Power, LLC shall notify SCAQMD 30 days prior to the implementation of the approved retirement plan for permanent shut down of Boiler #4, or advise SCAQMD as soon as practicable should El Segundo Power, LLC undertake permanent shutdown prior to December 31, 2015.

El Segundo Power, LLC shall cease operation of Boiler #4 within 90 calendar days for the first fire of Gas Turbine Unit 9 (Device D90), Unit 11 (Device D100), or Unit 12 (Device D106), whichever occurs first.

[RULE 1304(a)-Modeling and Offset Exemption, 6-14-1996]

#### **DEVICE CONDITIONS**

#### A. Emission Limits

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

#### A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
PM10	Less than or equal to 6935 LBS IN ANY ONE MONTH
SOX	Less than or equal to 1065 LBS IN ANY ONE MONTH
VOC	Less than or equal to 4930 LBS IN ANY ONE MONTH

The operator shall calculate the monthly emissions for VOC, PM10, and SOx, using the equation below and the following emission factors: VOC 2.93 lb/mmcf; PM10 4.66 lb/mmcf; and SOx 0.71lb/mmcf

Monthly Emissions, lb/month = X \* (EF)

where X = monthly fuel usage, mmcf/month; and EF = emission factor indicated above

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D67, D68]

#### A63.3 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 39191 LBS IN ANY CALENDAR MONTH
VOC	Less than or equal to 7546 LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to 8222 LBS IN ANY CALENDAR MONTH
SOX	Less than or equal to 1199 LBS IN ANY CALENDAR MONTH

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

The above limits apply after the equipment has been fully commissioned

The operator shall calculate the emission limits by using the calendar monthly fuel use data and the following emission factors: VOC: 2.92 lb/mmscf, PM10: 4.51 lb/mmscf, SOx: 0.71lb/mmscf

The operator shall calculate the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated by using monthly fuel use data and the following factors: natural gas commissioning: 22.52 lb/mmscf, normal operation: 13.86 lb/mmscf

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(3) PSD Analysis, 10-7-1988]

[Devices subject to this condition: D90]

### A63.4 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 10663 LBS IN ANY CALENDAR MONTH
VOC	Less than or equal to 1203 LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to 2200 LBS IN ANY CALENDAR MONTH
SOX	Less than or equal to 153 LBS IN ANY CALENDAR MONTH

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

The above limits apply after the equipment has been fully commissioned. The above limits apply to each turbine individually

The operator shall calculate the emission limits by using the calendar monthly fuel use data and the following emission factors: VOC: 2.66 lb/mmscf, PM10: 9.98 lb/mmscf, SOx: 0.71lb/mmscf

The operator shall calculate the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated by using monthly fuel use data and the following factors: natural gas commissioning: 258.44 lb/mmscf, normal operation: 9.30 lb/mmscf

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(3) PSD Analysis, 10-7-1988]

[Devices subject to this condition : D100, D106]

A63.5 The operator shall limit emissions from this equipment as follows:

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CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 251 LBS IN ANY CALENDAR MONTH
VOC	Less than or equal to 19 LBS IN ANY CALENDAR MONTH
PM10	Less than or equal to 58 LBS IN ANY CALENDAR MONTH
SOX	Less than or equal to 5 LBS IN ANY CALENDAR MONTH
VOC PM10	Less than or equal to 19 LBS IN ANY CALENDAR MONTH Less than or equal to 58 LBS IN ANY CALENDAR MONTH

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

The above limits apply after the equipment has been fully commissioned.

The operator shall calculate the emission limits by using the calendar monthly fuel use data and the following emission factors: VOC: 1.44 lb/mmscf, PM10: 6.80 lb/mmscf, SOx: 0.71 lb/mmscf

The operator shall calculate the emission limits for CO after the CO CEMS certification based upon readings from the SCAQMD certified CEMS. In the event the CO CEMS is not operating or the emissions exceed the valid upper range of the analyzer, the emissions shall be calculated by using monthly fuel use data and the following factors: natural gas commissioning: 45.35 lb/mmscf, normal operation: 22.66 lb/mmscf

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(3) PSD Analysis, 10-7-1988]

[Devices subject to this condition : D112]

A99.7 The 2.0 PPM NOX emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 415 gas turbine operating hours. Start-up shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

A gas turbine operating hour during the commissioning period consists of 60 operating minutes. An operating minute occurs when the gas turbine fuel flow during that minute is greater than zero.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D67, D68]

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

A99.8 The 2.0 PPM CO emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 415 gas turbine operating hours. Start-up shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

A gas turbine operating hour during the commissioning period consists of 60 operating minutes. An operating minute occurs when the gas turbine fuel flow during that minute is greater than zero.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A99.9 The 2.0 PPM VOC emission limit(s) shall not apply during turbine commissioning, start-up, and shutdown periods. The commissioning period shall not exceed 415 gas turbine operating hours. Start-up shall not exceed 60 minutes for each start-up. Shutdown periods shall not exceed 60 minutes for each shutdown. The turbine shall be limited to a maximum of 200 start-ups per year. Written records of commissioning, start-ups and shutdowns shall be maintained and made available upon request from the Executive Officer.

A gas turbine operating hour during the commissioning period consists of 60 operating minutes. An operating minute occurs when the gas turbine fuel flow during that minute is greater than zero.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition: D67, D68]

A99.10 The 16.55 LBS/MMCF NOX emission limit(s) shall only apply during the interim reporting period during initial turbine commissioning to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from entry into RECLAIM.

[RULE 2012, 5-6-2005]

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## FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D67, D68]

A99.11 The 8.66 LBS/MMCF NOX emission limit(s) shall only apply during the interim reporting period after initial turbine commissioning to report RECLAIM emissions. The interim reporting period shall not exceed 12 months from entry into RECLAIM.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]

A99.12 The 30.88 LBS/MMSCF NOX emission limit(s) shall only apply during the turbine commissioning period to report RECLAIM emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition: D90, D95]

A99.13 The 9.42 LBS/MMSCF NOX emission limit(s) shall only apply during the interim period after turbine commissioning to report RECLAIM emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D90, D95]

A99.14 The 96.58 LBS/MMSCF NOX emission limit(s) shall only apply during the turbine commissioning period to report RECLAIM emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D100, D106]

A99.15 The 16.16 LBS/MMSCF NOX emission limit(s) shall only apply during the interim period after turbine commissioning to report RECLAIM emissions.

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D100, D106]

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

A195.8 The 2.0 PPMV CO emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A195.9 The 2.0 PPMV NOX emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

A195.10 The 2.0 PPMV VOC emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(1)-Modeling, 5-10-1996; RULE 1303(b)(1)-Modeling, 12-6-2002]

[Devices subject to this condition : D67, D68]

A195.11 The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes at 15 percent O2, dry basis. The operator shall calculate and continuously record the NH3 slip concentration using the following:.

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### The operator shall comply with the terms and conditions set forth below:

NH3 (ppmv) = [a-b\*c/1EE+06]\*1EE+06/b; where

a = NH3 injection rate (lb/hr)/17 lb/lb-mol

b = dry exhaust gas flow rate (scf/hr)/385.3 scf/lb-mol

c = change in measured NOx across the SCR, (ppmvd at 15 percent O2)

The operator shall install and maintain a NOx analyzer to measure the SCR inlet NOx ppmv accurate to plus or minus 5 percent calibrated at least once every twelve months.

The NOx analyzer shall be installed and operated within 90 days of initial start-up.

The operator shall use the above described method or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information without corroborative data using an approved refernce method for the determination of ammonia.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition: C76, C80]

A195.12 The 2.0 PPMV NOX emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, fast start-ups, traditional start-ups, and shutdown periods. The turbine commissioning period shall not exceed 800 hours. A fast start-up shall not exceed 30 minutes. A traditional start-up shall not exceed 60 minutes. Shutdown time shall not exceed 30 minutes. The gas turbine shall be limited to a maximum of 200 total start-ups per year, and a maximum of 50 traditional start-ups per year.

Written records of commissioning, fast start-ups, traditional start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

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### The operator shall comply with the terms and conditions set forth below:

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D90, D95]

A195.13 The 2.0 PPMV CO emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, fast start-ups, traditional start-ups, and shutdown periods. The turbine commissioning period shall not exceed 800 hours. A fast start-up shall not exceed 30 minutes. A traditional start-up shall not exceed 60 minutes. Shutdown time shall not exceed 30 minutes. The gas turbine shall be limited to a maximum of 200 total start-ups per year, and a maximum of 50 traditional start-ups per year.

> Written records of commissioning, traditional fast-start-ups, start-ups, and be maintained and shutdowns shall made available upon request from the Executive Officer.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D90, D95]

A195.14 The 2.0 PPMV VOC emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, fast start-ups, traditional start-ups, and shutdown periods. The turbine commissioning period shall not exceed 800 hours. A fast start-up shall not exceed 30 minutes. A traditional start-up shall not exceed 60 minutes. Shutdown time shall not exceed 30 minutes. The gas turbine shall be limited to a maximum of 200 total start-ups per year, and a maximum of 50 traditional start-ups per year.

> Written records of commissioning, fast-start-ups. traditional start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D90, D95]

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#### The operator shall comply with the terms and conditions set forth below:

A195.15 The 2.5 PPMV NOX emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, start-ups, and shutdown periods. The turbine commissioning period shall not exceed 206 hours. Start-up shall not exceed 30 minutes. Shutdown time shall not exceed 20 minutes. The gas turbine shall be limited to a maximum of 480 start-ups per year.

> Written records of commissioning, start-ups, and shutdowns shall be maintained and made available upon request from the Executive Officer.

### [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D100, D106]

A195.16 The 4.0 PPMV CO emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, start-ups, and shutdown periods. The turbine commissioning period shall not exceed 206 hours. Start-up shall not exceed 30 minutes. Shutdown time shall not exceed 20 minutes. The gas turbine shall be limited to a maximum of 480 start-ups per year.

> Written records of commissioning, fast-start-ups, traditional start-ups, shutdowns shall be maintained and made available upon request from the Executive Officer.

#### [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D100, D106]

A195.17 The 2.0 PPMV VOC emission limit(s) is averaged over 1 hour, dry basis at 15 percent oxygen. This limit shall not apply to turbine commissioning, start-ups, and shutdown periods. The turbine commissioning period shall not exceed 206 hours. Start-up shall not exceed 30 minutes. Shutdown time shall not exceed 20 minutes. The gas turbine shall be limited to a maximum of 480 start-ups per year.

> Written records of commissioning. fast-start-ups, traditional shutdowns shall be maintained and made available upon request from the Executive Officer.

#### [RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

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### The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D100, D106]

A195.18 The 1,100 LBS/NET MW-HR CO emission limit(s) is averaged over 12 rolling months. This limit only applies if the capacity factor of the unit is 60% or greater on an annual basis.

[RULE Title 20, 11-1-2012]

[Devices subject to this condition: D90]

A327.1 For the purpose of determining compliance with District Rule 475, combustion contaminant emissions may exceed the concentration limit or the mass emission limit listed, but not both limits at the same time.

[RULE 475, 10-8-1976; RULE 475, 8-7-1978]

[Devices subject to this condition: D67, D68, D90, D95, D100, D106]

A433.1 The operator shall comply at all times with the 2.0 ppm 1-hour BACT limit for NOx, except as defined in condition A99.7 and for the following scenario:

Operating Scenario	Maximum Hourly Emission Limit	Operational Limit
Start-up	112 lb/hr	NOx emissions not to exceed
	ı	112 lbs total per start-up per
		turbine. Each turbine shall be
		limited to 200 start-ups per year,
		with each start-up not to exceed
		60 minutes

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D67, D68]

#### **B.** Material/Fuel Type Limits

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#### The operator shall comply with the terms and conditions set forth below:

B61.2 The operator shall not use natural gas containing the following specified compounds:

Compound	Range	grain per 100 scf
H2S	greater than	0.25

This concentration limit is an annual average based on monthly samples of natural gas composition or gas supplier documentation. The gaseous fuel sample shall be tested using District Method 307-91 for total sulfur calculated as H2S

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D67, D68, D90, D95, D100, D106, D112]

#### C. Throughput or Operating Parameter Limits

C1.6 The operator shall limit the fuel usage to no more than 1500 MM cubic feet in any one calendar month.

For the purpose of this condition, fuel usage shall be defined as the total natural gas usage of a single turbine.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D67, D68]

C1.7 The operator shall limit the number of start-ups to no more than 62 in any one calendar month.

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#### The operator shall comply with the terms and conditions set forth below:

The number of traditional start-ups shall not exceed 15 per month.

The number of traditional start-ups shall not exceed 1 per day.

NOx emissions during a fast start-up shall not exceed 36 lbs. NOx emissions during a traditional start-up shall not exceed 62 lbs.

The beginning of start-up occurs at initial fire in the combustor and the end of start-up occurs when BACT levels are achieved. If during start-up the process is aborted and the turbine is re-started, then the start-up and re-start is defined as "one start-up". In this case the start-up shall not exceed one hour..

The requirements of this condition do not apply during the initial commissioning period..

Th operator shall maintain records in a manner approved by the District to demonstarte compliance with this condition.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition: D90, D95]

C1.8 The operator shall limit the number of start-ups to no more than 60 in any one calendar month.

The number of start-ups shall not exceed 4 per day.

NOx emissions during a start-up shall not exceed 28 lbs..

The NOx emissions from a startup shall not exceed 28 lbs. The beginning of startup occurs at initial fire in the combustor and the end of startup occurs when the BACT levels are achieved. If during startup the process is aborted the process will count as one startup.

Th operator shall maintain records in a manner approved by the District to demonstarte compliance with this condition..

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### The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D100, D106]

C1.9 The operator shall limit the fuel usage to no more than 0.82 MM cubic feet per day.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2005, 6-3-2011]

[Devices subject to this condition : D112]

### D. Monitoring/Testing Requirements

D12.10 The operator shall install and maintain a(n) flow meter to accurately indicate the fuel usage of the turbine.

The operator shall also install and maintain a device to continuously record the parameter being measured.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]

D12.11 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall remain between 1 gallon per hour and 75 gallons per hour

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The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D12.12 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature of the in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall remain between 400 degrees F and 750 degrees F

The catalyst temperature shall not exceed 750 degrees F during the start-up period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D12.13 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

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### The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure drop acorss the catalyst shall remain between 1 inch of water column and 4 inches of water column

The pressure drop across the catalyst shall not exceed 4 inches of water during the start-up period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : C76, C80]

D12.14 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall not exceed 139.8 lb/hr

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition: C97]

D12.15 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

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### The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall remain between 300 degrees F and 650 degrees F

The temperature limitations of this condition do not apply during turbine start-up and shutdown periods

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition: C97]

D12.16 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure drop across the catalyst shall remain between 1 inch of water column and 4 inches of water column

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2012, 5-6-2005]

[Devices subject to this condition: C97]

D12.17 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

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### The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall not exceed 67.8 lb/hr

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C103, C109]

D12.18 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall remain between 600 degrees F and 1,125 degrees F

The temperature limitations of this condition do not apply during turbine start-up and shutdown periods

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition: C103, C109]

D12.19 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

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### The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure drop across the catalyst shall remain between 1 inch of water column and 12 inches of water column

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2012, 5-6-2005]

[Devices subject to this condition : C103, C109]

D12.20 The operator shall install and maintain a(n) flow meter to accurately indicate the flow rate of the total hourly throughput of injected ammonia.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The ammonia injection rate shall not exceed 5 lb/hr

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C114]

D12.21 The operator shall install and maintain a(n) temperature gauge to accurately indicate the temperature in the exhaust at the inlet to the SCR reactor.

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### The operator shall comply with the terms and conditions set forth below:

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The temperature shall remain between 500 degrees F and 750 degrees F

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C114]

D12.22 The operator shall install and maintain a(n) pressure gauge to accurately indicate the differential pressure across the SCR catalyst bed in inches of water column.

The operator shall also install and maintain a device to continuously record the parameter being measured.

The measuring device or gauge shall be accurate to within plus or minus 5 percent. It shall be calibrated once every 12 months.

The pressure drop across the catalyst shall remain between 1 inch of water column and 12 inches of water column

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2012, 5-6-2005]

[Devices subject to this condition : C114]

D29.7 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
	•	•	serving this equipment

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### The operator shall comply with the terms and conditions set forth below:

CO emissions	District method 100.1	1 hour	Outlet of the SCR
	·	·	serving this equipment
PM10	District Method 5	4 hours	Outlet of the SCR
emissions			serving this equipment
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR
			serving this equipment
SOX emissions	AQMD Laboratory	Not Applicable	Fuel sample
	Method 307-91		
NH3 emissions	AQMD Laboratory	1 hour	Outlet of the SCR
	Method 307-91	1	serving this equipment

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#### The operator shall comply with the terms and conditions set forth below:

The test shall be conducted after AQMD approval of the source test protocol, but no later than 180 days after initial start-up. The AQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in megawatts (MW).

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at maximum, average, and minimum loads.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of canisters is done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA method TO-12 (with preconcentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results shall be reported with two significant digits.

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#### The operator shall comply with the terms and conditions set forth below:

For the purpose of this condition, alternative test methods may be allowed for each of the above pollutants upon concurrence of AQMD and EPA

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) -PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

D29.8 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NH3 emissions	District method 207.1	1 hour	Outlet of the SCR
	and 5.3 or EPA method	I	serving this equipment
	17		

The test shall be conducted and the results submitted to the AQMD within 45 days after the test date. The AQMD shall be notified of the date and time of the test at least 7 days prior to the test.

The test shall be conducted at least quarterly during the first 12 months of operation and at least annually thereafter. The NOx concentration, as determined by the CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

The test shall be conducted to determine compliance with the Rule 1303 BACT concentration limit.

If the equipment is not operated in any given quarter, the operator may elect to defer the required testing to a quarter in which the equipment is operated.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

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### The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D67, D68]

D29.9 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
SOX emissions	AQMD Laboratory	Not Applicable	Fuel sample
	Method 307-91		
VOC emissions	District Method 25.3	1 hour	Outlet of the SCR
	1		serving this equipment
PM10	District Method 5	4 hours	Outlet of the SCR
emissions	1	ı	serving this equipment

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## FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

The test(s) shall be conducted at least once every three years for SOx and PM10, and yearly for VOC.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the test shall measure the fuel flow rate (CFH), the flue gas flow rate, and the turbine generating output in megawatts (MW).

The test shall be conducted in accordance with AQMD approved test protocol. The protocol shall be submitted to the AQMD engineer no later than 45 days before the proposed test date and shall be approved by the AQMD before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at 100 percent load.

The test shall be conducted for compliance verification of the BACT VOC 2.0 ppmv limit.

For natural gas fired turbines only, VOC compliance shall be demonstrated as follows: a) Stack gas samples are extracted into Summa canisters maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of canisters is done with zero gas analyzed/certified to contain less than 0.05 ppmv total hydrocarbon as carbon, and c) Analysis of canisters are per EPA method TO-12 (with preconcentration) and temperature of canisters when extracting samples for analysis is not below 70 deg F

The use of this alternative method for VOC compliance determination does not mean that it is more accurate than AQMD method 25.3, nor does it mean that it may be used in lieu of AQMD method 25.3 without prior approval except for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results shall be reported with two significant digits.

For the purpose of this condition, alternative test methods may be allowed for

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### The operator shall comply with the terms and conditions set forth below:

each of the above pollutants upon concurrence of AQMD and EPA

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D67, D68]

D29.10 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
			serving this equipment
CO emissions	District method 100.1	1 hour	Outlet of the SCR
			serving this equipment
VOC emissions	Approved District method	1 hour	Outlet of the SCR
			serving this equipment
PM10	Approved District method	District-approved	Outlet of the SCR
emissions		averaging time	serving this equipment
PM2.5	Approved District method	District-approved	Outlet of the SCR
		averaging time	serving this equipment
SOX emissions	Approved District method	District-approved	Fuel sample
	1	averaging time	1
NH3 emissions	District method 207.1	1 hour	Outlet of the SCR
	and 5.3 or EPA method	•	serving this equipment
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#### The operator shall comply with the terms and conditions set forth below:

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine the oxygen levels in the exhaust. In addition, the tests shall measure the fuel flow rate (CFH), and the flue gas flow rate. The combined gas turbine and steam turbine generating output in MW shall also be recorded.

The test shall be conducted in accordance with a District approved source etst protocol. The protocol shall be submitted to the SCAQMD engineer no later than 90 days before the proposed test date and shall be approved by District before the test commences...

The test protocol shall include the proposed operating conditions of the gas turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

For gas turbines only the VOC test shall use the following method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to having less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the canister temperature when extracting samples for analysis is not below 70 degrees F

The use of this alternative VOC test method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results must be reported with two significant digits.

The test shall be conducted when this equipment is operating at loads of 100 and 75 percent of maximum load for the NOx, CO, VOC, and ammonia tests. The PM10 and PM2.5 tests shall be conducted when this equipment is operating at 100 percent of maximum load.

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

The operator shall comply with the terms and conditions set forth below:

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2)-PSD-BACT, 10-7-1988; RULE 1703(a)(3) PSD Analysis, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D90, D95, D100, D106]

D29.11 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to	Required Test Method(s)	Averaging Time	Test Location
be tested			_
SOX emissions	Approved District method	District-approved	Fuel sample
	_	averaging time	
VOC emissions	Approved District method	1 hour	Outlet of the SCR
	ı	l	serving this equipment
PM10	Approved District method	District-approved	Outlet of the SCR
emissions	•	averaging time	serving this equipment

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## FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

The test shall be conducted at least once every three years.

The test shall be conducted and the results submitted to the District within 60 days after the test date. The SCAQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted when the gas turbine is operating at 100 percent of maximum load.

For gas turbines only the VOC test shall use the following method: a) Stack gas samples are extracted into Summa canisters, maintaining a final canister pressure between 400-500 mm Hg absolute, b) Pressurization of Summa canisters is done with zero gas analyzed/certified to having less than 0.05 ppmv total hydrocarbons as carbon, and c) Analysis of Summa canisters is per EPA Method TO-12 (with pre-concentration) and the canister temperature when extracting samples for analysis is not below 70 degrees F

The use of this alternative VOC test method is solely for the determination of compliance with the VOC BACT level of 2.0 ppmv calculated as carbon for natural gas fired turbines. The test results must be reported with two significant digits.

The test shall be conducted to demonstrate compliance with the Rule 1303 concentration and/or monthly emission limit.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D90, D95, D100, D106]

D29.12 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to	Required Test Method(s)	Averaging Time	Test Location
be tested			

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#### The operator shall comply with the terms and conditions set forth below:

NH3 emissions	District method 207.1	1 hour	Outlet of the SCR
	and 5.3 or EPA method	•	serving this equipment
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The test shall be conducted and the results submitted to the District within 60 days after the test date. The SCAQMD shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted at least quarterly during the first twelve months of operation and at least annually thereafter. The NOx concentration, as determined by the certified CEMS, shall be simultaneously recorded during the ammonia slip test. If the CEMS is inoperable or not yet certified, a test shall be conducted to determine the NOx emissions using District Method 100.1 measured over a 60 minute averaging time period.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D90, D95, D100, D106]

D29.13 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location
NOX emissions	District method 100.1	1 hour	Outlet of the SCR
CO emissions	District method 100.1	1 hour	Outlet of the SCR
PM10	District method 207.1	District-approved	Outlet of the SCR
emissions	and 5.3 or EPA method	averaging time	ı

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# FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

The test shall be conducted after District approval of the source test protocol, but no later than 180 days after initial start-up. The District shall be notified of the date and time of the test at least 10 days prior to the test.

The test shall be conducted to determine compliance with the BACT emission limits. NOx and CO concentrations shall be corrected to 3% excess O2, dry. In addition, the tests shall measure the fuel flow rate (CFH), the flue gas flow rate, oxygen level in the flue gas. The steam turbine generator output in MW shall also be recorded..

The test shall be conducted in accordance with a District approved source test protocol. The protocol shall be submitted to the AQMD engineer no later than 90 days before the proposed test date and shall be approved by the District before the test commences. The test protocol shall include the proposed operating conditions of the turbine during the tests, the identity of the testing lab, a statement from the testing lab certifying that it meets the criteria of Rule 304, and a description of all sampling and analytical procedures.

The test shall be conducted when this equipment is operating at loads of 100 and 75 percent of maximum load

Test results shall be submitted to AQMD within 60 days of the completion of the tests.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 1703(a)(3) PSD Analysis, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D112]

D82.4 The operator shall install and maintain a CEMS to measure the following parameters:

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#### The operator shall comply with the terms and conditions set forth below:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated no later than 90 days after initial start-up of the turbine, and in accordance with an approved AQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving intial approval from AQMD. Within two weeks of turbine start-up, the operator shall provide written notification to the AQMD of the exact date of start-up.

The CEMS shall be installed and operated to measure the CO concentration over a 15 minute averaging time period.

The CEMS shall convert the actual CO concentrations to mass emission rates (lb/hr) using the equation below and record the hourly emission rates on a continuous basis.

CO Emission Rate, (lb/hr) = K Cco Fd[20.9/(20.9-%O2)][(Qg \* HHV)/1000000], where

K = 7.267 EE-8 (lb/scf)/ppm

Cco = Average of four consecutive 15 min avg CO concentrations, ppm

Fd = 8710 dscf/MMBTU natural gas

%O2 = Hourly avg % by volume O2, dry basis, corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross high heating value of fuel gas, BTU/scf

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 218, 8-7-1981; RULE 218, 5-14-1999]

[Devices subject to this condition : D67, D68]

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operating no later than 90 days after initial start-up of the turbine and shall comply with the requirements of Rule 2012. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3). Within two weeks of the turbine start-up date, the operator shall provide written notification to the AQMD of the exact date of start-up.

The CEMS shall be installed and operating (for BACT purposes only) no later than 90 days after initial start-up of the turbine.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 5-6-2005; RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]

D82.6 The operator shall install and maintain a CEMS to measure the following parameters:

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

CO concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated to measure CO concentrations over a 15 minute averaging time period.

The CEMS shall be installed and operated no later than 90 days after initial start-up of the turbine and in accordance with an approved SCAQMD Rule 218 CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from SCAQMD. Within two weeks of the turbine start-up, the operator shall provide written notification to the District of the exact date of start-up.

The CEMS will convert the actual CO concentrations to mass emission rates (lb/hr) using the equation below and record the hourly emission rates on a continuous basis.

CO Emission rate, lb/hr = K\*Cco\*Fd[20.9/(20.9-%O2d)][(Qg\*HHV)/1E6], where

K = 7.267E-8 (lb/scf)/ppm

Cco = Average of four consecutive 15 minnute average CO concentrations, ppmv

Fd = 8710 dscf/MMBTU natural gas

%O2d = Hourly average % by vol. O2 dry, corresponding to Cco

Qg = Fuel gas usage during the hour, scf/hr

HHV = Gross higher heating value of fuel, BTU/scf

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : D90, D95, D100, D106]

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#### The operator shall comply with the terms and conditions set forth below:

D82.7 The operator shall install and maintain a CEMS to measure the following parameters:

NOX concentration in ppmv

Concentrations shall be corrected to 15 percent oxygen on a dry basis.

The CEMS shall be installed and operated no later than 90 days after intial start-up of the turbine, and in accordance with an approved SCAQMD REG XX CEMS plan application. The operator shall not install the CEMS prior to receiving initial approval from SCAQMD. Within two weeks of the initial start-up, the operator shall provide written notification to the District of the exact date of start-up.

Rule 2012 provisional RATA testing shall be completed and submitted to the SCAQMD within 90 days of the conclusion of the turbine commissioning period. During the interim period between the initial start-up and the provisional certification date of the CEMS, the operator shall comply with the monitoring requirements of Rule 2012(h)(2) and 2012(h)(3)

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011; RULE 2012, 5-6-2005]

[Devices subject to this condition : D90, D95, D100, D106]

#### E. Equipment Operation/Construction Requirements

E179.5 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated based upon the average of the continuous monitoring for that hour.

Condition Number D 12-11

Condition Number D 12-12

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C76, C80]

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

E179.6 For the purpose of the following condition number(s), continuously record shall be defined as measuring at least once every month and shall be calculated based upon the average of the continuous monitoring for that month.

Condition Number D 12-13

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition : C76, C80]

E179.7 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12-14

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : C97]

E179.8 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that month.

Condition Number D 12-15

Condition Number D 12-16

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : C97]

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#### The operator shall comply with the terms and conditions set forth below:

E179.9 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12-17

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : C103, C109]

E179.10 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that month.

Condition Number D 12-18

Condition Number D 12-19

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition: C103, C109]

E179.11 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that hour.

Condition Number D 12-20

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : C114]

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### The operator shall comply with the terms and conditions set forth below:

E179.12 For the purpose of the following condition number(s), continuously record shall be defined as recording at least once every hour and shall be calculated upon the average of the continuous monitoring for that month.

Condition Number D 12-21

Condition Number D 12-22

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : C114]

E193.2 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

In accordance with all air quality mitigation measures stipulated in the final California Energy Commission decision for the 00-AFC-14C project

[CA PRC CEQA, 11-23-1970]

[Devices subject to this condition : D67, D68, D90, D95, C97, D100, C103, D106, C109, D112, C114]

E193.3 The operator shall upon completion of construction, operate and maintain this equipment according to the following specifications:

The combined cycle gas turbine units 5 and 7 shall not operate simultaneously with boiler units 1,2, or 3 except for the 90 day period as stipulated in AQMD Rule 1313. El Segundo Power shall surrender the Permit to Operate (P/N F14448) for boiler no. 3 within 90 days of the start-up of the combined cycle gas turbines.

[RULE 1313(d), 12-7-1995]

[Devices subject to this condition : D67, D68]

E193.5 The operator shall operate and maintain this equipment according to the following requirements:

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#### The operator shall comply with the terms and conditions set forth below:

The operator shall vent this equipemnt to the oxidation catalyst and SCR control system whenever the gas turbine is in operation after initial commissioning.

The operator shall provide the SCAQMD with written notification of the initial start-up date.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D90, D95, D100, D106]

E193.6 The operator shall operate and maintain this equipment according to the following requirements:

The operator shall record the total net power generated in a calendar month in megawatt-hours.

The operator shall calculate and record greenhouse gas emissions of each calendar month using the following formula

GHG = 60.139\*FF, where

Where, GHG is the greenhouse gas emissions in tons of CO2e and FF is the monthly fuel usage in millions standard cubic feet.

The operator shall calculate and record the GHG emissions in pounds per net megawatt-hours on the 12-month rolling average. The GHG emissions from this equipment shall not exceed 764,191 tons per year. The GHG emissions shall not exceed 967 lbs per net megawatt-hours.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

[RULE 1714, 11-5-2010]

[Devices subject to this condition : D90]

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### The operator shall comply with the terms and conditions set forth below:

E193.7 The operator shall locate and operate this equipment according to the following requirements:

The operator shall calculate and continuously record the NH3 slip concentration using the following equation:

NH3 (ppmvd) = [a-b\*(c\*1.2)/1,000,000]\*1,000,000/b, where

a=NH3 injection rate (lb/hr)/17(lb/lb-mol), b= dry exhaust flow rate (scf/hr)/ (385.5 scf/lb-mol), c = change in measured NOx across the SCR, ppmvd at 15 percent O2.

The operator shall install a NOx analyzer to measure the SCR inlet NOx ppm accurate to within +/- 5 percent calibrated at least once every 12 months. The operator shall use the method described above or another alternative method approved by the Executive Officer.

The ammonia slip calculation procedures described above shall not be used for compliance determination or emission information determination without corroborative data using an approved reference method for the determination of ammonia. The ammonia slip calculation procedure shall be in-effect no later than 90 days after initial startup of the equipment.

[RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011; RULE 2012, 5-6-2005]

[Devices subject to this condition: C97, C103, C109, C114]

E193.8 The operator shall operate and maintain this equipment according to the following requirements:

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### The operator shall comply with the terms and conditions set forth below:

The operator shall record the total net power generated in a calendar month in megawatt-hours.

The operator shall calculate and record greenhouse gas emissions of each calendar month using the following formula

GHG = 60.139\*FF, where

Where, GHG is the greenhouse gas emissions in tons of CO2e and FF is the monthly fuel usage in millions standard cubic feet.

The operator shall calculate and record the GHG emissions in pounds per net megawatt-hours on the 12-month rolling average. The GHG emissions from this equipment shall not exceed 140,998 tons per year. The GHG emissions shall not exceed 1,503 lbs per net megawatt-hours.

The operator shall maintain records in a manner approved by the District to demonstrate compliance with this condition. The records shall be made available to SCAQMD upon request.

[RULE 1714, 11-5-2010]

[Devices subject to this condition : D100, D106]

E193.9 The operator shall operate and maintain this equipment according to the following requirements:

The operator shall vent this equipemnt to the oxidation catalyst and SCR control system whenever the auxiliary boiler is in operation.

The operator shall provide the SCAQMD with written notification of the initial start-up date.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988; RULE 2005, 6-3-2011]

[Devices subject to this condition : D112]

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#### The operator shall comply with the terms and conditions set forth below:

E448.2 The operator shall comply with the following requirements:

This equipment shall not supply either one-third or more of its potential electrical output or more than 219,000 MWh net electrical output to a utility distribution system on a 3 year rolling average basis.

The operator shall record and maintain written records of the amount of electricity supplied to the utility distribution system expressed as a percentage of the total potential electrical output of the turbine, and shall provide such records to the Executive Officer upon request.

The operator shall record and maintain written records of the net electrical output of the turbine to a utility distribution system, expressed in net MWh, and shall provide such records to the Executive Officer upon request.

[40CFR 63 Subpart KKKK, 4-20-2006]

[Devices subject to this condition : D100, D106]

E448.3 The operator shall comply with the following requirements:

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#### The operator shall comply with the terms and conditions set forth below:

The total maximum amount of electricity produced on a gross basis from gas turbine device D90 and the corresponding steam turbine, device D100 and device D106 shall not exceed 447 MWh

The gross electrical output shall be measured at the two generators serving the GE 7FA combined cycle gas turbine and the two generators serving the two Trent 60 simple cycle gas turbines

The monitoring equipment shall meet ANSI Standard No. C12 or equivalent, and have an accuracy of +/- 0.2 percent. The gross electrical output from generators shall be recorded at the CEMS DAS.

The operator shall record and maintain written records of the maximum amount of electricity produced from this equipment and shall make such records available to the Executive Officer upon request.

The operator shall maintain records for a minimum of five years, in a manner approved by the SCAQMD to demonstrate compliance with this condition.

[RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 2005, 6-3-2011]

[Devices subject to this condition: D90]

#### I. Administrative

This equipment shall not be operated unless the facility holds 52432 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 5-6-2005]

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#### The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D67]

1297.2 This equipment shall not be operated unless the facility holds 52432 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year RTCs held to satisfy this condition may be transferred only after one year of operation. If the hold amount is partially satisfied by holding from the initial start of operation. RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D68]

1297.3 This equipment shall not be operated unless the facility holds 148226 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year RTCs held to satisfy this condition may be transferred only after one year of operation. If the hold amount is partially satisfied by holding from the initial start of operation. RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition: D90]

1297 4 This equipment shall not be operated unless the facility holds 46675 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year RTCs held to satisfy this condition may be transferred only after one year of operation. from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

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## FACILITY PERMIT TO OPERATE EL SEGUNDO POWER, LLC

#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

#### The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D100]

This equipment shall not be operated unless the facility holds 46675 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition: D106]

This equipment shall not be operated unless the facility holds 521 pounds of NOx RTCs in its allocation account to offset the annual emissions increase for the first year of operation. RTCs held to satisfy this condition may be transferred only after one year from the initial start of operation. If the hold amount is partially satisfied by holding RTCs that expire midway through the hold period, those RTCs may be transferred upon their respective expiration dates. This hold amount is in addition to any other amount of RTCs required to be held under other condition(s) stated in this permit.

[RULE 2005, 6-3-2011]

[Devices subject to this condition : D112]

### K. Record Keeping/Reporting

K40.4 The operator shall provide to the District a source test report in accordance with the following specifications:

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703 - PSD Analysis, 10-7-1988; RULE 2005, 5-6-2005]

[Devices subject to this condition : D67, D68]

K40.5 The operator shall provide to the District a source test report in accordance with the following specifications:

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#### SECTION H: PERMIT TO CONSTRUCT AND TEMPORARY PERMIT TO OPERATE

### The operator shall comply with the terms and conditions set forth below:

Source test results shall be submitted to the District no later than 60 days after the source test was conducted.

Emission data shall be expressed in terms of concentration (ppmv) corrected to 15 percent oxygen (dry basis), mass rate (lbs/hr), and lbs/MM Cubic Feet. In addition, solid PM emissions, if required to be tested, shall also be reported in terms of grains per DSCF.

All exhaust flow rate shall be expressed in terms of dry standard cubic feet per minute (DSCFM) and dry actual cubic feet per minute (DACFM).

All moisture concentration shall be expressed in terms of percent corrected to 15 percent oxygen.

Source test results shall also include the oxygen levels in the exhaust, fuel flow rate (CFH), the flue gas temperature, and the generator power output (MW) under which the test was conducted.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; RULE 1303(b)(2)-Offset, 5-10-1996; RULE 1303(b)(2)-Offset, 12-6-2002; RULE 1703(a)(2) - PSD-BACT, 10-7-1988]

[Devices subject to this condition: D90, D95, D100, D106, D112]

K67.5 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use after CEMS certification

Natural gas fuel use during the commissioning period

Natural gas fuel use after the commissioning period and prior to CEMS certification

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D67, D68]

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### The operator shall comply with the terms and conditions set forth below:

K67.6 The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Natural gas fuel use during the commissioning period

[RULE 2012, 5-6-2005]

[Devices subject to this condition : D90, D95, D100, D106]